2015 FACILITY CONDITION SURVEY

SOUTHWESTERN COLLEGE

SURVEY CONDUCTED BY:

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REQUESTED BY:

Proposition R Bond Program
Southwestern College
Chula Vista, California

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The following individuals are acknowledged for their participation in and contribution to the Southwestern College Facility Condition Survey.

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INTRODUCTION AND SURVEY OVERVIEW

In April of 2015 the Proposition R Program Office at Southwestern College requested that a facility condition survey be conducted at the main campus of Southwestern College, located in Chula Vista, California, and at the three off-site Higher Education facilities in National City, Otay Mesa, and San Ysidro, as well as at the Crown Point Aquatic Center in Coronado. The objective of the facility condition survey was to determine the physical condition 56 of the buildings and select site amenities on the main campus, and the four off-site facilities; to identify and document capital repair (major maintenance) deficiencies through a visual assessment of key building systems; and to recommend corrective action and provide a budget-level cost estimate for correcting each deficiency. Each deficiency would also be prioritized utilizing a consistent methodology to identify and to budget capital repairs. This process would be based on a uniform set of procedures and a consistent deficiency prioritization methodology.

Pack & Associates, LLC of Redmond, Washington was retained to conduct the survey and to prepare a condition survey report documenting the results of the effort. The survey focused on 56 facilities encompassing approximately 521,000 GSF selected by the college on the main campus, and the four off-site locations, encompassing some 150,900 GSF. The focus of the condition survey, as conducted by the consultant includes:

- Identifying and documenting existing and probable future facility deficiencies that should be addressed in over a six-year (2015-2020) maintenance planning and capital repair programming time frame.

- Recommending corrective action for each deficiency and estimating the repair cost of each deficiency to guide the college in developing capital repair project requests.

- Determining the relative severity/priority of each deficiency to result in a deficiency score to be used as a guide for repair request timing.

Facility Survey

The facility condition survey was conducted during the period of July 20-24 and August 10-21of 2015. The condition survey commenced with an initial meting with the Proposition R program manager and staff, facility maintenance manager and key maintenance personnel to discuss key facility problems, arrange for space access, and identify appropriate points of contact to discuss questions. The survey was conducted by a team consisting of a maintenance specialist responsible for exterior closure and roofing system evaluations, a mechanical/electrical engineer responsible for HVAC, plumbing and electrical system evaluations, and an architect responsible for structural and interior closure/finish system evaluations. The survey consisted of a comprehensive assessment of interior and exterior closure, roof, HVAC, plumbing and electrical systems.

During the survey process team members interacted with maintenance personnel to clarify questions, obtain input as to equipment operating and maintenance histories, and discuss

suspected non-observable problems with hidden systems and/or components. Upon conclusion of the field survey cost estimates were developed for each deficiency and the deficiency forms were prepared for data entry into the consultant's condition survey database management system. The last step in the process involved the preparation of the final deficiency reports represented by this document.

Facility Overview

Southwestern College main campus is located on a 156 acre site in Chula Vista, California, at the southwest corner of Otay Lakes Rd. and H Street. There are currently 67 buildings, not including relocatables, located on the site. The majority of the buildings were constructed in the mid 1960s and early 1970s, and are now 45 to 50 years old. The buildings are constructed mostly of exterior loaded concrete frames and many are connected by wood-framed covered walkways and canopies.

The National City Higher Education Center is a single building of approximately 48,250 GSF located in National City. The Otay Mesa Higher Education Center is a complex of six buildings encompassing some 75,400 GSF located in San Diego. The San Ysidro Higher Education facility is a single building of approximately 19,000 GSF located in San Ysidro. The Crown Cove Aquatic Center is comprised of two facilities located in Coronado that are leased from the State of California. The college is responsible for providing maintenance for all but a small portion of the buildings. The leased facilities encompass approximately 8,200 GSF.

The 2015 condition survey identified a total of **593** deficiencies in fifty-five of the fifty-six facilities surveyed on the main campus, as well as at the four off-site locations. The identified deficiencies have an estimated repair cost in 2015 dollars of **$11,746.020.** The table on the following pages, titled Site *"Cost Summary by Building,"* summarizes the number of deficiencies and estimated repair cost for each facility in which deficiencies were identified.

Deficiency Overview

The 593 deficiencies identified through the facility condition survey were categorized according to buildings systems, as well as for the site. The table following the *"Site Cost Summary by Building"* table, titled *"Site Deficiency Summary by System,"* summarizes the number of deficiencies and estimated repair cost for each of eleven building systems and the site into which the deficiencies were categorized. **These deficiencies do not include any capital repairs that may have already been programmed for corrective action.**

The deficiencies that were identified and documented have resulted either from equipment that is deteriorated to the point that it is no longer cost-effective to repair or maintain, or building systems that have deteriorated over time. The deterioration may have resulted because of normal age or wear, installation problems, weather impacts, abuse, or lack of proper routine maintenance. Some deficiencies are also the result of design decisions that have resulted in system/component configurations with high maintenance costs, inefficient operating characteristics and premature deterioration. For some deficiencies the cause appears to be unknown at this time.

The table following the *"Site Deficiency Summary by System"* table, titled *"Site Deficiency Summary by Cause,"* summarizes the deficiencies identified by probable cause.

Maintenance/Repair/Replacement Programming

Planning and programming for the repair, maintenance and replacement of building systems and components should be performed utilizing a structured process that categorizes those actions according to the types of activities involved. To aid in this process we have categorized the deficiencies identified into five distinct maintenance categories for programming purposes:

- Annual PM
- Non-Annual Recurring Maintenance
- Repair/Maintenance
- Replacement/Renewal
- Improvement

The table on the following page, titled *"Site Deficiency Summary by Maintenance Category,"* identifies the number of deficiencies and associated costs recommended for each maintenance category.

A second table following this table, titled *"Critical/5 Yr. Deferred Site Repair Programming Summary by Facility,"* provides a six-year view of costs by building for the deficiencies identified based on whether a deficiency was designated as Critical or Deferrable by the survey team. Deficiencies identified as Critical should be corrected during the current year or as soon as practical. Deferrable deficiencies were assigned an estimated remaining life of between 1 and 5 years starting in 2016.

Condition Index

One indicator that is often used to benchmark overall facility condition is the percentage that results when the total deficiency repair cost of a facility is divided by its estimated replacement cost. In general, if the percentage is 5% or less of estimated replacement cost, a facility is considered to be in Excellent condition. If it is between 5% and 11%, a facility is considered to be in Good condition. If it is between 12% and 25% a facility is considered to be in Average condition. If it is between 26% and 50% it is considered to be in Poor condition. Below 50% it is considered to be in Failed condition. When the percentage is subtracted from 100% and expressed as a number, the result is termed the Facility Condition Index (FCI.)

Applying this benchmark, the percentage range of deficiency repair costs for the facilities in which deficiencies were identified was between 81% and 0.05% of estimated replacement cost. The table following the table titled *"Critical/5 Yr. Deferred Site Repair Programming Summary by Facility,"* titled *"Facility Condition Index rating by Building,"* compares total estimated repair costs versus estimated facility replacement costs for these facilities, and provides the Facility Condition Index for each. As shown in the table, the Facility Condition Index ranges from a low of 19, which is considered Failed, to a high of 100, which is considered Excellent The average condition rating for all the facilities is 89, which is considered Good.

Cost Estimates

The repair cost estimates that have been provided for each deficiency represent the estimated labor and material cost for correcting the deficiency, including normal installing sub-contractor overhead and profit, a cut/patch % allowance where applicable, a General

Conditions % allowance for the installing contractor where applicable, and a contingency % allowance, as well as an area cost adjustment for the San Diego area. Estimates are based on the R.S. Means series of construction and repair/renovation cost guides for 2015 and Pack & Associates in-house database. The area adjustment factor for the local geographic area is based on the R.S. Means cost guides. In those cases where estimating data for a unique item was not available from these sources the cost estimate provided is based on the experience of the technical specialists on the assessment team, or contact with vendors or construction specialists.

The cost estimates provided do NOT, however, include the following items:

- General Contractor markups;
- Architectural/Engineering Design Costs;
- Installing contractors main office OH;
- General Contractor Overhead and Profit;
- Additional Study/Analysis Costs;
- Sales Taxes;
- Performance bonds, permits, and insurance;
- Specialized equipment mobilization/demobilization.

Since the condition survey is based on a visual assessment, there are often aspects of a deficiency that cannot be ascertained because they are hidden from view. Thus, a clear picture of the extent of deterioration often cannot be determined till such time as a repair is actually undertaken. An example of this would be damage to roof decking. Often, a roof membrane replacement will not require decking replacement. However, there are instances where, once the membrane is removed, it is determined that all or some portion of the decking must also be replaced. In most cases the estimate for membrane replacement will not include decking unless it is apparent through a moisture survey, or indication on the underside via extensive staining, that the deck is also deteriorated. Similarly the extent of many structural, plumbing or HVAC deficiencies that may be behind walls, above ceilings or below floors is often not visible, and there are often no signs of additional damage beyond what is apparent on the surface.

For all of the above reasons, the cost estimates contained herein are meant to represent "base" costs for repair planning and programming. They can be impacted by the contingencies noted above as well as by the local contracting climate, the manner in which individual deficiencies are "packaged" into projects and other factors. **Realistically, because of these unknowns and associated related costs, as well as the items enumerated above, the actual costs of correcting a deficiency can be from 30% to as much as 60% higher than the base cost estimates provided for each deficiency. These considerations should be taken into account when developing a multi-year maintenance plan. The appropriate added cost percentage should be included in any final cost estimates developed for the plan.**

Survey Methodology

The facility condition survey is designed to systematically identify and document repair and maintenance deficiencies in a consistent manner. The survey is also designed to prioritize deficiencies using a scoring algorithm to derive a deficiency score for each deficiency. This score is intended to assist the College in its allocation deliberations for repair funding.

Repair/Maintenance Standards

A set of repair and maintenance standards was used by the survey team as a reference baseline for conducting the condition survey. The standards were designed by Pack & Associates to assist facility condition assessment personnel to identify minimum acceptable standards for building system condition. The standards provide a series of benchmarks that focus on:

- Maintaining a facility in a weathertight condition.
- Providing an adequate level of health and safety for occupants.
- Safeguarding capital investment in facilities,
- Helping meet or exceed the projected design life of key facility systems.
- Providing a baseline for maintenance planning.

Deficiency Severity/Corrective Action Benefit Scoring

To assist in the process of allocating repair funding two scores are calculated for each deficiency. The first score is called the Deficiency Severity Score and rates the relative severity of a given deficiency compared to other deficiencies. The second score is called the Corrective Action Benefit Score and rates the relative benefit of correcting a given deficiency compared to other deficiencies. The scoring systems are designed to maximize the objectivity of the surveyor while maintaining a high level of consistency in application among different surveyors.

A two-step scoring process is used for generating a Deficiency Severity Score. A priority is assigned to the deficiency by selecting either one or a combination of up to two potential levels of impact of the deficiency in descending order of relative importance:

Each impact choice is relatively less important than the one preceding it, and the surveyor assigns a percentage totaling 100% to up to two of the potential impacts.

The corrective action benefit scoring process is based on the premise that there are a finite number of definable benefits that can accrue through the expenditure of maintenance or repair dollars. Some of these benefits can accrue to a building system or component, some can accrue to an entire facility and some can accrue to the occupants and users of a facility. Six basic benefits have been identified and defined that can result from correcting a deficiency. The benefit score is determined by the field surveyor, who identifies one or more of the basic benefits as being applicable to a particular deficiency.

A more detailed discussion of the severity scoring system is provided in a separate section of this report.

Data Management/Reporting

The deficiency data identified and documented during the survey process is entered into a computerized database management system application that was developed in Microsoft Access. The system can generate a set of standardized detail and summary reports from this database system that provide a significant amount of information useful for repair as well as maintenance planning and programming. The six summary reports generated by the system have been presented above in this report. Since the system is also capable of generating eight different detail-level reports, providing a hard copy of all the reports would

result in a sizable amount of pages. Therefore, a subset of only three of these detail reports, as well as associated narrative discussions, are presented as hard copy in this document.

This document is divided into five sections that present the facility condition data and associated narratives so that they can easily be reviewed and analyzed by the reader.

The first section is titled “Introduction and Survey Overview”. It summarizes the results of the survey and provides an overview of the survey methodology and cost estimating process.

The second section is titled “Deficiency Summary”. It summarizes the deficiencies identified through the survey by building system in narrative form and includes a discussion of items of special concern documented by the survey.

The third section is titled “Maintenance Management Observations”. It discusses observed maintenance management issues, including staffing considerations, and maintenance funding considerations.

The fourth section is titled “Severity/Benefit Scoring”. It provides a narrative overview of the deficiency severity scoring and benefit scoring methodology used by Pack & Associates.

The last section contains the summary and detail data for each facility in which deficiencies were identified. For each facility there is first a *“Facility Condition Summary”* report that provides a narrative overview of deficiencies and certain summary data for each building. This is followed by a *“Deficiency Detail In Declining Severity Score Order”* report that provides the individual deficiency data detail for each facility grouped by building system and is presented in severity score order within each system. This is followed by the *“Multi-Year Programming Summary”* report, a 6-year programming summary that provides both descriptive and cost deficiency data, grouped by maintenance category, for each of six possible funding years, starting in 2015 for deficiencies designated as Critical.

Typical deficiency photos are provided at the end of the report for reference.

A sample of the remaining five detail reports will be provided to the Proposition R Bond Office with this submittal to allow it to determine if they would be useful, in which case they will be provided as a separate submittal.

The first of the five additional detail reports is titled *“Bldg. System Detail Report.”* This report is grouped by building system and provides the same level of detail as the Facility Detail report. The second report is titled *“Deficiency Detail by Maintenance Priority.”* This report is grouped by one of six maintenance priorities – Health/Safety, Prevent Facility Use Disruption, Prevent Building System Failure, Escalating Repair Cost Reduction, Maintenance/Operating Cost Reduction, and Occupant Comfort Enhancement – in declining order of urgency. The third report is titled *“Deficiency Detail by Recommended Repair Year.”* It is grouped by the recommended repair years assigned by the survey team, based on deferrability of 1 to 5 years from the survey date. There are also two reports that provide deficiency data in descending cost order. One is not grouped and one is grouped by maintenance category. These reports are meant to provide a basic overview of the relative magnitude of deficiency repair costs.

DEFICIENCY SUMMARY

The deficiencies identified through the condition survey reflect components and building systems that are currently malfunctioning or not operational, as well as components that are no longer cost-effective to repair or maintain. They also include components that are of a vintage for which it is difficult or impossible to obtain replacement parts, or components that have a high likelihood of failure during the next five years due to their advanced age.

Electrical Deficiencies

Ninety-eight deficiencies were identified. These deficiencies were primarily identified in the older buildings and consisted of issues with circuit breaker panel boards and distribution switchgear serving more than one building. Many circuit breaker panel boards are original equipment in buildings and are now 40 to 50 years old. Although the equipment is still functional, it is obsolete. Replacement parts are expensive and no longer readily available, and the equipment has reached the end of its generally accepted service life. There is also a concern with the reliability of the equipment, as it provides protection for the circuits connected to each breaker.

In several buildings there is distribution switchgear that is of a similar vintage, and which has the same issues regarding obsolescence, replacement part cost and availability, service life and reliability. The recommendation is that the panel boards and switchgear equipment should be programmed for replacement.

The maintenance staff and Proposition R program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting would be, and should be replaced with LED lighting. Retrofit kits are available and can be programmed for replacing existing lighting. However, the survey consultant considers this to be an Improvement rather than a repair.

Exterior Closure Deficiencies

Twenty-three deficiencies were identified. There are deteriorated wood fascia and trim boards on several buildings that need to be replaced. On several other buildings there are wood rooftop HVAC enclosures that are deteriorating and should be replaced. Two buildings have wood parapets on mechanical rooms that are badly deteriorated and need to be replaced.

The top of a concrete parapet on one building exhibits a lot of spalling where water collects in dimples where rebar is located. As this will contribute to rusting rebar installation of a metal parapet cap is recommended. Several buildings have concrete fascia which has joints with loose/deteriorating mortar. This needs to be addressed periodically by replacing the affected mortar. There is also parapet joint mortar on two buildings that is failing and needs to be replaced.

Additional deficiencies include damaged EIFS HVAC rooftop enclosures and badly deteriorated double doors on an enclosure on the roof of a building.

Floor Cover Deficiencies

Six floor cover deficiencies were identified. There is badly stained, dirty and generally deteriorating carpeting in six of the buildings that were surveyed. Replacement of all the carpet in these buildings has been recommended. The floor finishes in the other buildings surveyed were found to be in generally good condition.

HVAC Deficiencies

One-hundred deficiencies were identified. The majority of the HVAC deficiencies are associated with rooftop HVAC equipment that is aging. The rooftop equipment in a number of buildings, including condensing units, packaged A/C units, and split system heat pumps, appears to have been installed in 2001. and is now fourteen years old, which is almost ¾ of the generally accepted 20 year service life of the equipment. At this point increasing maintenance and repair costs can be anticipated going forward. Replacement should be programmed for this equipment starting in four to five years.

The air handling units in the mechanical rooms of several buildings appear to have also been installed in 2001. However, the units appear to still be in good condition, with remaining life estimated at about 15 more years. As the units age, however, maintenance requirements will become more frequent. The maintenance department should budget an allowance for repairs/maintenance that might be required over the next five years to properly maintain the equipment.

There is refrigerant piping insulation on several roofs associated with the HVAC equipment that is deteriorated and should be replaced at the same time as the equipment. In addition, there is also hot water piping insulation and expanded aluminum jacket insulation on several roofs that is also deteriorated and should be replaced. The joint sealant on the metal HVAC ductwork on several roofs is in various stages of deterioration, allowing conditioned air to escape to the outside and water to potentially leak into the ducts. The joints should all be re-sealed to conserve energy and prevent water damage.

There are also perforated Ceiling supply air diffusers in several buildings that are badly stained and rusting. These diffusers should all be replaced. Some system troubleshooting is required at the San Ysidro Higher Ed Center to address a large number of repetitive cold calls.

Interior Closure Deficiencies

Three deficiencies were identified. There are three buildings where some rest room partitions in the Mn's rest rooms have holes in the panels, or where the panels are badly marred and the surface damaged. These panels should be replaced with high-pressure plastic laminate partitions.

Paint/Finish Deficiencies

Ninety-one deficiencies have been identified. The smooth concrete surfaces and the surfaces of the roof parapets on a number of the concrete post and beam constructed buildings are badly discolored due to weathering and dirt accumulation. This detracts from the appearance of the building. In addition there is random concrete spalling on the beams

and posts. Pressure washing of all affected surfaces with a biologic agent to remove staining and loose spalled material is recommended.
The caulking in the joints of the parapet caps on several buildings is deteriorating to varying degrees, potentially allowing moisture to leak into the joints and onto the tops of the concrete parapets. Failing caulk should be removed and all joints on the affected caps re-caulked.

The finish on the sheet metal caps on the HVAC equipment enclosures on the roof of several buildings is peeling badly. The caps appear to be in good condition and only required re-finishing. Care should be taken to make sure the metal is properly primed after being cleaned. Sealant on the bolt heads on the HVAC enclosure mounting brackets on the same buildings is deteriorating and should be replaced on a scheduled basis—every two to three years. In addition, the finish on the wood of those HVAC enclosures is chalking and peeling across much of the surface. The wood surfaces should be re-finished and boards re-nailed as needed. There is also a metal strip at the base of the cement/stucco walls on some of these buildings that exhibits extensive surface rust. Rust should be removed and the metal re-finished.

One building has plywood fascia that is extremely weathered, with peeling paint. The surfaces need to be refinished. Another building has wood panels around the perimeter that have weathering surfaces that should also be re-finished. The metal stringers on the exterior stairs and landing frame are badly rusted, with some flaking metal. The metal should be thoroughly cleaned and re-finished. As an alternative the landing and stairs could be replaced.

The factory finish on the metal parapet caps on the San Ysidro Higher Ed Center is peeling badly and appears not to have been primed. Proper priming and re-finishing is required. The underside of two metal canopies on one building exhibit badly peeling paint. The metal appears not to have been primed. After thorough scraping/cleaning the metal should be properly primed and re-finished.

Exterior wood doors on one building are natural wood, with no apparent protective finish. Weathering and water staining is evident on the doors. The doors require sanding and the application of a clear sealer/urethane. There are exterior metal doors on a couple of other buildings that are badly weathered and need refinishing. There is torn and stained wallpaper on one wall inside of one building that should be replaced with high-pressure plastic laminate as the area receives a lot of abuse.

There is random minor damage such as scratches/marring and worn finishes on a number of interior doors throughout the main campus, likely resulting from constant use/abuse. Repair of minor scratches/dings and refinishing of worn door and frame surfaces will increase the life of the doors. An annual amount should be budgeted to address a set quantity of doors every year. Thirty-five has been recommended.

There is random weathering and minor chipping on the exterior wood panels on many of the buildings. The panels require scraping/sanding, patching of damaged areas, and re-finishing to protect the surfaces. It is recommended that funds be budgeted to address approximately 1,000 SF of panels every two years. There is also random weathering and minor chipping on the exterior wood window frames on many of the buildings. The window frames require scraping/sanding, patching of damaged areas, and re-finishing to protect the surfaces. It is recommended that funds be budgeted to address approximately thirty frames every years. There is random weathering and minor damage on a number of exterior doors throughout the campus. The finishes require scraping/sanding, patching of damaged areas,

and re-finishing to protect the surfaces. It is recommended that funds be budgeted to address approximately 25 doors every year.
The surfaces of the fire protection and natural gas piping on the roofs of many of the covered walkways are heavily oxidized and should be cleaned and finished with an epoxy-based paint.

Plumbing Deficiencies

Fourteen deficiencies have been identified. The lavatories and faucets in several rest rooms are old, the finishes are deteriorating, and the design is poor. The components are no longer cost-effective to repair or maintain and should be replaced. Under-counter lavatories and high-pressure laminate of synthetic quartz countertops are recommended.

There are domestic hot water heaters and storage tanks in a number of buildings that are in various stages of deterioration and at the end of their service lives. Replacement of the heaters and tanks is warranted.

Many of the supports for the fire protection and natural gas piping on the roofs of the covered walkways are are deteriorating and appear very inadequate and not to industry standard. Replacement with at least industry standard supports is recommended.

Sewer gas smells were observed in the first floor rest rooms in the San Ysidro Higher Ed Center. Some work has apparently been performed, however, the root cause of the gas odor has apparently not been determined. The soil, drain, waste and vent systems need to undergo additional troubleshooting.

Roof Deficiencies

Two-hundred nine deficiencies were identified. The majority of deficiencies focused on roof membrane and drains that require maintenance, replacement of roof membranes, replacement of sunscreens between buildings and covered walkways, and deteriorated covered walkway roof support beams.

In general roof maintenance appears to be very poor campus-wide. A majority of the roof surfaces are covered with leaves and debris, the membranes are very dirty, and drains/sumps are clogged with debris. These are items that should be addressed as part of an annual PM program. However, they have been noted as deficiencies due to the lack of attention. Clogged roof drains can clog downspouts and back water up onto membranes. Standing water can be detrimental to membranes over time. Similarly allowing leaves and debris to build up on membranes can cause a scouring action on the surface, which can accelerate membrane deterioration. Dirt buildup on the membranes makes it very difficult to determine the condition of the membrane and hides small deficiencies such as lap seam separation and membrane cuts or holes. It is very important that roof surfaces be cleaned at least every two years and drains/sumps a minimum of once a year.

A majority of the buildings constructed in the 60s and 70s have wood sunscreens between the covered walkways adjacent to the buildings and the buildings. The boards on these sunscreens, especially the tops of the boards, are constantly exposed to the elements, including rain. This deteriorates the finish on the boards very rapidly and exposes the surfaces to weather-related deterioration. The sunscreen appear to be an integral architectural feature of the building design and should be retained. The boards need to be replaced on most buildings. They should be replaced with treated S4S douglas fir lumber

and new hangers. The treated lumber is available in a browntone, which could eliminate the need for painting. The tops of the boards should be coated with 2 coats of a low-viscosity 100%-solids epoxy resin applied with a roller. The treated lumber and coating should provide a long-life system.

It is also recommended that once the roof surfaces have been cleared of debris the first time, those membranes not being replaced within the next five years should be power-washed using a cleaning solution formulated for single-ply membranes. Cleaning should be performed every three to four years.

There are several roofs on which the maintenance staff has indicated roof drains were damaged when the membrane was last replaced and the drains can no longer be kept properly fastened to the drain piping. These drains should be replaced when the roof membrane is next replaced. In addition, maintenance personnel have stated that they have identified deterioration in the drain piping, which drains vertically and under the slabs, in some of the buildings. They have requested that the vertical lines be abandoned and new lines installed to flow horizontally from below the drains to the building exterior. This should be done when the membrane is next replaced. It should be noted that this condition could not be independently verified by the survey team.

The roof access hatches on four buildings are very dangerous as portions or all of the closing damper and hinge mechanisms are broken. This presents a serious safety hazard for persons trying to access the roof. These hatches should be replaced as soon as possible. The roof access hatch on building 800 currently has no access hatch. It had one but the opening is now blocked by HVAC ducting. A new opening, access hatch, and ladder should be installed. The roof ladder in one building is wood and very old and unstable. It should be replaced with an aluminum ladder. Two roof ladders have no extendable/retractable grab bars, making egress out of the hatches difficult. Grab bars should be installed.

The single-ply membranes on ten buildings are 15 years old or more. On many of these roofs an assessment of condition was difficult because of debris build-up and very dirty membranes. To the extent possible an assessment of the membrane seams and fasteners was conducted to determine seam fraying and fastener lifting. Chalking and crazing of the surface was also examined to the extent possible. In all cases early indicators of deterioration were observed. Given the age of the roofs replacement programming has been recommended for 4 to 5 years out. Three built-up roofs were also observed to be in advanced stages of deterioration, with worn surfacing, split seams, and extensive cracking. Replacement of these roofs is also necessary. The metal roof on the maintenance shop building has extensive rusting on the panels, as well as numerous holes, especially at seams. Replacement of this roof is also warranted. There are three small cuts in the roof membrane on building 750 that need to be addressed

A number of cracked cement roof tiles were observed on one roof area at the Crown Cove Aquatic Center. These tiles should be replaced, and an annual budget allowance provided to replace broken tiles. The metal parapet cap on the main building was totally rusted through and falling apart. As this is a salt water environment, replacement with a stainless steel cap would be preferable.

The steel roof downspouts at building 2000 are welded to steel columns that support a covered walkway. These downspouts terminate about 4” above the concrete of the walkway and allow water to flow onto the bottoms of the steel support columns, where some rusting is

evident. The bottoms of these downspouts need to be reworked by adding a terminating piece to get water off the columns and repairing any rust on the columns.

The remaining deficiencies are associated with the wood structural support beams for the covered walkways adjacent to the buildings. Seven buildings have areas on some of the beams that are badly split, warped and otherwise deteriorated. The integrity of these beams is suspect and could endanger the integrity of the covered walkways. These beams should be replaced. The use of treated S4S douglas fir beams is recommended. These are available in a browntone, and are available in the larger sizes required, though they may have to be custom milled. The walkway support beams on two buildings have sections with some wood deterioration on the side surfaces and to depths of 1/" to 1". These damaged areas can be restored by cleaning out the deteriorated wood and utilizing a wood epoxy filler and sanding/painting the repairs.

Structural Deficiencies

Twenty-five deficiencies have been identified. The majority of the deficiencies are associated with spalling concrete on the concrete columns and beams on a number of buildings. On these buildings there is random minor to moderate spalling of the surface concrete, some of which exposes the structural rebar to the elements. All spalled concrete should be removed and spalled areas chipped, and exposed surfaces wire brushed. An epoxy bonding agent should be applied to all voids and the voids filled with high-strength epoxy-based patch cement. After the initial repairs, new spalling should be addressed every three to four years.

Site Deficiencies

Four deficiencies have been identified. These deficiencies address tree branches that are overhanging roofs on four buildings, allowing excessive debris to build-up on the roofs and clog drains. The trees at all the buildings need to be cut back from the roof.

Paving Deficiencies

Nineteen deficiencies have been identified. These deficiencies are associated with the campus parking lots, tennis courts, and walkways.

Fourteen tennis courts all have generalized cracking of the playing surfaces. Many of the cracks also appear to be present in the underlying asphalt/concrete. The four south tennis courts are the most problematic and the two bleacher courts are in the best relative condition. The remaining courts will also require work. Three deficiencies address these courts, which should be thoroughly cleaned, all cracks cleaned and filled using a polymer modified cement with silica sand, a base coat acrylic resurfacer applied, and two coats of acrylic color applied. Following a more detailed assessment additional repairs may be required to address low spots on the courts.

Eleven parking lots have deficiencies ranging from random hairline cracking to extensive wider cracking, to alligatoring, to base failure. These lots should all be addressed over the next five years to prevent further significant deterioration and material failure that would result in even more extensive and expensive repairs/replacement.

Repairs required include sweeping out, cleaning and sealing/patching of cracks, base and alligatored surface replacement by cold planing removal of 1/2" to 1" of asphalt and installing

a new 1" lift, and seal coating and re striping. In addition the parking area behind the bookstore has numerous small to moderate cracks that should be sealed/patched and the entire lot seal coated.

The concrete walks at tow buildings have a number of cracks that should be sealed to prevent further concrete deterioration. Portions of the concrete sidewalk adjacent to two buildings have badly broken sections that need to be replaced. In one of the areas tree roots are lifting the concrete.

Other Deficiencies

One deficiency classified as Other has been identified. A number of plastic-clad metal benches around the main campus site are deteriorated, including bent/rusted metal and shredded plastic. These benches should be replaced.

Deficiencies Requiring Immediate Attention

A number of deficiencies identified have been designated as Critical by the survey team. This means that they should be addressed as soon as possible.

1. The defective roof hatches on buildings 100, 103, 590, and 700 pose a serious safety hazards and need to be addressed quickly. Also, building 800 should have a new hatch installed as climbing over the concrete parapets is a safety hazard.

2. The lack of roof ladder grab bar extensions in buildings 105 and 900 is considered a safety hazard and should be addressed quickly.

3. The extensive rusting of the exterior stairs at building 381 needs to be addressed quickly to prevent further deterioration that could lead to failure. Also, one concrete walk section outside the building presents a serious safety hazard.

4. There are 3 small tears on the single-ply membrane on building 750 that should be addressed as an emergency repair.

5. One of the support beams on the covered walkway at building 560 is deteriorating to the point that replacement should be considered as a high priority.

6. The steel downspout terminations at building 2000 should be addressed soon to prevent further rusting of the bottoms of the walkway support columns.

7. The totally deteriorated metal parapet cap on building 9000 (Crown Cove) should be addressed to prevent parapet damage.

8. The peeling paint on the undersides of the metal canopies outside building 900 should be addressed as it is a nuisance. Large patches of paint can fall on passers-by.

9. The clogged roof drains/sumps and roof membranes with debris are considered Critical because maintenance appears to have been neglected for long periods and it is difficult to ascertain the condition of many of the membranes.

Continued Facility Utilization

The capital repairs that have been identified through this condition survey are considered to be minimum cost-effective recommendations for the continued use of the facilities at the College. The repairs should be performed as part of a “prudent owner” strategy. They reflect corrective action to building components that are generally deteriorated, are experiencing increased maintenance and repair requirements, have vastly exceeded their life expectancy, and are no longer considered cost-effective to repair or maintain.

MAINTENANCE MANAGEMENT OVERVIEW

The buildings at Southwestern College appear to have been reasonably well constructed and appear to be structurally sound. The interiors of the buildings are largely in good condition. The exteriors, and especially the roofs have some issues. Roof maintenance, especially, seems to have been very neglected.

Preventive Maintenance

Several recommendations are being made for preventive maintenance of select systems.

1. PM for roof systems is important for extending the life of the roof membranes on the buildings, especially with newer roofs. Preventive maintenance should focus on inspecting and cleaning roof drains/sumps at least once a year, and inspecting cap flashing joints annually to determine the condition of all caulking, and replace as necessary. This process will prevent many small leaks that can gradually cause more serious problems. A good roof PM program will save many dollars in unnecessary repairs and premature roof component replacement. Very little in the way of roof PM was evident during the condition survey.

   This PM program should also include the covered walkways, many of which have heavy amounts of leaf debris on them, as well as clogged roof drain inlets. The clogged drains can be especially problematic as they allow water to run over the sides of the roofs and onto the walkway support beams and the underside of the deck..

   Roof PM can be combined with minor repairs that will go a long way toward protecting the integrity of roof membranes and extending their life. Many organizations have successfully implemented a PM program that focuses not only on the tasks described above, but also on minor repairs. Typically, this is accomplished by assigning one person with knowledge of basic roofing systems and repairs the full-time task of performing both scheduled roof maintenance and minor repairs.

2. PM of electrical distribution panels is also strongly recommended every two to three years, especially for panels that are exposed to dirt and debris. Dirt and lint buildup inside electrical panels can cause overheating on busses or breakers that can lead to shorts or fires.

3. Replacement of roof-top HVAC equipment should be coupled with a sound PM program for the new equipment if it is to be preserved and its design life realized. A well-focused PM program, especially for new equipment, will significantly reduce the incidence of equipment breakdown and attendant repair cost. This will be true for the entire life cycle of the equipment. The lack of a PM program, on the other hand, will result in significantly shortened equipment life coupled with higher than normal repair and maintenance costs.

Long-Term Maintenance Planning

This facility condition survey provides the College with baseline data for multi-year maintenance planning and programming for the facilities that were surveyed, and will help

guide the College in establishing appropriate strategies for the required capital repair/replacement of those building systems and components.

One very effective tool for strategizing capital repairs and replacement is to develop a long-range maintenance plan that addresses capital repair and replacement needs in a comprehensive manner from both a facility and building system perspective, identifying emerging capital projects and prioritizing funding requirements into multi-year budgets. Such a plan, once established, must be fluid and revisited on an annual basis to modify and update projects as well as priorities. Without a well-developed and funded long-range maintenance plan the College will find itself increasingly behind the curve in terms of facility maintenance and will end up operating primarily in a reactive mode. The end result will be annual maintenance and repair costs that are much greater than with a process based on a sound multi-year maintenance plan and capital repair/replacement strategy.

Maintenance Management Concerns

Most maintenance organizations have experienced a significant reduction in funding due to declining funding by state, county and local government. Funding reductions have impacted all aspects of operations, including facility maintenance. Unfortunately, the impact on facility maintenance has only made a situation that was already becoming inadequate even worse.

That the steady erosion of funding for facility maintenance will have impacts should be obvious. One impact that can easily become a trend, and already has in some instances, is an overemphasis on “repair by replacement.” In part this is a reflection of our “throw away” society, where it has become much easier to replace something rather than attempt to troubleshoot and repair it. In part it is a reaction to increasingly scarce resources and resulting time pressures created by this scarcity.

One can sympathize with maintenance organizations who are being asked to do the same amount of work, and sometimes more, with less money and less staff, or with staffing levels that have not increased, despite significant increases in the amount of GSF being maintained because of new facility construction and acquisition. Troubleshooting equipment and taking the time to effect repairs may not be seen as a priority in such an environment. However, going down this road as a policy, whether explicitly stated or simply accepted as a trend, is dangerous, because the resulting long-term costs are far higher than following a prudent policy of balancing reasonable and cost-effective repairs and justifiable replacement.

Many facilities have older large equipment, especially HVAC equipment such as air handlers. This equipment, when manufactured, was very well constructed, often to industrial standards, as compared to commercial equipment manufactured today, which is very often much less robust. Much of this older equipment can be cost-effectively repaired. Fans, motor, dampers, heating/cooling coils, shafts and bearings in air handlers can all be replaced as they fail, without the added expense of replacing the case, which often requires expensive structural work because of size and location. Why throw away a chiller, when only the compressors are bad, and when they can often be rebuilt?

This tendency toward replacement rather than repair also too often extends to roofs. Many times the problems that occur with roof membranes can be satisfactorily resolved with repairs or partial replacement instead of wholesale replacement of the entire membrane. This will require more rigorous investigation to determine the extent of problems, often by employing thermal scanning and/or core sampling to determine the extent of leaks or

membrane condition as well as condition of underlying insulation. This does cost some money, but if it can save much more compared to the average replacement cost of a roof If repairs can extend the life of the membrane for five to ten more years, it is certainly money well spent.

If the expertise to troubleshoot and to really analyze the condition of building systems does not exist within the maintenance organization, the organization must make sure that the consultants it hires have the experience and expertise to provide effective troubleshooting and diagnosis, and that they can provide reasonable alternative solutions to a problem. Having design expertise is simply not enough. The same is true of contractors. A contractor should not be allowed to take the easy way out and simply recommend replacement when there could be cost-effective repair alternatives. The emphasis should be on contractors and consultants who can provide more than one solution to a maintenance problem, and insure that those solutions are reasonable and cost-effective.

Another increasing concern is DDC control systems. There appears to be a built-in obsolescence factor in these systems, such that manufacturers seem to be recommending replacement about every twelve years. It is all too common that colleges are being told that their systems are “obsolete” and will no longer be supported, that replacement parts will no longer be manufactured and that the college needs to upgrade to the latest system, often at very high cost. Attempting to determine the truth of these claims from manufacturers and their distributors has proved very difficult. To test these claims the survey consultant, starting in 2009, asked clients that requested DDC replacements to have the manufacturer and distributor provide written, signed confirmation that a system would no longer be supported as of a given date, that replacement parts would no longer be available as of a given date, and that there was no third party source of replacement parts. To date no such documentation has been forthcoming from either manufacturers or distributors.

It is highly likely that maintenance organizations will have to make do will less for the foreseeable future. This being the case, they need to make sure that their available maintenance funds are allocated in the most cost-effective manner possible. In practice this will mean giving a lot more thought to what should and can reasonably be rebuilt or repaired rather than simply replaced. It will also mean starting to apply the principles of life-cycle cost analysis and alternatives analysis to repair and replacement decisions.

DEFICIENCY SEVERITY AND BENEFIT SCORING METHODOLOGY

In most facility maintenance environments funding available for facility maintenance and repair never matches need in terms of identified requirements. This is true for capital repairs and improvements as well as for routine maintenance. Therefore, a key component of a sound maintenance planning process must be the ability to prioritize repair requirements for programming over a multi-year period and identify the potential benefits of recommended deficiency repairs. Pack & Associates accomplishes this process in two parts. The first part involves generating a severity score for each deficiency that ranks its relative severity compared to other deficiencies. The second part involves providing a basic measure of potential benefit to be gained by investing dollars in maintenance and/or repairs. Both parts are accomplished through a set of algorithms that assign a relative severity score as well as a benefit score to each deficiency identified during a facility condition survey. The scoring algorithms are "transparent" to the facility condition survey personnel so that they can be applied in a consistent manner across a large number of facilities.

Deficiency Severity Score

The key premise of the severity scoring process is that a surveyor should be able to assign a relative severity score to each deficiency in an objective fashion based on a clearly defined set of severity criteria. Timely accomplishment of repair work so that current deficiencies do not degrade to the point where more costly corrective action is required was the primary concern in designing the scoring system. A collateral concern was to reduce or eliminate any identified health and safety risks.

The core of the scoring process consists of:

- A reasonable set of definitions that are easily subscribed to by all levels of the survey management and execution team.
- A manageable number of priority levels, each of which is clearly distinct from the other.
- A clear implication of the potential impacts if corrective action is not taken.

Field prioritization of identified deficiencies is accomplished using a two-step scoring process which involves, first, determining whether a deficiency is Critical or Deferrable; and, second, prioritizing the criticality or deferability using a priority ranking system.

Criticality vs Deferability

A deficiency is considered **Critical** if it should be corrected within a short time of the date the assessment which identified that deficiency. Typically, this means that if the deficiency is not corrected within three to six months the potential for adverse impacts increases. Inherent in the assignment of "Critical" to a deficiency are the following three general considerations:

1) If the deficiency is not corrected within a reasonable time a significant health and/or safety risk will develop.

2) If the deficiency is not corrected within a reasonable time a significant increase in the cost of corrective action could result.
3) If the deficiency is not corrected within a reasonable time the deficiency could degrade to the point where an entire building system could be impacted.

All deficiencies degrade over time if they are not corrected, and often the cost of deferring corrective action will increase. **However, the magnitude of the degradation or cost increase is the key consideration in determining that a deficiency is "Critical."** For example, a built-up roof that has deteriorated to the point where asphalt is bubbling and felts are beginning to separate is deteriorating. However, if that deterioration is in its early stages and interior leaks are not yet present, roof replacement/repair can be legitimately deferred. There is a high likelihood that in a three to six month period there will be no significant increase in the repair/replacement cost of that roof or in the degree of overall degradation. If, however, the roof has been deteriorating for some time and leaks have become so common that they have begun to cause deterioration in other building systems the roof should be classified as "Critical." The cost of replacing that roof will not increase; however, the total cost of repairs associated with the leakage caused by that roof will in all likelihood increase significantly. Not only will the roof continue to degrade, but there will also be associated roof insulation, roof deck, or interior structural degradation, as well as possible damage to mechanical or electrical system components.

A deficiency is considered **Deferrable** if corrective action can be postponed for up to five years from the date that the assessment was conducted.

Obviously, deficiencies can degrade a great deal during five years, and their associated corrective costs can also increase significantly. However, inherent in the assignment of "Deferrable" to a deficiency are four general considerations:

1) The degree of degradation over the deferrable time frame will be at a relatively constant rate, or at least will not increase significantly from year to year.
2) The degree of corrective cost increase over the deferrable time frame will be at a relatively constant rate, or at least will not increase significantly from year to year.
3) Potential health/safety impacts will be minor and will not increase as to severity over the deferrable time frame.
4) There will be little, if any, mission impact over the deferrable time frame.

The point at which noticeable changes in the character of a deficiency can be projected with respect to the above considerations is the end point of the deferability time frame, because at that point the character of a deficiency can be assumed to change from "Deferrable" to "Critical."

The designation of "Critical" categorizes a deficiency as **Critical**. A **Deferrable** categorization requires selecting from among five deferability choices--"To 1 Yr.", "To 2 Yrs.", or "To 3 Yrs.", "To 4 Yrs.", or "To 5 Yrs."--to establish the deferability time frame. Thus, a deficiency can be deferred for several years without an appreciable change in the four considerations outlined above.

Prioritizing Deficiencies

Once a deficiency is categorized as either Critical or Deferrable, the next step in the scoring process is to assign a priority designating relative importance for planning and programming

purposes. A six-level prioritizing system has been developed for assigning a priority to a deficiency:

1 - Health/Safety This designation is the highest level priority assigned to a deficiency. It designates a deficiency as having potentially adverse health and/or safety impacts on building occupants or users if the deficiency is not corrected within the designated time frame.

2 – Bldg. Function Use This priority designates a deficiency as having a potentially adverse impact on the ability to fully provide one or more functions for which a facility or building system is used if the deficiency is not corrected within the designated time frame.

3 - System Use This priority designates a deficiency as having a potentially adverse impact on a building system's ability to operate properly if the deficiency is not corrected within the designated time frame.

4 - > Repair/Repl. Cost This priority designates that the repair or replacement cost associated with correcting a deficiency will escalate sharply after the time period designated for correction of the deficiency, in all probability because degradation of associated components or systems will occur.

5 - > Operating Cost This priority designates that the operating cost associated with correcting a deficiency will escalate sharply after the time period designated for correction of the deficiency.

6 - Quality of Use This is the lowest level priority assigned to a deficiency. It designates that the deficiency should be corrected as part of a "prudent owner" strategy within the time period designated.

For programming purposes each priority level is assumed to be relatively more important than the next. It is also assumed that more than one of the priority choices can apply to establishing the overall priority for a deficiency. Generally up to two selections can be made from the priority choices for each deficiency. Each of the selections are assigned a percentage value with the total of the selections equaling 100%. To avoid having to consider all possible combinations of numbers from 1 to 100 for a priority choice it was determined that a finite set of numbers should be used for scoring. For a single priority choice a score of 100 would always be assigned. For two priority choices, combinations of 50/50, 70/30, or 75/25 would typically be used.

In addition, a set of pre-determined severity scores have been developed for some two-dozen very common deficiencies consistently identified in major building systems through numerous condition surveys of a wide variety of facilities. This allows for even greater consistency in the prioritization process as similar deficiencies receive a similar severity score regardless of the person conducting the survey.

Severity Scoring

A severity score is calculated for each deficiency by an algorithm that is programmed into the database management system used by Pack & Associates for managing the survey data. The algorithm is a scoring process that calculates a severity score within each of the Critical or Deferrable choices based on a numerical value assigned to each facility-type category and the PRIORITY choices.

Benefit Score

The benefit scoring process is based on the premise that there are a finite number of definable benefits that can accrue through expenditure of maintenance or repair dollars. Some of these benefits can accrue to a building system or component, some can accrue to an entire facility, and some can accrue to the occupants or users of a facility. Pack & Associates, Inc. has identified six possible generalized benefits that could result from corrective action taken on a deficiency. These benefits have been defined through numerous discussions with clients for whom we have conducted condition surveys of thousands of facilities and include the following:

- Liability Avoidance
- Increased System/Component Life Expectancy
- Operating Cost Savings
- Bldg. Or System Reliability/Functionality Improvement
- Occupant Comfort Improvement
- Aesthetic Improvement

The process that is used to develop a potential benefit score for a deficiency is quite simple. First, the field surveyor determines the applicability of one or more of the six possible benefits to a particular deficiency. Then a scoring algorithm that is built into the database management system generates a benefit score based on the total of the values of each benefit.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

100 Administration 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$229,175** Cost Per Square Foot is **$47.72**

Facility Condition Rating = 84 (Fair) ***Average Severity Score = 51***

Repair Cost as a Percent of Facility Replacement Cost is 16 % 14 Deficiencies Were Identified

PRIMARY USE: Administration *FACILITY AGE:* *50* Yrs.

FACILITY SF: 4,802 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $1,464,610

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is High

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 29 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

100 Administration 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$550	
Annual PM		**2**	**50**	**$550**	**$0.11**
Improvement	Electrical	1	20	$3,400	
Improvement		**1**	**20**	**$3,400**	**$0.71**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,800	
Non-Annual Recurring Maintenance		**1**	**23**	**$1,800**	**$0.37**
Repair/Maintenance	HVAC	1	64	$5,200	
Repair/Maintenance	Paint/Finish	2	23	$3,000	
Repair/Maintenance	Structural	1	50	$2,100	
Repair/Maintenance		**4**	**40**	**$10,300**	**$2.14**
Replacement/Renewal	Electrical	1	68	$52,500	
Replacement/Renewal	HVAC	1	68	$49,700	
Replacement/Renewal	Roof	4	71	$110,925	
Replacement/Renewal		**6**	**70**	**$213,125**	**$44.38**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition, with only two minor deficiencies observed. Interior maintenance likewise appears adequate. The 14 deficiencies identified were associated with HVAC, electrical, roof and exterior/interior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be non-existent. The roof is covered with a significant amount of leaves and other debris and the membrane surface is extremely dirty, making it very difficult to determine overall condition. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane and the lack of maintenance, premature deterioration is likely, and the roof membrane and insulation should be replaced in 4 to 5 years. A short term alternative would be to apply a polyester-reinforced 20 mil fluid neoprene coating to a clean membrane surface. This could extend the life of the membrane by five to eight years.

Leaves and debris should be cleaned off the roof surface at least once per year. This will become especially important once a new roof is installed. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year.

The college maintenance staff has voiced concern over the roof drains, which drains down through the building and under the slab. Apparently they were damaged when the roof membrane was last replaced, and have been problematic to keep fastened to the drain line. There is also concern by maintenance staff over deterioration of the drain piping inside the building. It is recommended that the drains be replaced and the vertical drain lines abandoned in favor of new lines installed to flow horizontally from the drains to the exterior of the building. This should be done at the same time the roof membrane is next replaced.

The roof access hatch has no closing dampers, which creates a serious safety hazard as there is no way to retard the door from closing quickly with great force, and makes it difficult to open. The hatch is a safety hazard and should be replaced as quickly as possible.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment, including some exhaust fans, should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The circuit breaker panels are approximately 50 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

Two minor deficiencies were identified. The wallpaper on a wall in one room is torn and stained, as well as damaged

by cart traffic. It should be replaced with a high-pressure laminate plastic wainscot. The finish on one interior door is badly deteriorated. The door should be sanded, primed and re-finished.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

111 The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Various interior rooms

QUANTITY: 1 LS ***REPAIR COST:*** **$52,500** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 **Electrical** **Improvement** Light Fixtures

107 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, 4 x 4, Cans

Light fixtures throughout building.

QUANTITY: 59 EA ***REPAIR COST:*** **$3,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 38 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$55,900** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$11.64**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

110 The rooftop condensing unit and packaged A/C unit appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. There are also three circular aluminum exhaust fans on the roof that appear to be original 1965 equipment and should be scheduled for replacement at the same time.

Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Sixty feet of insulation has been included in the cost estimate.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$49,700** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

112 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$5,200** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **HVAC** **$54,900** **AV. SEVERITY SCORE =** **66** **COST PER BLDG GSF=** **$11.43**

40 **Paint/Finish** **Repair/Maintenance** Wall Finish

108 Wallpaper on one wall is torn and stained. Remove wallpaper and install 42" high pressure plastic laminate (HPL) wainscot. Patch, prime and paint wall above wainscot.
144 SF
101D

QUANTITY: 144 SF ***REPAIR COST:*** **$2,650** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 12 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Abuse *Recommended Method of Repair:* Contract
Benefit Score = 8 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Repair

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.
Perimeter of building

QUANTITY: 2,400 SF ***REPAIR COST:*** **$1,800** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

5 **Paint/Finish** **Repair/Maintenance** Door

109 Interior door finish is deteriorated/damaged. Sand, prime and re-finish door and install 42" high-pressure plastic laminate (HPL) kick plate on door.
3' x 6'-8"
101D

QUANTITY: 1 EA ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 12 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Abuse *Recommended Method of Repair:* In-House
Benefit Score = 8 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Repair

SYSTEM SUB-TOTAL **Paint/Finish** **$4,800** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$1.00**

100 Roof **Replacement/Renewal** Roof Access Hatch

102 The roof access hatch has no closing dampers, which creates a serious safety hazard as there is no way to retard the door from closing quickly and with great force, which could cause serious injury to anyone trying to close the hatch. It also makes the hatch very difficult to open, which can also be very dangerous. Replace the hatch with a new unit with dampers and side control handles.

Roof access hatch

QUANTITY: 1 EA ***REPAIR COST:*** **$2,025** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **A-Health/Safety Issue**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

75 Roof **Replacement/Renewal** Single-Ply Roof Membrane

113 College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is a significant amount of debris on the roof and the membrane surface is extremely dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times.

The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years.

A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset.

Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset.

Roof

Short Term Alternative A further inspection of the membrane surface can be conducted once it has been power washed. If only minimal to moderate chalking and/or crazing are apparent a fluid neoprene coating with a polyester reinforcing can be applied (20 mil) over the cleaned membrane to possibly extend membrane life another 5 to 8 years. Estimated cost is $35,200.

QUANTITY: 51 SQ ***REPAIR COST:*** **$72,750** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

68 **Roof** **Replacement/Renewal** Roof Drains

106 The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced. This should be done when the roof membrane is next replaced.

The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior. This should be done when the roof membrane is next replaced.
Estimate approximately 10 LF of 4" line per drain

At each roof drain

QUANTITY: 4 EA ***REPAIR COST:*** **$10,050** **Deferrable** **Est. Remaining Life = 4 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 0 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

60 **Roof** **Annual PM** Roof Drains

104 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 2 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

105 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4xboards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

3390 LF 2x8 boards and 485 LF of 4 x

All sunscreen boards on perimeter of building

QUANTITY: 3,875 LF ***REPAIR COST:*** **$26,100** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

40 **Roof** **Annual PM** Roof Membrane

103 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Once the roof membrane has been replaced, debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 5,000 SF ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$111,475** **AV. SEVERITY SCORE =** **64** **COST PER BLDG GSF=** **$23.21**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 30 SF ***REPAIR COST:*** **$2,100** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$2,100**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.44**
FACILITY TOTALS	**COST TOTAL =**	**$229,175**	**AV. SEVERITY SCORE =**	**51**	**COST PER BLDG GSF=**	**$47.72**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**100**	**Administration**	Roof							
		Roof Drains	2 EA							
104		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$200						
40	**100**	**Administration**	Roof							
		Roof Membrane	5,000 SF							
103		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Once the roof membrane has been replaced, debris should be cleaned off the roof at least once per year. *Roof surface*							$350	
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$200**	**$0**	**$0**	**$0**	**$0**	**$350**	**$550**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**100**	**Administration**	Electrical							
		Light Fixtures	59 EA							
107		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building.*			$3,400					
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$3,400**	**$0**	**$0**	**$0**	**$0**	**$3,400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
23	**100**	**Administration**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,400 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,800					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **23**	**$0**	**$1,800**	**$0**	**$0**	**$0**	**$0**	**$1,800**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**100**	**Administration**	HVAC							
		Air Handler	1 EA							
112		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$5,200					
50	**100**	**Administration**	Structural							
		Concrete Columns and Beams	30 SF							
101		There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$2,100					
40	**100**	**Administration**	Paint/Finish							
		Wall Finish	144 SF							
108		Wallpaper on one wall is torn and stained. Remove wallpaper and install 42” high pressure plastic laminate (HPL) wainscot. Patch, prime and paint wall above wainscot. *101D*			$2,650					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**100**	**Administration**	Paint/Finish							
		Door	1 EA							
109		Interior door finish is deteriorated/damaged. Sand, prime and re-finish door and install 42” high-pressure plastic laminate (HPL) kick plate on door. *101D*			$350					
TOTAL:		**Repair/Maintenance**	***AV. SEVER. SCORE =*** **40**	**$0**	**$10,300**	**$0**	**$0**	**$0**	**$0**	**$10,300**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
100	**100**	**Administration**	Roof							
		Roof Access Hatch	1 EA							
102		The roof access hatch has no closing dampers, which creates a serious safety hazard as there is no way to retard the door from closing quickly and with great force, which could cause serious injury to anyone trying to close the hatch. It also makes the hatch very difficult to open, which can also be very dangerous. Replace the hatch with a new unit with dampers and side control handles. *Roof access hatch*		$2,025						

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
75	**100**	**Administration**	Roof							
		Single-Ply Roof Membrane	51 SQ							
113		College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is a significant amount of debris on the roof and the membrane surface is extremely dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years. A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset. Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset. *Roof*						$72,750		

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**100**	**Administration**	Electrical							
		Circuit Breaker Panels	1 LS							
111		The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Various interior rooms*				$52,500				
68	**100**	**Administration**	Roof							
		Roof Drains	4 EA							
106		The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced. This should be done when the roof membrane is next replaced. The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior. This should be done when the roof membrane is next replaced. *At each roof drain*					$10,050		

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
68	**100**	**Administration**	HVAC							
		HVAC Equipment	1 LS							
110		The rooftop condensing unit and packaged A/C unit appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. There are also three circular aluminum exhaust fans on the roof that appear to be original 1965 equipment and should be scheduled for replacement at the same time. Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Sixty feet of insulation has been included in the cost estimate. *Roof*						$49,700	
40	**100**	**Administration**	Roof							
		Wood Sunscreen Boards	3,875 LF							
105		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4xboards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$26,100				

TOTAL: Replacement/Renewal	*AV. SEVER. SCORE =*	**70**	**$2,025**	**$0**	**$78,600**	**$0**	**$82,800**	**$49,700**	**$213,125**	
TOTAL FOR ALL CATEGORIES	*AV. SEVER. SCORE =*	**51**	**$2,225**	**$15,500**	**$78,600**	**$0**	**$82,800**	**$50,050**	**$229,175**	

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

102 Staff Lounge 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$271,245** Cost Per Square Foot is **$131.29**

Facility Condition Rating = 57 (Poor) ***Average Severity Score = 43***

Repair Cost as a Percent of Facility Replacement Cost is 43 % 14 Deficiencies Were Identified

PRIMARY USE: Staff Support *FACILITY AGE:* *50* Yrs.

FACILITY SF: 2,066 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $630,130

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 26 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

102 Staff Lounge 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$400	
Annual PM		**2**	**50**	**$400**	**$0.19**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$825	
Non-Annual Recurring Maintenance		**1**	**23**	**$825**	**$0.40**
Repair/Maintenance	Structural	1	50	$1,700	
Repair/Maintenance		**1**	**50**	**$1,700**	**$0.82**
Replacement/Renewal	Electrical	2	44	$101,220	
Replacement/Renewal	HVAC	3	47	$107,950	
Replacement/Renewal	Interior Closure	1	5	$650	
Replacement/Renewal	Plumbing	1	20	$3,950	
Replacement/Renewal	Roof	3	61	$54,550	
Replacement/Renewal		**10**	**44**	**$268,320**	**$129.87**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition, with only two minor deficiencies observed. Interior maintenance likewise appears adequate. The 14 deficiencies identified were associated with HVAC, electrical, roof and exterior/interior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Southwestern College SURVEY DATE: 8/15

102 Staff Lounge 900 Otay Lakes Rd.

Roof maintenance on this building appears to be non-existent. The roof is covered with significant amounts of leaves and other debris and the membrane surface is very dirty, making it difficult to determine overall condition. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane and the lack of maintenance, premature deterioration is likely and the roof membrane and insulation should be replaced in 4 to 5 years. A short term alternative would be to apply a polyester-reinforced 20 mil fluid neoprene coating to a clean membrane surface. This could extend the life of the membrane by five to eight years.

Leaves and debris should be cleaned off the roof surface at least once per year. This will become especially important once a new roof is installed. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year.

The college maintenance staff has voiced concern over the roof drains, which drains down through the building and under the slab. Apparently they were damaged when the roof membrane was last replaced, and have been problematic to keep fastened to the drain line. There is also concern by maintenance staff over deterioration of the drain piping inside the building. It is recommended that the drains be replaced and the vertical drain lines abandoned in favor of new lines installed to flow horizontally from the drains to the exterior of the building. This should be done at the same time the roof membrane is next replaced.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years. There is also some exhaust fans on the roof that appear to be original and should be replaced.

This building houses the hot water heating boiler that, in addition to this building, serves buildings 100, 103 and 104. The equipment is original and deteriorating. Replacement is warranted.

The circuit breaker panels are approximately 50 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced. The building also houses the main distribution gear for buildings 100, 102, 103, 104 and 105. This equipment is of similar age and condition, with similar concerns, and should also be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

The lavatories and faucets in the Men's rest room are old, with deteriorated finishes and poor design. The components are no longer cost-effective to maintain and should be replaced. New lavs and faucets set in a synthetic quartz or high-pressure laminate countertop are recommended.

Two minor deficiencies were identified. There are holes in some Men's rest room partitions, as well as surface damage. The partitions should be replaced with high-pressure plastic laminate partitions. The perforated HVAC supply diffusers in the ceilings of the building are stained and rusted, and should be replaced.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels and Distribution Swithboard

111 The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

This building also houses the main distribution switchgear for buildings 100, 102, 103, 104, and 105. This equipment is of a similar age and condition, with similar parts and reliability concerns. Replacement of this equipment is also recommended.

Same as existing unless additional capacity is required

Electrical Room and various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$98,800** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 **Electrical** **Replacement/Renewal** Light Fixtures

107 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, Cans, 2 x 2

Light fixtures throughout building.

QUANTITY: 44 EA ***REPAIR COST:*** **$2,420** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 38 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$101,220** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$48.99**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

112 This building houses the hot water heating boiler (900 MBH input with 1 HP pump) that serves buildings 100, 102, 103, and 104. It appears to be original 1965 equipment and is no longer considered cost-effective to repair or maintain. It should be replaced.

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$59,100** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016

68 **HVAC** **Replacement/Renewal** HVAC Equipment

110 The two packaged rooftop units appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. In addition, there are three circular aluminum exhaust fans on the roof that appear to be original 1965 equipment and should be scheduled for replacement at the same time.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$47,500** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

5 **HVAC** **Replacement/Renewal** HVAC Ceiling Diffusers

108 HVAC supply perforated ceiling diffuser(s) are stained and rusty. Install new ceiling diffuser(s).
2' x 2'

Ceilings throughout building

QUANTITY: 5 EA ***REPAIR COST:*** **$1,350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract
Benefit Score = 8 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

SYSTEM SUB-TOTAL **HVAC** **$107,950** **AV. SEVERITY SCORE =** **47** **COST PER BLDG GSF=** **$52.25**

5 **Interior Closure** **Replacement/Renewal** Toilet Partition

109 There are holes in the rest room partition(s), and there are areas where the surface finish is damaged. Replace with new high pressure plastic laminate toilet partition(s).
3' x 5'

Men's toilet.

QUANTITY: 1 EA ***REPAIR COST:*** **$650** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Abuse *Recommended Method of Repair:* Contract
Benefit Score = 21 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Interior Closure** **$650** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$0.31**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 1,260 SF ***REPAIR COST:*** **$825** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$825** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.40**

20 **Plumbing** **Replacement/Renewal** Rest Room Lavatory

106 The lavatories and faucets in the Men's rest room are old, with deteriorating finishes and poor design. The components are no longer cost-effective to repair or maintain and should be replaced with under-counter lavatories and new faucets set in a high-pressure laminate or synthetic quartz countertop.

3 Lavs, 3 faucets, 8' counter

Men's public restroom

QUANTITY: 1 LS ***REPAIR COST:*** **$3,950** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 29 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

SYSTEM SUB-TOTAL **Plumbing** **$3,950** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$1.91**

75 **Roof** **Replacement/Renewal** Single-Ply Roof Membrane

113 College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is a significant amount of debris on the roof and the membrane surface is extremely dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times.

The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years.

A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset.

Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset.

Roof

Short Term Alternative A further inspection of the membrane surface can be conducted once it has been power washed. If only minimal to moderate chalking and/or crazing are apparent a fluid neoprene coating with a polyester reinforcing can be applied (20 mil) over the cleaned membrane to possibly extend membrane life another 5 to 8 years. Estimated cost is $16,000.

QUANTITY: 23 SQ ***REPAIR COST:*** **$36,600** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

68 **Roof** **Replacement/Renewal** Roof Drains

105 The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced.

The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior

Estimate approximately 10 LF of 4" line per drain

At each roof drain

QUANTITY: 2 EA ***REPAIR COST:*** **$5,000** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 0 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 2 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

104 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

1540 LF 2x8 boards and 485 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 2,025 LF ***REPAIR COST:*** **$12,950** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

40 **Roof** **Annual PM** Roof Membrane

102 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Once the roof membrane has been replaced, debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 2,250 SF ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$54,950** **AV. SEVERITY SCORE =** **57** **COST PER BLDG GSF=** **$26.60**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 25 SF *REPAIR COST:* **$1,700** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$1,700**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.82**
FACILITY TOTALS	**COST TOTAL =**	**$271,245**	**AV. SEVERITY SCORE =**	**43**	**COST PER BLDG GSF=**	**$131.29**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**102**	**Staff Lounge**	Roof							
		Roof Drains	2 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$200						
40	**102**	**Staff Lounge**	Roof							
		Roof Membrane	2,250 SF							
102		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Once the roof membrane has been replaced, debris should be cleaned off the roof at least once per year. *Roof surface*							$200	
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$200**	**$0**	**$0**	**$0**	**$0**	**$200**	**$400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE / DEF. NO.	BLDG.	COMPONENT DEFICIENCY / LOCATION	SYSTEM / QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
23	**102**	**Staff Lounge**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	1,260 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$825					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **23**	**$0**	**$825**	**$0**	**$0**	**$0**	**$0**	**$825**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**102**	**Staff Lounge**	Structural							
		Concrete Columns and Beams	25 SF							
101		There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$1,700					
TOTAL:		**Repair/Maintenance**	***AV. SEVER. SCORE =*** **50**	**$0**	**$1,700**	**$0**	**$0**	**$0**	**$0**	**$1,700**

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
75	**102**	**Staff Lounge**	Roof							
		Single-Ply Roof Membrane	23 SQ							
113		College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is a significant amount of debris on the roof and the membrane surface is extremely dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years. A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset. Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset. *Roof*					$36,600		
68	**102**	**Staff Lounge**	HVAC							
		HVAC Equipment	1 LS							
112		This building houses the hot water heating boiler (900 MBH input with 1 HP pump) that serves buildings 100, 102, 103, and 104. It appears to be original 1965 equipment and is no longer considered cost-effective to repair or maintain. It should be replaced. *Mechanical Room*			$59,100					

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**102**	**Staff Lounge**	Electrical							
		Circuit Breaker Panels and Distribution Swithboard	1 LS							
111		The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. This building also houses the main distribution switchgear for buildings 100, 102, 103, 104, and 105. This equipment is of a similar age and condition, with similar parts and reliability concerns. Replacement of this equipment is also recommended. *Electrical Room and various locations*				$98,800				
68	**102**	**Staff Lounge**	Roof							
		Roof Drains	2 EA							
105		The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced. The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior *At each roof drain*						$5,000		

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**102**	**Staff Lounge**	HVAC							
		HVAC Equipment	1 LS							
110		The two packaged rooftop units appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. In addition, there are three circular aluminum exhaust fans on the roof that appear to be original 1965 equipment and should be scheduled for replacement at the same time. *Roof*							$47,500	
40	**102**	**Staff Lounge**	Roof							
		Wood Sunscreen Boards	2,025 LF							
104		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$12,950				
20	**102**	**Staff Lounge**	Electrical							
		Light Fixtures	44 EA							
107		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building.*			$2,420					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**102**	**Staff Lounge**	Plumbing							
		Rest Room Lavatory	1 LS							
106		The lavatories and faucets in the Men's rest room are old, with deteriorating finishes and poor design. The components are no longer cost-effective to repair or maintain and should be replaced with under-counter lavatories and new faucets set in a high-pressure laminate or synthetic quartz countertop. *Men's public restroom*			$3,950					
5	**102**	**Staff Lounge**	Interior Closure							
		Toilet Partition	1 EA							
109		There are holes in the rest room partition(s), and there are areas where the surface finish is damaged. Replace with new high pressure plastic laminate toilet partition(s). *Men's toilet.*			$650					
5	**102**	**Staff Lounge**	HVAC							
		HVAC Ceiling Diffusers	5 EA							
108		HVAC supply perforated ceiling diffuser(s) are stained and rusty. Install new ceiling diffuser(s). *Ceilings throughout building*			$1,350					
TOTAL: Replacement/Renewal			***AV. SEVER. SCORE =*** **44**	**$0**	**$67,470**	**$111,750**	**$0**	**$41,600**	**$47,500**	**$268,320**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **43**	**$200**	**$69,995**	**$111,750**	**$0**	**$41,600**	**$47,700**	**$271,245**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

103 Classroom — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$135,245** — Cost Per Square Foot is **$38.47**

Facility Condition Rating = 87 (Fair) — ***Average Severity Score = 57***

Repair Cost as a Percent of Facility Replacement Cost is 13 % — 11 Deficiencies Were Identified

PRIMARY USE: Classroom/Office — *FACILITY AGE:* *50* Yrs.

FACILITY SF: 3,516 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $1,072,380

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

103 Classroom — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$650	
Annual PM		**2**	**50**	**$650**	**$0.18**
Improvement	Electrical	1	20	$3,400	
Improvement		**1**	**20**	**$3,400**	**$0.97**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$985	
Non-Annual Recurring Maintenance		**1**	**23**	**$985**	**$0.28**
Repair/Maintenance	Electrical	1	72	$1,360	
Repair/Maintenance	HVAC	1	64	$5,200	
Repair/Maintenance		**2**	**68**	**$6,560**	**$1.87**
Replacement/Renewal	Electrical	1	68	$38,500	
Replacement/Renewal	Roof	4	71	$85,150	
Replacement/Renewal		**5**	**70**	**$123,650**	**$35.17**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition, with no deficiencies observed. Interior maintenance likewise appears adequate. The 11 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. No structural concerns were noted. The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

The roof access hatch has no closing dampers, which creates a serious safety hazard as there is no way to retard the door from closing quickly with great force, and makes it difficult to open. The hatch is a safety hazard and should be replaced as quickly as possible.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

103 Classroom 900 Otay Lakes Rd.

Roof maintenance on this building appears to be non-existent. The roof is covered with a significant amount of leaves and other debris and the membrane surface is very dirty, making it extremely difficult to determine overall condition. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane and the lack of maintenance, premature deterioration is likely and the roof membrane and insulation should be replaced in 4 to 5 years. A short term alternative would be to apply a polyester-reinforced 20 mil fluid neoprene coating to a clean membrane surface. This could extend the life of the membrane by five to eight years.

Leaves and debris should be cleaned off the roof surface at least once per year. This will become especially important once a new roof is installed. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year.

The college maintenance staff has voiced concern over the roof drains, which drains down through the building and under the slab. Apparently they were damaged when the roof membrane was last replaced, and have been problematic to keep fastened to the drain line. There is also concern by maintenance staff over deterioration of the drain piping inside the building. It is recommended that the drains be replaced and the vertical drain lines abandoned in favor of new lines installed to flow horizontally from the drains to the exterior of the building. This should be done at the same time the roof membrane is next replaced.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The circuit breaker panels are approximately 50 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced. There is also a badly rusted 1/2" electrical conduit on the roof that should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

72 **Electrical** **Repair/Maintenance** Conduit

106 Replace badly rusted electrical conduit
1/2"
Roof

QUANTITY: 120 LF ***REPAIR COST:*** **$1,360** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 45 ***Planning Priority:*** **A-Health/Safety Issue**

Repair

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

109 The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.
Same as existing unless additional capacity is required
Various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$38,500** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 **Electrical** **Improvement** Light Fixtures

107 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.
2 x 4, 4 x 4, 2 x 2
Light fixtures throughout building

QUANTITY: 60 EA ***REPAIR COST:*** **$3,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$43,260** **AV. SEVERITY SCORE =** **53** **COST PER BLDG GSF=** **$12.30**

64 **HVAC** **Repair/Maintenance** HVAC Equipment

108 A condensing unit on the roof appears to have been recently replaced and is in good condition. The air handling unit in the mechanical room of this building was installed in 2001 and appears to still be in good condition. However, as the unit ages repairs and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$5,200** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

SYSTEM SUB-TOTAL **HVAC** **$5,200** **AV. SEVERITY SCORE =** **64** **COST PER BLDG GSF=** **$1.48**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining.

Perimeter of building

QUANTITY: 1,500 SF ***REPAIR COST:*** **$985** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$985** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.28**

100 Roof **Replacement/Renewal** Roof Access Hatch

101 The roof access hatch has no closing dampers, which creates a serious safety hazard as there is no way to retard the door from closing quickly and with great force, which could cause serious injury to anyone trying to close the hatch. It also makes the hatch very difficult to open, which can also be very dangerous. Replace the hatch with a new unit with dampers and side control handles.

Roof access hatch

QUANTITY: 1 EA ***REPAIR COST:*** **$2,050** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **A-Health/Safety Issue**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

75 Roof **Replacement/Renewal** Single-Ply Roof Membrane

110 College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is a significant amount of debris on the roof and the membrane surface is very dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times.

The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years.

A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset.

Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset.

Roof

Short Term Alternative A further inspection of the membrane surface can be conducted once it has been power washed. If only minimal to moderate chalking and/or crazing are apparent a fluid neoprene coating with a polyester reinforcing can be applied (20 mil) over the cleaned membrane to possibly extend membrane life another 5 to 8 years. Estimated cost is $25,600.

QUANTITY: 39 SQ ***REPAIR COST:*** **$62,500** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

68 **Roof** **Replacement/Renewal** Roof Drains

105 The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced.

The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior

Estimate approximately 10 LF of 4" line per drain

At each roof drain

QUANTITY: 4 EA ***REPAIR COST:*** **$10,000** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 38 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 4 EA ***REPAIR COST:*** **$375** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

104 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

1288 LF 2x8 boards and 284 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 1,572 LF ***REPAIR COST:*** **$10,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

40 **Roof** **Annual PM** Roof Membrane

102 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Once the roof membrane has been replaced, debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 3,750 SF ***REPAIR COST:*** **$275** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$85,800**	**AV. SEVERITY SCORE =**	**64**	**COST PER BLDG GSF=**	**$24.40**
FACILITY TOTALS	**COST TOTAL =**	**$135,245**	**AV. SEVERITY SCORE =**	**57**	**COST PER BLDG GSF=**	**$38.47**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**103**	**Classroom**	Roof							
		Roof Drains	4 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$375						
40	**103**	**Classroom**	Roof							
		Roof Membrane	3,750 SF							
102		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Once the roof membrane has been replaced, debris should be cleaned off the roof at least once per year. *Roof surface*							$275	
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$375**	**$0**	**$0**	**$0**	**$0**	**$275**	**$650**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**103**	**Classroom**	Electrical							
		Light Fixtures	60 EA							
107		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*			$3,400					
TOTAL: Improvement			*AV. SEVER. SCORE =* **20**	**$0**	**$3,400**	**$0**	**$0**	**$0**	**$0**	**$3,400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
23	**103**	**Classroom**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	1,500 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining. *Perimeter of building*			$985					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **23**	**$0**	**$985**	**$0**	**$0**	**$0**	**$0**	**$985**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
72	**103**	**Classroom**	Electrical							
		Conduit	120 LF							
106		Replace badly rusted electrical conduit			$1,360					
		Roof								
64	**103**	**Classroom**	HVAC							
		HVAC Equipment	1 LS							
108		A condensing unit on the roof appears to have been recently replaced and is in good condition. The air handling unit in the mechanical room of this building was installed in 2001 and appears to still be in good condition. However, as the unit ages repairs and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.			$5,200					
		Mechanical Room								
TOTAL:		**Repair/Maintenance**	*AV. SEVER. SCORE =* **68**	**$0**	**$6,560**	**$0**	**$0**	**$0**	**$0**	**$6,560**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
100	**103**	**Classroom**	Roof							
		Roof Access Hatch	1 EA							
101		The roof access hatch has no closing dampers, which creates a serious safety hazard as there is no way to retard the door from closing quickly and with great force, which could cause serious injury to anyone trying to close the hatch. It also makes the hatch very difficult to open, which can also be very dangerous. Replace the hatch with a new unit with dampers and side control handles. *Roof access hatch*		$2,050						

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
75	**103**	**Classroom**	Roof							
		Single-Ply Roof Membrane	39 SQ							
110		College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is a significant amount of debris on the roof and the membrane surface is very dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years. A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset. Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset. *Roof*					$62,500		

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**103**	**Classroom**	Electrical							
		Circuit Breaker Panels	1 LS							
109		The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Various locations*				$38,500				
68	**103**	**Classroom**	Roof							
		Roof Drains	4 EA							
105		The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced. The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior *At each roof drain*							$10,000		

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**103**	**Classroom**	Roof							
		Wood Sunscreen Boards	1,572 LF							
104		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$10,600				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **70**	**$2,050**	**$0**	**$49,100**	**$0**	**$72,500**	**$0**	**$123,650**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **57**	**$2,425**	**$10,945**	**$49,100**	**$0**	**$72,500**	**$275**	**$135,245**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

104 Academic Senate 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$130,175** Cost Per Square Foot is **$67.91**

Facility Condition Rating = 78 (Fair) ***Average Severity Score = 52***

Repair Cost as a Percent of Facility Replacement Cost is 22 % 11 Deficiencies Were Identified

PRIMARY USE: Conference *FACILITY AGE:* *50* Yrs.

FACILITY SF: 1,917 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $584,685

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 26 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

104 Academic Senate 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$400	
Annual PM		**2**	**50**	**$400**	**$0.21**
Improvement	Electrical	1	20	$875	
Improvement		**1**	**20**	**$875**	**$0.46**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$825	
Non-Annual Recurring Maintenance		**1**	**23**	**$825**	**$0.43**
Repair/Maintenance	HVAC	1	64	$10,400	
Repair/Maintenance	Structural	1	50	$1,375	
Repair/Maintenance		**2**	**57**	**$11,775**	**$6.14**
Replacement/Renewal	Electrical	1	68	$36,500	
Replacement/Renewal	HVAC	1	68	$28,100	
Replacement/Renewal	Roof	3	61	$51,700	
Replacement/Renewal		**5**	**64**	**$116,300**	**$60.67**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition, with no deficiencies observed. Interior maintenance likewise appears adequate. The 10 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years. The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling

concrete.

Roof maintenance on this building appears to be poor. The roof is covered with a significant amount of leaves and other debris and the membrane surface is very dirty, making it difficult to determine overall condition. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane and the lack of maintenance, premature deterioration is likely and the roof membrane and insulation should be replaced in 4 to 5 years. A short term alternative would be to apply a polyester-reinforced 20 mil fluid neoprene coating to a clean membrane surface. This could extend the life of the membrane by five to eight years.

Leaves and debris should be cleaned off the roof surface at least once per year. This will become especially important once a new roof is installed. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year.

The college maintenance staff has voiced concern over the roof drains, which drains down through the building and under the slab. Apparently they were damaged when the roof membrane was last replaced, and have been problematic to keep fastened to the drain line. There is also concern by maintenance staff over deterioration of the drain piping inside the building. It is recommended that the drains be replaced and the vertical drain lines abandoned in favor of new lines installed to flow horizontally from the drains to the exterior of the building. This should be done at the same time the roof membrane is next replaced.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The circuit breaker panels are approximately 50 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

107 The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$36,500** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building

QUANTITY: 21 EA ***REPAIR COST:*** **$875** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$37,375** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$19.50**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

106 The two condensing units on the roof appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Seventy - five feet of insulation has been included in the cost estimate.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$28,100** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

108 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **HVAC** **$38,500** **AV. SEVERITY SCORE =** **66** **COST PER BLDG GSF=** **$20.08**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 1,260 SF ***REPAIR COST:*** **$825** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$825** **AV. SEVERITY SCORE = 23** **COST PER BLDG GSF= $0.43**

75 **Roof** **Replacement/Renewal** Single-Ply Roof Membrane

109 College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is an extensive amount of debris on the roof and the membrane surface is very dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times.

The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years.

A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset.

Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset.

Roof

Short Term Alternative A further inspection of the membrane surface can be conducted once it has been power washed. If only minimal to moderate chalking and/or crazing are apparent a fluid neoprene coating with a polyester reinforcing can be applied (20 mil) over the cleaned membrane to possibly extend membrane life another 5 to 8 years. Estimated cost is $16,000.

QUANTITY: 24 SQ ***REPAIR COST:*** **$34,900** **Deferrable** **Est. Remaining Life = 4 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract
Benefit Score = 54 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

68 **Roof** **Replacement/Renewal** Roof Drains

102 The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced.

The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior

Estimate approximately 10 LF of 4" line per drain

At each roof drain

QUANTITY: 2 EA ***REPAIR COST:*** **$5,000** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 0 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

60 **Roof** **Annual PM** Roof Drains

104 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 2 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

101 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

1470 LF 2x8 boards and 210 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 1,680 LF ***REPAIR COST:*** **$11,800** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

40 **Roof** **Annual PM** Roof Membrane

103 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Once the roof membrane has been replaced, debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 2,250 SF ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$52,100** **AV. SEVERITY SCORE =** **57** **COST PER BLDG GSF=** **$27.18**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

110 There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 20 SF ***REPAIR COST:*** **$1,375** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$1,375**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.72**
FACILITY TOTALS	**COST TOTAL =**	**$130,175**	**AV. SEVERITY SCORE =**	**52**	**COST PER BLDG GSF=**	**$67.91**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**104**	**Academic Senate**	Roof							
		Roof Drains	2 EA							
104		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$200						
40	**104**	**Academic Senate**	Roof							
		Roof Membrane	2,250 SF							
103		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Once the roof membrane has been replaced, debris should be cleaned off the roof at least once per year. *Roof surface*							$200	
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$200**	**$0**	**$0**	**$0**	**$0**	**$200**	**$400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**104**	**Academic Senate**	Electrical							
		Light Fixtures	21 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*			$875					
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$875**	**$0**	**$0**	**$0**	**$0**	**$875**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE / DEF. NO.	BLDG.	COMPONENT DEFICIENCY / LOCATION	SYSTEM / QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
23	**104**	**Academic Senate**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	1,260 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$825					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **23**	**$0**	**$825**	**$0**	**$0**	**$0**	**$0**	**$825**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**104**	**Academic Senate**	HVAC							
		Air Handler	1 EA							
108		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					
50	**104**	**Academic Senate**	Structural							
		Concrete Columns and Beams	20 SF							
110		There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$1,375					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **57**	**$0**	**$11,775**	**$0**	**$0**	**$0**	**$0**	**$11,775**

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
75	**104**	**Academic Senate**	Roof							
		Single-Ply Roof Membrane	24 SQ							
109		College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is an extensive amount of debris on the roof and the membrane surface is very dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years. A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset. Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset. *Roof*					$34,900		

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**104**	**Academic Senate**	Electrical							
		Circuit Breaker Panels	1 LS							
107		The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Various locations*				$36,500				
68	**104**	**Academic Senate**	Roof							
		Roof Drains	2 EA							
102		The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced. The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior *At each roof drain*							$5,000		

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
68	**104**	**Academic Senate**	HVAC							
		HVAC Equipment	1 LS							
106		The two condensing units on the roof appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Seventy - five feet of insulation has been included in the cost estimate. *Roof*								$28,100	
40	**104**	**Academic Senate**	Roof							
		Wood Sunscreen Boards	1,680 LF							
101		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*					$11,800				

TOTAL: Replacement/Renewal	***AV. SEVER. SCORE =*** **64**	**$0**	**$0**	**$48,300**	**$0**	**$39,900**	**$28,100**	**$116,300**
TOTAL FOR ALL CATEGORIES	***AV. SEVER. SCORE =*** **52**	**$200**	**$13,475**	**$48,300**	**$0**	**$39,900**	**$28,300**	**$130,175**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

105 Classroom — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$256,875** — Cost Per Square Foot is **$38.23**

Facility Condition Rating = 87 (Fair) — ***Average Severity Score = 55***

Repair Cost as a Percent of Facility Replacement Cost is 13 % — 11 Deficiencies Were Identified

PRIMARY USE: Campus Police — *FACILITY AGE:* *44* Yrs.

FACILITY SF: 6,720 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $2,049,600

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

105 Classroom — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	60	$375	
Annual PM		**1**	**60**	**$375**	**$0.06**
Improvement	Electrical	1	20	$6,700	
Improvement	Roof	1	100	$525	
Improvement		**2**	**60**	**$7,225**	**$1.08**
Non-Annual Recurring Maintenance	HVAC	1	20	$5,400	
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,375	
Non-Annual Recurring Maintenance		**2**	**21**	**$6,775**	**$1.01**
Repair/Maintenance	HVAC	1	64	$10,400	
Repair/Maintenance		**1**	**64**	**$10,400**	**$1.55**
Replacement/Renewal	Electrical	1	68	$58,200	
Replacement/Renewal	HVAC	1	68	$47,200	
Replacement/Renewal	Roof	3	61	$126,700	
Replacement/Renewal		**5**	**64**	**$232,100**	**$34.54**

CONDITION SUMMARY:

This building was constructed for the college in 1971. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition, with no deficiencies observed. Interior maintenance likewise appears adequate. The 11 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

105 Classroom 900 Otay Lakes Rd.

Roof maintenance on this building is difficult to determine. The roof is relatively bare of leaves and other debris, but the membrane surface is very dirty in areas, making it somewhat difficult to determine overall condition. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane and the lack of maintenance, premature deterioration is likely and the roof membrane and insulation should be replaced in 4 to 5 years. A short term alternative would be to apply a polyester-reinforced 20 mil fluid neoprene coating to a clean membrane surface. This could extend the life of the membrane by five to eight years.

Leaves and debris should be cleaned off the roof surface at least once per year. This will become especially important once a new roof is installed. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. The existing roof ladder has no extendable grab bar at the hatch opening. This poses a safety hazard that should be corrected by installing a bar.

The college maintenance staff has voiced concern over the roof drains, which drains down through the building and under the slab. Apparently they were damaged when the roof membrane was last replaced, and have been problematic to keep fastened to the drain line. There is also concern by maintenance staff over deterioration of the drain piping inside the building. It is recommended that the drains be replaced and the vertical drain lines abandoned in favor of new lines installed to flow horizontally from the drains to the exterior of the building. This should be done at the same time the roof membrane is next replaced.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The joint sealant on the metal ductwork on the roof is deteriorating, allowing hot and cold air to escape, reducing HVAC system efficiency and potentially allowing water to penetrate ducts. The existing joint sealant should be replaced.

The circuit breaker panels are approximately 44 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

108 The circuit breaker panelboards are original to the building and are now approximately 44 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Electrical Room and various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$58,200** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019

20 **Electrical** **Improvement** Light Fixtures

106 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building

QUANTITY: 117 EA ***REPAIR COST:*** **$6,700** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$64,900** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$9.66**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

107 The two condensing units on the roof appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Seventy - five feet of insulation has been included in the cost estimate.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$47,200** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

109 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

103 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 750 LF ***REPAIR COST:*** **$5,400** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$63,000** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$9.38**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining.

Perimeter of building

QUANTITY: 2,100 SF ***REPAIR COST:*** **$1,375** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,375** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.20**

100 **Roof** **Improvement** Roof Ladder

105 Install retractable roof ladder grab bar extender on top of roof ladder for safety.

Roof ladder

QUANTITY: 1 EA ***REPAIR COST:*** **$525** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **A-Health/Safety Issue**

Repair

75 **Roof** **Replacement/Renewal** Single-Ply Roof Membrane

110 College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is no debris on the roof, but the membrane is dirty in spots.

The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years.

A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset.

Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset.

Roof

Short Term Alternative A further inspection of the membrane surface can be conducted once it has been power washed. If only minimal to moderate chalking and/or crazing are apparent a fluid neoprene coating with a polyester reinforcing can be applied (20 mil) over the cleaned membrane to possibly extend membrane life another 5 to 8 years. Estimated cost is $46,000.

QUANTITY: 68 SQ ***REPAIR COST:*** **$94,200** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract
Benefit Score = 54 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2045

68 **Roof** **Replacement/Renewal** Roof Drains

104 The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced.

The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior
Estimate approximately 10 LF of 4" line per drain

At each roof drain

QUANTITY: 4 EA ***REPAIR COST:*** **$10,000** **Deferrable** **Est. Remaining Life = 4 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 0 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

60 **Roof** **Annual PM** Roof Drains

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 4 EA ***REPAIR COST:*** **$375** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

102 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

2800 LF 2x8 boards and 400 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 3,200 LF ***REPAIR COST:*** **$22,500** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**	**$127,600**	**AV. SEVERITY SCORE =**	**69**	**COST PER BLDG GSF=**	**$18.99**
FACILITY TOTALS	**COST TOTAL =**	**$256,875**	**AV. SEVERITY SCORE =**	**55**	**COST PER BLDG GSF=**	**$38.23**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE / DEF. NO.	BLDG.	COMPONENT DEFICIENCY / LOCATION	SYSTEM / QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**105**	**Classroom**	Roof							
		Roof Drains	4 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$375						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **60**	**$375**	**$0**	**$0**	**$0**	**$0**	**$0**	**$375**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
100	**105**	**Classroom**	Roof							
		Roof Ladder	1 EA							
105		Install retractable roof ladder grab bar extender on top of roof ladder for safety. *Roof ladder*			$525					
20	**105**	**Classroom**	Electrical							
		Light Fixtures	117 EA							
106		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*			$6,700					
TOTAL:		**Improvement**	*AV. SEVER. SCORE =* **60**	**$0**	**$7,225**	**$0**	**$0**	**$0**	**$0**	**$7,225**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
23	**105**	**Classroom**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,100 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining. *Perimeter of building*			$1,375					
20	**105**	**Classroom**	HVAC							
		HVAC Distribution Ductwork	750 LF							
103		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$5,400				
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **21**	**$0**	**$1,375**	**$5,400**	**$0**	**$0**	**$0**	**$6,775**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**105**	**Classroom**	HVAC							
		Air Handler	1 EA							
109		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **64**	**$0**	**$10,400**	**$0**	**$0**	**$0**	**$0**	**$10,400**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
75	**105**	**Classroom**	Roof							
	Single-Ply Roof Membrane		68 SQ							
110	College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is no debris on the roof, but the membrane is dirty in spots. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years. A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset. Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset. *Roof*							$94,200	
68	**105**	**Classroom**	Electrical							
	Circuit Breaker Panels		1 LS							
108	The circuit breaker panelboards are original to the building and are now approximately 44 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Electrical Room and various locations*							$58,200		

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**105**	**Classroom**	Roof							
		Roof Drains	4 EA							
104		The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced. The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior *At each roof drain*						$10,000		
68	**105**	**Classroom**	HVAC							
		HVAC Equipment	1 LS							
107		The two condensing units on the roof appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Seventy - five feet of insulation has been included in the cost estimate. *Roof*							$47,200	

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**105**	**Classroom**	Roof							
		Wood Sunscreen Boards	3,200 LF							
102		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$22,500				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **64**	**$0**	**$0**	**$22,500**	**$0**	**$68,200**	**$141,400**	**$232,100**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **55**	**$375**	**$19,000**	**$27,900**	**$0**	**$68,200**	**$141,400**	**$256,875**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

200 Business — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$238,725** — Cost Per Square Foot is **$27.96**

Facility Condition Rating = 91 (Good) — ***Average Severity Score = 44***

Repair Cost as a Percent of Facility Replacement Cost is 9 % — 14 Deficiencies Were Identified

PRIMARY USE: Classroom — *FACILITY AGE:* *50* Yrs.

FACILITY SF: 8,538 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $2,604,090

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

200 Business — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$1,000	
Annual PM		**2**	**50**	**$1,000**	**$0.12**
Improvement	Electrical	1	20	$9,300	
Improvement		**1**	**20**	**$9,300**	**$1.09**
Non-Annual Recurring Maintenance	HVAC	1	20	$300	
Non-Annual Recurring Maintenance	Paint/Finish	2	34	$2,225	
Non-Annual Recurring Maintenance	Roof	1	50	$3,700	
Non-Annual Recurring Maintenance		**4**	**35**	**$6,225**	**$0.73**
Repair/Maintenance	HVAC	1	64	$10,400	
Repair/Maintenance	Structural	1	50	$3,400	
Repair/Maintenance		**2**	**57**	**$13,800**	**$1.62**
Replacement/Renewal	Electrical	1	68	$124,800	
Replacement/Renewal	HVAC	1	68	$32,900	
Replacement/Renewal	Interior Closure	1	5	$2,800	
Replacement/Renewal	Roof	2	54	$47,900	
Replacement/Renewal		**5**	**50**	**$208,400**	**$24.41**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition, with only one minor deficiency observed. Interior maintenance likewise appears very adequate. The 14 deficiencies identified were associated with HVAC, electrical, roof and exterior/interior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding

agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be average. The roof is covered with a moderate amount of leaves and other debris and the membrane surface is dirty in a number of areas, making it somewhat difficult to determine overall condition. Leaves and debris should be cleaned off the roof surface at least once per year. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is recommended that the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane revealed no apparent deficiencies.

The college maintenance staff has voiced concern over the roof drains, which drains down through the building and under the slab. Apparently they were damaged when the roof membrane was last replaced, and have been problematic to keep fastened to the drain line. There is also concern by maintenance staff over deterioration of the drain piping inside the building. It is recommended that the drains be replaced and the vertical drain lines abandoned in favor of new lines installed to flow horizontally from the drains to the exterior of the building. This should be done at the same time the roof membrane is next replaced.

The parapet wall cap joint caulking is deteriorating, provides a way for moisture to leak into the joints and onto the concrete parapet cap, potentially degrading it. All joint caulking should be replaced.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment, including some exhaust fans, should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced at the same time.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape, reducing the energy efficiency of the equipment and allowing water to penetrate the joints. This can deteriorate the ductwork. The joint sealant should be replaced.

The circuit breaker panels are approximately 50 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced.

The building also houses the 1600 amp main distribution switchgear for buildings 200 and 220. This equipment is of similar age and condition, with similar parts and reliability concerns. Replacement is also recommended.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light

fixtures is viewed as an improvement.

There are some holes in the rest room partitions in the Men's rest room and some panels have damaged surfaces. The panels should be replaced with high-pressure plastic laminate panels.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels and Distribution Swithboard

111 The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

This building also houses the 1600 amp main distribution switchgear for buildings 200 and 220. This equipment is of a similar age and condition, with similar parts and reliability concerns. Replacement of this equipment is also recommended.

Same as existing unless additional capacity is required

Electrical Room and various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$124,800** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 **Electrical** **Improvement** Light Fixtures

109 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building

QUANTITY: 162 EA ***REPAIR COST:*** **$9,300** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$134,100** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$15.71**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

110 Two condensing units appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Refrigerant piping insulation on the roof is deteriorated and should be replaced when the condensing units are replaced. Fifty feet of insulation has been included in the cost estimate.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$32,900** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

112 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

102 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 40 LF ***REPAIR COST:*** **$300** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$43,600** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$5.11**

5 **Interior Closure** **Replacement/Renewal** Toilet Partition

108 There are holes in the rest room partition(s), and there are areas where the surface finish is damaged. Replace with new high pressure plastic laminate toilet partition(s).
One ADA and two regular size

Men's toilet

QUANTITY: 3 EA ***REPAIR COST:*** **$2,800** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Abuse *Recommended Method of Repair:* Contract
Benefit Score = 21 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Interior Closure** **$2,800** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$0.33**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

107 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 50 LF ***REPAIR COST:*** **$375** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,460 SF ***REPAIR COST:*** **$1,850** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,225** **AV. SEVERITY SCORE =** **34** **COST PER BLDG GSF=** **$0.26**

68 **Roof** **Replacement/Renewal** Roof Drains

106 The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced.

The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior

Estimate approximately 10 LF of 4" line per drain

At each roof drain

QUANTITY: 4 EA ***REPAIR COST:*** **$10,000** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

60 **Roof** **Annual PM** Roof Drains

104 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 4 EA ***REPAIR COST:*** **$400** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

113 The single-ply membrane on this building contains a moderate amount of leaf and other debris, and the surface has several dirty areas, which can makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An assessment of the membrane indicates that it appears to be in reasonable condition However, a thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 8,600 SF ***REPAIR COST:*** **$3,700** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 3 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract

Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

103 There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 8,550 SF ***REPAIR COST:*** **$600** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

105 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

4752 LF 2x8 boards and 594 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 5,346 LF ***REPAIR COST:*** **$37,900** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$52,600** **AV. SEVERITY SCORE =** **52** **COST PER BLDG GSF=** **$6.16**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 50 SF ***REPAIR COST:*** **$3,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$3,400**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.40**
FACILITY TOTALS	**COST TOTAL =**	**$238,725**	**AV. SEVERITY SCORE =**	**44**	**COST PER BLDG GSF=**	**$27.96**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**200**	**Business**	Roof							
		Roof Drains	4 EA							
104		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$400						
40	**200**	**Business**	Roof							
		Roof Membrane	8,550 SF							
103		There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$600						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$1,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,000**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE / DEF. NO.	BLDG.	COMPONENT DEFICIENCY / LOCATION	SYSTEM / QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**200**	**Business**	Electrical							
		Light Fixtures	162 EA							
109		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*			$9,300					
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$9,300**	**$0**	**$0**	**$0**	**$0**	**$9,300**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**200**	**Business**	Roof							
		Single-Ply Roof Membrane	8,600 SF							
113		The single-ply membrane on this building contains a moderate amount of leaf and other debris, and the surface has several dirty areas, which can makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An assessment of the membrane indicates that it appears to be in reasonable condition However, a thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$3,700					
46	**200**	**Business**	Paint/Finish							
		Metal Parapet Cap Joints	50 LF							
107		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*				$375				
23	**200**	**Business**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,460 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,850					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**200**	**Business**	HVAC							
		HVAC Distribution Ductwork	40 LF							
102		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$300				
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **35**	**$0**	**$5,550**	**$675**	**$0**	**$0**	**$0**	**$6,225**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**200**	**Business**	HVAC							
		Air Handler	1 EA							
112		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					
50	**200**	**Business**	Structural							
		Concrete Columns and Beams	50 SF							
101		There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$3,400					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **57**	**$0**	**$13,800**	**$0**	**$0**	**$0**	**$0**	**$13,800**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**200**	**Business**	Electrical							
		Circuit Breaker Panels and Distribution Swithboard	1 LS							
111		The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. This building also houses the 1600 amp main distribution switchgear for buildings 200 and 220. This equipment is of a similar age and condition, with similar parts and reliability concerns. Replacement of this equipment is also recommended. *Electrical Room and various locations*				$124,800				
68	**200**	**Business**	Roof							
		Roof Drains	4 EA							
106		The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced. The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior *At each roof drain*						$10,000		

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**200**	**Business**	HVAC							
		HVAC Equipment	1 LS							
110		Two condensing units appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Refrigerant piping insulation on the roof is deteriorated and should be replaced when the condensing units are replaced. Fifty feet of insulation has been included in the cost estimate. *Roof*							$32,900	
40	**200**	**Business**	Roof							
		Wood Sunscreen Boards	5,346 LF							
105		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$37,900				
5	**200**	**Business**	Interior Closure							
		Toilet Partition	3 EA							
108		There are holes in the rest room partition(s), and there are areas where the surface finish is damaged. Replace with new high pressure plastic laminate toilet partition(s). *Men's toilet*			$2,800					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL: Replacement/Renewal		*AV. SEVER. SCORE =*	**50**	**$0**	**$2,800**	**$162,700**	**$0**	**$10,000**	**$32,900**	**$208,400**
TOTAL FOR ALL CATEGORIES		*AV. SEVER. SCORE =*	**44**	**$1,000**	**$31,450**	**$163,375**	**$0**	**$10,000**	**$32,900**	**$238,725**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

210 Administration 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$117,075** Cost Per Square Foot is **$9.77**

Facility Condition Rating = 97 (Excellent) ***Average Severity Score = 43***

Repair Cost as a Percent of Facility Replacement Cost is 3 % 6 Deficiencies Were Identified

PRIMARY USE: Administration *FACILITY AGE:* *37* Yrs.

FACILITY SF: 11,982 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $3,654,510

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 28 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

210 Administration 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	60	$575	
Annual PM		**1**	**60**	**$575**	**$0.05**
Improvement	Electrical	1	20	$10,800	
Improvement		**1**	**20**	**$10,800**	**$0.90**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$2,100	
Non-Annual Recurring Maintenance	Roof	1	50	$5,400	
Non-Annual Recurring Maintenance		**2**	**36**	**$7,500**	**$0.63**
Replacement/Renewal	HVAC	1	68	$80,200	
Replacement/Renewal	Roof	1	40	$18,000	
Replacement/Renewal		**2**	**54**	**$98,200**	**$8.20**

CONDITION SUMMARY:

This building was constructed for the college in 1978. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition, with no deficiencies observed. Interior maintenance likewise appears very adequate. The 6 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears good. There is no debris present on the roof. However, the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is also strongly recommended that the roof membrane be power washed in about 3 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

Southwestern College SURVEY DATE: 8/15

210 Administration 900 Otay Lakes Rd.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment, including some exhaust fans, should be programmed for replacement in about 5 years. There are also four aluminum exhaust fans on the roof that are deteriorated and should be replaced at the same time.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures

103 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2

Light fixtures throughout building

QUANTITY: 189 EA ***REPAIR COST:*** **$10,800** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$10,800** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.90**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

104 Three packaged roof top air conditioning units dated 2001and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. There are also four circular aluminum exhaust fans on the roof that appear to be original 1965 equipment and should be scheduled for replacement at the same time.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$80,200** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

SYSTEM SUB-TOTAL **HVAC** **$80,200** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$6.69**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,760 SF ***REPAIR COST:*** **$2,100** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,100** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.18**

60 **Roof** **Annual PM** Roof Drains

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 6 EA ***REPAIR COST:*** **$575** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

105 The single-ply membrane on this building contains currently appears debris-free, but there is some surface dirt. As debris and dirt accumulate, it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in three to four years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 12,000 SF ***REPAIR COST:*** **$5,400** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

102 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

2250 LF 2x8 boards and 320 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 2,570 LF ***REPAIR COST:*** **$18,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**	**$23,975**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$2.00**
FACILITY TOTALS	**COST TOTAL =**	**$117,075**	**AV. SEVERITY SCORE =**	**43**	**COST PER BLDG GSF=**	**$9.77**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**210**	**Administration**	Roof							
		Roof Drains	6 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$575						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **60**	**$575**	**$0**	**$0**	**$0**	**$0**	**$0**	**$575**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**210**	**Administration**	Electrical							
		Light Fixtures	189 EA							
103		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*			$10,800					
TOTAL:		**Improvement**	***AV. SEVER. SCORE =*** **20**	**$0**	**$10,800**	**$0**	**$0**	**$0**	**$0**	**$10,800**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**210**	**Administration**	Roof							
		Single-Ply Roof Membrane	12,000 SF							
105		The single-ply membrane on this building contains currently appears debris-free, but there is some surface dirt. As debris and dirt accumulate, it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in three to four years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$5,400			
23	**210**	**Administration**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,760 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$2,100					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **36**	**$0**	**$2,100**	**$0**	**$5,400**	**$0**	**$0**	**$7,500**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**210**	**Administration**	HVAC							
		HVAC Equipment	1 LS							
104		Three packaged roof top air conditioning units dated 2001and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. There are also four circular aluminum exhaust fans on the roof that appear to be original 1965 equipment and should be scheduled for replacement at the same time. *Roof*							$80,200	
40	**210**	**Administration**	Roof							
		Wood Sunscreen Boards	2,570 LF							
102		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$18,000				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **54**	**$0**	**$0**	**$18,000**	**$0**	**$0**	**$80,200**	**$98,200**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **43**	**$575**	**$12,900**	**$18,000**	**$5,400**	**$0**	**$80,200**	**$117,075**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

220 Business — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$229,675** — Cost Per Square Foot is **$26.90**

Facility Condition Rating = 91 (Good) — ***Average Severity Score = 43***

Repair Cost as a Percent of Facility Replacement Cost is 9 % — 9 Deficiencies Were Identified

PRIMARY USE: Classroom — *FACILITY AGE:* *49* Yrs.

FACILITY SF: 8,538 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $2,604,090

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

220 Business — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	60	$375	
Annual PM		**1**	**60**	**$375**	**$0.04**
Improvement	Electrical	1	20	$12,750	
Improvement		**1**	**20**	**$12,750**	**$1.49**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,850	
Non-Annual Recurring Maintenance	Roof	1	50	$3,700	
Non-Annual Recurring Maintenance		**2**	**36**	**$5,550**	**$0.65**
Repair/Maintenance	Roof	1	70	$1,500	
Repair/Maintenance	Structural	1	50	$2,200	
Repair/Maintenance		**2**	**60**	**$3,700**	**$0.43**
Replacement/Renewal	Electrical	1	68	$111,400	
Replacement/Renewal	Floor Cover	1	5	$47,100	
Replacement/Renewal	Roof	1	40	$48,800	
Replacement/Renewal		**3**	**38**	**$207,300**	**$24.28**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition, with only one minor deficiency observed. Interior maintenance likewise appears very adequate. The 9 deficiencies identified were associated with HVAC, electrical, roof and exterior/interior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

Southwestern College SURVEY DATE: 8/15

220 Business 900 Otay Lakes Rd.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be adequate. The roof is pretty much debris-free. Leaves and debris should be cleaned off the roof surface at least once per year if they are present. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is also strongly recommended that the roof membrane be power washed in about 3 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

One of the covered walkway support beams has a large areas where the wood is deteriorating on the face of the beam. This beam, which may have to be custom milled, should be replaced as it could become a structural issue. An S4S treated doug fir browntone beam sould be used for maximum weather resistance and life expectancy.

The circuit breaker panels are approximately 49 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced.

The building also houses a 600 amp main distribution switchgear fed from building 200 that serves building 220. This equipment is of similar age and condition, with similar parts and reliability concerns. Replacement is also recommended.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

The carpet throughout the building is badly stained, very dirty and generally deteriorating. Replacement is recommended with a low-pile, high-wear commercial carpet. Prior to installation the concrete slab should be waterproofed.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels and Distribution Swithboard

107 The circuit breaker panelboards are original to the building and are now approximately 49 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

This building also houses a 600 amp distribution switchgear fed from building 200 that serves building 220. This equipment is of a similar age and condition, with similar parts and reliability concerns. Replacement of this equipment is also recommended.

Same as existing unless additional capacity is required

Electrical Room and various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$111,400** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018

20 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building

QUANTITY: 223 ***REPAIR COST:*** **$12,750** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$124,150** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$14.54**

5 **Floor Cover** **Replacement/Renewal** Carpet

106 Carpet is badly stained, very dirty, and generally deteriorating and should be replaced. Before installing new carpet, waterproof the concrete slab. Install new low pile high wear commercial grade carpet using waterproof adhesive.

140' x 60'

Carpet throughout building

QUANTITY: 960 SY ***REPAIR COST:*** **$47,100** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 21 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2033

SYSTEM SUB-TOTAL **Floor Cover** **$47,100** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$5.52**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,460 SF ***REPAIR COST:*** **$1,850** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,850** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.22**

70 **Roof** **Repair/Maintenance** Walkway Roof Support Beam

101 One of the covered walkway support beams on one side of the walkway has a large area where the wood is deteriorating on the face of the beam. This beam should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beam should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled.
4" x 15"

West side

Short Term Alternative Thoroughly clean-out all areas of deteriorating wood, apply low-viscosity epoxy resin sealer/consolidant to all affected surfaces, and apply epoxy resin repair paste/putty to all areas. When cured, sand smooth and re-finish repaired areas. ($1,075)

QUANTITY: 20 LF ***REPAIR COST:*** **$1,500** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 61 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 4 EA ***REPAIR COST:*** **$375** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

108 The single-ply membrane on this building is currently debris-free, but there is some surface dirt. As debris and more dirt accumulate it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in 2 to 3 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 8,600 SF ***REPAIR COST:*** **$3,700** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

104 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

6350 LF 2x8 boards

All sunscreen boards on perimeter of building

QUANTITY: 6,350 LF ***REPAIR COST:*** **$48,800** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$54,375** **AV. SEVERITY SCORE = 55** **COST PER BLDG GSF= $6.37**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

102 There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 30 SF ***REPAIR COST:*** **$2,200** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$2,200**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.26**
FACILITY TOTALS	**COST TOTAL =**	**$229,675**	**AV. SEVERITY SCORE =**	**43**	**COST PER BLDG GSF=**	**$26.90**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**220**	**Business**	Roof							
		Roof Drains	4 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$375						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **60**	**$375**	**$0**	**$0**	**$0**	**$0**	**$0**	**$375**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**220**	**Business**	Electrical							
		Light Fixtures	223							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*			$12,750					
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$12,750**	**$0**	**$0**	**$0**	**$0**	**$12,750**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**220**	**Business**	Roof							
		Single-Ply Roof Membrane	8,600 SF							
108		The single-ply membrane on this building is currently debris-free, but there is some surface dirt. As debris and more dirt accumulate it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in 2 to 3 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$3,700			
23	**220**	**Business**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,460 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,850					
TOTAL:		**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =* **36**	**$0**	**$1,850**	**$0**	**$3,700**	**$0**	**$0**	**$5,550**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
70	**220**	**Business**	Roof							
		Walkway Roof Support Beam	20 LF							
101		One of the covered walkway support beams on one side of the walkway has a large area where the wood is deteriorating on the face of the beam. This beam should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beam should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled. *West side*			$1,500					
50	**220**	**Business**	Structural							
		Concrete Columns and Beams	30 SF							
102		There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$2,200					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **60**	**$0**	**$3,700**	**$0**	**$0**	**$0**	**$0**	**$3,700**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**220**	**Business**	Electrical							
		Circuit Breaker Panels and Distribution Swithboard	1 LS							
107		The circuit breaker panelboards are original to the building and are now approximately 49 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. This building also houses a 600 amp distribution switchgear fed from building 200 that serves building 220. This equipment is of a similar age and condition, with similar parts and reliability concerns. Replacement of this equipment is also recommended. *Electrical Room and various locations*					$111,400			
40	**220**	**Business**	Roof							
		Wood Sunscreen Boards	6,350 LF							
104		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$48,800				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**220**	**Business**	Floor Cover							
		Carpet	960 SY							
106		Carpet is badly stained, very dirty, and generally deteriorating and should be replaced. Before installing new carpet, waterproof the concrete slab. Install new low pile high wear commercial grade carpet using waterproof adhesive. *Carpet throughout building*					$47,100			
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **38**	**$0**	**$0**	**$48,800**	**$158,500**	**$0**	**$0**	**$207,300**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **43**	**$375**	**$18,300**	**$48,800**	**$162,200**	**$0**	**$0**	**$229,675**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

315 Animal Storage 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$125,760** Cost Per Square Foot is **$184.94**

Facility Condition Rating = 39 (Failed) ***Average Severity Score = 44***

Repair Cost as a Percent of Facility Replacement Cost is 61 % 7 Deficiencies Were Identified

PRIMARY USE: Storage *FACILITY AGE:* *50* Yrs.

FACILITY SF: 680 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $207,400

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **C**

Importance of Facility to Operations is Low

Facility Use Intensity is Low

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Average

Relative Facility Priority Score = 19 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

315 Animal Storage 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$200	
Annual PM		**2**	**50**	**$200**	**$0.29**
Improvement	Electrical	1	20	$460	
Improvement		**1**	**20**	**$460**	**$0.68**
Non-Annual Recurring Maintenance	Paint/Finish	1	20	$1,800	
Non-Annual Recurring Maintenance		**1**	**20**	**$1,800**	**$2.65**
Replacement/Renewal	Electrical	1	68	$113,000	
Replacement/Renewal	Exterior Closure	1	23	$800	
Replacement/Renewal	Roof	1	75	$9,500	
Replacement/Renewal		**3**	**55**	**$123,300**	**$181.32**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of cast concrete columns and beams with concrete wall panels and decorative cast concrete roof parapets. Exterior walls have wood fascia and wood panels on the upper portions of the walls and parapet. The roof is a built-up membrane on a concrete roof deck.

The interior of the building was found to be in good condition, with no deficiencies observed. Interior maintenance likewise appears very adequate. The 7 deficiencies identified were associated with electrical, roof and exterior closure/finish systems.

Roof maintenance on this building appears to be non-existent. The roof is covered with leaves and other debris and the membrane surface is Very dirty. Leaves and debris should be cleaned off the roof surface at least once per year. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year.

The roof membrane is badly deteriorated. All surfacing is worn off and the exposed asphalt is dry and brittle, and badly worn in areas. A complete re-roof is recommended, the roof deck should be cleaned, and a mineral-surfaced cap sheet membrane should be installed.

The wood fascia/trim boards on one side of the building are badly deteriorated and should be replaced. The finish on the exterior wood panels on the upper part of the building is faded and generally deteriorating. These panels should be re-finished.

The circuit breaker panels are approximately 50 years old. They are still functional, though obsolete. Replacement

parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced.

The building also houses the main distribution switchgear for the 300 buildings. This equipment is of similar age and condition, with similar parts and reliability concerns. Replacement is also recommended.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels and Distribution Swithboard

106 The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

This building also houses the main distribution switchgear for the 300 buildings. This equipment is of a similar age and condition, with similar parts and reliability concerns. Replacement of this equipment is also recommended.

Same as existing unless additional capacity is required

Electrical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$113,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building

QUANTITY: 8 EA ***REPAIR COST:*** **$460** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$113,460** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$166.85**

23 **Exterior Closure** **Replacement/Renewal** Wood Fascia

102 The wood fascia/trim boards on one side of the building are badly deteriorated and should be replaced.
1 x 8

West upper side

QUANTITY: 112 SF ***REPAIR COST:*** **$800** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 26 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

SYSTEM SUB-TOTAL **Exterior Closure $800** **AV. SEVERITY SCORE = 23** **COST PER BLDG GSF= $1.18**

20 **Paint/Finish** **Non-Annual Recurring Maintenance** Wood Exterior Panels

103 The finish on the exterior wood panels is faded and generally deteriorating. Power wash and refinish panels with a clear sealer or light stain.

Concrete parapets on upper part of building

QUANTITY: 440 SF ***REPAIR COST:*** **$1,800** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 26 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish $1,800** **AV. SEVERITY SCORE = 20** **COST PER BLDG GSF= $2.65**

75 **Roof** **Replacement/Renewal** Built-Up Roof

104 The built-up roof membrane on the building is badly deteriorated. All surfacing is worn off and the exposed asphalt is very dry and brittle, and badly worn in some spots. The existing material should be removed, the concrete roof deck thoroughly cleaned and a mineral-surfaced cap sheet roof membrane installed.

Entire roof

QUANTITY: 8 SQ ***REPAIR COST:*** **$9,500** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 34 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

60 **Roof** **Annual PM** Roof Drains

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 1 EA ***REPAIR COST:*** **$125** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

100 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 735 SF ***REPAIR COST:*** **$75** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$9,700**	**AV. SEVERITY SCORE =**	**58**	**COST PER BLDG GSF=**	**$14.26**
FACILITY TOTALS	**COST TOTAL =**	**$125,760**	**AV. SEVERITY SCORE =**	**44**	**COST PER BLDG GSF=**	**$184.94**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**315**	**Animal Storage**	Roof							
		Roof Drains	1 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$125						
40	**315**	**Animal Storage**	Roof							
		Roof Membrane	735 SF							
100		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$75						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$200**	**$0**	**$0**	**$0**	**$0**	**$0**	**$200**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**315**	**Animal Storage**	Electrical							
		Light Fixtures	8 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*			$460					
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$460**	**$0**	**$0**	**$0**	**$0**	**$460**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
20	**315**	**Animal Storage**	Paint/Finish							
		Wood Exterior Panels	440 SF							
103		The finish on the exterior wood panels is faded and generally deteriorating. Power wash and refinish panels with a clear sealer or light stain. *Concrete parapets on upper part of building*					$1,800			
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$1,800**	**$0**	**$0**	**$1,800**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
75	**315**	**Animal Storage**	Roof							
	Built-Up Roof		8 SQ							
104	The built-up roof membrane on the building is badly deteriorated. All surfacing is worn off and the exposed asphalt is very dry and brittle, and badly worn in some spots. The existing material should be removed, the concrete roof deck thoroughly cleaned and a mineral-surfaced cap sheet roof membrane installed. *Entire roof*				$9,500					
68	**315**	**Animal Storage**	Electrical							
	Circuit Breaker Panels and Distribution Swithboard		1 LS							
106	The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. This building also houses the main distribution switchgear for the 300 buildings. This equipment is of a similar age and condition, with similar parts and reliability concerns. Replacement of this equipment is also recommended. *Electrical Room*					$113,000				
23	**315**	**Animal Storage**	Exterior Closure							
	Wood Fascia		112 SF							
102	The wood fascia/trim boards on one side of the building are badly deteriorated and should be replaced. *West upper side*				$800					
TOTAL:	**Replacement/Renewal**		*AV. SEVER. SCORE =* **55**	**$0**	**$10,300**	**$113,000**	**$0**	**$0**	**$0**	**$123,300**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*		*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =*	**44**	**$200**	**$10,760**	**$113,000**	**$1,800**	**$0**	**$0**	**$125,760**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

316 Greenhouse 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$24,725** Cost Per Square Foot is **$141.29**

Facility Condition Rating = 19 (Failed) ***Average Severity Score = 52***

Repair Cost as a Percent of Facility Replacement Cost is 81 % 3 Deficiencies Were Identified

PRIMARY USE: Horticulture *FACILITY AGE:* *50* Yrs.

FACILITY SF: 175 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $30,625

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **C**

Importance of Facility to Operations is Low

Facility Use Intensity is Low

Facility Suitability for Current Use is Marginal

Facility Construction Quality is Low

Relative Facility Priority Score = 14 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

316 Greenhouse 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Improvement	Electrical	1	20	$225	
Improvement		**1**	**20**	**$225**	**$1.29**
Replacement/Renewal	Electrical	1	68	$23,200	
Replacement/Renewal	HVAC	1	68	$1,300	
Replacement/Renewal		**2**	**68**	**$24,500**	**$140.00**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of metal framing with glass roof and wall panels and a cast concrete framing base approximately 3-feet high. The facility appears to have been somwehat neglected in terms of maintenance, though it appears to be structurally adequate.

There is one evaporative cooler in the building that is badly deteriorated and no longer cost-effective to repair. Replacement is warranted.

The circuit breaker panel is approximately 50 years old. It is still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panel should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panel

102 The circuit breaker panelboard is original to the building and is now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.
Same as existing unless additional capacity is required

QUANTITY: 1 LS ***REPAIR COST:*** **$23,200** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 **Electrical** **Improvement** Light Fixtures

100 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.
2 x 4
Light fixtures throughout building

QUANTITY: 4 EA ***REPAIR COST:*** **$225** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **Electrical** **$23,425** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$133.86**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

101 The evaporative cooler is badly deteriorated and no longer cost-effective to repair. It is recommended to be replaced.
Outside

QUANTITY: 1 LS ***REPAIR COST:*** **$1,300** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2026 2036

SYSTEM SUB-TOTAL	**HVAC**	**$1,300**	**AV. SEVERITY SCORE =**	**68**	**COST PER BLDG GSF=**	**$7.43**
FACILITY TOTALS	**COST TOTAL =**	**$24,725**	**AV. SEVERITY SCORE =**	**52**	**COST PER BLDG GSF=**	**$141.29**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**316**	**Greenhouse**	Electrical							
		Light Fixtures	4 EA							
100		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*				$225				
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$225**	**$0**	**$0**	**$0**	**$225**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**316**	**Greenhouse**	HVAC							
		HVAC Equipment	1 LS							
101		The evaporative cooler is badly deteriorated and no longer cost-effective to repair. It is recommended to be replaced. *Outside*			$1,300					
68	**316**	**Greenhouse**	Electrical							
		Circuit Breaker Panel	1 LS							
102		The circuit breaker panelboard is original to the building and is now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.				$23,200				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **68**	**$0**	**$1,300**	**$23,200**	**$0**	**$0**	**$0**	**$24,500**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **52**	**$0**	**$1,300**	**$23,425**	**$0**	**$0**	**$0**	**$24,725**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

340 Physics — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$197,550** — Cost Per Square Foot is **$32.47**

Facility Condition Rating = 92 (Good) — ***Average Severity Score = 49***

Repair Cost as a Percent of Facility Replacement Cost is 8 % — 14 Deficiencies Were Identified

PRIMARY USE: Classroom/Lab — *FACILITY AGE:* *50* Yrs.

FACILITY SF: 6,085 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $2,586,125

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

340 Physics 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$800	
Annual PM		**2**	**50**	**$800**	**$0.13**
Improvement	Electrical	1	20	$7,300	
Improvement		**1**	**20**	**$7,300**	**$1.20**
Non-Annual Recurring Maintenance	HVAC	1	20	$1,450	
Non-Annual Recurring Maintenance	Paint/Finish	2	34	$1,600	
Non-Annual Recurring Maintenance		**3**	**30**	**$3,050**	**$0.50**
Repair/Maintenance	HVAC	1	64	$10,400	
Repair/Maintenance	Structural	1	50	$700	
Repair/Maintenance		**2**	**57**	**$11,100**	**$1.82**
Replacement/Renewal	Electrical	1	68	$38,600	
Replacement/Renewal	Exterior Closure	1	46	$2,500	
Replacement/Renewal	HVAC	2	68	$44,300	
Replacement/Renewal	Roof	2	58	$89,900	
Replacement/Renewal		**6**	**61**	**$175,300**	**$28.81**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in good condition, with no deficiencies observed. Interior maintenance likewise appears adequate. The 14 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed

on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

The wood parapet on the mechanical room is badly deteriorated with cracks, checking and evidence of some rot. The parapet should be replaced.

Roof maintenance on this building appears to be poor. The roof is over 15 years old, covered with leaves and other debris, and the membrane surface is extremely dirty, making it difficult to determine overall condition. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane and the lack of maintenance, premature deterioration is likely and the roof membrane and insulation should be replaced in 4 to 5 years. A short term alternative would be to apply a polyester-reinforced 20 mil fluid neoprene coating to a clean membrane surface. This could extend the life of the membrane by five to eight years.

Leaves and debris should be cleaned off the roof surface at least once per year. This will become especially important once a new roof is installed. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year.

The parapet cap joint caulk is deteriorating, providing the potential for moisture to leak into the joints and onto the concrete parapet tops. All joint caulk should be replaced.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years. There is also some hot water piping insulation and exposed metal jacket on the roof that is badly deteriorated and should be replaced for energy efficiency.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape, and allowing water to potentially leak into the ducts, which can deteriorated ductwork and waste energy. All duct joint sealant should be replaced.

The circuit breaker panels are approximately 50 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

110 The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$38,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 **Electrical** **Improvement** Light Fixtures

108 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building

QUANTITY: 128 EA ***REPAIR COST:*** **$7,300** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$45,900** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$7.54**

46 **Exterior Closure** **Replacement/Renewal** Wood Parapet

107 The wood parapet is badly deteriorated with cracks, checking and evidence of some rot. Replace the entire parapet.

Mechanical room

QUANTITY: 120 SF ***REPAIR COST:*** **$2,500** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Exterior Closure $2,500** **AV. SEVERITY SCORE = 46** **COST PER BLDG GSF= $0.41**

68 **HVAC** **Replacement/Renewal** HVAC Heating Water Piping Insulation

112 The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated badly and should be replaced to reduce energy usage. One hundred and fifty feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket.
Insulation per industry standard or per energy code whichever is more stringent

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$6,900** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016

68 **HVAC** **Replacement/Renewal** HVAC Equipment

109 The two condensing units are dated 2001and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. Maintenance staff has also reported that they receive complaints from faculty that the condensing units are noisy and vibrate excessively. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$37,400** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

111 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 35 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

106 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 120 LF ***REPAIR COST:*** **$1,450** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$56,150** **AV. SEVERITY SCORE =** **55** **COST PER BLDG GSF=** **$9.23**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

102 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 25 LF ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random minor spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 1,885 SF ***REPAIR COST:*** **$1,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,600** **AV. SEVERITY SCORE =** **34** **COST PER BLDG GSF=** **$0.26**

75 **Roof** **Replacement/Renewal** Single-Ply Roof Membrane

113 College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is over 15 years old. There is an extensive amount of debris on the roof and the membrane is very dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times.

The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years.

A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset.

Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset, but does include removal/reset of 150 LF of ductwork.

Roof

Short Term Alternative A further inspection of the membrane surface can be conducted once it has been power washed. If only minimal to moderate chalking and/or crazing are apparent a fluid neoprene coating with a polyester reinforcing can be applied (20 mil) over the cleaned membrane to possibly extend membrane life another 5 to 8 years. Estimated cost is $32,600.

QUANTITY: 59 SQ ***REPAIR COST:*** **$77,600** **Deferrable** **Est. Remaining Life = 4 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract
Benefit Score = 54 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

60 **Roof** **Annual PM** Roof Drains

104 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 5 EA ***REPAIR COST:*** **$450** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

103 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 5,820 SF ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

105 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

1540 LF 2x8 boards and 220 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 1,760 LF ***REPAIR COST:*** **$12,300** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**	**$90,700**	**AV. SEVERITY SCORE =**	**54**	**COST PER BLDG GSF=**	**$14.91**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 10 SF ***REPAIR COST:*** **$700** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$700**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.12**

FACILITY TOTALS	**COST TOTAL =**	**$197,550**	**AV. SEVERITY SCORE =**	**49**	**COST PER BLDG GSF=**	**$32.47**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**340**	**Physics**	Roof							
		Roof Drains	5 EA							
104		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$450						
40	**340**	**Physics**	Roof							
		Roof Membrane	5,820 SF							
103		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$350						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$800**	**$0**	**$0**	**$0**	**$0**	**$0**	**$800**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE / DEF. NO.	BLDG.	COMPONENT DEFICIENCY / LOCATION	SYSTEM / QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**340**	**Physics**	Electrical							
		Light Fixtures	128 EA							
108		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*			$7,300					
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$7,300**	**$0**	**$0**	**$0**	**$0**	**$7,300**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
46	**340**	**Physics**	Paint/Finish							
		Metal Parapet Cap Joints	25 LF							
102		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*				$200				
23	**340**	**Physics**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	1,885 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random minor spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,400					
20	**340**	**Physics**	HVAC							
		HVAC Distribution Ductwork	120 LF							
106		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$1,450				
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **30**	**$0**	**$1,400**	**$1,650**	**$0**	**$0**	**$0**	**$3,050**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**340**	**Physics**	HVAC							
		Air Handler	1 EA							
111		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					
50	**340**	**Physics**	Structural							
		Concrete Columns and Beams	10 SF							
101		There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$700					
TOTAL: Repair/Maintenance			***AV. SEVER. SCORE =*** **57**	**$0**	**$11,100**	**$0**	**$0**	**$0**	**$0**	**$11,100**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
75	**340**	**Physics**	Roof							
		Single-Ply Roof Membrane	59 SQ							
113		College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is over 15 years old. There is an extensive amount of debris on the roof and the membrane is very dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years. A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset. Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset, but does include removal/reset of 150 LF of ductwork. *Roof*					$77,600		

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**340**	**Physics**	HVAC							
		HVAC Heating Water Piping Insulation	1 LS							
112		The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated badly and should be replaced to reduce energy usage. One hundred and fifty feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket. *Roof*			$6,900					
68	**340**	**Physics**	Electrical							
		Circuit Breaker Panels	1 LS							
110		The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Various locations*				$38,600				
68	**340**	**Physics**	HVAC							
		HVAC Equipment	1 LS							
109		The two condensing units are dated 2001and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. Maintenance staff has also reported that they receive complaints from faculty that the condensing units are noisy and vibrate excessively. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. *Roof*							$37,400	
46	**340**	**Physics**	Exterior Closure							
		Wood Parapet	120 SF							
107		The wood parapet is badly deteriorated with cracks, checking and evidence of some rot. Replace the entire parapet. *Mechanical room*				$2,500				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**340**	**Physics**	Roof							
		Wood Sunscreen Boards	1,760 LF							
105		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$12,300				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **61**	**$0**	**$6,900**	**$53,400**	**$0**	**$77,600**	**$37,400**	**$175,300**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **49**	**$800**	**$26,700**	**$55,050**	**$0**	**$77,600**	**$37,400**	**$197,550**

FACILITY CONDITION SUMMARY REPORT

Southwestern College

SURVEY DATE: 8/15

381 Exhibit Hall

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$102,900**

Cost Per Square Foot is **$62.03**

Facility Condition Rating = 85 (Fair)

Average Severity Score = 58

Repair Cost as a Percent of Facility Replacement Cost is 15 %

12 Deficiencies Were Identified

PRIMARY USE: Exhibits

FACILITY AGE: *48* Yrs.

FACILITY SF: 1,659 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $705,075

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

381 Exhibit Hall 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Improvement	Electrical	1	20	$1,375	
Improvement		**1**	**20**	**$1,375**	**$0.83**
Non-Annual Recurring Maintenance	Paint/Finish	2	46	$3,125	
Non-Annual Recurring Maintenance		**2**	**46**	**$3,125**	**$1.88**
Repair/Maintenance	Exterior Closure	1	50	$1,050	
Repair/Maintenance	HVAC	1	64	$5,200	
Repair/Maintenance		**2**	**57**	**$6,250**	**$3.77**
Replacement/Renewal	Electrical	1	68	$21,300	
Replacement/Renewal	Exterior Closure	1	60	$5,300	
Replacement/Renewal	HVAC	1	68	$34,500	
Replacement/Renewal	Paving	1	90	$2,900	
Replacement/Renewal	Roof	3	62	$28,150	
Replacement/Renewal		**7**	**67**	**$92,150**	**$55.55**

CONDITION SUMMARY:

This building was constructed for the college in 1967. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. The roof is a built-up membrane on a wood roof deck.

The interior of the building was found to be in good condition, with no deficiencies observed. Interior maintenance likewise appears adequate. The 12 deficiencies identified were associated with HVAC, electrical, roof , paving and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was deteriorating mortar in some of the joints of the parapet panels. The deteriorated mortar should be cleaned/chipped and the joints re-mortared.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

The wood double doors to the small space on the roof of the building are badly deteriorated, as is the frame. The door and frame should be replaced with a pre-finished unit. The metal stringers on the exterior stairs to the roof, and the

landing frame are badly rusted, and some metal is flaking off the surface. However, structural integrity does not appear to have been compromised. The metal should be thoroughly wire brushed/cleaned and a rust-inhibiting primer and two coats of epoxy-based paint applied. An alternative would be to replace the stairs and landing.

The roof membrane is badly deteriorated. Much of the surfacing is worn off and the exposed asphalt is dry and brittle, and badly worn in a few areas. A complete re-roof is recommended, the roof deck should be cleaned, and a mineral-surfaced cap sheet membrane should be installed.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

Two of the covered walkway support beams have large aeas where the wood is deteriorating on the face of the beams. These beams should be replaced rather than repaired as the deterioration is too far advanced. Replacement with S4S treated browntone douglas fir beams is recommended to achieve maximum weather resistance and life expectancy. Though beams of this size are available, they may have to be custom milled.

The rooftop condensing unit appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The circuit breaker panel is approximately 48 years old and still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panel should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

Tree roots are lifting and badly cracking/breaking one section of the concrete walkway slab outside the building. The slab should be replaced and the edges of two other slabs that are lifting slightly, also due to tree roots, should be ground down to eliminate trip hazards.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panel

110 The circuit breaker panelboard is original to the building and is now approximately 48 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Interior

QUANTITY: 1 LS ***REPAIR COST:*** **$21,300** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 **Electrical** **Improvement** Light Fixtures

108 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, 2 x 2

Light fixtures throughout building

QUANTITY: 24 EA ***REPAIR COST:*** **$1,375** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$22,675** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$13.67**

60 **Exterior Closure** **Replacement/Renewal** Wood Exterior Doors

104 The wood double doors to the space on top of the building are badly deteriorated, as is the frame. The face is delaminating from the rest of the door. Replace the door and frame with a pre-finished metal door and frame.
6-0 x 7-0

Structure on top of the roof

QUANTITY: 1 EA ***REPAIR COST:*** **$5,300** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 44 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

50 **Exterior Closure** **Repair/Maintenance** Parapet Joints

103 The mortar in some of the joints of the parapet panels is generally deteriorating. Clean-out/chip existing mortar and re-mortar joints.

Roof parapet panels

QUANTITY: 52 LF ***REPAIR COST:*** **$1,050** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 36 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Exterior Closure $6,350** **AV. SEVERITY SCORE = 55** **COST PER BLDG GSF= $3.83**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

109 The condensing unit is estimated to date from 2001and is now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$34,500** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

111 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$5,200** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **HVAC** **$39,700** **AV. SEVERITY SCORE =** **66** **COST PER BLDG GSF=** **$23.93**

70 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Metal Stairs

106 The metal stringers on the exterior stairs and the landing frame are badly rusting and rusted metal is flaking off the surface. Metal should be thoroughly scraped and sanded, a rust-inhibiting primer applied, and two coats of epoxy-based paint applied.

Exterior stairs at side of building

Long Term Alternative Replace the metal stairs and landing with a cement-filled pan stair system and landing. Estimated cost is $16,800.

QUANTITY: 90 SF ***REPAIR COST:*** **$1,825** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House

Benefit Score = 69 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 1,750 SF ***REPAIR COST:*** **$1,300** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$3,125** **AV. SEVERITY SCORE =** **46** **COST PER BLDG GSF=** **$1.88**

90 **Paving** **Replacement/Renewal** Concrete Walkway

107 Tree roots are lifting and badly cracking/breaking one section of concrete walkway slab. Replace slab and grind two other slabs that are lifting due to roots to eliminate trip hazards.

75SF of broken slab and 25 LF of lifting slab

North side of building

QUANTITY: 75 SF ***REPAIR COST:*** **$2,900** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract

Benefit Score = 0 ***Planning Priority:*** **A-Health/Safety Issue**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2040

SYSTEM SUB-TOTAL **Paving** **$2,900** **AV. SEVERITY SCORE =** **90** **COST PER BLDG GSF=** **$1.75**

75 **Roof** **Replacement/Renewal** Built-Up Roof

102 The built-up roof membrane on the building is badly deteriorated. Surfacing is wearing off and the exposed asphalt is very dry and brittle, and badly worn in some spots. The existing material should be removed, the roof deck thoroughly cleaned, a vapor barrier and insulation board installed, and a single-ply TPO roof membrane installed.

Entire roof

QUANTITY: 15 SQ ***REPAIR COST:*** **$16,750** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

70 **Roof** **Replacement/Renewal** Walkway Roof Support Beam

105 Two of the covered walkway support beams have large areas where the wood is deteriorating on the face of the beam. These beams should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beams should be replaced with a S4S treated browntone douglas fir beams. NOTE: Though beams of this size are available, they may have to be custom milled.

2 ea. 4" x 15" x 20'

Walkways

QUANTITY: 40 LF ***REPAIR COST:*** **$3,000** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 61 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

101 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

1010 LF 2x8 boards and 288 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 1,300 LF ***REPAIR COST:*** **$8,400** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**	**$28,150**	**AV. SEVERITY SCORE =**	**62**	**COST PER BLDG GSF=**	**$16.97**
FACILITY TOTALS	**COST TOTAL =**	**$102,900**	**AV. SEVERITY SCORE =**	**58**	**COST PER BLDG GSF=**	**$62.03**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**381**	**Exhibit Hall**	Electrical							
		Light Fixtures	24 EA							
108		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*			$1,375					
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$1,375**	**$0**	**$0**	**$0**	**$0**	**$1,375**

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
70	**381**	**Exhibit Hall**	Paint/Finish							
		Exterior Metal Stairs	90 SF							
106		The metal stringers on the exterior stairs and the landing frame are badly rusting and rusted metal is flaking off the surface. Metal should be thoroughly scraped and sanded, a rust-inhibiting primer applied, and two coats of epoxy-based paint applied. *Exterior stairs at side of building*		$1,825						
23	**381**	**Exhibit Hall**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	1,750 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,300					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **46**	**$1,825**	**$1,300**	**$0**	**$0**	**$0**	**$0**	**$3,125**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**381**	**Exhibit Hall**	HVAC							
		Air Handler	1 EA							
111		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$5,200					
50	**381**	**Exhibit Hall**	Exterior Closure							
		Parapet Joints	52 LF							
103		The mortar in some of the joints of the parapet panels is generally deteriorating. Clean-out/chip existing mortar and re-mortar joints. *Roof parapet panels*			$1,050					
TOTAL:		**Repair/Maintenance**	***AV. SEVER. SCORE =*** **57**	**$0**	**$6,250**	**$0**	**$0**	**$0**	**$0**	**$6,250**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
90	**381**	**Exhibit Hall**	Paving							
		Concrete Walkway	75 SF							
107		Tree roots are lifting and badly cracking/breaking one section of concrete walkway slab. Replace slab and grind two other slabs that are lifting due to roots to eliminate trip hazards. *North side of building*		$2,900						
75	**381**	**Exhibit Hall**	Roof							
		Built-Up Roof	15 SQ							
102		The built-up roof membrane on the building is badly deteriorated. Surfacing is wearing off and the exposed asphalt is very dry and brittle, and badly worn in some spots. The existing material should be removed, the roof deck thoroughly cleaned, a vapor barrier and insulation board installed, and a single-ply TPO roof membrane installed. *Entire roof*				$16,750				
70	**381**	**Exhibit Hall**	Roof							
		Walkway Roof Support Beam	40 LF							
105		Two of the covered walkway support beams have large areas where the wood is deteriorating on the face of the beam. These beams should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beams should be replaced with a S4S treated browntone douglas fir beams. NOTE: Though beams of this size are available, they may have to be custom milled. *Walkways*			$3,000					

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**381**	**Exhibit Hall**	Electrical							
		Circuit Breaker Panel	1 LS							
110		The circuit breaker panelboard is original to the building and is now approximately 48 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Interior*				$21,300				
68	**381**	**Exhibit Hall**	HVAC							
		HVAC Equipment	1 LS							
109		The condensing unit is estimated to date from 2001and is now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. *Roof*							$34,500	
60	**381**	**Exhibit Hall**	Exterior Closure							
		Wood Exterior Doors	1 EA							
104		The wood double doors to the space on top of the building are badly deteriorated, as is the frame. The face is delaminating from the rest of the door. Replace the door and frame with a pre-finished metal door and frame. *Structure on top of the roof*		$5,300						

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**381**	**Exhibit Hall**	Roof							
		Wood Sunscreen Boards	1,300 LF							
101		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$8,400				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **67**	**$8,200**	**$3,000**	**$46,450**	**$0**	**$0**	**$34,500**	**$92,150**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **58**	**$10,025**	**$11,925**	**$46,450**	**$0**	**$0**	**$34,500**	**$102,900**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

382 Planetarium — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$97,950** — Cost Per Square Foot is **$59.04**

Facility Condition Rating = 86 (Fair) — ***Average Severity Score = 43***

Repair Cost as a Percent of Facility Replacement Cost is 14 % — 8 Deficiencies Were Identified

PRIMARY USE: Planetarium/Classroom — *FACILITY AGE:* *48* Yrs.

FACILITY SF: 1,659 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $705,075

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

382 Planetarium — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Improvement	Electrical	1	20	$1,650	
Improvement	Floor Cover	1	5	$10,800	
Improvement		**2**	**13**	**$12,450**	**$7.50**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,300	
Non-Annual Recurring Maintenance		**1**	**23**	**$1,300**	**$0.78**
Repair/Maintenance	Exterior Closure	1	50	$1,000	
Repair/Maintenance		**1**	**50**	**$1,000**	**$0.60**
Replacement/Renewal	Electrical	1	68	$26,600	
Replacement/Renewal	HVAC	1	68	$46,800	
Replacement/Renewal	Roof	2	55	$9,800	
Replacement/Renewal		**4**	**61**	**$83,200**	**$50.15**

CONDITION SUMMARY:

This building was constructed for the college in 1967. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. The roof is a built-up membrane on a wood roof deck.

The interior of the building was found to be in good condition, with only one deficiencies observed. Interior maintenance likewise appears adequate. The 8 deficiencies identified were associated with HVAC, electrical, roof , and exterior/interior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was deteriorating mortar in some of the joints of the parapet panels. The deteriorated mortar should be cleaned/chipped and the joints re-mortared.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

382 Planetarium 900 Otay Lakes Rd.

One of the covered walkway support beams has a large area where the wood is deteriorating on the face of the beam. The beam should be replaced rather than repaired as the deterioration is too far advanced. Replacement with an S4S treated browntone douglas fir beam is recommended to achieve maximum weather resistance and life expectancy. Though a beam of this size is available, it may have to be custom milled.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years.

The circuit breaker panel is approximately 48 years old and still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panel should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

The carpet throughout the building is badly stained, very dirty, and generally deteriorating. Replace with a low-pile high-wear commercial carpet. Prior to installation the slab should be waterproofed.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panel

107 The circuit breaker panelboard is original to the building and is now approximately 48 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

QUANTITY: 1 LS ***REPAIR COST:*** **$26,600** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019

20 **Electrical** **Improvement** Light Fixtures

104 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, 2 x 2

Light fixtures throughout building

QUANTITY: 29 EA ***REPAIR COST:*** **$1,650** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

SYSTEM SUB-TOTAL **Electrical** **$28,250** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$17.03**

50 **Exterior Closure** **Repair/Maintenance** Concrete Parapets

103 The mortar in the joints of the concrete parapets is deteriorating and should be replaced. Chip/remove all mortar and install new joint sealant. Use of a flexible sealant is recommended.

Perimeter of roof

QUANTITY: 52 LF ***REPAIR COST:*** **$1,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

SYSTEM SUB-TOTAL **Exterior Closure** **$1,000** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.60**

5 **Floor Cover** **Improvement** Carpet

105 Carpet is badly stained, very dirty, deteriorating, and should be replaced. Before installing new carpet, waterproof the concrete slab. Install new low pile high wear commercial grade carpet using waterproof adhesive.
220 SY

Throughout building

QUANTITY: 220 SY ***REPAIR COST:*** **$10,800** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 8 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2033

SYSTEM SUB-TOTAL **Floor Cover** **$10,800** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$6.51**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

106 The packaged rooftop A/C units date from 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$46,800** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

SYSTEM SUB-TOTAL **HVAC** **$46,800** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$28.21**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 1,750 SF ***REPAIR COST:*** **$1,300** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,300** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.78**

70 **Roof** **Replacement/Renewal** Walkway Roof Support Beam

102 One of the covered walkway support beams on one side of the walkway has a large area where the wood is deteriorating on the face of the beam. This beam should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beam should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled.

4" x 15" x 20'

Walkways

QUANTITY: 20 LF ***REPAIR COST:*** **$1,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 61 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

101 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

1010 LF 2x8 boards and 288 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 1,300 LF ***REPAIR COST:*** **$8,400** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**	**$9,800**	**AV. SEVERITY SCORE =**	**55**	**COST PER BLDG GSF=**	**$5.91**
FACILITY TOTALS	**COST TOTAL =**	**$97,950**	**AV. SEVERITY SCORE =**	**43**	**COST PER BLDG GSF=**	**$59.04**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**382**	**Planetarium**	Electrical							
		Light Fixtures	29 EA							
104		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*			$1,650					
5	**382**	**Planetarium**	Floor Cover							
		Carpet	220 SY							
105		Carpet is badly stained, very dirty, deteriorating, and should be replaced. Before installing new carpet, waterproof the concrete slab. Install new low pile high wear commercial grade carpet using waterproof adhesive. *Throughout building*					$10,800			
TOTAL:		**Improvement**	***AV. SEVER. SCORE =*** **13**	**$0**	**$1,650**	**$0**	**$10,800**	**$0**	**$0**	**$12,450**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
23	**382**	**Planetarium**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	1,750 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,300					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **23**	**$0**	**$1,300**	**$0**	**$0**	**$0**	**$0**	**$1,300**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**382**	**Planetarium**	Exterior Closure							
		Concrete Parapets	52 LF							
103		The mortar in the joints of the concrete parapets is deteriorating and should be replaced. Chip/remove all mortar and install new joint sealant. Use of a flexible sealant is recommended. *Perimeter of roof*				$1,000				
TOTAL:		**Repair/Maintenance**	*AV. SEVER. SCORE =* **50**	**$0**	**$0**	**$1,000**	**$0**	**$0**	**$0**	**$1,000**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
70	**382**	**Planetarium**	Roof							
		Walkway Roof Support Beam	20 LF							
102		One of the covered walkway support beams on one side of the walkway has a large area where the wood is deteriorating on the face of the beam. This beam should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beam should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled. *Walkways*			$1,400					
68	**382**	**Planetarium**	Electrical							
		Circuit Breaker Panel	1 LS							
107		The circuit breaker panelboard is original to the building and is now approximately 48 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.						$26,600		
68	**382**	**Planetarium**	HVAC							
		HVAC Equipment	1 LS							
106		The packaged rooftop A/C units date from 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. *Roof*							$46,800	

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**382**	**Planetarium**	Roof							
		Wood Sunscreen Boards	1,300 LF							
101		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$8,400				
TOTAL: Replacement/Renewal			***AV. SEVER. SCORE =*** **61**	**$0**	**$1,400**	**$8,400**	**$0**	**$26,600**	**$46,800**	**$83,200**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **43**	**$0**	**$4,350**	**$9,400**	**$10,800**	**$26,600**	**$46,800**	**$97,950**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

400 Office 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$202,400** Cost Per Square Foot is **$74.08**

Facility Condition Rating = 76 (Fair) ***Average Severity Score = 40***

Repair Cost as a Percent of Facility Replacement Cost is 24 % 13 Deficiencies Were Identified

PRIMARY USE: Faculty Offices *FACILITY AGE:* *50* Yrs.

FACILITY SF: 2,732 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $833,260

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 30 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

400 Office 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	60	$200	
Annual PM		**1**	**60**	**$200**	**$0.07**
Improvement	Electrical	1	5	$1,800	
Improvement		**1**	**5**	**$1,800**	**$0.66**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$800	
Non-Annual Recurring Maintenance	Roof	1	50	$1,300	
Non-Annual Recurring Maintenance		**2**	**36**	**$2,100**	**$0.77**
Repair/Maintenance	HVAC	1	64	$5,000	
Repair/Maintenance	Roof	1	20	$200	
Repair/Maintenance	Structural	1	50	$3,425	
Repair/Maintenance		**3**	**45**	**$8,625**	**$3.16**
Replacement/Renewal	Electrical	1	68	$116,600	
Replacement/Renewal	Floor Cover	1	5	$10,800	
Replacement/Renewal	HVAC	1	68	$38,200	
Replacement/Renewal	Plumbing	1	5	$4,475	
Replacement/Renewal	Roof	2	54	$19,600	
Replacement/Renewal		**6**	**42**	**$189,675**	**$69.43**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in good condition, with only two deficiencies observed. Interior maintenance likewise appears adequate. The 13 deficiencies identified were associated with HVAC, plumbing, electrical, roof and exterior/interior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of

concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears good. The roof is relatively debris-free. However, leaves and debris should be cleaned off the roof surface at least once per year if they accumulate. The roof drains and sumps should be cleaned at least once per year. It is also strongly recommended that the roof membrane be power washed in the next three years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life.There is also a drip edge missing on the roof of the mechanical room, which should be replaced. An assessment of the roof membrane revealed no aparent deficiencies.

The college maintenance staff has voiced concern over the roof drains, which drains down through the building and under the slab. Apparently they were damaged when the roof membrane was last replaced, and have been problematic to keep fastened to the drain line. There is also concern by maintenance staff over deterioration of the drain piping inside the building. It is recommended that the drains be replaced and the vertical drain lines abandoned in favor of new lines installed to flow horizontally from the drains to the exterior of the building. This should be done at the same time the roof membrane is next replaced.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment, including some exhaust fans, should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The circuit breaker panels are approximately 50 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced.

This building also houses the main distribution switchgear for the 400 buildings. This equipment is of similar age and condition, with similar parts and reliability concerns. Replacement of this equipment should also be programmed.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

The lavatories and faucets in the Staffs rest room are old, with deteriorated finishes and poor design. The components are no longer cost-effective to maintain and should be replaced. New lavs and faucets set in a synthetic quartz or high-pressure laminate countertop are recommended.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

400 Office 900 Otay Lakes Rd.

The carpet throughout the building is badly stained and dirty, and generally deteriorating. It should be replaced with a low-pile, high-wear commercial grade carpet.. The slab should be waterproofed prior to new carpet installation.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panel and Distribution Swithboard

110 The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

This building also houses the main distribution switchgear for the 400 buildings. This equipment is of a similar age and condition, with similar parts and reliability concerns. Replacement of this equipment is also recommended.

Same as existing unless additional capacity is required

Electrical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$116,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

5 **Electrical** **Improvement** Light Fixtures

107 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building

QUANTITY: 31 EA ***REPAIR COST:*** **$1,800** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **Electrical** **$118,400** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$43.34**

5 **Floor Cover** **Replacement/Renewal** Carpet

106 Carpet is badly stained and dirty and should be replaced. Before installing new carpet, waterproof the concrete slab. Install new low pile high wear commercial grade carpet using waterproof adhesive.
220 SY

Throughout building

QUANTITY: 220 SY ***REPAIR COST:*** **$10,800** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 8 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2033

SYSTEM SUB-TOTAL **Floor Cover** **$10,800** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$3.95**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

109 The condensing unit serving the building appears to have been installed in 2001, and is now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Two circular aluminum exhaust fans on the roof also appear to be deteriorating and should be replaced at the same time.

Refrigerant piping insulation on the roof is deteriorated and should also be replaced when the condensing units are replaced. Forty feet of insulation has been included in the cost estimate.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$38,200** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

111 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$5,000** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **HVAC** **$43,200** **AV. SEVERITY SCORE =** **66** **COST PER BLDG GSF=** **$15.81**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 1,400 SF ***REPAIR COST:*** **$800** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$800** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.29**

5 **Plumbing** **Replacement/Renewal** Rest Room Lavatory

108 The lavatories and faucets in the staff rest room are old, with deteriorating finishes and poor design. The components are no longer cost-effective to repair or maintain and should be replaced with under-counter lavatories and new faucets set in a high-pressure laminate or synthetic quartz countertop.

3 Lavs; 3 faucets; 1 - 4' counter & 1 - 5'-4" counter

Staff toilets

QUANTITY: 1 LS ***REPAIR COST:*** **$4,475** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 13 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Plumbing** **$4,475** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$1.64**

68 **Roof** **Replacement/Renewal** Roof Drains

105 The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced.

The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior

Estimate approximately 10 LF of 4" line per drain

At each roof drain

QUANTITY: 2 EA ***REPAIR COST:*** **$5,700** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 0 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 2 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

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50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

112 The single-ply membrane on this building is currently debris-free. An inspection of the surfaces indicated no apparent deficiencies. However, as debris and dirt accumulate, it will make it more difficult to ascertain the condition of the roof, and can hasten membrane wear. A thorough cleaning of the membrane surface is recommended in about three years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 2,400 SF ***REPAIR COST:*** **$1,300** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract

Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

104 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.
1740 LF 2x8 boards and 248 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 1,988 LF ***REPAIR COST:*** **$13,900** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

20 **Roof** **Repair/Maintenance** Roof Drip Edge

102 The drip edge is missing on the roof of the mechanical room. Install drip edge.
4"

Mechanical room roof perimeter

QUANTITY: 50 LF ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 34 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Roof** **$21,300** **AV. SEVERITY SCORE =** **48** **COST PER BLDG GSF=** **$7.80**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 50 SF ***REPAIR COST:*** **$3,425** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$3,425**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$1.25**
FACILITY TOTALS	**COST TOTAL =**	**$202,400**	**AV. SEVERITY SCORE =**	**40**	**COST PER BLDG GSF=**	**$74.08**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**400**	**Office**	Roof							
		Roof Drains	2 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$200						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **60**	**$200**	**$0**	**$0**	**$0**	**$0**	**$0**	**$200**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**400**	**Office**	Electrical							
		Light Fixtures	31 EA							
107		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*				$1,800				
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$1,800**	**$0**	**$0**	**$0**	**$1,800**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**400**	**Office**	Roof							
		Single-Ply Roof Membrane	2,400 SF							
112		The single-ply membrane on this building is currently debris-free. An inspection of the surfaces indicated no apparent deficiencies. However, as debris and dirt accumulate, it will make it more difficult to ascertain the condition of the roof, and can hasten membrane wear. A thorough cleaning of the membrane surface is recommended in about three years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$1,300			
23	**400**	**Office**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	1,400 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$800					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **36**	**$0**	**$800**	**$0**	**$1,300**	**$0**	**$0**	**$2,100**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**400**	**Office**	HVAC							
		Air Handler	1 EA							
111		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$5,000					
50	**400**	**Office**	Structural							
		Concrete Columns and Beams	50 SF							
101		There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$3,425					
20	**400**	**Office**	Roof							
		Roof Drip Edge	50 LF							
102		The drip edge is missing on the roof of the mechanical room. Install drip edge. *Mechanical room roof perimeter*			$200					
TOTAL:		**Repair/Maintenance**	***AV. SEVER. SCORE =*** **45**	**$0**	**$8,625**	**$0**	**$0**	**$0**	**$0**	**$8,625**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**400**	**Office**	Electrical							
		Circuit Breaker Panel and Distribution Swithboard	1 LS							
110		The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. This building also houses the main distribution switchgear for the 400 buildings. This equipment is of a similar age and condition, with similar parts and reliability concerns. Replacement of this equipment is also recommended. *Electrical Room*				$116,600				
68	**400**	**Office**	Roof							
		Roof Drains	2 EA							
105		The roof drains were damaged when the hypalon membrane was installed on the roof and they no longer can be kept properly fastened to the drain line. They should be replaced. The roof drains also currently drain down through the building and under the slab. Maintenance personnel have identified deterioration in the drain piping inside some buildings in the past and suspect additional deterioration may be occurring. It is recommended that the vertical drain lines be abandoned and new lines installed to flow horizontally from below the drains to the exterior *At each roof drain*							$5,700		

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**400**	**Office**	HVAC							
		HVAC Equipment	1 LS							
109		The condensing unit serving the building appears to have been installed in 2001, and is now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Two circular aluminum exhaust fans on the roof also appear to be deteriorating and should be replaced at the same time. Refrigerant piping insulation on the roof is deteriorated and should also be replaced when the condensing units are replaced. Forty feet of insulation has been included in the cost estimate. *Roof*								$38,200	
40	**400**	**Office**	Roof							
		Wood Sunscreen Boards	1,988 LF							
104		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*					$13,900				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**400**	**Office**	Plumbing							
		Rest Room Lavatory	1 LS							
108		The lavatories and faucets in the staff rest room are old, with deteriorating finishes and poor design. The components are no longer cost-effective to repair or maintain and should be replaced with under-counter lavatories and new faucets set in a high-pressure laminate or synthetic quartz countertop. *Staff toilets*				$4,475				
5	**400**	**Office**	Floor Cover							
		Carpet	220 SY							
106		Carpet is badly stained and dirty and should be replaced. Before installing new carpet, waterproof the concrete slab. Install new low pile high wear commercial grade carpet using waterproof adhesive. *Throughout building*					$10,800			
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **42**	**$0**	**$0**	**$134,975**	**$10,800**	**$5,700**	**$38,200**	**$189,675**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **40**	**$200**	**$9,425**	**$136,775**	**$12,100**	**$5,700**	**$38,200**	**$202,400**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

410 English — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$143,300** — Cost Per Square Foot is **$23.93**

Facility Condition Rating = 92 (Good) — ***Average Severity Score = 48***

Repair Cost as a Percent of Facility Replacement Cost is 8 % — 14 Deficiencies Were Identified

PRIMARY USE: Classroom — *FACILITY AGE:* *50* Yrs.

FACILITY SF: 5,989 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $1,826,645

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

410 English — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$800	
Annual PM		**2**	**50**	**$800**	**$0.13**
Improvement	Electrical	1	5	$10,700	
Improvement		**1**	**5**	**$10,700**	**$1.79**
Non-Annual Recurring Maintenance	HVAC	1	20	$1,550	
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,400	
Non-Annual Recurring Maintenance	Roof	1	50	$2,700	
Non-Annual Recurring Maintenance		**3**	**31**	**$5,650**	**$0.94**
Repair/Maintenance	HVAC	1	64	$10,400	
Repair/Maintenance	Roof	1	70	$550	
Repair/Maintenance	Structural	1	50	$2,400	
Repair/Maintenance		**3**	**61**	**$13,350**	**$2.23**
Replacement/Renewal	Electrical	1	68	$47,400	
Replacement/Renewal	Exterior Closure	1	50	$1,300	
Replacement/Renewal	HVAC	2	68	$46,500	
Replacement/Renewal	Roof	1	40	$17,600	
Replacement/Renewal		**5**	**59**	**$112,800**	**$18.83**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in good condition. Interior maintenance likewise appears adequate. The 14 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out

and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building is poor. The roof is covered with a large amount of leaves and other debris and the membrane surface has some dirty areas, making it difficult to determine overall condition. Leaves and debris should be cleaned off the roof surface at least once per year. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is also strongly recommended that the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface, where possible, revealed no apparent deficiencies.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

One of the main walkway support beams has an area where the wood is partially deteriorated on the face of the beam. The beam appears sound enough that the wood can be repaired. Repair should be accomplished using a 2-component, solvent-free low viscosity epoxy resin sealer-consolidant brushed on all affected areas, followed by application of a 2-component epoxy resin structural repair paste or putty.

The wood parapets on the top of the mechanical room bump-out enclosure are badly deteriorated, including cracking and splitting, and extensive peeling paint. Replacement is recommended.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The hot water heating piping insulation and exposed aluminum jacket on the roof are badly deteriorated and should be replaced to maintain system efficiency and save energy. The joint sealant on the metal HVAC ductwork on the roof is badly deteriorated, allowing hot/cold air to escape, reducing HVAC system efficiency. Replacement of all joint sealant is required.

The circuit breaker panels are approximately 50 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

110 The circuit breaker panelboards are original to the building and are now approximately 48 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$47,400** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

5 **Electrical** **Improvement** Light Fixtures

108 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building

QUANTITY: 187 EA ***REPAIR COST:*** **$10,700** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **Electrical** **$58,100** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$9.70**

50 **Exterior Closure** **Replacement/Renewal** Wood Parapet

105 The wood parapets on top of the mechanical room bump out are badly deteriorated. Wood appear cracked and split and paint is peeling extensively. Replace the parapets.

Room of mechanical room bump out

QUANTITY: 120 SF ***REPAIR COST:*** **$1,300** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 0 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2043

SYSTEM SUB-TOTAL **Exterior Closure $1,300** **AV. SEVERITY SCORE = 50** **COST PER BLDG GSF= $0.22**

68 **HVAC** **Replacement/Renewal** HVAC Heating Water Piping Insulation

112 The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and should be replaced to reduce energy usage. Two hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket.
Insulation per industry standard or per energy code whichever is more stringent

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$9,200** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016

68 **HVAC** **Replacement/Renewal** HVAC Equipment

109 The two condensing units are dated 2001and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. Maintenance staff has also reported that they receive complaints from faculty that the condensing units are noisy and vibrate excessively. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Roof and Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$37,300** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

111 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

106 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 40 LF ***REPAIR COST:*** **$1,550** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$58,450** **AV. SEVERITY SCORE =** **55** **COST PER BLDG GSF=** **$9.76**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 1,900 SF ***REPAIR COST:*** **$1,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,400** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.23**

70 **Roof** **Repair/Maintenance** Walkway Roof Support Beam

107 One of the main walkway support beams has an area where the wood is partially deteriorated on the face of the beam. The beam appears sound enough that the deteriorated wood can be repaired. All deteriorated wood should be thoroughly removed, followed by the application of a 2-component, solvent-free, low viscosity epoxy resin sealer-consilidant applied by brush to all affected areas. This should be followed by the application of a 2-component epoxy resin structural repair product, either in putty or trowellable paste form. Once the repair resin has cured, the areas can be sanded smooth and refinished.

4" x 15"

Walkway roof

QUANTITY: 3 SF ***REPAIR COST:*** **$550** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 61 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 5 EA ***REPAIR COST:*** **$450** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

113 The single-ply membrane on this building contains significant leaf and other debris, and the surface is fairly dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of non-dirty areas of the membrane indicated no apparent deficiencies. However, thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 6,014 SF ***REPAIR COST:*** **$2,700** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

102 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 6,000 SF ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

104 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

2200 LF 2x8 boards and 314 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 2,514 LF ***REPAIR COST:*** **$17,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$21,650** **AV. SEVERITY SCORE =** **52** **COST PER BLDG GSF=** **$3.61**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random moderate spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 35 SF ***REPAIR COST:*** **$2,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Structural** **$2,400** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.40**

FACILITY TOTALS **COST TOTAL =** **$143,300** **AV. SEVERITY SCORE =** **48** **COST PER BLDG GSF=** **$23.93**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**410**	**English**	Roof							
		Roof Drains	5 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$450						
40	**410**	**English**	Roof							
		Roof Membrane	6,000 SF							
102		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$350						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$800**	**$0**	**$0**	**$0**	**$0**	**$0**	**$800**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**410**	**English**	Electrical							
		Light Fixtures	187 EA							
108		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*				$10,700				
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$10,700**	**$0**	**$0**	**$0**	**$10,700**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**410**	**English**	Roof							
		Single-Ply Roof Membrane	6,014 SF							
113		The single-ply membrane on this building contains significant leaf and other debris, and the surface is fairly dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of non-dirty areas of the membrane indicated no apparent deficiencies. However, thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$2,700					
23	**410**	**English**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	1,900 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,400					
20	**410**	**English**	HVAC							
		HVAC Distribution Ductwork	40 LF							
106		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$1,550				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**31**	**$0**	**$4,100**	**$1,550**	**$0**	**$0**	**$0**	**$5,650**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
70	**410**	**English**	Roof							
		Walkway Roof Support Beam	3 SF							
107		One of the main walkway support beams has an area where the wood is partially deteriorated on the face of the beam. The beam appears sound enough that the deteriorated wood can be repaired. All deteriorated wood should be thoroughly removed, followed by the application of a 2-component, solvent-free, low viscosity epoxy resin sealer-consilidant applied by brush to all affected areas. This should be followed by the application of a 2-component epoxy resin structural repair product, either in putty or trowellable paste form. Once the repair resin has cured, the areas can be sanded smooth and refinished. *Walkway roof*			$550					
64	**410**	**English**	HVAC							
		Air Handler	1 EA							
111		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					
50	**410**	**English**	Structural							
		Concrete Columns and Beams	35 SF							
101		There is random moderate spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$2,400					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **61**	**$0**	**$13,350**	**$0**	**$0**	**$0**	**$0**	**$13,350**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**410**	**English**	HVAC							
		HVAC Heating Water Piping Insulation	1 LS							
112		The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and should be replaced to reduce energy usage. Two hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket. *Roof*			$9,200					
68	**410**	**English**	Electrical							
		Circuit Breaker Panels	1 LS							
110		The circuit breaker panelboards are original to the building and are now approximately 48 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Various locations*				$47,400				
68	**410**	**English**	HVAC							
		HVAC Equipment	1 LS							
109		The two condensing units are dated 2001and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. Maintenance staff has also reported that they receive complaints from faculty that the condensing units are noisy and vibrate excessively. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. *Roof and Mechanical Room*							$37,300	
50	**410**	**English**	Exterior Closure							
		Wood Parapet	120 SF							
105		The wood parapets on top of the mechanical room bump out are badly deteriorated. Wood appear cracked and split and paint is peeling extensively. Replace the parapets. *Room of mechanical room bump out*					$1,300			

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**410**	**English**	Roof							
		Wood Sunscreen Boards	2,514 LF							
104		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$17,600				
TOTAL: Replacement/Renewal			***AV. SEVER. SCORE =*** **59**	**$0**	**$9,200**	**$65,000**	**$1,300**	**$0**	**$37,300**	**$112,800**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **48**	**$800**	**$26,650**	**$77,250**	**$1,300**	**$0**	**$37,300**	**$143,300**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

420 Academic Success Center 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$163,850** Cost Per Square Foot is **$6.54**

Facility Condition Rating = 98 (Excellent) ***Average Severity Score = 38***

Repair Cost as a Percent of Facility Replacement Cost is 2 % 10 Deficiencies Were Identified

PRIMARY USE: Student Support *FACILITY AGE:* *42* Yrs.

FACILITY SF: 25,035 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 2005

Current Facility Replacement Cost is Approximately $10,639,875

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

420 Academic Success Center 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$2,150	
Annual PM		**2**	**50**	**$2,150**	**$0.09**
Improvement	Electrical	1	5	$26,400	
Improvement		**1**	**5**	**$26,400**	**$1.05**
Non-Annual Recurring Maintenance	HVAC	1	20	$8,100	
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$5,900	
Non-Annual Recurring Maintenance	Roof	1	50	$8,700	
Non-Annual Recurring Maintenance		**3**	**31**	**$22,700**	**$0.91**
Repair/Maintenance	HVAC	1	68	$36,400	
Repair/Maintenance		**1**	**68**	**$36,400**	**$1.45**
Replacement/Renewal	HVAC	1	68	$51,700	
Replacement/Renewal	Plumbing	1	5	$3,000	
Replacement/Renewal	Roof	1	40	$21,500	
Replacement/Renewal		**3**	**38**	**$76,200**	**$3.04**

CONDITION SUMMARY:

This building was constructed for the college in 1973 and extensively renovated in 2005. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 10 deficiencies identified were associated with HVAC, plumbing, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

420 Academic Success Center 900 Otay Lakes Rd.

Roof maintenance on this building is reasonable. The roof is covered with moderate amounts of leaves and other debris and the membrane surface has some dirty areas. Leaves and debris should be cleaned off the roof surface at least once per year. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is also strongly recommended that the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment is dated 1994, making it 21 years old. This is past he 20 year life expectancy of the equipment. The equipment appears to be deteriorating and the equipment is no longer considered cost-effective to repair or maintain. The equipment should be replaced.

The air handling equipment on the roof, which includes two multi-zone units with DX cooling and gas heat, appears to be in good condition. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The joint sealant on the metal HVAC ductwork on the roof is badly deteriorated, allowing hot/cold air to escape, reducing HVAC system efficiency. Replacement of all joint sealant is required.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

The lavatories and faucets in the Staffs rest rooms are old, with deteriorated finishes and poor design. The components are no longer cost-effective to maintain and should be replaced. New lavs and faucets set in a synthetic quartz or high-pressure laminate countertop are recommended.

5 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2

Light fixtures throughout building

QUANTITY: 462 EA ***REPAIR COST:*** **$26,400** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **Electrical** **$26,400** **AV. SEVERITY SCORE = 5** **COST PER BLDG GSF= $1.05**

68 **HVAC** **Repair/Maintenance** HVAC Equipment

107 The air handling equipment is comprised of two large multi-zone units with direct expansion cooling coils and natural gas heat. The equipment was inspected and appears to be in good operating condition. However, as the units age repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the equipment and extend its life.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$36,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

68 **HVAC** **Replacement/Renewal** HVAC Equipment

108 The two packaged roof top air conditioning units are dated 1994 and are well past their expected service life of 20 years. Repair costs will only escalate going forward and the units are no longer considered cost-effective to repair. It is recommended that they be scheduled for replacement. In addition, it is recommended that two circular aluminum exhaust fans that are deteriorating and nearing the end of their expected life also be replaced.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$51,700** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

104 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 790 LF ***REPAIR COST:*** **$8,100** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$96,200** **AV. SEVERITY SCORE =** **52** **COST PER BLDG GSF=** **$3.84**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 7,900 SF ***REPAIR COST:*** **$5,900** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$5,900** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.24**

5 **Plumbing** **Replacement/Renewal** Rest Room Lavatory

106 The lavatories and faucets in the staff rest room are old, with deteriorating finishes and poor design. The components are no longer cost-effective to repair or maintain and should be replaced with under-counter lavatories and new faucets set in a high-pressure laminate or synthetic quartz countertop.

2 Lavs; 2 faucets; 6'-3" counter

Men's restroom

QUANTITY: 1 LS ***REPAIR COST:*** **$3,000** **Deferrable** **Est. Remaining Life =** **2 Yrs.**

Life Expectancy New = 40 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 13 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

SYSTEM SUB-TOTAL **Plumbing** **$3,000** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$0.12**

60 **Roof** **Annual PM** Roof Drains

102 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 15 EA ***REPAIR COST:*** **$1,350** **Critical** **Est. Remaining Life =** **0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

151 The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface is fairly dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of cleaner areas of the membrane indicated no apparent deficiencies. Thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 25,100 SF ***REPAIR COST:*** **$8,700** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

101 There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 25,080 SF ***REPAIR COST:*** **$800** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

103 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

2670 LF 2x8 boards and 445 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 3,115 LF ***REPAIR COST:*** **$21,500** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**	**$32,350**	**AV. SEVERITY SCORE =**	**48**	**COST PER BLDG GSF=**	**$1.29**
FACILITY TOTALS	**COST TOTAL =**	**$163,850**	**AV. SEVERITY SCORE =**	**38**	**COST PER BLDG GSF=**	**$6.54**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**420**	**Academic Support Center**	Roof							
		Roof Drains	15 EA							
102		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$1,350						
40	**420**	**Academic Support Center**	Roof							
		Roof Membrane	25,080 SF							
101		There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$800						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$2,150**	**$0**	**$0**	**$0**	**$0**	**$0**	**$2,150**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**420**	**Academic Success Center**	Electrical							
		Light Fixtures	462 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*				$26,400				
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$26,400**	**$0**	**$0**	**$0**	**$26,400**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**420**	**Academic Success Center**	Roof							
		Single-Ply Roof Membrane	25,100 SF							
151		The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface is fairly dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of cleaner areas of the membrane indicated no apparent deficiencies. Thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*				$8,700				
23	**420**	**Academic Support Center**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	7,900 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$5,900					
20	**420**	**Academic Support Center**	HVAC							
		HVAC Distribution Ductwork	790 LF							
104		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$8,100				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**31**	**$0**	**$5,900**	**$16,800**	**$0**	**$0**	**$0**	**$22,700**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**420**	**Academic Success Center**	HVAC							
		HVAC Equipment	1 LS							
107		The air handling equipment is comprised of two large multi-zone units with direct expansion cooling coils and natural gas heat. The equipment was inspected and appears to be in good operating condition. However, as the units age repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the equipment and extend its life. *Roof*			$36,400					
TOTAL: Repair/Maintenance			***AV. SEVER. SCORE =*** **68**	**$0**	**$36,400**	**$0**	**$0**	**$0**	**$0**	**$36,400**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**420**	**Academic Success Center**	HVAC							
		HVAC Equipment	1 LS							
108		The two packaged roof top air conditioning units are dated 1994 and are well past their expected service life of 20 years. Repair costs will only escalate going forward and the units are no longer considered cost-effective to repair. It is recommended that they be scheduled for replacement. In addition, it is recommended that two circular aluminum exhaust fans that are deteriorating and nearing the end of their expected life also be replaced. *Roof*			$51,700					
40	**420**	**Academic Support Center**	Roof							
		Wood Sunscreen Boards	3,115 LF							
103		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$21,500			
5	**420**	**Academic Success Center**	Plumbing							
		Rest Room Lavatory	1 LS							
106		The lavatories and faucets in the staff rest room are old, with deteriorating finishes and poor design. The components are no longer cost-effective to repair or maintain and should be replaced with under-counter lavatories and new faucets set in a high-pressure laminate or synthetic quartz countertop. *Men's restroom*				$3,000				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL: Replacement/Renewal		*AV. SEVER. SCORE =*	**38**	**$0**	**$51,700**	**$24,500**	**$0**	**$0**	**$0**	**$76,200**
TOTAL FOR ALL CATEGORIES		*AV. SEVER. SCORE =*	**38**	**$2,150**	**$94,000**	**$67,700**	**$0**	**$0**	**$0**	**$163,850**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

430 Classroom — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$130,800** — Cost Per Square Foot is **$16.15**

Facility Condition Rating = 95 (Good) — ***Average Severity Score = 45***

Repair Cost as a Percent of Facility Replacement Cost is 5 % — 9 Deficiencies Were Identified

PRIMARY USE: Classroom — *FACILITY AGE:* *36* Yrs.

FACILITY SF: 8,097 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $2,469,585

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

430 Classroom — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$600	
Annual PM		**2**	**50**	**$600**	**$0.07**
Improvement	Electrical	1	5	$9,900	
Improvement		**1**	**5**	**$9,900**	**$1.22**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$2,700	
Non-Annual Recurring Maintenance	Roof	1	50	$3,275	
Non-Annual Recurring Maintenance		**2**	**36**	**$5,975**	**$0.74**
Repair/Maintenance	Structural	1	50	$1,025	
Repair/Maintenance		**1**	**50**	**$1,025**	**$0.13**
Replacement/Renewal	HVAC	1	68	$93,300	
Replacement/Renewal	Roof	2	55	$20,000	
Replacement/Renewal		**3**	**59**	**$113,300**	**$13.99**

CONDITION SUMMARY:

This building was constructed for the college in 1979. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 9 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

430 Classroom 900 Otay Lakes Rd.

Roof maintenance on this building is average. The roof is covered with moderate amounts of leaves and other debris and the membrane surface has some dirty areas, making it somewhat difficult to determine overall condition. Leaves and debris should be cleaned off the roof surface at least once per year. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is also strongly recommended that the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the relatively clean portions of the membrane revealed no apparent deficiencies.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

One of the covered walkway support beams has a large area where the wood is deteriorating on top of the beam. The beam should be replaced rather than repaired as the deterioration is too far advanced. Replacement with an S4S treated browntone douglas fir beam is recommended to achieve maximum weather resistance and life expectancy. Though a beam of this size is available, it may have to be custom milled.

The rooftop gas boiler and two circulating pumps appear to be slowly deteriorating and should be scheduled for replacement in 4 to 5 years. The equipment is of an agen that it will soon no longer be cost-effective to repair. Similarly, a boiler relief valve cooler should also be replaced. In addition, five exhaust fans on the roof are also deteriorationg and should be replaced at the same time.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

5 **Electrical** **Improvement** Light Fixtures

106 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building

QUANTITY: 173 EA ***REPAIR COST:*** **$9,900** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **Electrical** **$9,900** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$1.22**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

107 A packaged roof top natural gas boiler and two circulating pumps appear to be at the end of their expected service life and are recommended to be scheduled for replacement. Pump appurtenances (triple duty valve, suction strainer, air separate) are recommended to be replaced at the same time. There is also a cooler that cools the boiler relief valve discharge before it enters a drain. This equipment should also be replaced. Support frame for the boiler and pumps are recommended to be painted. There are four aluminum circular exhaust fans and one square exhaust fan on the roof that are recommended to be replaced.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$93,300** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

SYSTEM SUB-TOTAL **HVAC** **$93,300** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$11.52**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 3,580 SF ***REPAIR COST:*** **$2,700** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,700** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.33**

70 **Roof** **Replacement/Renewal** Walkway Roof Support Beam

105 One of the covered walkway support beams on one side of the walkway has a large area where the wood is deteriorating on the top of the beam. This beam should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beam should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled.
4" x 15" x 20'

Top of beam on walkway

QUANTITY: 20 LF ***REPAIR COST:*** **$1,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 61 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 4 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

108 The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface is fairly dirty in many areas. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of areas of the membrane that were relatively clean indicates no apparent deficiencies. However, a thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 8,000 SF ***REPAIR COST:*** **$3,275** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

102 There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 8,000 SF ***REPAIR COST:*** **$400** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

104 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

2320 LF 2x8 boards and 330 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 2,650 LF ***REPAIR COST:*** **$18,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$23,875** **AV. SEVERITY SCORE =** **52** **COST PER BLDG GSF=** **$2.95**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 15 SF ***REPAIR COST:*** **$1,025** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$1,025**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.13**
FACILITY TOTALS	**COST TOTAL =**	**$130,800**	**AV. SEVERITY SCORE =**	**45**	**COST PER BLDG GSF=**	**$16.15**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**430**	**Classroom**	Roof							
		Roof Drains	4 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$200						
40	**430**	**Classroom**	Roof							
		Roof Membrane	8,000 SF							
102		There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$400						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$600**	**$0**	**$0**	**$0**	**$0**	**$0**	**$600**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**430**	**Classroom**	Electrical							
		Light Fixtures	173 EA							
106		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*				$9,900				
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$9,900**	**$0**	**$0**	**$0**	**$9,900**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**430**	**Classroom**	Roof							
		Single-Ply Roof Membrane	8,000 SF							
108		The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface is fairly dirty in many areas. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of areas of the membrane that were relatively clean indicates no apparent deficiencies. However, a thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$3,275					
23	**430**	**Classroom**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	3,580 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$2,700					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **36**	**$0**	**$5,975**	**$0**	**$0**	**$0**	**$0**	**$5,975**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**430**	**Classroom**	Structural							
		Concrete Columns and Beams	15 SF							
101		There is random minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$1,025					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **50**	**$0**	**$1,025**	**$0**	**$0**	**$0**	**$0**	**$1,025**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
70	**430**	**Classroom**	Roof							
		Walkway Roof Support Beam	20 LF							
105		One of the covered walkway support beams on one side of the walkway has a large area where the wood is deteriorating on the top of the beam. This beam should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beam should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled. *Top of beam on walkway*			$1,400					
68	**430**	**Classroom**	HVAC							
		HVAC Equipment	1 LS							
107		A packaged roof top natural gas boiler and two circulating pumps appear to be at the end of their expected service life and are recommended to be scheduled for replacement. Pump appurtenances (triple duty valve, suction strainer, air separate) are recommended to be replaced at the same time. There is also a cooler that cools the boiler relief valve discharge before it enters a drain. This equipment should also be replaced. Support frame for the boiler and pumps are recommended to be painted. There are four aluminum circular exhaust fans and one square exhaust fan on the roof that are recommended to be replaced. *Roof*							$93,300	

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**430**	**Classroom**	Roof							
		Wood Sunscreen Boards	2,650 LF							
104		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.				$18,600				
		All sunscreen boards on perimeter of building								
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **59**	**$0**	**$1,400**	**$18,600**	**$0**	**$0**	**$93,300**	**$113,300**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **45**	**$600**	**$8,400**	**$28,500**	**$0**	**$0**	**$93,300**	**$130,800**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

440 Language — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$139,900** — Cost Per Square Foot is **$22.95**

Facility Condition Rating = 92 (Good) — ***Average Severity Score = 49***

Repair Cost as a Percent of Facility Replacement Cost is 8 % — 10 Deficiencies Were Identified

PRIMARY USE: Classroom — *FACILITY AGE:* *50* Yrs.

FACILITY SF: 6,095 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $1,858,975

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

440 Language — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	60	$300	
Annual PM		**1**	**60**	**$300**	**$0.05**
Improvement	Electrical	1	5	$8,000	
Improvement		**1**	**5**	**$8,000**	**$1.31**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,400	
Non-Annual Recurring Maintenance	Roof	1	50	$2,400	
Non-Annual Recurring Maintenance		**2**	**36**	**$3,800**	**$0.62**
Repair/Maintenance	HVAC	1	64	$10,400	
Repair/Maintenance	Structural	1	50	$2,100	
Repair/Maintenance		**2**	**57**	**$12,500**	**$2.05**
Replacement/Renewal	Electrical	1	68	$52,000	
Replacement/Renewal	HVAC	2	68	$45,700	
Replacement/Renewal	Roof	1	40	$17,600	
Replacement/Renewal		**4**	**61**	**$115,300**	**$18.92**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in good condition. Interior maintenance likewise appears adequate. The 10 deficiencies identified were associated with HVAC electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

Southwestern College SURVEY DATE: 8/15

440 Language 900 Otay Lakes Rd.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building is average. The roof currently appears free of debris, but the membrane surface has some dirty areas. Leaves and any debris should be cleaned off the roof surface at least once per year. However, the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is also recommended that the roof membrane be power washed in about 3 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment, including some exhaust fans, should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The circuit breaker panels are approximately 50 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

106 The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$52,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

5 **Electrical** **Improvement** Light Fixtures

104 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building

QUANTITY: 140 EA ***REPAIR COST:*** **$8,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **Electrical** **$60,000** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$9.84**

68 **HVAC** **Replacement/Renewal** HVAC Heating Water Piping Insulation

108 The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. One hundred and fifty feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket.

Insulation per industry standard or per energy code whichever is more stringent

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$6,900** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016

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68 **HVAC** **Replacement/Renewal** HVAC Equipment

105 The two condensing units are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. Maintenance staff has also reported that they receive complaints from faculty that the condensing units are noisy and vibrate excessively. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$38,800** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

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64 **HVAC** **Repair/Maintenance** Air Handler

107 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **HVAC** **$56,100** **AV. SEVERITY SCORE =** **66** **COST PER BLDG GSF=** **$9.20**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 1,885 SF ***REPAIR COST:*** **$1,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,400** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.23**

60 **Roof** **Annual PM** Roof Drains

102 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 3 EA ***REPAIR COST:*** **$300** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

109 The single-ply membrane on this building is currently debris-free. However, as debris and dirt accumulate, it will become difficult in the future to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of the membrane indicates no apparent deficiencies. A thorough cleaning of the membrane surface is recommended as a preventive measure in about 3 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 5,860 SF ***REPAIR COST:*** **$2,400** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

103 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

2200 LF 2x8 boards and 314 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 2,515 LF ***REPAIR COST:*** **$17,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$20,300** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$3.33**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 30 SF ***REPAIR COST:*** **$2,100** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$2,100**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.34**
FACILITY TOTALS	**COST TOTAL =**	**$139,900**	**AV. SEVERITY SCORE =**	**49**	**COST PER BLDG GSF=**	**$22.95**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**440**	**Language**	Roof							
		Roof Drains	3 EA							
102		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$300						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **60**	**$300**	**$0**	**$0**	**$0**	**$0**	**$0**	**$300**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**440**	**Language**	Electrical							
		Light Fixtures	140 EA							
104		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*				$8,000				
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$8,000**	**$0**	**$0**	**$0**	**$8,000**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**440**	**Language**	Roof							
		Single-Ply Roof Membrane	5,860 SF							
109		The single-ply membrane on this building is currently debris-free. However, as debris and dirt accumulate, it will become difficult in the future to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of the membrane indicates no apparent deficiencies. A thorough cleaning of the membrane surface is recommended as a preventive measure in about 3 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$2,400			
23	**440**	**Language**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	1,885 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,400					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **36**	**$0**	**$1,400**	**$0**	**$2,400**	**$0**	**$0**	**$3,800**

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**440**	**Language**	HVAC							
		Air Handler	1 EA							
107		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					
50	**440**	**Language**	Structural							
		Concrete Columns and Beams	30 SF							
101		There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$2,100					
TOTAL: Repair/Maintenance			***AV. SEVER. SCORE =*** **57**	**$0**	**$12,500**	**$0**	**$0**	**$0**	**$0**	**$12,500**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**440**	**Language**	HVAC							
		HVAC Heating Water Piping Insulation	1 LS							
108		The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. One hundred and fifty feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket. *Roof*			$6,900					
68	**440**	**Language**	Electrical							
		Circuit Breaker Panels	1 LS							
106		The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Various locations*				$52,000				
68	**440**	**Language**	HVAC							
		HVAC Equipment	1 LS							
105		The two condensing units are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. Maintenance staff has also reported that they receive complaints from faculty that the condensing units are noisy and vibrate excessively. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. *Roof*							$38,800	

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**440**	**Language**	Roof							
		Wood Sunscreen Boards	2,515 LF							
103		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.				$17,600				
		All sunscreen boards on perimeter of building								
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **61**	**$0**	**$6,900**	**$69,600**	**$0**	**$0**	**$38,800**	**$115,300**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **49**	**$300**	**$20,800**	**$77,600**	**$2,400**	**$0**	**$38,800**	**$139,900**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

450 Office — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$44,000** — Cost Per Square Foot is **$28.39**

Facility Condition Rating = 91 (Good) — ***Average Severity Score = 42***

Repair Cost as a Percent of Facility Replacement Cost is 9 % — 8 Deficiencies Were Identified

PRIMARY USE: Administration — *FACILITY AGE:* *43* Yrs.

FACILITY SF: 1,550 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $472,750

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 26 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

450 Office 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$275	
Annual PM		**2**	**50**	**$275**	**$0.18**
Improvement	Electrical	1	5	$1,400	
Improvement		**1**	**5**	**$1,400**	**$0.90**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$800	
Non-Annual Recurring Maintenance	Roof	1	50	$1,100	
Non-Annual Recurring Maintenance		**2**	**36**	**$1,900**	**$1.23**
Repair/Maintenance	Structural	1	50	$725	
Repair/Maintenance		**1**	**50**	**$725**	**$0.47**
Replacement/Renewal	Electrical	1	68	$35,000	
Replacement/Renewal	Roof	1	40	$4,700	
Replacement/Renewal		**2**	**54**	**$39,700**	**$25.61**

CONDITION SUMMARY:

This building was constructed for the college in 1972. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in good condition. Interior maintenance likewise appears adequate. The 9 deficiencies identified were associated with electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

450 Office 900 Otay Lakes Rd.

Roof maintenance on this building is average. The roof has a moderate amount of leaves and debris on the surface, and some dirty areas, all of which makes inspecting the condition of the membrane somewhat difficult. Leaves and any debris should be cleaned off the roof surface at least once per year. The roof drains and sumps are badly clogged and should be cleaned at least once per year. It is also strongly recommended that the roof membrane be power washed in about 2 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The circuit breaker panel is approximately 43 years old. It is still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panel should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panel

106 The circuit breaker panelboard is original to the building and is now approximately 43 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Electrical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$35,000** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building

QUANTITY: 24 EA ***REPAIR COST:*** **$1,400** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **Electrical** **$36,400** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$23.48**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 1,056 SF ***REPAIR COST:*** **$800** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$800** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.52**

60 **Roof** **Annual PM** Roof Drains

103 The roof drain and drain recess is clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 1 EA ***REPAIR COST:*** **$125** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

107 The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface has some areas of dirt consolidation. Continued inattention will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Examination of relatively clean areas of the membrane indicate no apparent deficiencies. Thorough cleaning of the membrane surface is recommended in about 2 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 1,600 SF ***REPAIR COST:*** **$1,100** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract

Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

102 There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 1,590 SF ***REPAIR COST:*** **$150** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

104 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

615 LF 2x8 boards

All sunscreen boards on perimeter of building

QUANTITY: 615 LF ***REPAIR COST:*** **$4,700** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$6,075** **AV. SEVERITY SCORE =** **48** **COST PER BLDG GSF=** **$3.92**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 10 SF ***REPAIR COST:*** **$725** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Structural** **$725** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.47**

FACILITY TOTALS **COST TOTAL =** **$44,000** **AV. SEVERITY SCORE =** **42** **COST PER BLDG GSF=** **$28.39**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**450**	**Office**	Roof							
		Roof Drains	1 EA							
103		The roof drain and drain recess is clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$125						
40	**450**	**Office**	Roof							
		Roof Membrane	1,590 SF							
102		There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$150						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$275**	**$0**	**$0**	**$0**	**$0**	**$0**	**$275**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**450**	**Office**	Electrical							
		Light Fixtures	24 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*				$1,400				
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$1,400**	**$0**	**$0**	**$0**	**$1,400**

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**450**	**Office**	Roof							
		Single-Ply Roof Membrane	1,600 SF							
107		The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface has some areas of dirt consolidation. Continued inattention will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Examination of relatively clean areas of the membrane indicate no apparent deficiencies. Thorough cleaning of the membrane surface is recommended in about 2 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*				$1,100				
23	**450**	**Office**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	1,056 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$800					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **36**	**$0**	**$800**	**$1,100**	**$0**	**$0**	**$0**	**$1,900**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**450**	**Office**	Structural							
		Concrete Columns and Beams	10 SF							
101		There is random minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$725					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **50**	**$0**	**$725**	**$0**	**$0**	**$0**	**$0**	**$725**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**450**	**Office**	Electrical							
		Circuit Breaker Panel	1 LS							
106		The circuit breaker panelboard is original to the building and is now approximately 43 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Electrical Room*							$35,000	
40	**450**	**Office**	Roof							
		Wood Sunscreen Boards	615 LF							
104		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$4,700				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **54**	**$0**	**$0**	**$4,700**	**$0**	**$0**	**$35,000**	**$39,700**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **42**	**$275**	**$1,525**	**$7,200**	**$0**	**$0**	**$35,000**	**$44,000**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

460 Behavioral Science 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$210,250** Cost Per Square Foot is **$28.84**

Facility Condition Rating = 93 (Good) ***Average Severity Score = 46***

Repair Cost as a Percent of Facility Replacement Cost is 7 % 12 Deficiencies Were Identified

PRIMARY USE: Classroom *FACILITY AGE:* *41* Yrs.

FACILITY SF: 7,290 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $3,098,250

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

460 Behavioral Science 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$850	
Annual PM		**2**	**50**	**$850**	**$0.12**
Improvement	Electrical	1	5	$10,000	
Improvement		**1**	**5**	**$10,000**	**$1.37**
Non-Annual Recurring Maintenance	HVAC	1	20	$5,125	
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,600	
Non-Annual Recurring Maintenance	Roof	1	50	$3,150	
Non-Annual Recurring Maintenance		**3**	**31**	**$9,875**	**$1.35**
Repair/Maintenance	HVAC	1	64	$10,400	
Repair/Maintenance	Structural	1	50	$725	
Repair/Maintenance		**2**	**57**	**$11,125**	**$1.53**
Replacement/Renewal	Electrical	1	68	$86,200	
Replacement/Renewal	HVAC	2	68	$72,700	
Replacement/Renewal	Roof	1	40	$19,500	
Replacement/Renewal		**4**	**61**	**$178,400**	**$24.47**

CONDITION SUMMARY:

This building was constructed for the college in 1974. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 12 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

Southwestern College SURVEY DATE: 8/15

460 Behavioral Science 900 Otay Lakes Rd.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be poor. The roof has a significant amount of leaves and debris on the surface, and many dirty areas, all of which makes inspecting the condition of the membrane difficult. Leaves and debris should be cleaned off the roof surface at least once per year. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is also strongly recommended that the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of clean areas of the membrane surface revealed no apparent deficiencies.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment, including three deteriorating exhaust fans, should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The joint sealant on the metal HVAC ductwork on the roof is badly deteriorated, allowing hot/cold air to escape, reducing HVAC system efficiency. Replacement of all joint sealant is required. The hot water heating piping insulation and exposed aluminum jacket on the roof are badly deteriorated and should be replaced to maintain system efficiency and save energy.

The circuit breaker panel is approximately 41 years old. It is still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panel should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panel and Distribution Swithboard

108 The circuit breaker panelboard is original to the building and is now approximately 41 years old. This building also has main distribution switchgear. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Electrical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$86,200** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 **Electrical** **Improvement** Light Fixtures

106 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building

QUANTITY: 175 EA ***REPAIR COST:*** **$10,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **Electrical** **$96,200** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$13.20**

68 **HVAC** **Replacement/Renewal** HVAC Heating Water Piping Insulation

110 The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Two hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket.

Insulation per industry standard or per energy code whichever is more stringent

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$9,200** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

68 **HVAC** **Replacement/Renewal** HVAC Equipment

107 HVAC equipment appears to have been replaced in Year 2001. The two condensing units are nearing the end of their expected service life of 20 years and it is recommended that they be scheduled for replacement within the next 5 years. There are two aluminum circular exhaust fans and one square exhaust fan on the roof that are recommended to be replaced. Refrigerant piping insulation on the roof is deteriorated and should be replaced when the condensing units are replace. Forty - five feet of insulation has been included in the cost.

Roof and Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$63,500** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

109 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

105 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 500 LF ***REPAIR COST:*** **$5,125** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$88,225** **AV. SEVERITY SCORE =** **55** **COST PER BLDG GSF=** **$12.10**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,160 SF ***REPAIR COST:*** **$1,600** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,600** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.22**

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 4 EA ***REPAIR COST:*** **$375** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

111 The single-ply membrane on this building contains significant amounts of leaf and other debris, and the surface is somewhat dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of relatively clean areas of the membrane revealed no apparent deficiencies. Thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 7,200 SF ***REPAIR COST:*** **$3,150** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

102 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 7,200 SF ***REPAIR COST:*** **$475** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 Roof **Replacement/Renewal** Wood Sunscreen Boards

104 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

2500 LF 2x8 boards and 100 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 2,600 LF ***REPAIR COST:*** **$19,500** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$23,500** **AV. SEVERITY SCORE =** **48** **COST PER BLDG GSF=** **$3.22**

50 Structural **Repair/Maintenance** Concrete Columns and Beams

101 There is random minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 10 SF ***REPAIR COST:*** **$725** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Structural** **$725** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.10**

FACILITY TOTALS **COST TOTAL =** **$210,250** **AV. SEVERITY SCORE =** **46** **COST PER BLDG GSF=** **$28.84**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**460**	**Behavioral Science**	Roof							
		Roof Drains	4 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$375						
40	**460**	**Behavioral Science**	Roof							
		Roof Membrane	7,200 SF							
102		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$475						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$850**	**$0**	**$0**	**$0**	**$0**	**$0**	**$850**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**460**	**Behavioral Science**	Electrical							
		Light Fixtures	175 EA							
106		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*				$10,000				
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$10,000**	**$0**	**$0**	**$0**	**$10,000**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**460**	**Behavioral Science**	Roof							
		Single-Ply Roof Membrane	7,200 SF							
111		The single-ply membrane on this building contains significant amounts of leaf and other debris, and the surface is somewhat dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of relatively clean areas of the membrane revealed no apparent deficiencies. Thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$3,150					
23	**460**	**Behavioral Science**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,160 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,600					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**460**	**Behavioral Science**	HVAC							
		HVAC Distribution Ductwork	500 LF							
105		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$5,125				
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **31**	**$0**	**$4,750**	**$5,125**	**$0**	**$0**	**$0**	**$9,875**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**460**	**Behavioral Science**	HVAC							
		Air Handler	1 EA							
109		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					
50	**460**	**Behavioral Science**	Structural							
		Concrete Columns and Beams	10 SF							
101		There is random minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$725					
TOTAL:		**Repair/Maintenance**	*AV. SEVER. SCORE =* **57**	**$0**	**$11,125**	**$0**	**$0**	**$0**	**$0**	**$11,125**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**460**	**Behavioral Science**	HVAC							
		HVAC Heating Water Piping Insulation	1 LS							
110		The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Two hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket. *Roof*			$9,200					
68	**460**	**Behavioral Science**	HVAC							
		HVAC Equipment	1 LS							
107		HVAC equipment appears to have been replaced in Year 2001. The two condensing units are nearing the end of their expected service life of 20 years and it is recommended that they be scheduled for replacement within the next 5 years. There are two aluminum circular exhaust fans and one square exhaust fan on the roof that are recommended to be replaced. Refrigerant piping insulation on the roof is deteriorated and should be replaced when the condensing units are replace. Forty - five feet of insulation has been included in the cost. *Roof and Mechanical Room*							$63,500	
68	**460**	**Behavioral Science**	Electrical							
		Circuit Breaker Panel and Distribution Swithboard	1 LS							
108		The circuit breaker panelboard is original to the building and is now approximately 41 years old. This building also has main distribution switchgear. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Electrical Room*							$86,200	

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**460**	**Behavioral Science**	Roof							
		Wood Sunscreen Boards	2,600 LF							
104		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$19,500				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **61**	**$0**	**$9,200**	**$19,500**	**$0**	**$0**	**$149,700**	**$178,400**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **46**	**$850**	**$25,075**	**$34,625**	**$0**	**$0**	**$149,700**	**$210,250**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

470 Social Science — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$183,600** — Cost Per Square Foot is **$17.42**

Facility Condition Rating = 94 (Good) — ***Average Severity Score = 46***

Repair Cost as a Percent of Facility Replacement Cost is 6 % — 11 Deficiencies Were Identified

PRIMARY USE: Classroom — *FACILITY AGE:* *41* Yrs.

FACILITY SF: 10,542 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $3,215,310

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

470 Social Science 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$1,050	
Annual PM		**2**	**50**	**$1,050**	**$0.10**
Improvement	Electrical	1	5	$13,750	
Improvement		**1**	**5**	**$13,750**	**$1.30**
Non-Annual Recurring Maintenance	HVAC	1	20	$12,500	
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$2,100	
Non-Annual Recurring Maintenance	Roof	1	50	$3,900	
Non-Annual Recurring Maintenance		**3**	**31**	**$18,500**	**$1.75**
Repair/Maintenance	HVAC	1	64	$15,600	
Repair/Maintenance		**1**	**64**	**$15,600**	**$1.48**
Replacement/Renewal	Electrical	1	68	$55,500	
Replacement/Renewal	HVAC	2	68	$79,200	
Replacement/Renewal	Roof	1	40	$0	
Replacement/Renewal		**4**	**61**	**$134,700**	**$12.78**

CONDITION SUMMARY:

This building was constructed for the college in 1974. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 11 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be inadequate. The roof has a significant amount of leaves and debris

on the surface, and many dirty areas, all of which makes inspecting the condition of the membrane difficult. Leaves and debris should be cleaned off the roof surface at least once per year. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is also strongly recommended that the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface, where possible, revealed no apparent deficiencies.

The sunscreens have been removed on three sides of the building, likely due to advanced deterioration. It is assumed that the fourth side will be removed also. As it is uncertain if the college has programmed replacement, no cost estimate is provided at this time. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment, including one exhaust fan, should be programmed for replacement in about 5 years. There are also some steel duct supports that are oxidizing and should be re-finished.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The joint sealant on the metal HVAC ductwork on the roof is badly deteriorated, allowing hot/cold air to escape, reducing HVAC system efficiency. Replacement of all joint sealant is required. The hot water heating piping insulation and exposed aluminum jacket on the roof are badly deteriorated and should be replaced to maintain system efficiency and save energy.

The circuit breaker panelboards are approximately 41 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

107 The circuit breaker panelboards are original to the building and are now approximately 41 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$55,500** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2

Light fixtures throughout building

QUANTITY: 240 EA ***REPAIR COST:*** **$13,750** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **Electrical** **$69,250** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$6.57**

68 **HVAC** **Replacement/Renewal** HVAC Heating Water Piping Insulation

109 The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Three hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket.

Insulation per industry standard or per energy code whichever is more stringent

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$11,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016

68 **HVAC** **Replacement/Renewal** HVAC Equipment

106 The two condensing units are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

There is also one circular aluminum exhaust fan on the roof that appears to be deteriorating and should be replaced.
In addition, the bare carbon steel duct supports are oxidizing and should be re-finished to minimize rusting.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$67,800** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

108 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$15,600** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

104 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 1,220 LF ***REPAIR COST:*** **$12,500** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$107,300** **AV. SEVERITY SCORE =** **55** **COST PER BLDG GSF=** **$10.18**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,760 SF ***REPAIR COST:*** **$2,100** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,100** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.20**

60 **Roof** **Annual PM** Roof Drains

102 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 5 EA ***REPAIR COST:*** **$500** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

110 The single-ply membrane on this building contains significant debris, and there is random dirt across the surface. Continued inattention will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of the few clean areas of the membrane revealed no apparent deficiencies. Thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 10,200 SF ***REPAIR COST:*** **$3,900** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

101 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 10,200 SF ***REPAIR COST:*** **$550** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

103 The sunscreens have been removed on the north, east and west sides of the building, likely due to advanced deterioration. It is assumed that the south side will be removed also. Uncertain if college has already programmed replacement. However, no estimate is provided for replacement at this time. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the boards be replaced with treated S4S douglas fir browntone boards, and 2 coats of low viscosity epoxy resin sealer applied to the tops of the boards retard constant weathering and significantly reduce maintenance costs.

All sunscreen boards on perimeter of building

QUANTITY: 0 LF ***REPAIR COST:*** **$0** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**		**$4,950**	**AV. SEVERITY SCORE =**	**48**	**COST PER BLDG GSF=**	**$0.47**
FACILITY TOTALS		**COST TOTAL =**	**$183,600**	**AV. SEVERITY SCORE =**	**46**	**COST PER BLDG GSF=**	**$17.42**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**470**	**Social Science**	Roof							
		Roof Drains	5 EA							
102		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$500						
40	**470**	**Social Science**	Roof							
		Roof Membrane	10,200 SF							
101		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$550						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$1,050**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,050**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**470**	**Social Science**	Electrical							
		Light Fixtures	240 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*				$13,750				
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$13,750**	**$0**	**$0**	**$0**	**$13,750**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**470**	**Social Science**	Roof							
		Single-Ply Roof Membrane	10,200 SF							
110		The single-ply membrane on this building contains significant debris, and there is random dirt across the surface. Continued inattention will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of the few clean areas of the membrane revealed no apparent deficiencies. Thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$3,900					
23	**470**	**Social Science**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,760 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$2,100					
20	**470**	**Social Science**	HVAC							
		HVAC Distribution Ductwork	1,220 LF							
104		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$12,500				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**31**	**$0**	**$6,000**	**$12,500**	**$0**	**$0**	**$0**	**$18,500**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**470**	**Social Science**	HVAC							
		Air Handler	1 EA							
108		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*							$15,600	
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **64**	**$0**	**$0**	**$0**	**$0**	**$0**	**$15,600**	**$15,600**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**470**	**Social Science**	HVAC							
		HVAC Heating Water Piping Insulation	1 LS							
109		The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Three hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket. *Roof*			$11,400					
68	**470**	**Social Science**	Electrical							
		Circuit Breaker Panels	1 LS							
107		The circuit breaker panelboards are original to the building and are now approximately 41 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Various locations*							$55,500	
68	**470**	**Social Science**	HVAC							
		HVAC Equipment	1 LS							
106		The two condensing units are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. There is also one circular aluminum exhaust fan on the roof that appears to be deteriorating and should be replaced. In addition, the bare carbon steel duct supports are oxidizing and should be re-finished to minimize rusting. *Roof*							$67,800	

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
40	**470**	**Social Science**	Roof							
		Wood Sunscreen Boards	0 LF							
103		The sunscreens have been removed on the north, east and west sides of the building, likely due to advanced deterioration. It is assumed that the south side will be removed also. Uncertain if college has already programmed replacement. However, no estimate is provided for replacement at this time. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the boards be replaced with treated S4S douglas fir browntone boards, and 2 coats of low viscosity epoxy resin sealer applied to the tops of the boards retard constant weathering and significantly reduce maintenance costs.				$0				
		All sunscreen boards on perimeter of building								
TOTAL: Replacement/Renewal			***AV. SEVER. SCORE =*** **61**	**$0**	**$11,400**	**$0**	**$0**	**$0**	**$123,300**	**$134,700**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **46**	**$1,050**	**$17,400**	**$26,250**	**$0**	**$0**	**$138,900**	**$183,600**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

500 Graphics — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$207,700** — Cost Per Square Foot is **$23.95**

Facility Condition Rating = 94 (Good) — ***Average Severity Score = 48***

Repair Cost as a Percent of Facility Replacement Cost is 6 % — 13 Deficiencies Were Identified

PRIMARY USE: Classroom/Lab — *FACILITY AGE:* *50* Yrs.

FACILITY SF: 8,674 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 2010

Current Facility Replacement Cost is Approximately $3,686,450

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

500 Graphics 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$575	
Annual PM		**2**	**50**	**$575**	**$0.07**
Improvement	Electrical	1	5	$8,750	
Improvement		**1**	**5**	**$8,750**	**$1.01**
Non-Annual Recurring Maintenance	HVAC	1	20	$2,250	
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,850	
Non-Annual Recurring Maintenance	Roof	1	50	$3,175	
Non-Annual Recurring Maintenance		**3**	**31**	**$7,275**	**$0.84**
Repair/Maintenance	HVAC	1	64	$10,400	
Repair/Maintenance	Structural	1	50	$2,050	
Repair/Maintenance		**2**	**57**	**$12,450**	**$1.44**
Replacement/Renewal	Electrical	1	68	$110,800	
Replacement/Renewal	HVAC	2	68	$66,500	
Replacement/Renewal	Roof	2	55	$1,350	
Replacement/Renewal		**5**	**63**	**$178,650**	**$20.60**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities at the college. The building received some renovation in 2010. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 13 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed

on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be poor. The roof has a significant amount of leaves and debris on the surface, and some dirty areas, all of which makes inspecting the condition of the membrane difficult. Leaves and debris should be cleaned off the roof surface at least once per year. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is also strongly recommended that the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane, where possible, revealed no apparent deficiencies.

The sunscreen boards around the building have been removed, likely due to advanced deterioration. As it is uncertain if the college has already programmed replacement, no cost estimate has been provided for replacement. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

One of the covered walkway support beams has several areas where the wood is badly split and deteriorating. This beam is no longer considered repairable and should be replaced. Replacement with a S4S treated brownstone douglas fir beam is recommended. Though beams of this size are available, they may have to be custom milled.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment, including two deteriorating exhaust fans, should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The joint sealant on the metal HVAC ductwork on the roof is badly deteriorated, allowing hot/cold air to escape, reducing HVAC system efficiency. Replacement of all joint sealant is required. The hot water heating piping insulation and exposed aluminum jacket on the roof are badly deteriorated and should be replaced to maintain system efficiency and save energy.

The circuit breaker panels are approximately 50 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panel

109 The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Electrical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$110,800** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

5 **Electrical** **Improvement** Light Fixtures

107 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2

Light fixtures throughout building

QUANTITY: 153 EA ***REPAIR COST:*** **$8,750** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$119,550** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$13.78**

68 **HVAC** **Replacement/Renewal** HVAC Heating Water Piping Insulation

111 The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Two hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket.

Insulation per industry standard or per energy code whichever is more stringent

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$8,900** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016

68 **HVAC** **Replacement/Renewal** HVAC Equipment

108 The two condensing units are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. There are also two circular aluminum roof exhaust fans that appear to be deteriorating and are recommended to be replaced.

Refrigerant piping insulation on the roof is deteriorated as well and should be replaced when the condensing units are replaced. Fifty feet of insulation has been included in the cost estimate.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$57,600** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

110 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

105 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 220 LF ***REPAIR COST:*** **$2,250** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2032

SYSTEM SUB-TOTAL **HVAC** **$79,150** **AV. SEVERITY SCORE =** **55** **COST PER BLDG GSF=** **$9.12**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,475 SF ***REPAIR COST:*** **$1,850** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,850** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.21**

70 **Roof** **Replacement/Renewal** Covered Walkway Support Beam

106 One of the covered walkway support beams on one side of the walkway has several areas where the wood is badly split and deteriorating. This beam should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beam should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled.
4" x 15"

East side of walkway

QUANTITY: 20 LF ***REPAIR COST:*** **$1,350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 61 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 4 EA ***REPAIR COST:*** **$375** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

112 The single-ply membrane on this building contains significant leaf and other debris, and the surface is very dirt encrusted. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Examination of the very few relatively clean areas indicated no apparent deficiencies. Thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 8,845 SF ***REPAIR COST:*** **$3,175** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

102 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 8,850 SF ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

104 The sunscreens have been removed on all sides of the building, likely due to advanced deterioration. It is uncertain if college has already programmed replacement. Therefore, no estimate is provided for replacement at this time. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the boards be replaced with treated S4S douglas fir browntone boards, and 2 coats of a low viscosity epoxy resin sealer applied to the top of the boards to retard constant weathering and significantly reduce maintenance costs.

All sunscreen boards on perimeter of building

QUANTITY: 0 LF ***REPAIR COST:*** **$0** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$5,100** **AV. SEVERITY SCORE =** **52** **COST PER BLDG GSF=** **$0.59**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 30 SF ***REPAIR COST:*** **$2,050** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Structural** **$2,050** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.24**

FACILITY TOTALS **COST TOTAL =** **$207,700** **AV. SEVERITY SCORE =** **48** **COST PER BLDG GSF=** **$23.95**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**500**	**Graphics**	Roof							
		Roof Drains	4 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$375						
40	**500**	**Graphics**	Roof							
		Roof Membrane	8,850 SF							
102		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$200						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$575**	**$0**	**$0**	**$0**	**$0**	**$0**	**$575**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**500**	**Graphics**	Electrical							
		Light Fixtures	153 EA							
107		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*					$8,750			
TOTAL: Improvement			*AV. SEVER. SCORE =* **5**	**$0**	**$0**	**$0**	**$8,750**	**$0**	**$0**	**$8,750**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**500**	**Graphics**	Roof							
		Single-Ply Roof Membrane	8,845 SF							
112		The single-ply membrane on this building contains significant leaf and other debris, and the surface is very dirt encrusted. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Examination of the very few relatively clean areas indicated no apparent deficiencies. Thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$3,175					
23	**500**	**Graphics**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,475 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,850					
20	**500**	**Graphics**	HVAC							
		HVAC Distribution Ductwork	220 LF							
105		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$2,250				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**31**	**$0**	**$5,025**	**$2,250**	**$0**	**$0**	**$0**	**$7,275**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**500**	**Graphics**	HVAC							
		Air Handler	1 EA							
110		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					
50	**500**	**Graphics**	Structural							
		Concrete Columns and Beams	30 SF							
101		There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$2,050					
TOTAL: Repair/Maintenance			***AV. SEVER. SCORE =*** **57**	**$0**	**$12,450**	**$0**	**$0**	**$0**	**$0**	**$12,450**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
70	**500**	**Graphics**	Roof							
		Covered Walkway Support Beam	20 LF							
106		One of the covered walkway support beams on one side of the walkway has several areas where the wood is badly split and deteriorating. This beam should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beam should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled. *East side of walkway*			$1,350					
68	**500**	**Graphics**	HVAC							
		HVAC Heating Water Piping Insulation	1 LS							
111		The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Two hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket. *Roof*			$8,900					
68	**500**	**Graphics**	Electrical							
		Circuit Breaker Panel	1 LS							
109		The circuit breaker panelboards are original to the building and are now approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Electrical Room*				$110,800				

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
68	**500**	**Graphics**	HVAC							
		HVAC Equipment	1 LS							
108		The two condensing units are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. There are also two circular aluminum roof exhaust fans that appear to be deteriorating and are recommended to be replaced. Refrigerant piping insulation on the roof is deteriorated as well and should be replaced when the condensing units are replaced. Fifty feet of insulation has been included in the cost estimate. *Roof*								$57,600	
40	**500**	**Graphics**	Roof							
		Wood Sunscreen Boards	0 LF							
104		The sunscreens have been removed on all sides of the building, likely due to advanced deterioration. It is uncertain if college has already programmed replacement. Therefore, no estimate is provided for replacement at this time. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the boards be replaced with treated S4S douglas fir browntone boards, and 2 coats of a low viscosity epoxy resin sealer applied to the top of the boards to retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*					$0				
TOTAL: Replacement/Renewal			***AV. SEVER. SCORE =*** **63**	**$0**	**$10,250**	**$110,800**	**$0**	**$0**	**$57,600**	**$178,650**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **48**	**$575**	**$27,725**	**$113,050**	**$8,750**	**$0**	**$57,600**	**$207,700**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

510 Classroom — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$114,775** — Cost Per Square Foot is **$18.46**

Facility Condition Rating = 94 (Good) — ***Average Severity Score = 44***

Repair Cost as a Percent of Facility Replacement Cost is 6 % — 8 Deficiencies Were Identified

PRIMARY USE: Classroom — *FACILITY AGE:* *44* Yrs.

FACILITY SF: 6,219 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 2011

Current Facility Replacement Cost is Approximately $1,896,795

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

510 Classroom — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Improvement	Electrical	1	5	$3,500	
Improvement	Roof	1	100	$525	
Improvement		**2**	**53**	**$4,025**	**$0.65**
Non-Annual Recurring Maintenance	HVAC	1	20	$3,100	
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,400	
Non-Annual Recurring Maintenance	Roof	1	50	$2,400	
Non-Annual Recurring Maintenance		**3**	**31**	**$6,900**	**$1.11**
Repair/Maintenance	Structural	1	50	$700	
Repair/Maintenance		**1**	**50**	**$700**	**$0.11**
Replacement/Renewal	Electrical	1	68	$87,900	
Replacement/Renewal	Roof	1	40	$15,250	
Replacement/Renewal		**2**	**54**	**$103,150**	**$16.59**

CONDITION SUMMARY:

This building was constructed for the college in 1971. The building underwent a comprehensive renovation in 2011. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 8 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

510 Classroom 900 Otay Lakes Rd.

It appears that the roof on this building is in the process of being replaced. Roof drains/sumps appear to be in good condition. As debris and dirt accumulate on the new roof, it is recommended that the roof membrane be power washed in about 3 years after the new membrane is installed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The roof access ladder has no extension bar to extend grip above the hatch, which is a potential safety hazard. An extension grab bar should be installed.

The joint sealant on the metal HVAC ductwork on the roof is badly deteriorated, allowing hot/cold air to escape, reducing HVAC system efficiency. Replacement of all joint sealant is required.

The circuit breaker panels are approximately 44 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

106 The circuit breaker panelboards are original to the building and are now approximately 44 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$87,900** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building

QUANTITY: 61 EA ***REPAIR COST:*** **$3,500** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$91,400** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$14.70**

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

104 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 300 LF ***REPAIR COST:*** **$3,100** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$3,100** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.50**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapet

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 1,885 SF ***REPAIR COST:*** **$1,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,400** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.23**

100 **Roof** **Improvement** Roof Ladder Extension

102 The roof access ladder has no extension to extend above the hatch, which is a potential safety hazard. Install an extension bar for the ladder.

Roof access hatch

QUANTITY: 1 EA ***REPAIR COST:*** **$525** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 54 ***Planning Priority:*** **A-Health/Safety Issue**

Repair

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

107 There is roof work underway on this building -- apparently a membrane replacement. Dirt and debris should not be allowed to accumulated extensively on the new membrane, as it can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 5,860 SF ***REPAIR COST:*** **$2,400** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

103 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the boards be replaced with treated S4S douglas fir browntone boards, and sheet metal caps with drip edges fabricated and installed on the tops of the boards to retard constant weathering and significantly reduce maintenance costs.
1655 LF 2x8 boards and 1.5" x 3" caps

All sunscreen boards on perimeter of building

Short Term Alternative Install metal caps with drip edges ($8,750)

QUANTITY: 1,655 LF ***REPAIR COST:*** **$15,250** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$18,175** **AV. SEVERITY SCORE =** **63** **COST PER BLDG GSF=** **$2.92**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 10 SF ***REPAIR COST:*** **$700** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$700**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.11**
FACILITY TOTALS	**COST TOTAL =**	**$114,775**	**AV. SEVERITY SCORE =**	**44**	**COST PER BLDG GSF=**	**$18.46**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
100	**510**	**Classroom**	Roof							
		Roof Ladder Extension	1 EA							
102		The roof access ladder has no extension to extend above the hatch, which is a potential safety hazard. Install an extension bar for the ladder. *Roof access hatch*		$525						
5	**510**	**Classroom**	Electrical							
		Light Fixtures	61 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*					$3,500			
TOTAL:	**Improvement**		*AV. SEVER. SCORE =* **53**	**$525**	**$0**	**$0**	**$3,500**	**$0**	**$0**	**$4,025**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**510**	**Classroom**	Roof							
		Single-Ply Roof Membrane	5,860 SF							
107		There is roof work underway on this building -- apparently a membrane replacement. Dirt and debris should not be allowed to accumulated extensively on the new membrane, as it can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$2,400				
23	**510**	**Classroom**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	1,885 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,400					
20	**510**	**Classroom**	HVAC							
		HVAC Distribution Ductwork	300 LF							
104		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$3,100				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**31**	**$0**	**$1,400**	**$3,100**	**$2,400**	**$0**	**$0**	**$6,900**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**510**	**Classroom**	Structural							
		Concrete Columns and Beams	10 SF							
101		There is random minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$700					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **50**	**$0**	**$700**	**$0**	**$0**	**$0**	**$0**	**$700**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**510**	**Classroom**	Electrical							
		Circuit Breaker Panels	1 LS							
106		The circuit breaker panelboards are original to the building and are now approximately 44 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Various locations*						$87,900		
40	**510**	**Classroom**	Roof							
		Wood Sunscreen Boards	1,655 LF							
103		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the boards be replaced with treated S4S douglas fir browntone boards, and sheet metal caps with drip edges fabricated and installed on the tops of the boards to retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$15,250				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **54**	**$0**	**$0**	**$15,250**	**$0**	**$0**	**$87,900**	**$103,150**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **44**	**$525**	**$2,100**	**$18,350**	**$5,900**	**$0**	**$87,900**	**$114,775**

FACILITY CONDITION SUMMARY REPORT

Southwestern College
540 Electronics

SURVEY DATE: 8/15
900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$1,507,750**
Cost Per Square Foot is **$174.39**

Facility Condition Rating = 59 (Poor)
Average Severity Score = 48

Repair Cost as a Percent of Facility Replacement Cost is 41 %
12 Deficiencies Were Identified

PRIMARY USE: Classroom/Lab
FACILITY AGE: *50* Yrs.
FACILITY SF: 8,646 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 1978
Current Facility Replacement Cost is Approximately $3,674,550

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

540 Electronics 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$925	
Annual PM		**2**	**50**	**$925**	**$0.11**
Improvement	Electrical	1	5	$8,100	
Improvement		**1**	**5**	**$8,100**	**$0.94**
Non-Annual Recurring Maintenance	Paint/Finish	2	41	$2,075	
Non-Annual Recurring Maintenance	Roof	1	50	$3,650	
Non-Annual Recurring Maintenance		**3**	**44**	**$5,725**	**$0.66**
Repair/Maintenance	HVAC	2	42	$15,500	
Repair/Maintenance	Structural	1	50	$2,100	
Repair/Maintenance		**3**	**45**	**$17,600**	**$2.04**
Replacement/Renewal	Electrical	1	68	$1,385,000	
Replacement/Renewal	HVAC	2	68	$90,400	
Replacement/Renewal		**3**	**68**	**$1,475,400**	**$170.65**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities at the college. It received some renovation work in 1978. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 12 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-

up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be sub-par. The roof has a significant amount of leaves and debris on the surface, and many dirty areas, all of which makes inspecting the condition of the membrane difficult. Leaves and debris should be cleaned off the roof surface at least once per year. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is also strongly recommended that the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface, where possible, revealed no apparent deficiencies.

The parapet cap joint sealant is slowly deteriorating, allowing moisture to penetrate the joints onto the top of the parapets. All sealant should be replaced.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The joint sealant on the metal HVAC ductwork on the roof is badly deteriorated, allowing hot/cold air to escape, reducing HVAC system efficiency. Replacement of all joint sealant is required. The hot water heating piping insulation and exposed aluminum jacket on the roof are badly deteriorated and should be replaced to maintain system efficiency and save energy.

The circuit breaker panel is approximately 50 years old. The building also houses the main distribution switchgear for the 500, 510 and 540 buildings. The equipment is still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panel and Distribution Swithboar

108 The circuit breaker panelboard is original to the building and is now approximately 50 years old. This building also houses the main distribution switchgear for the 500, 510 and 540 buildings. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Electrical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$1,385,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

5 **Electrical** **Improvement** Light Fixtures

106 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building

QUANTITY: 141 EA ***REPAIR COST:*** **$8,100** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$1,393,100** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$161.13**

68 **HVAC** **Replacement/Renewal** HVAC Heating Water Piping Insulation

110 The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Two hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket.

Insulation per industry standard or per energy code whichever is more stringent

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$9,200** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

68 **HVAC** **Replacement/Renewal** HVAC Equipment

107 The two condensing units and one packaged roof top air conditioning unit are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Refrigerant piping insulation on the roof is deteriorated and should be replaced when the condensing units are replaced. Fifty feet of insulation has been included in the cost.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$81,200** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

109 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

20 **HVAC** **Repair/Maintenance** HVAC Distribution Ductwork

105 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 500 LF ***REPAIR COST:*** **$5,100** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2032

SYSTEM SUB-TOTAL **HVAC** **$105,900** **AV. SEVERITY SCORE =** **55** **COST PER BLDG GSF=** **$12.25**

60 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Roof Parapet Cap Joints

102 The parapet cap joint sealant is slowly deteriorating. Deteriorated sealant will allow moisture to enter cap joints, penetrating to parapet below. Existing sealant should be removed and new sealant installed.

8" parapet cap

Perimeter of roof

QUANTITY: 31 LF ***REPAIR COST:*** **$225** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapet

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,470 SF ***REPAIR COST:*** **$1,850** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,075** **AV. SEVERITY SCORE =** **41** **COST PER BLDG GSF=** **$0.24**

60 **Roof** **Annual PM** Roof Drains

104 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 6 EA ***REPAIR COST:*** **$650** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

111 The single-ply membrane on this building contains significant leaf and other debris, and the surface is very dirt encrusted. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended. An examination of the few clean areas of membrane indicated no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 8,760 SF ***REPAIR COST:*** **$3,650** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

103 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 8,760 SF ***REPAIR COST:*** **$275** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$4,575** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.53**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 30 SF ***REPAIR COST:*** **$2,100** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$2,100**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.24**
FACILITY TOTALS	**COST TOTAL =**	**$1,507,750**	**AV. SEVERITY SCORE =**	**48**	**COST PER BLDG GSF=**	**$174.39**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**540**	**Electronics**	Roof							
		Roof Drains	6 EA							
104		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$650						
40	**540**	**Electronics**	Roof							
		Roof Membrane	8,760 SF							
103		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$275						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$925**	**$0**	**$0**	**$0**	**$0**	**$0**	**$925**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**540**	**Electronics**	Electrical							
		Light Fixtures	141 EA							
106		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*					$8,100			
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$0**	**$8,100**	**$0**	**$0**	**$8,100**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**540**	**Electronics**	Paint/Finish							
		Metal Roof Parapet Cap Joints	31 LF							
102		The parapet cap joint sealant is slowly deteriorating. Deteriorated sealant will allow moisture to enter cap joints, penetrating to parapet below. Existing sealant should be removed and new sealant installed. *Perimeter of roof*					$225			
50	**540**	**Electronics**	Roof							
		Single-Ply Roof Membrane	8,760 SF							
111		The single-ply membrane on this building contains significant leaf and other debris, and the surface is very dirt encrusted. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended. An examination of the few clean areas of membrane indicated no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$3,650					
23	**540**	**Electronics**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,470 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,850					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**44**	**$0**	**$5,500**	**$0**	**$225**	**$0**	**$0**	**$5,725**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**540**	**Electronics**	HVAC							
		Air Handler	1 EA							
109		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					
50	**540**	**Electronics**	Structural							
		Concrete Columns and Beams	30 SF							
101		There is random spalling of surface concrete on the building. It ranges from minor spalling to significant spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$2,100					
20	**540**	**Electronics**	HVAC							
		HVAC Distribution Ductwork	500 LF							
105		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$5,100				
TOTAL: Repair/Maintenance			***AV. SEVER. SCORE =*** **45**	**$0**	**$12,500**	**$5,100**	**$0**	**$0**	**$0**	**$17,600**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**540**	**Electronics**	Electrical							
		Circuit Breaker Panel and Distribution Swithboard	1 LS							
108		The circuit breaker panelboard is original to the building and is now approximately 50 years old. This building also houses the main distribution switchgear for the 500, 510 and 540 buildings. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Electrical Room*				#########				
68	**540**	**Electronics**	HVAC							
		HVAC Heating Water Piping Insulation	1 LS							
110		The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Two hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket. *Roof*						$9,200		
68	**540**	**Electronics**	HVAC							
		HVAC Equipment	1 LS							
107		The two condensing units and one packaged roof top air conditioning unit are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Refrigerant piping insulation on the roof is deteriorated and should be replaced when the condensing units are replaced. Fifty feet of insulation has been included in the cost. *Roof*							$81,200	

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL: Replacement/Renewal		*AV. SEVER. SCORE =*	**68**	**$0**	**$0**	#########	**$0**	**$9,200**	**$81,200**	**$1,475,400**
TOTAL FOR ALL CATEGORIES		*AV. SEVER. SCORE =*	**48**	**$925**	**$18,000**	#########	**$8,325**	**$9,200**	**$81,200**	**$1,507,750**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

550 Tech/Human Services 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$255,000** Cost Per Square Foot is **$29.87**

Facility Condition Rating = 93 (Good) ***Average Severity Score = 50***

Repair Cost as a Percent of Facility Replacement Cost is 7 % 10 Deficiencies Were Identified

PRIMARY USE: Classroom *FACILITY AGE:* *41* Yrs.

FACILITY SF: 8,538 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 2010

Current Facility Replacement Cost is Approximately $3,627,375

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

550 Tech/Human Services 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Improvement	Electrical	1	5	$11,150	
Improvement		**1**	**5**	**$11,150**	**$1.31**
Non-Annual Recurring Maintenance	HVAC	1	20	$3,100	
Non-Annual Recurring Maintenance	Roof	1	50	$3,400	
Non-Annual Recurring Maintenance		**2**	**35**	**$6,500**	**$0.76**
Repair/Maintenance	HVAC	1	64	$10,400	
Repair/Maintenance	Structural	1	50	$700	
Repair/Maintenance		**2**	**57**	**$11,100**	**$1.30**
Replacement/Renewal	Electrical	1	68	$90,500	
Replacement/Renewal	HVAC	2	68	$110,100	
Replacement/Renewal	Roof	2	55	$25,650	
Replacement/Renewal		**5**	**63**	**$226,250**	**$26.50**

CONDITION SUMMARY:

This building was constructed for the college in 1974. The building underwent a minor renovation in 2010. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 10 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

Roof maintenance on this building appears to be good. The roof has only a minor minor amount of debris on the surface, and few dirty areas. Roof drains/sumps appear to be in good condition. As debris and dirt accumulate, it is recommended that the roof membrane be power washed in about 3 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no

apparent deficiencies.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment, including six rooftop exhaust fans, should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The joint sealant on the metal HVAC ductwork on the roof is badly deteriorated, allowing hot/cold air to escape, reducing HVAC system efficiency. Replacement of all joint sealant is required. The hot water heating piping insulation and exposed aluminum jacket on the roof are badly deteriorated and should be replaced to maintain system efficiency and save energy.

The circuit breaker panels are approximately 41 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

106 The circuit breaker panelboards are original to the building and are now approximately 41 years old. Although the equipment is still functional, it is growing obsolete, replacement parts are expensive and not readily available, and the equipment is nearing the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$90,500** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 **Electrical** **Improvement** Light Fixtures

104 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2, 4 x 4

Light fixtures throughout building

QUANTITY: 195 EA ***REPAIR COST:*** **$11,150** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$101,650** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$11.91**

68 **HVAC** **Replacement/Renewal** HVAC Heating Water Piping Insulation

108 The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Three hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket.

Insulation per industry standard or per energy code whichever is more stringent

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$11,000** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

68 **HVAC** **Replacement/Renewal** HVAC Equipment

105 The two condensing units and one packaged roof top air conditioning unit are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Fifty feet of insulation has been included in the cost. There is also one circular aluminum and five square exhaust fans that appear to be deteriorating and are recommended to be replaced.

Roof and Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$99,100** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

107 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

103 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 300 LF ***REPAIR COST:*** **$3,100** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$123,600** **AV. SEVERITY SCORE = 55** **COST PER BLDG GSF= $14.48**

70 **Roof** **Replacement/Renewal** Walkway Roof Support Beam

101 Several of the covered walkway support beams have large areas where the wood is deteriorating on the face of the beams. These beams should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beams should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled.
4" x 15"

Covered walkway

QUANTITY: 100 LF ***REPAIR COST:*** **$6,900** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 61 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

109 The single-ply membrane on this building is debris-free, and there is only minor dirt on a few areas of the membrane. If debris and dirt are allowed to accumulate, however, it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An assessment of the membrane indicated no apparent deficiencies. Thorough cleaning of the membrane surface is recommended in about 3 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 8,845 SF ***REPAIR COST:*** **$3,400** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

102 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

2435 LF 2x8 boards

All sunscreen boards on perimeter of building

QUANTITY: 2,435 LF ***REPAIR COST:*** **$18,750** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$29,050** **AV. SEVERITY SCORE =** **53** **COST PER BLDG GSF=** **$3.40**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

100 There is random minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 10 SF ***REPAIR COST:*** **$700** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Structural** **$700** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.08**

FACILITY TOTALS **COST TOTAL =** **$255,000** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$29.87**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE / DEF. NO.	BLDG.	COMPONENT DEFICIENCY / LOCATION	SYSTEM / QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**550**	**Tech/Human Services**	Electrical							
		Light Fixtures	195 EA							
104		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*					$11,150			
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$0**	**$11,150**	**$0**	**$0**	**$11,150**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**550**	**Tech/Human Services**	Roof							
		Single-Ply Roof Membrane	8,845 SF							
109		The single-ply membrane on this building is debris-free, and there is only minor dirt on a few areas of the membrane. If debris and dirt are allowed to accumulate, however, it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An assessment of the membrane indicated no apparent deficiencies. Thorough cleaning of the membrane surface is recommended in about 3 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$3,400			
20	**550**	**Tech/Human Services**	HVAC							
		HVAC Distribution Ductwork	300 LF							
103		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$3,100				
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **35**	**$0**	**$0**	**$3,100**	**$3,400**	**$0**	**$0**	**$6,500**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**550**	**Tech/Human Services**	HVAC							
		Air Handler	1 EA							
107		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					
50	**550**	**Tech/Human Services**	Structural							
		Concrete Columns and Beams	10 SF							
100		There is random minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$700					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **57**	**$0**	**$11,100**	**$0**	**$0**	**$0**	**$0**	**$11,100**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
70	**550**	**Tech/Human Services**	Roof							
		Walkway Roof Support Beam	100 LF							
101		Several of the covered walkway support beams have large areas where the wood is deteriorating on the face of the beams. These beams should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beams should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled. *Covered walkway*			$6,900					
68	**550**	**Tech/Human Services**	HVAC							
		HVAC Heating Water Piping Insulation	1 LS							
108		The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Three hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket. *Roof*						$11,000		
68	**550**	**Tech/Human Services**	HVAC							
		HVAC Equipment	1 LS							
105		The two condensing units and one packaged roof top air conditioning unit are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Fifty feet of insulation has been included in the cost. There is also one circular aluminum and five square exhaust fans that appear to be deteriorating and are recommended to be replaced. *Roof and Mechanical Room*							$99,100	

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**550**	**Tech/Human Services**	Electrical							
		Circuit Breaker Panels	1 LS							
106		The circuit breaker panelboards are original to the building and are now approximately 41 years old. Although the equipment is still functional, it is growing obsolete, replacement parts are expensive and not readily available, and the equipment is nearing the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Various locations*						$90,500		
40	**550**	**Tech/Human Services**	Roof							
		Wood Sunscreen Boards	2,435 LF							
102		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$18,750				
TOTAL: Replacement/Renewal			***AV. SEVER. SCORE =*** **63**	**$0**	**$6,900**	**$18,750**	**$0**	**$11,000**	**$189,600**	**$226,250**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **50**	**$0**	**$18,000**	**$21,850**	**$14,550**	**$11,000**	**$189,600**	**$255,000**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

560 General Classroom — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$312,525** — Cost Per Square Foot is **$35.75**

Facility Condition Rating = 88 (Fair) — ***Average Severity Score = 53***

Repair Cost as a Percent of Facility Replacement Cost is 12 % — 13 Deficiencies Were Identified

PRIMARY USE: Classroom — *FACILITY AGE:* *41* Yrs.

FACILITY SF: 8,742 *NO. OF STORIES:* 1.0 — *LAST RENOVATED:* 2010

Current Facility Replacement Cost is Approximately $2,666,310

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

560 General Classroom 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	40	$150	
Annual PM		**1**	**40**	**$150**	**$0.02**
Improvement	Electrical	1	5	$12,300	
Improvement		**1**	**5**	**$12,300**	**$1.41**
Non-Annual Recurring Maintenance	Paint/Finish	2	34	$2,075	
Non-Annual Recurring Maintenance	Roof	1	50	$3,300	
Non-Annual Recurring Maintenance		**3**	**40**	**$5,375**	**$0.61**
Repair/Maintenance	HVAC	1	64	$10,400	
Repair/Maintenance	Roof	1	70	$9,900	
Repair/Maintenance	Structural	1	50	$1,700	
Repair/Maintenance		**3**	**61**	**$22,000**	**$2.52**
Replacement/Renewal	Electrical	1	68	$119,100	
Replacement/Renewal	HVAC	3	68	$150,600	
Replacement/Renewal	Plumbing	1	68	$3,000	
Replacement/Renewal		**5**	**68**	**$272,700**	**$31.19**

CONDITION SUMMARY:

This building was constructed for the college in 1974. It received some renovation work in 2010. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 13 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

Southwestern College SURVEY DATE: 8/15

560 General Classroom 900 Otay Lakes Rd.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be average . The roof has some debris on the surface, and some dirty areas. Leaves and debris should be cleaned off the roof surface at least once per year. It is recommended that the roof membrane be power washed in about 2 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The parapet cap joint sealant is slowly deteriorating, allowing moisture to penetrate the joints onto the top of the parapets. All sealant should be replaced.

The outside 6 x 15 support beams for the covered walkway on the north side of the building have several sections with some wood deterioration on the surface and to depths of what to appear to be 1/2" to 1". Similar deterioration is also evident on the outside beams on the east side walkway. These damaged areas can be restored by utilizing a wood epoxy filler and sanding/painting the repairs.

Two additional covered walkway support beams on one side of the walkway have large areas where the wood is deteriorating on the face of the beams. These beams should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beams should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled.

One outside beam on the NW corner and one beam on the NE corner have ends that are badly deteriorated and can no longer be restored. The compromised beams should be replaced with new beams to prevent potential system failure. The new beams should be primed and painted prior to installation. An end beam supporting the walkway likewise has extensively cracked, gouged and generally deteriorated areas, which potentially compromise the integrity of the beam. The beam should also be replaced.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The hot water heating piping insulation and exposed aluminum jacket on the roof are badly deteriorated and should be replaced to maintain system efficiency and save energy. The hot water heating boiler in the mechanical room is deteriorating, as evidenced by leaking. This boiler should be programmed for replacement. The mechanical room also has a deteriorating gas hot water heater and storage tank that should be replaced.

The circuit breaker panels are approximately 41 years old. The building also houses the main distribution switchgear for the 560 and 570 buildings. The equipment is still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panel and Distribution Swithboard

110 The circuit breaker panelboards are original to the building and are approximately 41 years old. This building also houses the main distribution switchgear for buildings 560 and 570 . Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Electrical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$119,100** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building

QUANTITY: 215 EA ***REPAIR COST:*** **$12,300** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$131,400** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$15.03**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

108 The mechanical room includes a hot water heating boiler. It appears to be deteriorating as water was observed leaking from the boiler. It is recommended that the boiler be scheduled for replacement.

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$63,100** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

68 **HVAC** **Replacement/Renewal** HVAC Equipment

106 The two condensing units are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Fifty feet of insulation has been included in the cost.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$55,600** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

68 **HVAC** **Replacement/Renewal** HVAC Heating Water Piping Insulation

111 The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. This hot water heating piping also appears to serve Building 570. Six hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket.
Insulation per industry standard or per energy code whichever is more stringent

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$31,900** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

64 **HVAC** **Repair/Maintenance** Air Handler

107 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **HVAC** **$161,000** **AV. SEVERITY SCORE =** **67** **COST PER BLDG GSF=** **$18.42**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

103 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 30 LF ***REPAIR COST:*** **$225** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,460 SF ***REPAIR COST:*** **$1,850** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,075** **AV. SEVERITY SCORE =** **34** **COST PER BLDG GSF=** **$0.24**

68 **Plumbing** **Replacement/Renewal** Plumbing Equipment

109 The mechanical room includes a domestic hot water natural gas heater and storage tank with 32 MBH input and approximately 40 gallons of storage. It appears to be nearing the end of its service life and is recommended to be scheduled for replacement.

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$3,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2027 2037

SYSTEM SUB-TOTAL **Plumbing** **$3,000** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$0.34**

70 **Roof** **Repair/Maintenance** Covered Walkway Support Beams

104 The outside 6 x 15 support beams for the covered walkway and sunscreens on the north side of the building have several sections with some wood deterioration on the surface and to depths of what to appear to be 1/2" to 1". Similar deterioration is also evident on the outside beams on the east side walkway. These damaged areas can be restored by utilizing a wood epoxy filler and sanding/painting the repairs.

Two of the covered walkway support beams on one side of the walkway have large areas where the wood is deteriorating on the face of the beams. These beams should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beams should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled.

One outside beam on the NW corner and one beam on the NE corner have ends that are badly deteriorated and can no longer be restored. The compromised beams should be replaced with new beams to prevent potential system failure. The new beams should be primed and painted prior to installation.

An end beam supporting the walkway likewise has extensively cracked, gouged and generally deteriorated areas, which potentially compromise the integrity of the beam. The beam should also be replaced.

Approximately 50 SF of repair and 3ea. New 20' beams

North and East sides of walkway

QUANTITY: 1 LS ***REPAIR COST:*** **$9,900** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 61 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

112 The single-ply membrane on this building contains minor amounts of leaf and other debris, and the surface has a few dirty areas. An assessment of the membrane indicated no apparent deficiencies. However, if debris and dirt are allowed to accumulate, it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 2 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 8,815 SF ***REPAIR COST:*** **$3,300** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

102 There is a minor amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 8,815 SF ***REPAIR COST:*** **$150** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$13,350** **AV. SEVERITY SCORE =** **53** **COST PER BLDG GSF=** **$1.53**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random moderate spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 25 SF ***REPAIR COST:*** **$1,700** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$1,700**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.19**
FACILITY TOTALS	**COST TOTAL =**	**$312,525**	**AV. SEVERITY SCORE =**	**53**	**COST PER BLDG GSF=**	**$35.75**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**560**	**General Classroom**	Roof							
		Roof Membrane	8,815 SF							
102		There is a minor amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$150						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **40**	**$150**	**$0**	**$0**	**$0**	**$0**	**$0**	**$150**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**560**	**General Classroom**	Electrical							
		Light Fixtures	215 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*					$12,300			
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$0**	**$12,300**	**$0**	**$0**	**$12,300**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**560**	**General Classroom**	Roof							
		Single-Ply Roof Membrane	8,815 SF							
112		The single-ply membrane on this building contains minor amounts of leaf and other debris, and the surface has a few dirty areas. An assessment of the membrane indicated no apparent deficiencies. However, if debris and dirt are allowed to accumulate, it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 2 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*				$3,300				
46	**560**	**General Classroom**	Paint/Finish							
		Metal Parapet Cap Joints	30 LF							
103		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*				$225				
23	**560**	**General Classroom**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,460 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,850					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**40**	**$0**	**$1,850**	**$3,525**	**$0**	**$0**	**$0**	**$5,375**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
70	**560**	**General Classroom**	Roof							
		Covered Walkway Support Beams	1 LS							
104		The outside 6 x 15 support beams for the covered walkway and sunscreens on the north side of the building have several sections with some wood deterioration on the surface and to depths of what to appear to be 1/2" to 1". Similar deterioration is also evident on the outside beams on the east side walkway. These damaged areas can be restored by utilizing a wood epoxy filler and sanding/painting the repairs. Two of the covered walkway support beams on one side of the walkway have large areas where the wood is deteriorating on the face of the beams. These beams should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beams should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled. One outside beam on the NW corner and one beam on the NE corner have ends that are badly deteriorated and can no longer be restored. The compromised beams should be replaced with new beams to prevent potential system failure. The new beams should be primed and painted prior to installation. An end beam supporting the walkway likewise has extensively cracked, gouged and generally deteriorated areas, which potentially compromise the integrity of the beam. The beam should also be replaced. *North and East sides of walkway*		$9,900					
64	**560**	**General Classroom**	HVAC							
		Air Handler	1 EA							
107		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**560**	**General Classroom**	Structural							
		Concrete Columns and Beams	25 SF							
101		There is random moderate spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$1,700					
TOTAL:		**Repair/Maintenance**	*AV. SEVER. SCORE =* **61**	**$9,900**	**$12,100**	**$0**	**$0**	**$0**	**$0**	**$22,000**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**560**	**General Classroom**	Plumbing							
		Plumbing Equipment	1 LS							
109		The mechanical room includes a domestic hot water natural gas heater and storage tank with 32 MBH input and approximately 40 gallons of storage. It appears to be nearing the end of its service life and is recommended to be scheduled for replacement. *Mechanical Room*				$3,000				
68	**560**	**General Classroom**	HVAC							
		HVAC Equipment	1 LS							
108		The mechanical room includes a hot water heating boiler. It appears to be deteriorating as water was observed leaking from the boiler. It is recommended that the boiler be scheduled for replacement. *Mechanical Room*				$63,100				
68	**560**	**General Classroom**	HVAC							
		HVAC Equipment	1 LS							
106		The two condensing units are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Fifty feet of insulation has been included in the cost. *Roof*							$55,600	

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**560**	**General Classroom**	Electrical							
		Circuit Breaker Panel and Distribution Swithboard	1 LS							
110		The circuit breaker panelboards are original to the building and are approximately 41 years old. This building also houses the main distribution switchgear for buildings 560 and 570 . Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Electrical Room*							$119,100	
68	**560**	**General Classroom**	HVAC							
		HVAC Heating Water Piping Insulation	1 LS							
111		The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. This hot water heating piping also appears to serve Building 570. Six hundred feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket. *Roof*							$31,900	
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **68**	**$0**	**$0**	**$66,100**	**$0**	**$0**	**$206,600**	**$272,700**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **53**	**$10,050**	**$13,950**	**$69,625**	**$12,300**	**$0**	**$206,600**	**$312,525**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

570 Photography Lab 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$26,950** Cost Per Square Foot is **$3.08**

Facility Condition Rating = 99 (Excellent) ***Average Severity Score = 33***

Repair Cost as a Percent of Facility Replacement Cost is 1 % 4 Deficiencies Were Identified

PRIMARY USE: Classroom/Lab *FACILITY AGE:* *37* Yrs.

FACILITY SF: 8,742 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 2011

Current Facility Replacement Cost is Approximately $3,715,350

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

570 Photography Lab 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Improvement	Electrical	1	20	$5,700	
Improvement		**1**	**20**	**$5,700**	**$0.65**
Non-Annual Recurring Maintenance	HVAC	1	20	$600	
Non-Annual Recurring Maintenance	Roof	1	50	$3,250	
Non-Annual Recurring Maintenance		**2**	**35**	**$3,850**	**$0.44**
Replacement/Renewal	Roof	1	40	$17,400	
Replacement/Renewal		**1**	**40**	**$17,400**	**$1.99**

CONDITION SUMMARY:

This building was constructed for the college in 1978. The building underwent a major comprehensive renovation in 2011. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 4 deficiencies identified were associated with HVAC, electrical, and roof systems.

Structurally the building appears to be well constructed, with no concerns noted.

Roof maintenance on this building appears to be good. No debris was noted, and the drains/sumps are clean. As there are some dirty areas on the membrane, it is recommended that the roof membrane be power washed in 3 to 4 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The joint sealant on the metal HVAC ductwork on the roof is badly deteriorated, allowing hot/cold air to escape, reducing HVAC system efficiency. Replacement of all joint sealant is required.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light

fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures

102 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Fixtures throughout building

QUANTITY: 100 EA ***REPAIR COST:*** **$5,700** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$5,700** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.65**

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

100 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 60 LF ***REPAIR COST:*** **$600** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$600** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.07**

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

103 The single-ply membrane on this building is fairly free of debris. However, there are a couple of areas of dirty membrane. As more dirt accumulates it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in 3 to 4 years. An assessment of the membrane indicated no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 8,580 SF ***REPAIR COST:*** **$3,250** **Deferrable** **Est. Remaining Life = 4 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

101 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

2170 LF 2x8 boards and 310 LF of 4x

All sunscreen boards on perimeter of building

QUANTITY: 2,480 LF ***REPAIR COST:*** **$17,400** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**	**$20,650**	**AV. SEVERITY SCORE =**	**45**	**COST PER BLDG GSF=**	**$2.36**
FACILITY TOTALS	**COST TOTAL =**	**$26,950**	**AV. SEVERITY SCORE =**	**33**	**COST PER BLDG GSF=**	**$3.08**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**570**	**Photography Lab**	Electrical							
		Light Fixtures	100 EA							
102		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*					$5,700			
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$5,700**	**$0**	**$0**	**$5,700**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**570**	**Photography Lab**	Roof							
		Single-Ply Roof Membrane	8,580 SF							
103		The single-ply membrane on this building is fairly free of debris. However, there are a couple of areas of dirty membrane. As more dirt accumulates it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in 3 to 4 years. An assessment of the membrane indicated no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$3,250		
20	**570**	**Photography Lab**	HVAC							
		HVAC Distribution Ductwork	60 LF							
100		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$600				
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **35**	**$0**	**$0**	**$600**	**$0**	**$3,250**	**$0**	**$3,850**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**570**	**Photography Lab**	Roof							
		Wood Sunscreen Boards	2,480 LF							
101		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$17,400				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **40**	**$0**	**$0**	**$17,400**	**$0**	**$0**	**$0**	**$17,400**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **33**	**$0**	**$0**	**$18,000**	**$5,700**	**$3,250**	**$0**	**$26,950**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

590 Automotive — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$462,300** — Cost Per Square Foot is **$17.20**

Facility Condition Rating = 96 (Good) — ***Average Severity Score = 53***

Repair Cost as a Percent of Facility Replacement Cost is 4 % — 13 Deficiencies Were Identified

PRIMARY USE: Classroom/Lab — *FACILITY AGE:* *45* Yrs.

FACILITY SF: 26,877 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 1985

Current Facility Replacement Cost is Approximately $11,422,725

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Average

Relative Facility Priority Score = 24 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

590 Automotive — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	60	$200	
Annual PM		**1**	**60**	**$200**	**$0.01**
Improvement	Electrical	3	20	$29,600	
Improvement		**3**	**20**	**$29,600**	**$1.10**
Non-Annual Recurring Maintenance	HVAC	1	20	$3,100	
Non-Annual Recurring Maintenance	Roof	1	50	$6,250	
Non-Annual Recurring Maintenance		**2**	**35**	**$9,350**	**$0.35**
Replacement/Renewal	Electrical	3	68	$218,500	
Replacement/Renewal	HVAC	3	68	$201,300	
Replacement/Renewal	Roof	1	100	$3,350	
Replacement/Renewal		**7**	**72**	**$423,150**	**$15.74**

CONDITION SUMMARY:

This facility, comprised of five buildings, appears to have been constructed in three phases --1970, 1974, and 1985. The buildings are single-story structures constructed of steel framing with steel wall panels and CMU walls, and wood roof decks with single-ply roof membranes on most surfaces, and some metal roof panels.

The interior of the buildings was found to be in good condition for use supporting the college automotive training program. Interior maintenance likewise appears adequate. Structurally the buildings are in good condition for their use. The 13 deficiencies identified were associated with HVAC, electrical, and roof systems.

Roof maintenance on this building appears to be average. Some leaf and debris build-up was noted, and the drains/sumps are clogged and need to be cleaned. Roof and drain cleaning should be performed at least annually to maintain the roof in good condition and prevent premature membrane wear. As there are some dirty areas on the membrane, it is recommended that the roof membrane be power washed in about 2 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The roof access hatch in the office/classroom building is in very poor condition and no longer operates properly. This hatch should be replaced and an extension grab bar added to the roof ladder.

The rooftop HVAC equipment on the Lab A, Lab B, and Lab C buildings appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing

maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years. There are also eight exhaust fans on the roof of Lab B that are deteriorating and should be replaced.

There is a utility set exhaust fan on the roof of Lab A that has deteriorating wood supports that should be replaced. In addition, the unit itself has surface oxidation and should be re-finished to prevent further rusting. There is also a small amount of black steel gas piping on the roof that should be painted to prevent oxidation.

The joint sealant on the metal HVAC ductwork on the roof is badly deteriorated, allowing hot/cold air to escape, reducing HVAC system efficiency. Replacement of all joint sealant is required.

There are two distribution switchboards outside of Labs A and C that serve the 590 buildings, and appear to be 45 years old. The equipment is still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The switchboards should be replaced.

The circuit breaker panels in Labs A and C appear to be approximately 41 years old. The equipment is still functional, though becoming obsolete. Replacement parts are becoming expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panels should be replaced within the next 8 to 10 years.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures in Lab A, B and C is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

110 Circuit breaker panelboards are original to the building and are approximately 41 years old. Although the equipment is still functional, it is growing obsolete, replacement parts are expensive and not readily available, and the equipment is nearing the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced within the next 8 to 10 years.

Same as existing unless additional capacity is required

Various locations in Lab C

QUANTITY: 1 LS ***REPAIR COST:*** **$59,800** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

109 Circuit breaker panelboards are original to the building and are approximately 41 years old. Although the equipment is still functional, it is growing obsolete, replacement parts are expensive and not readily available, and the equipment is nearing the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced within the next 8 to 10 years.

Same as existing unless additional capacity is required

Various locations in Lab A

QUANTITY: 1 LS ***REPAIR COST:*** **$54,700** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

68 **Electrical** **Replacement/Renewal** Distribution Switchboard

111 There are two distribution switchboards that serve the 590 Automotive area. They appear original to the buildings and are approximately 45 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is approaching the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Outdoors adjacent to Labs A & C

QUANTITY: 1 LS ***REPAIR COST:*** **$104,000** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

20 **Electrical** **Improvement** Light Fixtures

104 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Fixtures throughout Lab B

QUANTITY: 156 EA ***REPAIR COST:*** **$8,900** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

20 **Electrical** **Improvement** Light Fixtures

103 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2

Fixtures throughout Lab A

QUANTITY: 181 EA ***REPAIR COST:*** **$10,350** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

20 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2

Fixtures throughout Lab C

QUANTITY: 181 EA ***REPAIR COST:*** **$10,350** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **Electrical** **$248,100** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$9.23**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

107 The HVAC equipment appears to have been replaced in 2001. The three packaged roof top air conditioning units are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

There are also eight deteriorating circular exhaust fans on the roof that appear original and should be replaced at the same time.

Roof of Lab B

QUANTITY: 1 LS ***REPAIR COST:*** **$64,800** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

68 **HVAC** **Replacement/Renewal** HVAC Equipment

108 The four packaged roof top air conditioning units are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Roof of Lab C

QUANTITY: 1 LS ***REPAIR COST:*** **$76,000** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

68 **HVAC** **Replacement/Renewal** HVAC Equipment

106 The two packaged roof top air conditioning unit are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

There is also a utility set exhaust fan on the roof that requires the deteriorating wood support to be replaced and surface rust on the unit to be removed, and the unit re-finished to protect the carbon steel surfaces from the elements. In addition, a small amount of black steel gas piping requires a surface coating to protect it from the elements.

Roof of Lab A

QUANTITY: 1 LS ***REPAIR COST:*** **$60,500** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

100 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof of office/classroom and Lab B

QUANTITY: 300 LF ***REPAIR COST:*** **$3,100** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$204,400** **AV. SEVERITY SCORE =** **56** **COST PER BLDG GSF=** **$7.61**

100 **Roof** **Replacement/Renewal** Roof Access Hatch

101 The roof access hatch is in very poor shape and no longer operates properly, posing a potential safety hazard. Replace the hatch with a new unit with extension grab bar.

Roof access hatch on office/classroom building

QUANTITY: 1 EA ***REPAIR COST:*** **$3,350** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **A-Health/Safety Issue**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

60 **Roof** **Annual PM** Roof Drains

102 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter-Office bldg.

QUANTITY: 2 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

112 The single-ply membranes on the five buildings that comprise this facility contain minor amounts of leaf and other debris, and the surface is dirty in random areas. Continued accumulation of debris and dirt can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended. An assessment of the membranes indicated no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Hypalon membranes on A, B, C, and D

QUANTITY: 20,245 SF ***REPAIR COST:*** **$6,250** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract

Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$9,800**	**AV. SEVERITY SCORE =**	**70**	**COST PER BLDG GSF=**	**$0.36**
FACILITY TOTALS	**COST TOTAL =**	**$462,300**	**AV. SEVERITY SCORE =**	**53**	**COST PER BLDG GSF=**	**$17.20**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
60	**590**	**Automotive**	Roof							
		Roof Drains	2 EA							
102		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter-Office bldg.*		$200						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **60**	**$200**	**$0**	**$0**	**$0**	**$0**	**$0**	**$200**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**590**	**Automotive-B**	Electrical							
		Light Fixtures	156 EA							
104		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout Lab B*				$8,900				
20	**590**	**Automotive-A**	Electrical							
		Light Fixtures	181 EA							
103		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout Lab A*				$10,350				
20	**590**	**Automotive-C**	Electrical							
		Light Fixtures	181 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout Lab C*				$10,350				
TOTAL: Improvement			*AV. SEVER. SCORE =* **20**	**$0**	**$0**	**$29,600**	**$0**	**$0**	**$0**	**$29,600**

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
50	**590**	**Automotive**	Roof							
		Single-Ply Roof Membrane	20,245 SF							
112		The single-ply membranes on the five buildings that comprise this facility contain minor amounts of leaf and other debris, and the surface is dirty in random areas. Continued accumulation of debris and dirt can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended. An assessment of the membranes indicated no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Hypalon membranes on A, B, C, and D*				$6,250				
20	**590**	**Automotive**	HVAC							
		HVAC Distribution Ductwork	300 LF							
100		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof of office/classroom and Lab B*				$3,100				
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **35**	**$0**	**$0**	**$9,350**	**$0**	**$0**	**$0**	**$9,350**

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
100	**590**	**Automotive**	Roof							
		Roof Access Hatch	1 EA							
101		The roof access hatch is in very poor shape and no longer operates properly, posing a potential safety hazard. Replace the hatch with a new unit with extension grab bar. *Roof access hatch on office/classroom building*		$3,350						
68	**590**	**Automotive-B**	HVAC							
		HVAC Equipment	1 LS							
107		The HVAC equipment appears to have been replaced in 2001. The three packaged roof top air conditioning units are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. There are also eight deteriorating circular exhaust fans on the roof that appear original and should be replaced at the same time. *Roof of Lab B*							$64,800	
68	**590**	**Automotive-C**	HVAC							
		HVAC Equipment	1 LS							
108		The four packaged roof top air conditioning units are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. *Roof of Lab C*							$76,000	

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**590**	**Automotive-C**	Electrical							
		Circuit Breaker Panels	1 LS							
110		Circuit breaker panelboards are original to the building and are approximately 41 years old. Although the equipment is still functional, it is growing obsolete, replacement parts are expensive and not readily available, and the equipment is nearing the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced within the next 8 to 10 years. *Various locations in Lab C*							$59,800	
68	**590**	**Automotive-A**	HVAC							
		HVAC Equipment	1 LS							
106		The two packaged roof top air conditioning unit are dated 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. There is also a utility set exhaust fan on the roof that requires the deteriorating wood support to be replaced and surface rust on the unit to be removed, and the unit re-finished to protect the carbon steel surfaces from the elements. In addition, a small amount of black steel gas piping requires a surface coating to protect it from the elements. *Roof of Lab A*							$60,500	

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**590**	**Automotive-A**	Electrical							
		Circuit Breaker Panels	1 LS							
109		Circuit breaker panelboards are original to the building and are approximately 41 years old. Although the equipment is still functional, it is growing obsolete, replacement parts are expensive and not readily available, and the equipment is nearing the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced within the next 8 to 10 years. *Various locations in Lab A*							$54,700	
68	**590**	**Automotive**	Electrical							
		Distribution Switchboard	1 LS							
111		There are two distribution switchboards that serve the 590 Automotive area. They appear original to the buildings and are approximately 45 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is approaching the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Outdoors adjacent to Labs A & C*							$104,000	
TOTAL: Replacement/Renewal			***AV. SEVER. SCORE =*** **72**	**$3,350**	**$0**	**$0**	**$0**	**$0**	**$419,800**	**$423,150**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **53**	**$3,550**	**$0**	**$38,950**	**$0**	**$0**	**$419,800**	**$462,300**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

600 ASO — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$289,525** — Cost Per Square Foot is **$17.16**

Facility Condition Rating = 95 (Good) — ***Average Severity Score = 47***

Repair Cost as a Percent of Facility Replacement Cost is 5 % — 8 Deficiencies Were Identified

PRIMARY USE: Student Union — *FACILITY AGE:* *50* Yrs.

FACILITY SF: 16,874 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 2001

Current Facility Replacement Cost is Approximately $6,159,010

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

600 ASO 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$950	
Annual PM		**2**	**50**	**$950**	**$0.06**
Improvement	Electrical	1	20	$6,400	
Improvement		**1**	**20**	**$6,400**	**$0.38**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$2,600	
Non-Annual Recurring Maintenance	Roof	1	50	$3,750	
Non-Annual Recurring Maintenance		**2**	**36**	**$6,350**	**$0.38**
Repair/Maintenance	Structural	1	50	$1,025	
Repair/Maintenance		**1**	**50**	**$1,025**	**$0.06**
Replacement/Renewal	HVAC	1	68	$268,600	
Replacement/Renewal	Plumbing	1	68	$6,200	
Replacement/Renewal		**2**	**68**	**$274,800**	**$16.29**

CONDITION SUMMARY:

This building appears to be two original buildings constructed in 1965 and joined through the construction of an enclosed common area between the buildings. This appears to have been constructed in 2001. The original buildings are single-story structures constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. The center section common area is steel framed with aluminum window walls and a Kalwal roof panel system. The roof on the original buildings is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 8 deficiencies identified were associated with HVAC, electrical, plumbing, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-

up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be average . The roof has moderate amounts of debris on the surface, and some dirty areas. Leaves and debris should be cleaned off the roof surface at least once per year. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is recommended that the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years. Rusting of sheet metal ductwork joints and transition ductwork was also observed on the roof. Ductwork sections need to be replaced and most joints on the ductwork needs to be replaced. The mechanical room also has a deteriorating gas hot water heater and storage tank that should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures

104 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Fixtures throughout building

QUANTITY: 112 EA ***REPAIR COST:*** **$6,400** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$6,400** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.38**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

105 The HVAC equipment appears to have been replaced in 2001. The eleven packaged roof top air conditioning units are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Rusting of the sheet metal ductwork joints and transition ductwork were also observed. The cost estimate provided includes amounts to repair and or replace ductwork sections and re-seal joint to minimize rusting in the future.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$268,600** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

SYSTEM SUB-TOTAL **HVAC** **$268,600** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$15.92**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 3,500 SF ***REPAIR COST:*** **$2,600** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,600** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.15**

68 **Plumbing** **Replacement/Renewal** Plumbing Equipment

106 The mechanical room includes a domestic hot water natural gas heater and storage tank with 75 MBH input and approximately 75 gallons of storage. It appears to be deteriorating and is recommended to be scheduled for replacement.

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$6,200** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2027 2037

SYSTEM SUB-TOTAL **Plumbing** **$6,200** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$0.37**

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 8 EA ***REPAIR COST:*** **$750** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:***

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

107 The single-ply membrane on this building contains significant amounts of leaf and other debris, and the surface is very dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended. An assessment of relatively clean areas of the membrane indicated no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 9,605 SF ***REPAIR COST:*** **$3,750** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

102 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 9,605 SF ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$4,700** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.28**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random light spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 15 SF ***REPAIR COST:*** **$1,025** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$1,025**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.06**
FACILITY TOTALS	**COST TOTAL =**	**$289,525**	**AV. SEVERITY SCORE =**	**47**	**COST PER BLDG GSF=**	**$17.16**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**600**	**ASO**	Roof							
		Roof Drains	8 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$750						
40	**600**	**ASO**	Roof							
		Roof Membrane	9,605 SF							
102		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$200						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$950**	**$0**	**$0**	**$0**	**$0**	**$0**	**$950**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**600**	**ASO**	Electrical							
		Light Fixtures	112 EA							
104		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*					$6,400			
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$6,400**	**$0**	**$0**	**$6,400**

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
50	**600**	**ASO**	Roof							
		Single-Ply Roof Membrane	9,605 SF							
107		The single-ply membrane on this building contains significant amounts of leaf and other debris, and the surface is very dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended. An assessment of relatively clean areas of the membrane indicated no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$3,750					
23	**600**	**ASO**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	3,500 SF							
100		The smooth concrete surfaces on the building are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$2,600					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **36**	**$0**	**$6,350**	**$0**	**$0**	**$0**	**$0**	**$6,350**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**600**	**ASO**	Structural							
		Concrete Columns and Beams	15 SF							
101		There is random light spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$1,025					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **50**	**$0**	**$1,025**	**$0**	**$0**	**$0**	**$0**	**$1,025**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**600 ASO**		Plumbing							
		Plumbing Equipment	1 LS							
106		The mechanical room includes a domestic hot water natural gas heater and storage tank with 75 MBH input and approximately 75 gallons of storage. It appears to be deteriorating and is recommended to be scheduled for replacement. *Mechanical Room*				$6,200				
68	**600 ASO**		HVAC							
		HVAC Equipment	1 LS							
105		The HVAC equipment appears to have been replaced in 2001. The eleven packaged roof top air conditioning units are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Rusting of the sheet metal ductwork joints and transition ductwork were also observed. The cost estimate provided includes amounts to repair and or replace ductwork sections and re-seal joint to minimize rusting in the future. *Roof*								$268,600	
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **68**	**$0**	**$0**	**$6,200**	**$0**	**$0**	**$268,600**	**$274,800**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **47**	**$950**	**$7,375**	**$6,200**	**$6,400**	**$0**	**$268,600**	**$289,525**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

610 Student Union 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$515,675** Cost Per Square Foot is **$23.81**

Facility Condition Rating = 93 (Good) ***Average Severity Score = 52***

Repair Cost as a Percent of Facility Replacement Cost is 7 % 12 Deficiencies Were Identified

PRIMARY USE: Cafeteria/Dining *FACILITY AGE:* *50* Yrs.

FACILITY SF: 21,660 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 1988

Current Facility Replacement Cost is Approximately $7,905,900

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

610 Student Union 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$1,375	
Annual PM		**2**	**50**	**$1,375**	**$0.06**
Improvement	Electrical	1	20	$16,800	
Improvement		**1**	**20**	**$16,800**	**$0.78**
Non-Annual Recurring Maintenance	Paint/Finish	2	31	$8,250	
Non-Annual Recurring Maintenance	Roof	1	50	$9,200	
Non-Annual Recurring Maintenance		**3**	**38**	**$17,450**	**$0.81**
Repair/Maintenance	Structural	1	50	$15,700	
Repair/Maintenance		**1**	**50**	**$15,700**	**$0.72**
Replacement/Renewal	Electrical	1	68	$161,700	
Replacement/Renewal	HVAC	3	68	$254,250	
Replacement/Renewal	Plumbing	1	68	$48,400	
Replacement/Renewal		**5**	**68**	**$464,350**	**$21.44**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original buildings on the campus. It received an extensive remodel in1988. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 12 deficiencies identified were associated with HVAC, electrical, plumbing, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

610 Student Union 900 Otay Lakes Rd.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be acceptable . The roof has minor debris debris on the surface, primarily on the perimeter, and a few dirty areas. Leaves and debris should be cleaned off the roof surface at least once per year. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is recommended that the roof membrane be power washed in about 3 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The wood panels around the perimeter of the building are in reasonable shape. However, the surfaces are weathering and should be re-finished with an oil-based wood sealer to prevent further deterioration.

The air handler in the mechanical room appears to be an original multi-zone unit using chilled water from the central plant for cooling. As this unit is now 50 years old, it is well past its service life and should be programmed for replacement. In addition, the hot water boiler that provides comfort heating is deteriorating and at the end of its service life. Replacement of the 840 MBH natural gas boiler and pump is recommended.

Two gas-fired make-up units, two aluminum exhaust fans serving the grease hoods, and two additional exhaust fans, all located on the roof, are deteriorating and should be scheduled for replacement in 4 to 5 years. The domestic hot water heater and storage tank in the mechanical room are also deteriorating and need to be replaced.

The circuit breaker panels are approximately 50 years old. The building also houses the main distribution switchgear for this and other buildings. The equipment is still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The equipment should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panel and Distribution Swithboard

106 The circuit breaker panelboards are original to the building and are approximately 50 years old. This building also houses the main distribution switchgear for this building and others. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Electrical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$161,700** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2

Fixtures throughout building

QUANTITY: 294 EA ***REPAIR COST:*** **$16,800** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$178,500** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$8.24**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

110 The air handling unit appears to be an original multi-zone unit utilizing chilled water for cooling from the central plant. As this unit would now be fifty years old, and well past its expected service life, it should be programmed for replacement within the next 3 years.

Same as existing unless additional capacity is required

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$113,200** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

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68 **HVAC** **Replacement/Renewal** HVAC Equipment

109 The hot water boiler for comfort heating is deteriorating and is at the end of its expected service life. Replacement is recommended. Equipment includes a 840 MBH output natural gas fired boiler and 1 hp pump.

Same as existing unless additional capacity is required

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$60,300** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 49 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

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68 **HVAC** **Replacement/Renewal** HVAC Equipment

107 On the roof there are several pieces of mechanical equipment that appear to be deteriorating and nearing the end of their expected service life. Equipment includes two natural gas-fired make-up units, two of the four circular aluminum exhaust fans that serve grease hoods, and two more circular aluminum exhaust fans. It is recommended that this equipment be scheduled for replacement within the next 5 years.

Same as existing unless additional capacity is required

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$80,750** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **HVAC** **$254,250** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$11.74**

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Wood Panels

104 The wood panels around the perimeter of the building are in reasonable shape. However, the surfaces are weathering and should be re-finished with an oil-based wood sealer to prevent further weathering deterioration.

Perimeter of building

QUANTITY: 6,350 SF ***REPAIR COST:*** **$5,300** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 46 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 3,950 SF ***REPAIR COST:*** **$2,950** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$8,250** **AV. SEVERITY SCORE =** **31** **COST PER BLDG GSF=** **$0.38**

68 **Plumbing** **Replacement/Renewal** Domestic Water Heating and Storage Equipment

108 The domestic hot water heater and storage tank are slowly deteriorating, nearing the end of their expected service life and are recommended to be replaced. Equipment includes a 510 MBH output natural gas fired boiler, a 1/2 hp, and a 520 gallon storage tank.

Same as existing unless additional capacity is required

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$48,400** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

SYSTEM SUB-TOTAL **Plumbing** **$48,400** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$2.23**

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 12 EA ***REPAIR COST:*** **$1,100** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

111 The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface is dirty in some areas. An assessment of the membrane does not indicate any apparent deficiencies. However, as debris continues to accumulate it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 26,130 SF ***REPAIR COST:*** **$9,200** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

102 There are moderate amounts of leaves and tree debris on the roof membrane surface, primarily around the perimeter. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 26,130 SF ***REPAIR COST:*** **$275** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$10,575** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.49**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is minor random spalling of surface concrete on the building, except for the concrete beam that supports the parapet wall at the rear of the building. This beam has extensive face spalling. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 250 SF ***REPAIR COST:*** **$15,700** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$15,700**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.72**
FACILITY TOTALS	**COST TOTAL =**	**$515,675**	**AV. SEVERITY SCORE =**	**52**	**COST PER BLDG GSF=**	**$23.81**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**610**	**Student Union**	Roof							
		Roof Drains	12 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$1,100						
40	**610**	**Student Union**	Roof							
		Roof Membrane	26,130 SF							
102		There are moderate amounts of leaves and tree debris on the roof membrane surface, primarily around the perimeter. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$275						
TOTAL: Annual PM			***AV. SEVER. SCORE =*** **50**	**$1,375**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,375**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**610**	**Student Union**	Electrical							
		Light Fixtures	294 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*					$16,800			
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$16,800**	**$0**	**$0**	**$16,800**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**610**	**Student Union**	Roof							
		Single-Ply Roof Membrane	26,130 SF							
111		The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface is dirty in some areas. An assessment of the membrane does not indicate any apparent deficiencies. However, as debris continues to accumulate it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$9,200			
40	**610**	**Student Union**	Paint/Finish							
		Exterior Wood Panels	6,350 SF							
104		The wood panels around the perimeter of the building are in reasonable shape. However, the surfaces are weathering and should be re-finished with an oil-based wood sealer to prevent further weathering deterioration. *Perimeter of building*			$5,300					
23	**610**	**Student Union**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	3,950 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$2,950					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**38**	**$0**	**$8,250**	**$0**	**$9,200**	**$0**	**$0**	**$17,450**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**610**	**Student Union**	Structural							
		Concrete Columns and Beams	250 SF							
101		There is minor random spalling of surface concrete on the building, except for the concrete beam that supports the parapet wall at the rear of the building. This beam has extensive face spalling. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$15,700					
TOTAL:		**Repair/Maintenance**	*AV. SEVER. SCORE =* **50**	**$0**	**$15,700**	**$0**	**$0**	**$0**	**$0**	**$15,700**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**610**	**Student Union**	Electrical							
		Circuit Breaker Panel and Distribution Swithboard	1 LS							
106		The circuit breaker panelboards are original to the building and are approximately 50 years old. This building also houses the main distribution switchgear for this building and others. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Electrical Room*				$161,700				
68	**610**	**Student Union**	HVAC							
		HVAC Equipment	1 LS							
110		The air handling unit appears to be an original multi-zone unit utilizing chilled water for cooling from the central plant. As this unit would now be fifty years old, and well past its expected service life, it should be programmed for replacement within the next 3 years. *Mechanical Room*				$113,200				
68	**610**	**Student Union**	HVAC							
		HVAC Equipment	1 LS							
109		The hot water boiler for comfort heating is deteriorating and is at the end of its expected service life. Replacement is recommended. Equipment includes a 840 MBH output natural gas fired boiler and 1 hp pump. *Mechanical Room*				$60,300				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**610**	**Student Union**	HVAC							
		HVAC Equipment	1 LS							
107		On the roof there are several pieces of mechanical equipment that appear to be deteriorating and nearing the end of their expected service life. Equipment includes two natural gas-fired make-up units, two of the four circular aluminum exhaust fans that serve grease hoods, and two more circular aluminum exhaust fans. It is recommended that this equipment be scheduled for replacement within the next 5 years. *Roof*					$80,750			
68	**610**	**Student Union**	Plumbing							
		Domestic Water Heating and Storage Equipment	1 LS							
108		The domestic hot water heater and storage tank are slowly deteriorating, nearing the end of their expected service life and are recommended to be replaced. Equipment includes a 510 MBH output natural gas fired boiler, a 1/2 hp, and a 520 gallon storage tank. *Mechanical Room*							$48,400	
TOTAL: Replacement/Renewal			***AV. SEVER. SCORE =*** **68**	**$0**	**$0**	**$335,200**	**$80,750**	**$0**	**$48,400**	**$464,350**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **52**	**$1,375**	**$23,950**	**$335,200**	**$106,750**	**$0**	**$48,400**	**$515,675**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

620 Learning Resource Center 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$281,100** Cost Per Square Foot is **$2.93**

Facility Condition Rating = 99 (Excellent) ***Average Severity Score = 51***

Repair Cost as a Percent of Facility Replacement Cost is 1 % 7 Deficiencies Were Identified

PRIMARY USE: Library *FACILITY AGE:* *12* Yrs.

FACILITY SF: 95,852 *NO. OF STORIES:* 3.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $29,234,860

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

620 Learning Resource Center 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$950	
Annual PM		**2**	**50**	**$950**	**$0.01**
Improvement	Electrical	1	20	$74,400	
Improvement	Roof	1	50	$48,000	
Improvement		**2**	**35**	**$122,400**	**$1.28**
Non-Annual Recurring Maintenance	Roof	1	50	$12,150	
Non-Annual Recurring Maintenance		**1**	**50**	**$12,150**	**$0.13**
Repair/Maintenance	HVAC	1	68	$135,200	
Repair/Maintenance	Plumbing	1	68	$10,400	
Repair/Maintenance		**2**	**68**	**$145,600**	**$1.52**

CONDITION SUMMARY:

This building was constructed for the college in 2003. It is a three-story steel-frame building with concrete exterior wall panels and aluminum window walls. The roof is a single-ply membrane, likely PVC, on a steel pan roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 7 deficiencies identified were associated with HVAC, electrical, plumbing and roof systems.

Roof maintenance on this building appears to be adequate . The roof has minor amounts of debris on the surface, and a few dirty areas. Leaves and debris should be cleaned off the roof surface at least once per year. However, the roof drains and sumps are badly clogged and should be cleaned at least once per year. It is recommended that the roof membrane be power washed in about 2 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

There are also a large number of holes in the tops of the stucco parapets, which let water leak into the parapets, which can result in damage and deterioration. Pre-finished sheet metal caps should be installed on all parapets.

Three large packaged roof-top HVAC units serve this building. The equipment appears to be in good condition. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years. In addition, surface rust is developing on the domestic hot water storage tank and water heater on the roof. The surfaces of the equipment should be re-finished.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

620 Learning Resource Center 900 Otay Lakes Rd.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures

103 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2

Fixtures throughout building

QUANTITY: 1,301 EA ***REPAIR COST:*** **$74,400** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$74,400** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.78**

68 **HVAC** **Repair/Maintenance** HVAC Equipment

104 Three large packaged roof-top HVAC units serve this building. The equipment appears to still be in good condition. However, as the units age repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the units and extend their life.

Also included are one-time repairs of rusting ductwork and joints, and refinishing the hot water heating equipment and exhaust fan on the roof.

Same as existing unless additional capacity is required

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$135,200** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

SYSTEM SUB-TOTAL **HVAC** **$135,200** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$1.41**

68 **Plumbing** **Repair/Maintenance** Domestic Water Heating and Storage Equipment

105 The domestic hot water heater and storage tank on the roof appear to be in good operating condition. However, surface rust is developing on the exterior surfaces of the equipment. A repair/maintenance allowance is being recommended to prepare and paint exterior surfaces as well as provide funds for repairs and maintenance of the equipment for the next 5 years.
Same as existing unless additional capacity is required
Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

SYSTEM SUB-TOTAL **Plumbing** **$10,400** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$0.11**

60 **Roof** **Annual PM** Roof Drains

102 Four of seven roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.
Roof perimeter

QUANTITY: 4 EA ***REPAIR COST:*** **$400** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Improvement** Stucco Roof Parapet

101 There are a significant number of cracks and holes on the top of the stucco parapets, which let water leak into the parapets. This can result in parapet damage and deterioration. Install metal caps on all parapets.
18" caps
Perimeter of roof and circular central opening

QUANTITY: 1,015 LF ***REPAIR COST:*** **$48,000** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

106 The single-ply membrane on this building contains minor amounts of leaf and other debris, and the surface is dirty in areas. As accumulations of debris and dirt increase, it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface in about 2 years is recommended. An assessment of the membrane indicated no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 38,830 SF *REPAIR COST:* **$12,150** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

100 There is a minor amount of debris on the roof membrane surface, primarily inside the mechanical enclosure. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 38,830 SF *REPAIR COST:* **$550** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$61,100**	**AV. SEVERITY SCORE =** **50**	**COST PER BLDG GSF=**	**$0.64**
FACILITY TOTALS	**COST TOTAL =**	**$281,100**	**AV. SEVERITY SCORE =** **51**	**COST PER BLDG GSF=**	**$2.93**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**620**	**Learning Resource Center**	Roof							
		Roof Drains	4 EA							
102		Four of seven roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$400						
40	**620**	**Learning Resource Center**	Roof							
		Roof Membrane	38,830 SF							
100		There is a minor amount of debris on the roof membrane surface, primarily inside the mechanical enclosure. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$550						
TOTAL: Annual PM			***AV. SEVER. SCORE =*** **50**	**$950**	**$0**	**$0**	**$0**	**$0**	**$0**	**$950**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**620**	**Learning Resource Center**	Roof							
		Stucco Roof Parapet	1,015 LF							
101		There are a significant number of cracks and holes on the top of the stucco parapets, which let water leak into the parapets. This can result in parapet damage and deterioration. Install metal caps on all parapets. *Perimeter of roof and circular central opening*			$48,000					
20	**620**	**Learning Resource Center**	Electrical							
		Light Fixtures	1,301 EA							
103		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*					$74,400			
TOTAL: Improvement			*AV. SEVER. SCORE =* **35**	**$0**	**$48,000**	**$0**	**$74,400**	**$0**	**$0**	**$122,400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**620**	**Learning Resource Center**	Roof							
		Single-Ply Roof Membrane	38,830 SF							
106		The single-ply membrane on this building contains minor amounts of leaf and other debris, and the surface is dirty in areas. As accumulations of debris and dirt increase, it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface in about 2 years is recommended. An assessment of the membrane indicated no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*				$12,150				
TOTAL:		**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =* **50**	**$0**	**$0**	**$12,150**	**$0**	**$0**	**$0**	**$12,150**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**620**	**Learning Resource Center**	Plumbing							
		Domestic Water Heating and Storage Equipment	1 LS							
105		The domestic hot water heater and storage tank on the roof appear to be in good operating condition. However, surface rust is developing on the exterior surfaces of the equipment. A repair/maintenance allowance is being recommended to prepare and paint exterior surfaces as well as provide funds for repairs and maintenance of the equipment for the next 5 years. *Roof*			$10,400					
68	**620**	**Learning Resource Center**	HVAC							
		HVAC Equipment	1 LS							
104		Three large packaged roof-top HVAC units serve this building. The equipment appears to still be in good condition. However, as the units age repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the units and extend their life. Also included are one-time repairs of rusting ductwork and joints, and refinishing the hot water heating equipment and exhaust fan on the roof. *Roof*			$135,200					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **68**	**$0**	**$145,600**	**$0**	**$0**	**$0**	**$0**	**$145,600**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **51**	**$950**	**$193,600**	**$12,150**	**$74,400**	**$0**	**$0**	**$281,100**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

630 Bookstore — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$246,850** — Cost Per Square Foot is **$29.39**

Facility Condition Rating = 90 (Good) — ***Average Severity Score = 45***

Repair Cost as a Percent of Facility Replacement Cost is 10 % — 13 Deficiencies Were Identified

PRIMARY USE: Bookstore — *FACILITY AGE:* *34* Yrs.

FACILITY SF: 8,400 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $2,562,000

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Average

Relative Facility Priority Score = 29 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

630 Bookstore 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$850	
Annual PM		**2**	**50**	**$850**	**$0.10**
Improvement	Electrical	1	20	$8,350	
Improvement		**1**	**20**	**$8,350**	**$0.99**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,700	
Non-Annual Recurring Maintenance	Paving	1	40	$4,700	
Non-Annual Recurring Maintenance		**2**	**31**	**$6,400**	**$0.76**
Repair/Maintenance	Paving	1	40	$1,525	
Repair/Maintenance		**1**	**40**	**$1,525**	**$0.18**
Replacement/Renewal	Floor Cover	1	5	$36,300	
Replacement/Renewal	HVAC	2	36	$74,350	
Replacement/Renewal	Plumbing	1	68	$2,350	
Replacement/Renewal	Roof	3	72	$116,725	
Replacement/Renewal		**7**	**51**	**$229,725**	**$27.35**

CONDITION SUMMARY:

This building was constructed for the college in 1981. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. Two interior deficiencies were identified. The 13 deficiencies identified were associated with HVAC, electrical, roof, paving and exterior/interior closure/finish systems.

Structurally the building appears to be well constructed. The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

630 Bookstore 900 Otay Lakes Rd.

Roof maintenance on this building appears to be poor. The roof is covered with leaves and other debris and the membrane surface is very dirty, making it difficult to determine overall condition. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane and the lack of maintenance, premature deterioration is likely, and the roof membrane and insulation should be replaced in 4 to 5 years. A short term alternative would be to apply a polyester-reinforced 20 mil fluid neoprene coating to a clean membrane surface. This could extend the life of the membrane by five to eight years.

Leaves and debris should be cleaned off the roof surface at least once per year. This will become especially important once a new roof is installed. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year.

The roof access hatch no longer operates properly. The closing and damper mechanisms are severely compromised, which creates a serious safety hazard for anyone trying to operate the hatch. The hatch should be replaced with a new unit with dampers and side control handles.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years. In addition, the perforated HVAC supply ceiling diffusers throughout the building are very stained and rusted. These units should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

The carpet and vinyl throughout the building, except for the storage area, are badly stained, dirty, and generally deteriorating. The carpet and tile should be replaced with all carpet. Prior to installation the concrete slab should be waterproofed.

The concrete walkway in front of the building has a number of cracks that should be sealed to prevent further deterioration. The asphalt parking area behind the loading dock has numerous small to moderate cracks over the surface. Failure to address the cracking could lead to more extensive deterioration or paving failure. The entire parking area should be cleaned and have a seal coat applied.

20 **Electrical** **Improvement** Light Fixtures

107 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Fixtures throughout building

QUANTITY: 146 EA ***REPAIR COST:*** **$8,350** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$8,350** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.99**

5 **Floor Cover** **Replacement/Renewal** Carpet

108 Carpet and vinyl tile are badly stained, dirty, generally deteriorating, and should be replaced with all carpet. Before installing new carpet, waterproof the concrete slab. Install new low pile high wear commercial grade carpet in the entire area using waterproof adhesive.

700 SY

All areas except storage area

QUANTITY: 700 SY ***REPAIR COST:*** **$36,300** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 8 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2032

SYSTEM SUB-TOTAL **Floor Cover** **$36,300** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$4.32**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

110 The HVAC equipment appears to have been replaced in 2001. The three packaged roof top air conditioning units are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

A Restroom exhaust fan that appears to be original is also recommended to be replaced at the same time.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$71,400** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

5 **HVAC** **Replacement/Renewal** HVAC Ceiling Diffusers

109 HVAC supply perforated ceiling diffuser(s) are stained and rusty. Install new ceiling diffuser(s).
2' x 2'

Ceilings throughout building

QUANTITY: 11 EA ***REPAIR COST:*** **$2,950** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract
Benefit Score = 8 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **HVAC** **$74,350** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$8.85**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,240 SF ***REPAIR COST:*** **$1,700** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,700** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.20**

40 **Paving** **Non-Annual Recurring Maintenance** Parking Area Asphalt

106 The parking area asphalt behind the bookstore in the loading dock area has numerous small to moderate cracks over the surface. Failure to address this cracking could result in more extensive deterioration, potentially requiring extensive repair/replacement of asphalt. The entire parking area should be cleaned and have a seal-coat applied.

Behind building

QUANTITY: 528 SY ***REPAIR COST:*** **$4,700** **Deferrable** **Est. Remaining Life =** **2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 46 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paving** **Repair/Maintenance** Concrete Walkway

105 The concrete walk in front of the building has a number of cracks that should be sealed to prevent further deterioration of the concrete.

Front of building

QUANTITY: 125 LF ***REPAIR COST:*** **$1,525** **Deferrable** **Est. Remaining Life =** **2 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 42 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Paving** **$6,225** **AV. SEVERITY SCORE =** **40** **COST PER BLDG GSF=** **$0.74**

68 **Plumbing** **Replacement/Renewal** Domestic Water Heating and Storage Equipment

111 The domestic hot water heater and storage tank are slowly deteriorating and should be programmed for replacement. Equipment includes an approximately 15 gallon storage tank and 1500 watt upper and lower electric heating elements.

Same as existing unless additional capacity is required

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$2,350** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2027 2037

SYSTEM SUB-TOTAL **Plumbing** **$2,350** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$0.28**

100 **Roof** **Replacement/Renewal** Roof Access Hatch

101 The roof access hatch no longer operates properly. The closing and damper mechanisms are deteriorated, which creates a serious safety hazard to anyone trying to operate the hatch. It also makes the hatch very difficult to open, which can also be very dangerous. Replace the hatch with a new unit with dampers and side control handles.

Roof access hatch

QUANTITY: 1 EA ***REPAIR COST:*** **$2,025** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **A-Health/Safety Issue**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

75 **Roof** **Replacement/Renewal** Single-Ply Roof Membrane

112 College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is a moderate amount of debris on the roof and the membrane is very dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times.

The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years.

A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset.

Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset.

Roof

Short Term Alternative A further inspection of the membrane surface can be conducted once it has been power washed. If only minimal to moderate chalking and/or crazing are apparent a fluid neoprene coating with a polyester reinforcing can be applied (20 mil) over the cleaned membrane to possibly extend membrane life another 5 to 8 years. Estimated cost is $55,000.

QUANTITY: 86 SQ ***REPAIR COST:*** **$98,900** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2045

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 6 EA ***REPAIR COST:*** **$650** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

102 There are moderate amounts of leaves and tree debris on the perimeter of the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Once the new roof membrane has been installed, debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 8,585 SF ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

104 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8, 4x15 and 6x14 boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.
1925 LF 2x8 boards, 275 LF of 4 x, and 160 LF of 6x

All sunscreen boards on perimeter of building

QUANTITY: 2,360 LF ***REPAIR COST:*** **$15,800** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**	**$117,575**	**AV. SEVERITY SCORE =**	**63**	**COST PER BLDG GSF=**	**$14.00**
FACILITY TOTALS	**COST TOTAL =**	**$246,850**	**AV. SEVERITY SCORE =**	**45**	**COST PER BLDG GSF=**	**$29.39**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**630**	**Bookstore**	Roof							
		Roof Drains	6 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$650						
40	**630**	**Bookstore**	Roof							
		Roof Membrane	8,585 SF							
102		There are moderate amounts of leaves and tree debris on the perimeter of the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Once the new roof membrane has been installed, debris should be cleaned off the roof at least once per year. *Roof surface*		$200						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$850**	**$0**	**$0**	**$0**	**$0**	**$0**	**$850**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE / DEF. NO.	BLDG.	COMPONENT DEFICIENCY / LOCATION	SYSTEM / QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**630**	**Bookstore**	Electrical							
		Light Fixtures	146 EA							
107		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*					$8,350			
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$8,350**	**$0**	**$0**	**$8,350**

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
40	**630**	**Bookstore**	Paving							
		Parking Area Asphalt	528 SY							
106		The parking area asphalt behind the bookstore in the loading dock area has numerous small to moderate cracks over the surface. Failure to address this cracking could result in more extensive deterioration, potentially requiring extensive repair/replacement of asphalt. The entire parking area should be cleaned and have a seal-coat applied. *Behind building*				$4,700				
23	**630**	**Bookstore**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,240 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,700					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **31**	**$0**	**$1,700**	**$4,700**	**$0**	**$0**	**$0**	**$6,400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**630**	**Bookstore**	Paving							
		Concrete Walkway	125 LF							
105		The concrete walk in front of the building has a number of cracks that should be sealed to prevent further deterioration of the concrete. *Front of building*				$1,525				
TOTAL:		**Repair/Maintenance**	***AV. SEVER. SCORE =*** **40**	**$0**	**$0**	**$1,525**	**$0**	**$0**	**$0**	**$1,525**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
100	**630**	**Bookstore**	Roof							
		Roof Access Hatch	1 EA							
101		The roof access hatch no longer operates properly. The closing and damper mechanisms are deteriorated, which creates a serious safety hazard to anyone trying to operate the hatch. It also makes the hatch very difficult to open, which can also be very dangerous. Replace the hatch with a new unit with dampers and side control handles. *Roof access hatch*		$2,025						
75	**630**	**Bookstore**	Roof							
		Single-Ply Roof Membrane	86 SQ							
112		College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is a moderate amount of debris on the roof and the membrane is very dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 4 to 5 years. A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset. Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset. *Roof*						$98,900	

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**630**	**Bookstore**	Plumbing							
		Domestic Water Heating and Storage Equipment	1 LS							
111		The domestic hot water heater and storage tank are slowly deteriorating and should be programmed for replacement. Equipment includes an approximately 15 gallon storage tank and 1500 watt upper and lower electric heating elements. *Mechanical Room*				$2,350				
68	**630**	**Bookstore**	HVAC							
		HVAC Equipment	1 LS							
110		The HVAC equipment appears to have been replaced in 2001. The three packaged roof top air conditioning units are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. A Restroom exhaust fan that appears to be original is also recommended to be replaced at the same time. *Roof*							$71,400	
40	**630**	**Bookstore**	Roof							
		Wood Sunscreen Boards	2,360 LF							
104		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8, 4x15 and 6x14 boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$15,800				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**630**	**Bookstore**	HVAC							
		HVAC Ceiling Diffusers	11 EA							
109		HVAC supply perforated ceiling diffuser(s) are stained and rusty. Install new ceiling diffuser(s). *Ceilings throughout building*				$2,950				
5	**630**	**Bookstore**	Floor Cover							
		Carpet	700 SY							
108		Carpet and vinyl tile are badly stained, dirty, generally deteriorating, and should be replaced with all carpet. Before installing new carpet, waterproof the concrete slab. Install new low pile high wear commercial grade carpet in the entire area using waterproof adhesive. *All areas except storage area*				$36,300				
TOTAL: Replacement/Renewal			***AV. SEVER. SCORE =*** **51**	**$2,025**	**$0**	**$57,400**	**$0**	**$0**	**$170,300**	**$229,725**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **45**	**$2,875**	**$1,700**	**$63,625**	**$8,350**	**$0**	**$170,300**	**$246,850**

FACILITY CONDITION SUMMARY REPORT

Southwestern College
640 Journalism

SURVEY DATE: 8/15
900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$88,375**
Cost Per Square Foot is **$30.84**

Facility Condition Rating = 90 (Fair)
Average Severity Score = 41

Repair Cost as a Percent of Facility Replacement Cost is 10 %
7 Deficiencies Were Identified

PRIMARY USE: Classroom/Office
FACILITY AGE: *16* Yrs.

FACILITY SF: 2,866 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $874,130

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 29 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

640 Journalism — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	40	$150	
Annual PM		**1**	**40**	**$150**	**$0.05**
Improvement	Electrical	1	20	$2,450	
Improvement		**1**	**20**	**$2,450**	**$0.85**
Non-Annual Recurring Maintenance	Paint/Finish	1	46	$400	
Non-Annual Recurring Maintenance	Roof	1	50	$1,875	
Non-Annual Recurring Maintenance		**2**	**48**	**$2,275**	**$0.79**
Replacement/Renewal	Exterior Closure	1	60	$10,100	
Replacement/Renewal	Floor Cover	1	5	$17,200	
Replacement/Renewal	HVAC	1	68	$56,200	
Replacement/Renewal		**3**	**44**	**$83,500**	**$29.13**

CONDITION SUMMARY:

This facility was constructed for the college in 1999. It is a one-story wood-frame building with cement/stucco exterior walls that have small exposed aggregate embedded in the stucco and decorative stucco clad parapets. The roof deck is wood over wood/metal tube trusses covered with a single-ply membrane.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. One interior deficiency was identified. The 7 deficiencies identified were associated with HVAC, electrical, roof, and exterior/interior closure/finish systems.

Roof maintenance on this building appears to be adequate . The roof has only minor debris on the surface, and very few dirty areas. Leaves and debris should be cleaned off the roof surface at least once per year. The roof drains and sumps are badly clogged and should be cleaned at least once per year. It is recommended that in 3 to 4 years the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The joint sealant on the metal parapet caps is deteriorating, allowing moisture to potentially penetrate the joints and run onto the stucco parapet tops. All joint sealant should be replaced.

The wood boards on the HVAC equipment enclosure on the roof, including the top and bottom rails and 4 x 4 posts, are badly weathered and cracked/checked. All the wood on the enclosures should be replaced. It is recommended that 5/4 Trex boards be used to replace the 1x8s. The top and bottom rails and posts should be replaced with treated

lumber and primed and painted.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

The carpet throughout the building is stained, dirty and generally deteriorating. Replacement with a low-pile, high-wear commercial grade carpet should be considered. Prior to installation the floor should be waterproofed.

20 **Electrical** **Improvement** Light Fixtures

104 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x4, 2 x 2

Fixtures throughout building

QUANTITY: 43 EA ***REPAIR COST:*** **$2,450** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$2,450** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.85**

60 **Exterior Closure** **Replacement/Renewal** HVAC Equipment Enclosure

102 The wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and cracked/checked. All of the wood on the enclosure should be replaced. It is recommended that 5/4 Trex boards be used to replace the 1x8s. The new top/bottom 2x4 rails and 4x4 posts should be treated lumber and primed and painted after installation.

750 LF of 1x8; 212 LF of 2x4; 105 LF of 4x4

Roof

QUANTITY: 1,067 LF ***REPAIR COST:*** **$10,100** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 62 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2043

SYSTEM SUB-TOTAL **Exterior Closure** **$10,100** **AV. SEVERITY SCORE =** **60** **COST PER BLDG GSF=** **$3.52**

5 **Floor Cover** **Replacement/Renewal** Carpet

103 Carpet is badly stained, dirty, generally deteriorating, and should be replaced. Before installing new carpet, waterproof the concrete slab. Install new low pile high wear commercial grade carpet using waterproof adhesive. 350 SY

Throughout building

QUANTITY: 350 SY ***REPAIR COST:*** **$17,200** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 8 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2032

SYSTEM SUB-TOTAL **Floor Cover** **$17,200** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$6.00**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

105 The three packaged roof top air conditioning units appear to be around 15 years old. As such they have reached approximately 70% of their generally accepted 20 year service life. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$56,200** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

SYSTEM SUB-TOTAL **HVAC** **$56,200** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$19.61**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

101 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 56 LF ***REPAIR COST:*** **$400** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$400** **AV. SEVERITY SCORE =** **46** **COST PER BLDG GSF=** **$0.14**

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

106 The single-ply membrane on this building contains minor amounts of leaves and other debris, and some dirt on membrane surface. If more debris and dirt accumulate it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. An assessment of clean areas of the membrane indicated no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 3,366 SF ***REPAIR COST:*** **$1,875** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

100 There are minor amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 3,366 SF ***REPAIR COST:*** **$150** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$2,025** **AV. SEVERITY SCORE =** **45** **COST PER BLDG GSF=** **$0.71**

FACILITY TOTALS **COST TOTAL =** **$88,375** **AV. SEVERITY SCORE =** **41** **COST PER BLDG GSF=** **$30.84**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**640**	**Journalism**	Roof							
		Roof Membrane	3,366 SF							
100		There are minor amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$150						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **40**	**$150**	**$0**	**$0**	**$0**	**$0**	**$0**	**$150**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**640**	**Journalism**	Electrical							
		Light Fixtures	43 EA							
104		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*					$2,450			
TOTAL:		**Improvement**	***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$2,450**	**$0**	**$0**	**$2,450**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**640**	**Journalism**	Roof							
		Single-Ply Roof Membrane	3,366 SF							
106		The single-ply membrane on this building contains minor amounts of leaves and other debris, and some dirt on membrane surface. If more debris and dirt accumulate it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. An assessment of clean areas of the membrane indicated no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$1,875			
46	**640**	**Journalism**	Paint/Finish							
		Metal Parapet Cap Joints	56 LF							
101		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*				$400				
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **48**	**$0**	**$0**	**$400**	**$1,875**	**$0**	**$0**	**$2,275**

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**640**	**Journalism**	HVAC							
		HVAC Equipment	1 LS							
105		The three packaged roof top air conditioning units appear to be around 15 years old. As such they have reached approximately 70% of their generally accepted 20 year service life. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. *Roof*							$56,200	
60	**640**	**Journalism**	Exterior Closure							
		HVAC Equipment Enclosure	1,067 LF							
102		The wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and cracked/checked. All of the wood on the enclosure should be replaced. It is recommended that 5/4 Trex boards be used to replace the 1x8s. The new top/bottom 2x4 rails and 4x4 posts should be treated lumber and primed and painted after installation. *Roof*					$10,100			
5	**640**	**Journalism**	Floor Cover							
		Carpet	350 SY							
103		Carpet is badly stained, dirty, generally deteriorating, and should be replaced. Before installing new carpet, waterproof the concrete slab. Install new low pile high wear commercial grade carpet using waterproof adhesive. *Throughout building*				$17,200				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **44**	**$0**	**$0**	**$17,200**	**$10,100**	**$0**	**$56,200**	**$83,500**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **41**	**$150**	**$0**	**$17,600**	**$14,425**	**$0**	**$56,200**	**$88,375**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

650 Resource TR 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$75,500** Cost Per Square Foot is **$30.08**

Facility Condition Rating = 90 (Good) ***Average Severity Score = 48***

Repair Cost as a Percent of Facility Replacement Cost is 10 % 8 Deficiencies Were Identified

PRIMARY USE: Student Support *FACILITY AGE:* *16* Yrs.

FACILITY SF: 2,510 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $765,559

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 26 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

650 Resource TR — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$800	
Annual PM		**2**	**50**	**$800**	**$0.32**
Improvement	Electrical	1	20	$2,500	
Improvement		**1**	**20**	**$2,500**	**$1.00**
Non-Annual Recurring Maintenance	Paint/Finish	1	46	$450	
Non-Annual Recurring Maintenance	Roof	1	50	$2,000	
Non-Annual Recurring Maintenance		**2**	**48**	**$2,450**	**$0.98**
Repair/Maintenance	Exterior Closure	1	40	$350	
Repair/Maintenance		**1**	**40**	**$350**	**$0.14**
Replacement/Renewal	Exterior Closure	1	60	$13,200	
Replacement/Renewal	HVAC	1	68	$56,200	
Replacement/Renewal		**2**	**64**	**$69,400**	**$27.65**

CONDITION SUMMARY:

This facility was constructed for the college in 1999. It is a one-story wood-frame building with cement/stucco exterior walls that have small exposed aggregate embedded in the stucco and decorative stucco clad parapets. The roof deck is wood over wood/metal tube trusses covered with a single-ply membrane.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 8 deficiencies identified were associated with HVAC, electrical, roof, and exterior closure/finish systems.

There is a small hole, probably the result of damage, in one of the exterior walls that should be repaired to prevent water or animal intrusion into the wall cavity.

Roof maintenance on this building appears to be adequate . The roof has only minor debris on the surface, and very few dirty areas. Leaves and debris should still be cleaned off the roof surface at least once per year. The roof drains and sumps are badly clogged and should be cleaned at least once per year. It is recommended that in 3 to 4 years the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

Southwestern College SURVEY DATE: 8/15

650 Resource TR 900 Otay Lakes Rd.

The joint sealant on the metal parapet caps is deteriorating, allowing moisture to potentially penetrate the joints and run onto the stucco parapet tops. All joint sealant should be replaced.

The wood boards on the HVAC equipment enclosure on the roof, including the top and bottom rails and 4 x 4 posts, are badly weathered and cracked/checked. All the wood on the enclosures should be replaced. It is recommended that 5/4 Trex boards be used to replace the 1x8s. The top and bottom rails and posts should be replaced with treated lumber and primed and painted.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x4, 2 x 2

Fixtures throughout building

QUANTITY: 44 EA ***REPAIR COST:*** **$2,500** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$2,500** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$1.00**

60 **Exterior Closure** **Replacement/Renewal** HVAC Equipment Enclosure

103 The wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and cracked/checked. All of the wood on the enclosure should be replaced. It is recommended that 5/4 Trex boards be used to replace the 1x8s. The new top/bottom 2x4 rails and 4x4 posts should be treated lumber and primed and painted after installation.

1225 LF of 1x8; 350 LF of 2x4; 200 LF of 4x4

Roof

QUANTITY: 1,775 LF ***REPAIR COST:*** **$13,200** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 62 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2043

40 **Exterior Closure** **Repair/Maintenance** Stucco/Cement Wall

104 Repair hole in wall resulting from damage.

Adjacent to Bldg. 651

QUANTITY: 1 SF ***REPAIR COST:*** **$350** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 46 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Exterior Closure** **$13,550** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$5.40**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

106 The three packaged roof top air conditioning units appear to be around 15 years old. As such they have reached approximately 70% of their generally accepted 20 year service life. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$56,200** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

SYSTEM SUB-TOTAL **HVAC** **$56,200** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$22.39**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

102 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 64 LF ***REPAIR COST:*** **$450** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$450** **AV. SEVERITY SCORE =** **46** **COST PER BLDG GSF=** **$0.18**

60 **Roof** **Annual PM** Roof Drains

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 6 EA ***REPAIR COST:*** **$650** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

107 The single-ply membrane on this building contains minor amounts of debris. However, as more debris and dirt collect it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. An assessment of the membrane indicated no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 3,216 SF ***REPAIR COST:*** **$2,000** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

100 There are minor amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 3,216 SF ***REPAIR COST:*** **$150** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$2,800**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$1.12**
FACILITY TOTALS	**COST TOTAL =**	**$75,500**	**AV. SEVERITY SCORE =**	**48**	**COST PER BLDG GSF=**	**$30.08**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**650**	**Resource TR**	Roof							
		Roof Drains	6 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$650						
40	**650**	**Resource TR**	Roof							
		Roof Membrane	3,216 SF							
100		There are minor amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$150						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$800**	**$0**	**$0**	**$0**	**$0**	**$0**	**$800**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**650**	**Resource TR**	Electrical							
		Light Fixtures	44 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*					$2,500			
TOTAL: Improvement			*AV. SEVER. SCORE =* **20**	**$0**	**$0**	**$0**	**$2,500**	**$0**	**$0**	**$2,500**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**650**	**Resource TR**	Roof							
		Single-Ply Roof Membrane	3,216 SF							
107		The single-ply membrane on this building contains minor amounts of debris. However, as more debris and dirt collect it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. An assessment of the membrane indicated no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$2,000			
46	**650**	**Resource TR**	Paint/Finish							
		Metal Parapet Cap Joints	64 LF							
102		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*				$450				
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **48**	**$0**	**$0**	**$450**	**$2,000**	**$0**	**$0**	**$2,450**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE / DEF. NO.	BLDG.	COMPONENT DEFICIENCY / LOCATION	SYSTEM / QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**650**	**Resource TR**	Exterior Closure							
		Stucco/Cement Wall	1 SF							
104		Repair hole in wall resulting from damage. *Adjacent to Bldg. 651*		$350						
TOTAL: Repair/Maintenance			***AV. SEVER. SCORE =*** **40**	**$350**	**$0**	**$0**	**$0**	**$0**	**$0**	**$350**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**650**	**Resource TR**	HVAC							
		HVAC Equipment	1 LS							
106		The three packaged roof top air conditioning units appear to be around 15 years old. As such they have reached approximately 70% of their generally accepted 20 year service life. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. *Roof*							$56,200	
60	**650**	**Resource TR**	Exterior Closure							
		HVAC Equipment Enclosure	1,775 LF							
103		The wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and cracked/checked. All of the wood on the enclosure should be replaced. It is recommended that 5/4 Trex boards be used to replace the 1x8s. The new top/bottom 2x4 rails and 4x4 posts should be treated lumber and primed and painted after installation. *Roof*					$13,200			
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **64**	**$0**	**$0**	**$0**	**$13,200**	**$0**	**$56,200**	**$69,400**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **48**	**$1,150**	**$0**	**$450**	**$17,700**	**$0**	**$56,200**	**$75,500**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

660 Community Service — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$90,800** — Cost Per Square Foot is **$22.42**

Facility Condition Rating = 93 (Good) — ***Average Severity Score = 49***

Repair Cost as a Percent of Facility Replacement Cost is 7 % — 7 Deficiencies Were Identified

PRIMARY USE: Continuing Education — *FACILITY AGE:* *16* Yrs.

FACILITY SF: 4,050 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $1,235,250

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 29 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

660 Community Service 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$800	
Annual PM		**2**	**50**	**$800**	**$0.20**
Improvement	Electrical	1	20	$3,150	
Improvement		**1**	**20**	**$3,150**	**$0.78**
Non-Annual Recurring Maintenance	Roof	1	50	$2,675	
Non-Annual Recurring Maintenance		**1**	**50**	**$2,675**	**$0.66**
Repair/Maintenance	Paint/Finish	1	46	$475	
Repair/Maintenance		**1**	**46**	**$475**	**$0.12**
Replacement/Renewal	Exterior Closure	1	60	$13,200	
Replacement/Renewal	HVAC	1	68	$70,500	
Replacement/Renewal		**2**	**64**	**$83,700**	**$20.67**

CONDITION SUMMARY:

This facility was constructed for the college in 1999. It is a one-story wood-frame building with cement/stucco exterior walls that have small exposed aggregate embedded in the stucco and decorative stucco clad parapets. The roof deck is wood over wood/metal tube trusses covered with a single-ply membrane.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 7 deficiencies identified were associated with HVAC, electrical, roof, and exterior closure/finish systems.

Roof maintenance on this building appears to be adequate . The roof has only minor debris on the surface, and very few dirty areas. Leaves and debris should still be cleaned off the roof surface at least once per year. The roof drains and sumps are badly clogged and should be cleaned at least once per year. It is recommended that in 3 to 4 years the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The joint sealant on the metal parapet caps is deteriorating, allowing moisture to potentially penetrate the joints and run onto the stucco parapet tops. All joint sealant should be replaced.

The wood boards on the HVAC equipment enclosure on the roof, including the top and bottom rails and 4 x 4 posts,

are badly weathered and cracked/checked. All the wood on the enclosures should be replaced. It is recommended that 5/4 Trex boards be used to replace the 1x8s. The top and bottom rails and posts should be replaced with treated lumber and primed and painted.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 Electrical **Improvement** Light Fixtures

104 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x4,

Fixtures throughout building

QUANTITY: 55 EA ***REPAIR COST:*** **$3,150** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$3,150** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.78**

60 Exterior Closure **Replacement/Renewal** HVAC Equipment Enclosure

103 The wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and cracked/checked. All of the wood on the enclosure should be replaced. It is recommended that 5/4 Trex boards be used to replace the 1x8s. The new top/bottom 2x4 rails and 4x4 posts should be treated lumber and primed and painted after installation.

1225 LF of 1x8; 350 LF of 2x4; 200 LF of 4x4

Roof

QUANTITY: 1,775 LF ***REPAIR COST:*** **$13,200** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 62 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2043

SYSTEM SUB-TOTAL **Exterior Closure** **$13,200** **AV. SEVERITY SCORE =** **60** **COST PER BLDG GSF=** **$3.26**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

105 The four packaged roof top air conditioning units appear to be around 15 years old. As such they have reached approximately 70% of their generally accepted 20 year service life. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$70,500** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

SYSTEM SUB-TOTAL **HVAC** **$70,500** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$17.41**

46 **Paint/Finish** **Repair/Maintenance** Metal Parapet Cap Joints

102 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 66 LF ***REPAIR COST:*** **$475** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$475** **AV. SEVERITY SCORE =** **46** **COST PER BLDG GSF=** **$0.12**

60 **Roof** **Annual PM** Roof Drains

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 7 EA ***REPAIR COST:*** **$650** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

106 The single-ply membrane on this building contains minor amounts of debris, and some surface dirt. As more debris and dirt accumulate it will make very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. An assessment of the membrane indicated no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 4,815 SF ***REPAIR COST:*** **$2,675** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

100 There are minor amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 4,815 SF ***REPAIR COST:*** **$150** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$3,475**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.86**
FACILITY TOTALS	**COST TOTAL =**	**$90,800**	**AV. SEVERITY SCORE =**	**49**	**COST PER BLDG GSF=**	**$22.42**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**660**	**Community Service**	Roof							
		Roof Drains	7 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$650						
40	**660**	**Community Service**	Roof							
		Roof Membrane	4,815 SF							
100		There are minor amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$150						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$800**	**$0**	**$0**	**$0**	**$0**	**$0**	**$800**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**660**	**Community Service**	Electrical							
		Light Fixtures	55 EA							
104		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*					$3,150			
TOTAL:		**Improvement**	***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$3,150**	**$0**	**$0**	**$3,150**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**660**	**Community Service**	Roof							
		Single-Ply Roof Membrane	4,815 SF							
106		The single-ply membrane on this building contains minor amounts of debris, and some surface dirt. As more debris and dirt accumulate it will make very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. An assessment of the membrane indicated no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$2,675			
TOTAL:		**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =* **50**	**$0**	**$0**	**$0**	**$2,675**	**$0**	**$0**	**$2,675**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
46	**660**	**Community Service**	Paint/Finish							
		Metal Parapet Cap Joints	66 LF							
102		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*				$475				
TOTAL: Repair/Maintenance			***AV. SEVER. SCORE =*** **46**	**$0**	**$0**	**$475**	**$0**	**$0**	**$0**	**$475**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**660**	**Community Service**	HVAC							
		HVAC Equipment	1 LS							
105		The four packaged roof top air conditioning units appear to be around 15 years old. As such they have reached approximately 70% of their generally accepted 20 year service life. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. *Roof*							$70,500	
60	**660**	**Community Service**	Exterior Closure							
		HVAC Equipment Enclosure	1,775 LF							
103		The wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and cracked/checked. All of the wood on the enclosure should be replaced. It is recommended that 5/4 Trex boards be used to replace the 1x8s. The new top/bottom 2x4 rails and 4x4 posts should be treated lumber and primed and painted after installation. *Roof*					$13,200			
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **64**	**$0**	**$0**	**$0**	**$13,200**	**$0**	**$70,500**	**$83,700**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **49**	**$800**	**$0**	**$475**	**$19,025**	**$0**	**$70,500**	**$90,800**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

700 Art — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$307,750** — Cost Per Square Foot is **$35.62**

Facility Condition Rating = 88 (Fair) — ***Average Severity Score = 56***

Repair Cost as a Percent of Facility Replacement Cost is 12 % — 12 Deficiencies Were Identified

PRIMARY USE: Classroom — *FACILITY AGE:* *50* Yrs.

FACILITY SF: 8,640 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $2,635,200

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Average

Relative Facility Priority Score = 29 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

700 Art 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$925	
Annual PM		**2**	**50**	**$925**	**$0.11**
Improvement	Electrical	1	20	$11,450	
Improvement		**1**	**20**	**$11,450**	**$1.33**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,825	
Non-Annual Recurring Maintenance		**1**	**23**	**$1,825**	**$0.21**
Repair/Maintenance	HVAC	1	64	$10,400	
Repair/Maintenance	Structural	1	50	$1,000	
Repair/Maintenance		**2**	**57**	**$11,400**	**$1.32**
Replacement/Renewal	Electrical	1	68	$94,300	
Replacement/Renewal	HVAC	2	68	$63,900	
Replacement/Renewal	Roof	3	72	$123,950	
Replacement/Renewal		**6**	**70**	**$282,150**	**$32.66**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities at the college. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 12 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on about 8 columns. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a

biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be average. The roof has a minor amount of leaves and debris on the surface. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed, there are areas of chalking, and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane (15 yrs.), and an apparent lack of proper maintenance, as indicated by the roof inspection, premature deterioration is likely, and the roof membrane and insulation should be replaced in 2 to 3 years. A short term alternative would be to apply a polyester-reinforced 20 mil fluid neoprene coating to a clean membrane surface. This could extend the life of the membrane by five to eight years.

Once the new roof is installed leaves and debris should be cleaned off the roof surface at least once per year. The roof drains and sumps are badly clogged and should be cleaned at least once per year.

The roof access hatch no longer operates properly. It is broken off at the hinges and the closing and damper mechanisms are severely compromised, which creates a serious safety hazard for anyone trying to operate the hatch. The hatch should be replaced with a new unit with dampers and side control handles.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The hot water heating piping insulation and exposed aluminum jacket on the roof are badly deteriorated and should be replaced to maintain system efficiency and save energy.

The circuit breaker panels in the building are approximately 50 years old. The equipment is still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. The panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

110 Circuit breaker panelboards are original to the building and are approximately 50 years old. Although the equipment is still functional, it is growing obsolete, replacement parts are expensive and not readily available, and the equipment is nearing the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$94,300** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 **Electrical** **Improvement** Light Fixtures

106 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x4, cans

Fixtures throughout building

QUANTITY: 200 EA ***REPAIR COST:*** **$11,450** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$105,750** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$12.24**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

107 The two condensing units appear to have been replaced in 2001 and are now 14 years old. As such they have reached approximately 70% of their generally accepted 20 year service life. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Forty feet of insulation has been included in the cost estimate.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$50,900** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

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68 **HVAC** **Replacement/Renewal** HVAC Heating Water Piping Insulation

108 The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Three hundred and fifty feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket.

Insulation per industry standard or per energy code whichever is more stringent

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$13,000** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

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64 **HVAC** **Repair/Maintenance** Air Handler

109 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **HVAC** **$74,300** **AV. SEVERITY SCORE =** **66** **COST PER BLDG GSF=** **$8.60**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,430 SF ***REPAIR COST:*** **$1,825** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,825** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.21**

100 **Roof** **Replacement/Renewal** Roof Access Hatch

102 The roof access hatch is broken off at the hinges, which creates a serious safety hazard as the door cannot be properly opened and could cause serious injury to anyone trying to open or close the hatch. Replace the hatch with a new unit with dampers and side control handles.

Roof access hatch

QUANTITY: 1 EA ***REPAIR COST:*** **$2,000** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 54 ***Planning Priority:*** **A-Health/Safety Issue**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

75 **Roof** **Replacement/Renewal** Single-Ply Roof Membrane

111 College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is only a small amount of debris on the roof and the membrane is only dirty in a few spots.

The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 3 years.

A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset.

Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset.

Roof

Short Term Alternative A further inspection of the membrane surface can be conducted once it has been power washed. If only minimal to moderate chalking and/or crazing are apparent a fluid neoprene coating with a polyester reinforcing can be applied (20 mil) over the cleaned membrane to possibly extend membrane life another 5 to 8 years. Estimated cost is $55,000.

QUANTITY: 86 SQ ***REPAIR COST:*** **$100,500** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract
Benefit Score = 54 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2043

60 **Roof** **Annual PM** Roof Drains

104 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 6 EA ***REPAIR COST:*** **$650** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

103 There is a minor amount of leaves and tree debris on the roof membrane surface, which should nevertheless be removed. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 8,580 SF ***REPAIR COST:*** **$275** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

105 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

2688 LF 2x8 boards and 336 LF of 4 x

All sunscreen boards on perimeter of building

QUANTITY: 3,024 LF ***REPAIR COST:*** **$21,450** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$124,875** **AV. SEVERITY SCORE =** **63** **COST PER BLDG GSF=** **$14.45**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random spalling of surface concrete on the building, mostly on the ends of approximately 8 beams, with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 15 SF ***REPAIR COST:*** **$1,000** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$1,000**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.12**
FACILITY TOTALS	**COST TOTAL =**	**$307,750**	**AV. SEVERITY SCORE =**	**56**	**COST PER BLDG GSF=**	**$35.62**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**700**	**Art**	Roof							
		Roof Drains	6 EA							
104		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$650						
40	**700**	**Art**	Roof							
		Roof Membrane	8,580 SF							
103		There is a minor amount of leaves and tree debris on the roof membrane surface, which should nevertheless be removed. Debris should be cleaned off the roof at least once per year. *Roof surface*		$275						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$925**	**$0**	**$0**	**$0**	**$0**	**$0**	**$925**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**700**	**Art**	Electrical							
		Light Fixtures	200 EA							
106		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.					$11,450			
		Fixtures throughout building								
TOTAL:		**Improvement**	***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$11,450**	**$0**	**$0**	**$11,450**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
23	**700**	**Art**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,430 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,825					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **23**	**$0**	**$1,825**	**$0**	**$0**	**$0**	**$0**	**$1,825**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**700**	**Art**	HVAC							
		Air Handler	1 EA							
109		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,400					
50	**700**	**Art**	Structural							
		Concrete Columns and Beams	15 SF							
101		There is random spalling of surface concrete on the building, mostly on the ends of approximately 8 beams, with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$1,000					
TOTAL: Repair/Maintenance			***AV. SEVER. SCORE =*** **57**	**$0**	**$11,400**	**$0**	**$0**	**$0**	**$0**	**$11,400**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
100	**700**	**Art**	Roof							
		Roof Access Hatch	1 EA							
102		The roof access hatch is broken off at the hinges, which creates a serious safety hazard as the door cannot be properly opened and could cause serious injury to anyone trying to open or close the hatch. Replace the hatch with a new unit with dampers and side control handles. *Roof access hatch*		$2,000						
75	**700**	**Art**	Roof							
		Single-Ply Roof Membrane	86 SQ							
111		College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is only a small amount of debris on the roof and the membrane is only dirty in a few spots. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 3 years. A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset. Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset. *Roof*					$100,500			

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**700**	**Art**	Electrical							
		Circuit Breaker Panels	1 LS							
110		Circuit breaker panelboards are original to the building and are approximately 50 years old. Although the equipment is still functional, it is growing obsolete, replacement parts are expensive and not readily available, and the equipment is nearing the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Various locations*				$94,300				
68	**700**	**Art**	HVAC							
		HVAC Equipment	1 LS							
107		The two condensing units appear to have been replaced in 2001 and are now 14 years old. As such they have reached approximately 70% of their generally accepted 20 year service life. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Forty feet of insulation has been included in the cost estimate. *Roof*							$50,900	
68	**700**	**Art**	HVAC							
		HVAC Heating Water Piping Insulation	1 LS							
108		The hot water heating piping insulation and exposed aluminum jacket on the roof has deteriorated and is recommended to be replaced to reduce energy usage. Three hundred and fifty feet of one inch diameter piping was determined to require replacement of its insulation and aluminum jacket. *Roof*							$13,000	

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**700**	**Art**	Roof							
		Wood Sunscreen Boards	3,024 LF							
105		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4x boards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$21,450				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **70**	**$2,000**	**$0**	**$115,750**	**$100,500**	**$0**	**$63,900**	**$282,150**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **56**	**$2,925**	**$13,225**	**$115,750**	**$111,950**	**$0**	**$63,900**	**$307,750**

FACILITY CONDITION SUMMARY REPORT

Southwestern College
710 Art Gallery

SURVEY DATE: 8/15
900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$310,000**
Facility Condition Rating = 86 (Fair)
Repair Cost as a Percent of Facility Replacement Cost is 14 %

Cost Per Square Foot is **$43.06**
Average Severity Score = 51
10 Deficiencies Were Identified

PRIMARY USE: Art Gallery
FACILITY AGE: *46* Yrs.
FACILITY SF: 7,200 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*
Current Facility Replacement Cost is Approximately $2,196,000

0 Deficiencies Require Additional Study/Analysis
Recommended Maintenance Level is **B**
Importance of Facility to Operations is High
Facility Use Intensity is Moderate
Facility Suitability for Current Use is Adequate
Facility Construction Quality is Average

Relative Facility Priority Score = 27 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

710 Art Gallery 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$675	
Annual PM		**2**	**50**	**$675**	**$0.09**
Improvement	Electrical	1	20	$14,200	
Improvement		**1**	**20**	**$14,200**	**$1.97**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$1,650	
Non-Annual Recurring Maintenance		**1**	**23**	**$1,650**	**$0.23**
Repair/Maintenance	Structural	1	50	$700	
Repair/Maintenance		**1**	**50**	**$700**	**$0.10**
Replacement/Renewal	Electrical	1	68	$87,700	
Replacement/Renewal	HVAC	1	64	$100,700	
Replacement/Renewal	Plumbing	1	68	$2,975	
Replacement/Renewal	Roof	2	58	$101,400	
Replacement/Renewal		**5**	**63**	**$292,775**	**$40.66**

CONDITION SUMMARY:

This building was constructed for the college in 1969. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 10 deficiencies identified were associated with HVAC, electrical, plumbing, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on several columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-

up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be poor. The roof has a significant amount of leaves and debris on the surface and the membrane is very dirty, making a proper assessment difficult. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed, and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane (15 yrs.), and an apparent lack of proper maintenance, as indicated by the roof inspection, premature deterioration is likely, and the roof membrane and insulation should be replaced in 1 to 2 years. In fact, maintenance staff have indicated that there have been some membrane leaks observed. A short term alternative would be to apply a polyester-reinforced 20 mil fluid neoprene coating to a clean membrane surface. This could extend the life of the membrane by five to eight years.

Once the new roof is installed leaves and debris should be cleaned off the roof surface at least once per year. The roof drains and sumps are badly clogged and should be cleaned at least once per year.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The air handler in this building appears to be the original built-up system, making it 50 years old. The unit is generally deteriorated and no longer cost-effective to maintain. Replacement is recommended. It should be noted that the unit has a chilled water cooling coil and is currently being connected to the campus central chiller/heating system.

The domestic hot water heater and storage tank located in the mechanical room are generally deteriorated and not cost-effective to repair. Replacement is recommended.

The building has a 400 amp distribution switchboard for power distribution to the circuit panels. The equipment is original and approximately 46 years old. The equipment is still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the equipment should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels and Switchboard

107 This building has a 400 Amp distribution switchboard for electrical power distribution to circuit breaker panels. The switchboard and circuit breaker panelboards are original to the building and are approximately 46 years old. Although the equipment is still functional, it is growing obsolete, replacement parts are expensive and not readily available, and the equipment is nearing the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$87,700** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019

20 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x4, 2 x 2

Fixtures throughout building

QUANTITY: 248 EA ***REPAIR COST:*** **$14,200** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$101,900** **AV. SEVERITY SCORE = 44** **COST PER BLDG GSF= $14.15**

64 **HVAC** **Replacement/Renewal** Air Handler

106 The air handling unit for this building appears to be the original built-up system. The unit is deteriorated and is no longer considered cost-effective to repair or maintain. Replacement is recommended. The unit has a chilled water cooling coil and is currently being connected to the campus wide chilled water system and new central heating plant.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$100,700** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

SYSTEM SUB-TOTAL **HVAC** **$100,700** **AV. SEVERITY SCORE =** **64** **COST PER BLDG GSF=** **$13.99**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,200 SF ***REPAIR COST:*** **$1,650** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,650** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.23**

68 **Plumbing** **Replacement/Renewal** Domestic Water Heating and Storage Equipment

108 The domestic hot water heater and storage tank are deteriorating and no longer cost-effective to repair. Replacement is recommended. Equipment includes an approximately 40 gallon storage tank and 40 MBH Input natural gas heating capacity.

Same as existing unless additional capacity is required

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$2,975** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Plumbing** **$2,975** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$0.41**

75 **Roof** **Replacement/Renewal** Single-Ply Roof Membrane

109 College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is an extensive amount of debris on the roof and the membrane is very dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times.

The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Maintenance has also reported that the roof has experienced a number of leaks. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 1 to 2 years.

A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset.

Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset.

Roof

Short Term Alternative A further inspection of the membrane surface can be conducted once it has been power washed. If only minimal to moderate chalking and/or crazing are apparent a fluid neoprene coating with a polyester reinforcing can be applied (20 mil) over the cleaned membrane to possibly extend membrane life another 5 to 8 years. Estimated cost is $48,000.

QUANTITY: 75 SQ ***REPAIR COST:*** **$88,500** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 4 EA ***REPAIR COST:*** **$400** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

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40 **Roof** **Annual PM** Roof Membrane

102 There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 7,500 SF ***REPAIR COST:*** **$275** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

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40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

104 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4xboards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

1605 LF 2x8 boards and 230 LF of 4 x

All sunscreen boards on perimeter of building

QUANTITY: 1,835 LF ***REPAIR COST:*** **$12,900** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**	**$102,075**	**AV. SEVERITY SCORE =**	**54**	**COST PER BLDG GSF=**	**$14.18**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is random spalling of surface concrete on the building. It ranges from minor spalling to moderate spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 10 SF ***REPAIR COST:*** **$700** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$700**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.10**

FACILITY TOTALS	**COST TOTAL =**	**$310,000**	**AV. SEVERITY SCORE =**	**51**	**COST PER BLDG GSF=**	**$43.06**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**710**	**Art Gallery**	Roof							
		Roof Drains	4 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$400						
40	**710**	**Art Gallery**	Roof							
		Roof Membrane	7,500 SF							
102		There are significant amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$275						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$675**	**$0**	**$0**	**$0**	**$0**	**$0**	**$675**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**710**	**Art Gallery**	Electrical							
		Light Fixtures	248 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.					$14,200			
		Fixtures throughout building								
TOTAL:		**Improvement**	*AV. SEVER. SCORE =* **20**	**$0**	**$0**	**$0**	**$14,200**	**$0**	**$0**	**$14,200**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE / DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
23	**710**	**Art Gallery**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,200 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,650					
TOTAL:		**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =* **23**	**$0**	**$1,650**	**$0**	**$0**	**$0**	**$0**	**$1,650**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**710**	**Art Gallery**	Structural							
		Concrete Columns and Beams	10 SF							
101		There is random spalling of surface concrete on the building. It ranges from minor spalling to moderate spalling with exposed rebar. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. Any exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$700					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **50**	**$0**	**$700**	**$0**	**$0**	**$0**	**$0**	**$700**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
75	**710**	**Art Gallery**	Roof							
		Single-Ply Roof Membrane	75 SQ							
109		College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is an extensive amount of debris on the roof and the membrane is very dirty, making an assessment of condition very difficult. It is apparent that maintenance has been badly lacking in recent times. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. Maintenance has also reported that the roof has experienced a number of leaks. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 1 to 2 years. A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset. Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset. *Roof*			$88,500					
68	**710**	**Art Gallery**	Plumbing							
		Domestic Water Heating and Storage Equipment	1 LS							
108		The domestic hot water heater and storage tank are deteriorating and no longer cost-effective to repair. Replacement is recommended. Equipment includes an approximately 40 gallon storage tank and 40 MBH Input natural gas heating capacity. *Mechanical Room*				$2,975				

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**710**	**Art Gallery**	Electrical							
		Circuit Breaker Panels and Switchboard	1 LS							
107		This building has a 400 Amp distribution switchboard for electrical power distribution to circuit breaker panels. The switchboard and circuit breaker panelboards are original to the building and are approximately 46 years old. Although the equipment is still functional, it is growing obsolete, replacement parts are expensive and not readily available, and the equipment is nearing the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Various locations*						$87,700		
64	**710**	**Art Gallery**	HVAC							
		Air Handler	1 EA							
106		The air handling unit for this building appears to be the original built-up system. The unit is deteriorated and is no longer considered cost-effective to repair or maintain. Replacement is recommended. The unit has a chilled water cooling coil and is currently being connected to the campus wide chilled water system and new central heating plant. *Mechanical Room*				$100,700				
40	**710**	**Art Gallery**	Roof							
		Wood Sunscreen Boards	1,835 LF							
104		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4xboards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$12,900				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL: Replacement/Renewal		*AV. SEVER. SCORE =*	**63**	**$0**	**$88,500**	**$116,575**	**$0**	**$87,700**	**$0**	**$292,775**
TOTAL FOR ALL CATEGORIES		*AV. SEVER. SCORE =*	**51**	**$675**	**$90,850**	**$116,575**	**$14,200**	**$87,700**	**$0**	**$310,000**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

750 Art 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$362,550** Cost Per Square Foot is **$22.48**

Facility Condition Rating = 95 (Good) ***Average Severity Score = 52***

Repair Cost as a Percent of Facility Replacement Cost is 5 % 10 Deficiencies Were Identified

PRIMARY USE: Classroom *FACILITY AGE:* *40* Yrs.

FACILITY SF: 16,128 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $6,845,400

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Average

Relative Facility Priority Score = 29 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

750 Art 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$1,050	
Annual PM		**2**	**50**	**$1,050**	**$0.07**
Improvement	Electrical	1	20	$10,700	
Improvement		**1**	**20**	**$10,700**	**$0.66**
Repair/Maintenance	Roof	1	40	$250	
Repair/Maintenance		**1**	**40**	**$250**	**$0.02**
Replacement/Renewal	Exterior Closure	1	60	$1,800	
Replacement/Renewal	HVAC	2	64	$181,900	
Replacement/Renewal	Roof	3	58	$166,850	
Replacement/Renewal		**6**	**60**	**$350,550**	**$21.74**

CONDITION SUMMARY:

This building was constructed for the college in 1975. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck. The building has a large interior courtyard onto which a number of shop-type space and storage areas open.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 10 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems. Structurally the building appears to be well constructed. No exterior structural deficiencies were identified.

Roof maintenance on this building appears to be average. The roof has a moderate amount of leaves and debris on the surface and a number of dirty areas on the membrane. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed, there is chalking on the surface, and there are a number of fasteners that are "lifting" under the membrane. Given the age of the membrane (15 yrs.), and an apparent lack of proper maintenance, as indicated by the roof inspection, premature deterioration is likely, and the roof membrane and insulation should be replaced in 4 to 5 years. In fact, there are three small cuts that are evident in the roof membrane that require immediate patching to prevent water leaks. Maintenance staff have indicated that there have been some membrane leaks observed. A short term alternative would be to apply a polyester-reinforced 20 mil fluid neoprene coating to a clean membrane surface. This could extend the life of the membrane by five to eight years.

Southwestern College SURVEY DATE: 8/15

750 Art 900 Otay Lakes Rd.

Once the new roof is installed leaves and debris should be cleaned off the roof surface at least once per year. The roof drains and sumps are badly clogged and should be cleaned at least once per year.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

One 6 x 15 support beam on the exterior side for the covered walkway on one corner of the building has several areas with extensive wood deterioration on the surface and to depths of 1/2" to 1.5". This beam is too compromised to repair and should be replaced, preferrably with an S4S treated browntone douglas fir beam. Though beams of this size are available, they may have to be custom milled.

There are several badly deteriorated 2 x 10 double fascia boards in the courtyard area of the building that should be replaced.

The air handler in this building appears to be the original multi-zone unit with a chilled water coil and gas-fired hot deck. The unit is 40 years old, generally deteriorated and no longer cost-effective to maintain. Replacement is recommended. In addition, four packaged roof-top A/C units are slowly deteriorating and require increasing levels of maintenance. At this point replacement should be programmed for these units, as well as for one roof exhaust fan.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 Electrical **Improvement** Light Fixtures

106 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x4, cans

Fixtures throughout building

QUANTITY: 187 EA ***REPAIR COST:*** **$10,700** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$10,700** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.66**

60 Exterior Closure **Replacement/Renewal** Fascia Boards

103 Replace badly deteriorated wood fascia boards.
Double 2x10s

Atrium side of building

QUANTITY: 290 LF ***REPAIR COST:*** **$1,800** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 44 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Exterior Closure** **$1,800** **AV. SEVERITY SCORE =** **60** **COST PER BLDG GSF=** **$0.11**

64 **HVAC** **Replacement/Renewal** HVAC Equipment

108 Four packaged roof top air conditioning units are slowly deteriorating and require increased levels of maintenance and repair. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement should be considered. One deteriorated roof exhaust fan should be replaced and three exhaust fans should be painted to retard oxidation of surfaces.

In addition, approximately 200 lineal feet of natural gas piping should be painted and pipe supports replaced.

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$78,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract
Benefit Score = 49 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

64 **HVAC** **Replacement/Renewal** HVAC Equipment

107 The air handling unit in the mechanical room appears to be an original multi-zone unit with a chilled water cooling coil and natural gas-fired hot deck. This unit appears fairly well deteriorated and is no longer cost-effective to repair or maintain. It should be programmed for replacement.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$103,300** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 35 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

SYSTEM SUB-TOTAL **HVAC** **$181,900** **AV. SEVERITY SCORE =** **64** **COST PER BLDG GSF=** **$11.28**

75 **Roof** **Replacement/Renewal** Single-Ply Roof Membrane

109 College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is moderate debris and dirt on the membrane, making an assessment of condition somewhat difficult. It is apparent that maintenance has been lacking in recent times.

The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. In addition, three cuts were identified in the membrane in one area of the roof. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 5 years. This includes the storage area roof.

A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset.

Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset.

Roof

Short Term Alternative A further inspection of the membrane surface can be conducted once it has been power washed. If only minimal to moderate chalking and/or crazing are apparent a fluid neoprene coating with a polyester reinforcing can be applied (20 mil) over the cleaned membrane to possibly extend membrane life another 5 to 8 years. Estimated cost is $89,600.

QUANTITY: 140 SQ ***REPAIR COST:*** **$143,900** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2045

60 **Roof** **Annual PM** Roof Drains

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 6 EA ***REPAIR COST:*** **$650** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

60 **Roof** **Replacement/Renewal** Covered Walkway Support Beam

104 One outside 6 x 15 support beam for the covered walkway on the SW corner of the building has several sections with extensive wood deterioration on the surface and to depths of what to appear to be 1/2" to 1.5". This beam should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beam should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled.

The new beam should be primed and painted prior to installation.
6x16

SW corner of the building on covered walkway

QUANTITY: 12 LF ***REPAIR COST:*** **$950** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

40 **Roof** **Repair/Maintenance** Single-Ply Roof Membrane

105 There are three small cuts evident in the roof membrane that require patching to prevent water leaks and potential further deterioration of the membrane.

15 LF south of the 3rd rooftop HVAC unit looking east

QUANTITY: 1 SF ***REPAIR COST:*** **$250** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 36 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

40 **Roof** **Annual PM** Roof Membrane

100 There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 12,300 SF ***REPAIR COST:*** **$400** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

102 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4xboards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

2744 LF 2x8 boards and 392 LF of 4 x

All sunscreen boards on perimeter of building

QUANTITY: 3,136 LF ***REPAIR COST:*** **$22,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**	**$168,150**	**AV. SEVERITY SCORE =**	**53**	**COST PER BLDG GSF=**	**$10.43**
FACILITY TOTALS	**COST TOTAL =**	**$362,550**	**AV. SEVERITY SCORE =**	**52**	**COST PER BLDG GSF=**	**$22.48**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**750**	**Art**	Roof							
		Roof Drains	6 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$650						
40	**750**	**Art**	Roof							
		Roof Membrane	12,300 SF							
100		There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$400						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$1,050**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,050**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE / DEF. NO.	BLDG.	COMPONENT DEFICIENCY / LOCATION	SYSTEM / QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**750**	**Art**	Electrical							
		Light Fixtures	187 EA							
106		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*					$10,700			
TOTAL:		**Improvement**	***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$10,700**	**$0**	**$0**	**$10,700**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
75	**750**	**Art**	Roof							
		Single-Ply Roof Membrane	140 SQ							
109		College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 15 years old. There is moderate debris and dirt on the membrane, making an assessment of condition somewhat difficult. It is apparent that maintenance has been lacking in recent times. The assessment conducted focused on membrane seams and fasteners and determining the condition of the surface relative to chalking and crazing of the surface, which are indicators of deterioration. Many areas of the seams appear frayed and there are a number of fasteners that are "lifting" under the membrane. In addition, three cuts were identified in the membrane in one area of the roof. Given the age of the membrane, its apparent lack of maintenance, and its apparent condition, it is recommended that the membrane be programmed for replacement in 5 years. This includes the storage area roof. A complete removal of the existing membrane, flashings and any insulation board are recommended. The roof deck should be evaluated to determine its condition and whether any repairs are required. Replacement should include installation of a new vapor barrier, polystyrene or similar insulation board of at least 2" thickness and R-10 rated along with tapered insulation for proper drainage, a new 60 mil mechanically attached PVC membrane, and metal parapet cap flashing. Roof drain inlets will also have to be reset. Note: The cost estimate does not include deck repairs needed, if any, or HVAC equipment removal/reset. *Roof*						$143,900	

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**750**	**Art**	HVAC							
		HVAC Equipment	1 LS							
108		Four packaged roof top air conditioning units are slowly deteriorating and require increased levels of maintenance and repair. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement should be considered. One deteriorated roof exhaust fan should be replaced and three exhaust fans should be painted to retard oxidation of surfaces. In addition, approximately 200 lineal feet of natural gas piping should be painted and pipe supports replaced. *Roof*				$78,600				
64	**750**	**Art**	HVAC							
		HVAC Equipment	1 EA							
107		The air handling unit in the mechanical room appears to be an original multi-zone unit with a chilled water cooling coil and natural gas-fired hot deck. This unit appears fairly well deteriorated and is no longer cost-effective to repair or maintain. It should be programmed for replacement. *Mechanical Room*				$103,300				
60	**750**	**Art**	Roof							
		Covered Walkway Support Beam	12 LF							
104		One outside 6 x 15 support beam for the covered walkway on the SW corner of the building has several sections with extensive wood deterioration on the surface and to depths of what to appear to be 1/2" to 1.5". This beam should be considered for replacement to prevent deterioration from potentially compromising the integrity of the covered walkway. The beam should be replaced with a S4S treated browntone douglas fir beam. NOTE: Though beams of this size are available, they may have to be custom milled. The new beam should be primed and painted prior to installation. *SW corner of the building on covered walkway*			$950					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**750**	**Art**	Exterior Closure							
		Fascia Boards	290 LF							
103		Replace badly deteriorated wood fascia boards. *Atrium side of building*				$1,800				
40	**750**	**Art**	Roof							
		Wood Sunscreen Boards	3,136 LF							
102		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4xboards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$22,000				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **60**	**$0**	**$950**	**$205,700**	**$0**	**$0**	**$143,900**	**$350,550**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **54**	**$1,050**	**$950**	**$205,700**	**$10,700**	**$0**	**$143,900**	**$362,300**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

800 Music 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$78,700** Cost Per Square Foot is **$8.90**

Facility Condition Rating = 98 (Excellent) ***Average Severity Score = 52***

Repair Cost as a Percent of Facility Replacement Cost is 2 % 10 Deficiencies Were Identified

PRIMARY USE: Classroom/Studio *FACILITY AGE:* *50* Yrs.

FACILITY SF: 8,845 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 2007

Current Facility Replacement Cost is Approximately $3,759,125

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

800 Music 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	60	$1,050	
Annual PM		**1**	**60**	**$1,050**	**$0.12**
Improvement	Electrical	1	20	$7,700	
Improvement		**1**	**20**	**$7,700**	**$0.87**
Non-Annual Recurring Maintenance	Paint/Finish	2	34	$2,350	
Non-Annual Recurring Maintenance	Roof	1	50	$4,100	
Non-Annual Recurring Maintenance		**3**	**40**	**$6,450**	**$0.73**
Repair/Maintenance	HVAC	1	64	$10,000	
Repair/Maintenance	Structural	1	50	$700	
Repair/Maintenance		**2**	**57**	**$10,700**	**$1.21**
Replacement/Renewal	HVAC	1	68	$38,000	
Replacement/Renewal	Roof	2	70	$14,800	
Replacement/Renewal		**3**	**69**	**$52,800**	**$5.97**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities at the college. It underwent a major interior renovation in 2007. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 10 deficiencies identified were associated with HVAC, electrical, roof and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on beams and columns. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-

up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be average. The roof has a minor amount of leaves and debris on the surface. Leaves and debris should be cleaned off the roof surface at least once per year. The roof drains and sumps are badly clogged and should be cleaned at least once per year. It is recommended that in 3 years the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The metal parapet cap joint sealant is deteriorating, which will allow moisture to leak onto the concrete parapet. Replacement of all sealant is recommended. The roof access ladder is wood and appears to be quite old. It is hard to climb and does not appear very safe. Replacement with an aluminum ladder and extender grab bar is recommended.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment should be programmed for replacement in about 5 years. There is also some refrigerant piping insulation associated with the equipment on the roof that is deteriorated and should also be replaced.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures

106 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x4

Fixtures throughout building

QUANTITY: 135 EA ***REPAIR COST:*** **$7,700** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$7,700** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.87**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

107 The two condensing units appear to have been replaced in 2001 and are now 14 years old. As such they have reached approximately 70% of their generally accepted 20 year service life. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Forty feet of insulation has been included in the cost estimate .

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$38,000** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

64 **HVAC** **Repair/Maintenance** Air Handler

108 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,000** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **HVAC** **$48,000** **AV. SEVERITY SCORE =** **66** **COST PER BLDG GSF=** **$5.43**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

105 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 72 LF ***REPAIR COST:*** **$500** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,470 SF ***REPAIR COST:*** **$1,850** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,350** **AV. SEVERITY SCORE =** **34** **COST PER BLDG GSF=** **$0.27**

100 **Roof** **Replacement/Renewal** Roof Ladder

102 The roof access ladder is wood and appears to be quite old. It is somewhat rickety to climb and does not appear very safe. Replace this ladder with an aluminum roof ladder and retractable extender bar.

Roof access hatch

QUANTITY: 1 EA ***REPAIR COST:*** **$2,200** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **A-Health/Safety Issue**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2040

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 10 EA ***REPAIR COST:*** **$1,050** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

109 The single-ply membrane on this building appears to be fairly new. There does not appear to be any debris on the surface, and the membrane is relatively clean. However, as debris and dirt accumulate, it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. An assessment of the membrane revealed no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 8,850 SF ***REPAIR COST:*** **$4,100** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

104 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4xboards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.
1575 LF 2x8 boards and 225 LF of 4 x

All sunscreen boards on perimeter of building

QUANTITY: 1,800 LF ***REPAIR COST:*** **$12,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$19,950** **AV. SEVERITY SCORE =** **63** **COST PER BLDG GSF=** **$2.26**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 30 SF ***REPAIR COST:*** **$700** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$700**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.08**
FACILITY TOTALS	**COST TOTAL =**	**$78,700**	**AV. SEVERITY SCORE =**	**52**	**COST PER BLDG GSF=**	**$8.90**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**800**	**Music**	Roof							
		Roof Drains	10 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$1,050						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **60**	**$1,050**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,050**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**800**	**Music**	Electrical							
		Light Fixtures	135 EA							
106		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*					$7,700			
TOTAL:		**Improvement**	***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$7,700**	**$0**	**$0**	**$7,700**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**800**	**Music**	Roof							
		Single-Ply Roof Membrane	8,850 SF							
109		The single-ply membrane on this building appears to be fairly new. There does not appear to be any debris on the surface, and the membrane is relatively clean. However, as debris and dirt accumulate, it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. An assessment of the membrane revealed no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$4,100			
46	**800**	**Music**	Paint/Finish							
		Metal Parapet Cap Joints	72 LF							
105		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*				$500				
23	**800**	**Music**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,470 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,850					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**40**	**$0**	**$1,850**	**$500**	**$4,100**	**$0**	**$0**	**$6,450**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
64	**800**	**Music**	HVAC							
		Air Handler	1 EA							
108		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,000					
50	**800**	**Music**	Structural							
		Concrete Columns and Beams	30 SF							
101		There is minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$700					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **57**	**$0**	**$10,700**	**$0**	**$0**	**$0**	**$0**	**$10,700**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
100	**800**	**Music**	Roof							
		Roof Ladder	1 EA							
102		The roof access ladder is wood and appears to be quite old. It is somewhat rickety to climb and does not appear very safe. Replace this ladder with an aluminum roof ladder and retractable extender bar. *Roof access hatch*		$2,200						
68	**800**	**Music**	HVAC							
		HVAC Equipment	1 LS							
107		The two condensing units appear to have been replaced in 2001 and are now 14 years old. As such they have reached approximately 70% of their generally accepted 20 year service life. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. Refrigerant piping insulation on the roof is also deteriorated and should be replaced when the condensing units are replaced. Forty feet of insulation has been included in the cost estimate . *Roof*							$38,000	
40	**800**	**Music**	Roof							
		Wood Sunscreen Boards	1,800 LF							
104		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4xboards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$12,600				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL: Replacement/Renewal		*AV. SEVER. SCORE =*	**69**	**$2,200**	**$0**	**$12,600**	**$0**	**$0**	**$38,000**	**$52,800**
TOTAL FOR ALL CATEGORIES		*AV. SEVER. SCORE =*	**52**	**$3,250**	**$12,550**	**$13,100**	**$11,800**	**$0**	**$38,000**	**$78,700**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

850 Music — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$55,175** — Cost Per Square Foot is **$7.66**

Facility Condition Rating = 98 (Excellent) — ***Average Severity Score = 48***

Repair Cost as a Percent of Facility Replacement Cost is 2 % — 13 Deficiencies Were Identified

PRIMARY USE: Classroom/Studio — *FACILITY AGE:* *40* Yrs.

FACILITY SF: 7,200 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 2007

Current Facility Replacement Cost is Approximately $3,060,000

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

850 Music 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$675	
Annual PM		**2**	**50**	**$675**	**$0.09**
Improvement	Electrical	1	20	$7,500	
Improvement		**1**	**20**	**$7,500**	**$1.04**
Non-Annual Recurring Maintenance	HVAC	1	20	$13,700	
Non-Annual Recurring Maintenance	Paint/Finish	2	34	$2,250	
Non-Annual Recurring Maintenance	Roof	1	50	$3,000	
Non-Annual Recurring Maintenance		**4**	**35**	**$18,950**	**$2.63**
Repair/Maintenance	HVAC	1	64	$10,000	
Repair/Maintenance	Paving	2	55	$1,050	
Repair/Maintenance	Structural	1	50	$700	
Repair/Maintenance		**4**	**56**	**$11,750**	**$1.63**
Replacement/Renewal	Roof	2	70	$16,300	
Replacement/Renewal		**2**	**70**	**$16,300**	**$2.26**

CONDITION SUMMARY:

This building was constructed for the college in 1975. It underwent a major interior renovation in 2007. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. Exterior walls have T1-11 wood panels below some of the windows and on some upper portions of the walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears adequate. The 13 deficiencies identified were associated with HVAC, electrical, roof, paving and exterior closure/finish systems.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on beams and columns. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

850 Music 900 Otay Lakes Rd.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Roof maintenance on this building appears to be average. The roof has a moderate amount of leaves and debris on the surface. Leaves and debris should be cleaned off the roof surface at least once per year. The roof drains and sumps are badly clogged and should be cleaned at least once per year. It is recommended that in 2 years the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

The metal parapet cap joint sealant is deteriorating, which will allow moisture to leak onto the concrete parapet. Replacement of all sealant is recommended. There is currently no roof access in the interior of this building. The original access hatch is covered by HVAC ductwork and not useable. Accessing the roof with an extension ladder necessitates climbing over a 4-foot parapet wall on top of the roof. This can be dangerous in inclement weather. A new access hatch, ladder and extendable grab bar should be installed.

The top surfaces of the sunscreen boards around the building are constantly exposed to elements, including rain. The tops of the boards and some side surfaces exhibit moderate to extensive deterioration. These sunscreens are a key architectural feature and should be retained. The sunscreen boards can be replaced with pressure-treated S4S douglas fir browntone boards. The top surfaces can be then coated with a low viscosity 100%-solids epoxy resin coating. This would significantly extend the life of the boards and significantly reduce maintenance costs.

The air handler in the mechanical room is 14 years old and still appears to be in good condition. It should last another 15 years at least. However, maintenance/repair requirements will become more frequent going forward. Therefore an allowance should be budgeted for repairs/maintenance that may be required over the next five years.

The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing conditioned air to escape, reducing HVAC system efficiency, and potentially allowing water to leak into the ducts. Replacement of all sealant is necessary.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

The concrete walk on the west side of the building has several cracks that should be sealed to prevent further concrete deterioration. A portion of the concrete sidewalk on the south side of the building is badly broken and should be replaced to avoid tripping hazards.

20 **Electrical** **Improvement** Light Fixtures

110 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x4, cans

Fixtures throughout building

QUANTITY: 131 EA ***REPAIR COST:*** **$7,500** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$7,500** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$1.04**

64 **HVAC** **Repair/Maintenance** Air Handler

111 The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life.

Mechanical Room

QUANTITY: 1 EA ***REPAIR COST:*** **$10,000** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

106 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 1,336 LF ***REPAIR COST:*** **$13,700** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$23,700** **AV. SEVERITY SCORE =** **42** **COST PER BLDG GSF=** **$3.29**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

107 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 84 LF ***REPAIR COST:*** **$600** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 2,200 SF ***REPAIR COST:*** **$1,650** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,250** **AV. SEVERITY SCORE =** **34** **COST PER BLDG GSF=** **$0.31**

70 **Paving** **Repair/Maintenance** Concrete Sidewalk

109 A portion of the concrete sidewalk on the south side of the building is badly broken and should be replaced to avoid tripping hazards.

South side of building

QUANTITY: 20 SF ***REPAIR COST:*** **$750** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract
Benefit Score = 67 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

40 **Paving** **Repair/Maintenance** Concrete Walkway

108 The concrete walk on the west side of the building has several cracks that should be sealed to prevent further deterioration of the concrete.

West side of building

QUANTITY: 25 LF ***REPAIR COST:*** **$300** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 42 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Paving** **$1,050** **AV. SEVERITY SCORE =** **55** **COST PER BLDG GSF=** **$0.15**

100 **Roof** **Replacement/Renewal** Roof Access Hatch

102 There is currently no roof access in this building. The existing access hatch is now covered by HVAC ductwork and is no longer useable. Access is now by extension ladder, which then necessitates climbing over a 4-foot parapet wall to access the roof. This can be dangerous, especially in inclement weather. A new access hatch and ladder with retractable extension grab bar should be installed.

Mechanical room or custodial closet

QUANTITY: 1 EA ***REPAIR COST:*** **$4,000** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **A-Health/Safety Issue**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

60 **Roof** **Annual PM** Roof Drains

104 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 4 EA ***REPAIR COST:*** **$400** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

112 The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface is dirty in a few places. As debris and dirt continue to accumulate, it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 2 years. An assessment of the membrane revealed no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 7,500 SF ***REPAIR COST:*** **$3,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

103 There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 7,500 SF ***REPAIR COST:*** **$275** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Replacement/Renewal** Wood Sunscreen Boards

105 The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4xboards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs.

1540 LF 2x8 boards and 220 LF of 4 x

All sunscreen boards on perimeter of building

QUANTITY: 1,760 LF ***REPAIR COST:*** **$12,300** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL **Roof** **$19,975** **AV. SEVERITY SCORE =** **58** **COST PER BLDG GSF=** **$2.77**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 10 SF ***REPAIR COST:*** **$700** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Structural** **$700** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.10**

FACILITY TOTALS **COST TOTAL =** **$55,175** **AV. SEVERITY SCORE =** **48** **COST PER BLDG GSF=** **$7.66**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**850**	**Music**	Roof							
		Roof Drains	4 EA							
104		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$400						
40	**850**	**Music**	Roof							
		Roof Membrane	7,500 SF							
103		There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$275						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$675**	**$0**	**$0**	**$0**	**$0**	**$0**	**$675**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**850**	**Music**	Electrical							
		Light Fixtures	131 EA							
110		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*					$7,500			
TOTAL:		**Improvement**	***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$7,500**	**$0**	**$0**	**$7,500**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**850**	**Music**	Roof							
		Single-Ply Roof Membrane	7,500 SF							
112		The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface is dirty in a few places. As debris and dirt continue to accumulate, it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 2 years. An assessment of the membrane revealed no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*				$3,000				
46	**850**	**Music**	Paint/Finish							
		Metal Parapet Cap Joints	84 LF							
107		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*				$600				
23	**850**	**Music**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	2,200 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are badly discolored due to weathering. This detracts from the overall appearance of the building. There is also random spalling of the concrete surfaces on the beams and columns. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$1,650					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**850**	**Music**	HVAC							
		HVAC Distribution Ductwork	1,336 LF							
106		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$13,700				
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **35**	**$0**	**$1,650**	**$17,300**	**$0**	**$0**	**$0**	**$18,950**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
70	**850**	**Music**	Paving							
		Concrete Sidewalk	20 SF							
109		A portion of the concrete sidewalk on the south side of the building is badly broken and should be replaced to avoid tripping hazards. *South side of building*			$750					
64	**850**	**Music**	HVAC							
		Air Handler	1 EA							
111		The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its remaining life is estimated at 15 years. However, as the unit ages repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the air handler and extend its life. *Mechanical Room*			$10,000					
50	**850**	**Music**	Structural							
		Concrete Columns and Beams	10 SF							
101		There is minor spalling of surface concrete on the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$700					
40	**850**	**Music**	Paving							
		Concrete Walkway	25 LF							
108		The concrete walk on the west side of the building has several cracks that should be sealed to prevent further deterioration of the concrete. *West side of building*				$300				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **56**	**$0**	**$11,450**	**$300**	**$0**	**$0**	**$0**	**$11,750**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
100	**850**	**Music**	Roof							
		Roof Access Hatch	1 EA							
102		There is currently no roof access in this building. The existing access hatch is now covered by HVAC ductwork and is no longer useable. Access is now by extension ladder, which then necessitates climbing over a 4-foot parapet wall to access the roof. This can be dangerous, especially in inclement weather. A new access hatch and ladder with retractable extension grab bar should be installed. *Mechanical room or custodial closet*		$4,000						
40	**850**	**Music**	Roof							
		Wood Sunscreen Boards	1,760 LF							
105		The top surfaces of the sunscreen boards are constantly exposed to the elements, including rain. This deteriorates the paint fairly rapidly and exposes top and side wood surfaces to weather-caused deterioration. The sunscreens are an integral architectural feature of the building design and should be retained. It is recommended that the 2x8 boards be replaced with treated S4S douglas fir browntone boards, and new hangers. The top surface of the 2x8 and 4xboards should then be coated with 2 coats of a low viscosity 100%-solids epoxy resin coating applied with a roller. The treated wood and low viscosity epoxy resin should significantly extend the life of the boards, retard constant weathering and significantly reduce maintenance costs. *All sunscreen boards on perimeter of building*				$12,300				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **70**	**$4,000**	**$0**	**$12,300**	**$0**	**$0**	**$0**	**$16,300**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **48**	**$4,675**	**$13,100**	**$29,900**	**$7,500**	**$0**	**$0**	**$55,175**

FACILITY CONDITION SUMMARY REPORT

Southwestern College
900 Auditorium

SURVEY DATE: 8/15
900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$522,500**
Cost Per Square Foot is **$21.91**

Facility Condition Rating = 96 (Excellent)
Average Severity Score = 52

Repair Cost as a Percent of Facility Replacement Cost is 4 %
14 Deficiencies Were Identified

PRIMARY USE: Theater
FACILITY AGE: *48* Yrs.

FACILITY SF: 23,850 *NO. OF STORIES:* 2.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $13,117,500

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Marginal

Facility Construction Quality is Average

Relative Facility Priority Score = 21 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

900 Auditorium 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$1,875	
Annual PM		**2**	**50**	**$1,875**	**$0.08**
Improvement	Electrical	1	20	$19,500	
Improvement	Exterior Closure	1	50	$38,000	
Improvement	Roof	1	100	$475	
Improvement		**3**	**57**	**$57,975**	**$2.43**
Non-Annual Recurring Maintenance	Paint/Finish	2	35	$8,300	
Non-Annual Recurring Maintenance	Roof	1	50	$7,900	
Non-Annual Recurring Maintenance	Site	1	20	$750	
Non-Annual Recurring Maintenance		**4**	**35**	**$16,950**	**$0.71**
Repair/Maintenance	Structural	1	50	$2,400	
Repair/Maintenance		**1**	**50**	**$2,400**	**$0.10**
Replacement/Renewal	Electrical	1	68	$150,800	
Replacement/Renewal	Exterior Closure	1	60	$39,000	
Replacement/Renewal	HVAC	2	68	$253,500	
Replacement/Renewal		**4**	**66**	**$443,300**	**$18.59**

CONDITION SUMMARY:

This building was constructed for the college in 1967. It is a single-story structure with a basement constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. The three-level roof is a single-ply membrane, likely hypalon, on a wood roof deck. The building has historically been used for performing arts functions and for some classes. It is used by the public as well as the college. The college is considering replacing the facility, as it no longer meets the standards for a college/community performing arts facility. One major problem with the building is that it has no public rest-room facilities.

The interior of the building was found to be in very average condition for use. Though Interior maintenance appears adequate, many of the amenities are dated and require high levels of maintenance. The 14 deficiencies identified were associated with HVAC, electrical, roof, and exterior closure/finish systems. They represent the minimum deficiencies that the college would have to correct if it plans to continue using this building beyond the next five years.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

900 Auditorium 900 Otay Lakes Rd.

Structurally the building appears to be well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on beams and columns. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

A number of places on the top of the concrete parapets on all three roof levels exhibit concrete spalling, which can allow water to penetrate the concrete, causing further deterioration. All spalling concrete should be removed and a metal parapet cap installed on all three roof levels.

The glass entry doors at the front of the building appear to be original. The frame finish is badly weathered, the closers and panic bars no longer operate properly and the weather stripping is poor. These doors and frames should be replaced with anodized aluminum/glass doors with 1/2' tempered glass, new hardware and closers. In addition, the access doors on both sides of the building are badly weathered on the exterior. Unchecked, this could lead to oxidation of the metal. All doors and frames should be refinished.

The underside of two metal canopies on either side of the front entrance have extensively peeling paint. A close inspection indicates that the metal surface may have been improperly prepared, possibly without application of a primer. All loose paint should be removed and a rust-inhibiting primer and two coats of enamel should be applied to the surface.

Roof maintenance on this building appears to be average. The roof has a minor amount of leaves and debris on the surfaces on all three levels. Leaves and debris should be cleaned off the roof surfaces at least once per year. The roof drains and sumps are badly clogged and should be cleaned at least once per year. It is recommended that in 3 years the roof membranes be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. A retractable roof ladder grab bar extender should be installed on the roof ladder to the middle roof for safety. An assessment of the membrane surface revealed no apparent deficiencies.

The hot water boiler appears to be original, making it 48 years old and well past its service life. Continuing to maintain the boiler will be increasingly costly, and some deterioration is evident. The boiler should be replaced in 3 to 5 years. It should be noted that it is located in the basement and any replacement unit must be able to utilize the available doorway, which may require multiple units.

Except for the air handler serving the main seating area, the HVAC equipment also appears original, probably also 48 years old. Continuing to maintain the equipment will be increasingly costly, and some deterioration is evident. The equipment, consisting of the lobby/stage air handler and the return/exhaust fans serving the lobby/stage/seating area, should be replaced in 3 to 5 years.

The distribution switchboard and circuit breaker panels are original and approximately 48 years old. The equipment is still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the equipment should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

One tree that overhangs the west side of the lower roof allows excessive debris to build up on the roof. The tree needs to be cut back from over the roof.

68 **Electrical** **Replacement/Renewal** Distribution Switchboard and Circuit Breaker Panel

111 The main distribution switchboard and circuit breaker panelboards are original to the building and are approximately 48 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced if the college intends to retain this building beyond another 5 years.

Same as existing unless additional capacity is required

Various locations

QUANTITY: 1 LS ***REPAIR COST:*** **$150,800** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

20 **Electrical** **Improvement** Light Fixtures

109 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, sconces, 4 x 4

Light fixtures throughout building

QUANTITY: 341 EA ***REPAIR COST:*** **$19,500** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

SYSTEM SUB-TOTAL **Electrical** **$170,300** **AV. SEVERITY SCORE = 44** **COST PER BLDG GSF= $7.14**

60 **Exterior Closure** **Replacement/Renewal** Aluminum/Glass Double Entry Door

104 The glass entry doors at the front of the building appear to be original. The finish is badly weathered, the closers and panic bars no longer operate properly and are of an age where repairs are no longer cost-effective. Weatherstripping is poor and glazing is not energy efficient.

Replace the doors with anodized aluminum and glass doors with 1/2" thick tempered insulating glass, narrow stiles and jambs, hardware weatherstripping, panic hardware and closers.

6-0 x 7-0

Front of building

QUANTITY: 4 EA ***REPAIR COST:*** **$39,000** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 42 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2043

50 **Exterior Closure** **Improvement** Concrete Parapet

102 A number of places on the top of the concrete parapets on the upper, middle and lower roofs exhibit spalling of concrete, which can potentially allow water to penetrate the concrete, causing further deterioration. All spalling concrete should be removed and the affected areas power brushed to remove all debris. To prevent future damage a metal parapet cap should be installed on all three roofs.

375 SF of concrete patching; 990 LF of parapet cap-8"

Entire parapet on upper, middle, and lower roofs

QUANTITY: 990 LF ***REPAIR COST:*** **$38,000** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2043

SYSTEM SUB-TOTAL **Exterior Closure** **$77,000** **AV. SEVERITY SCORE =** **55** **COST PER BLDG GSF=** **$3.23**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

112 The hot water boiler appears to be original, which would make it 48 years old, well past its expected service life of 35 years. Maintaining the boiler going forward will be increasingly costly, and some deterioration is evident. If the college intends to keep this facility longer that another 3 to 5 years the boiler will definitely need to be replaced.

The boiler is located in the basement and any replacement boiler must either be able to pass through a standard-width doorway or would require major structural demo work to walls, which would be very costly. Utilizing the available doorway would require the replacement equipment to be multiple packaged boilers piped in parallel.

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$117,700** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018

68 **HVAC** **Replacement/Renewal** HVAC Equipment

110 Except for the air handler that serves the main seating area, which appears to have been replaced in the recent past, the building HVAC equipment appears to be original, which would make it 48 years old. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered if this building will be retained by the college for longer than five years.

Replacement would be recommended for the air handler that serves the lobby and stage areas, the return/exhaust fans that serve the seating area, lobby and stage, and one small exhaust fan.

Mechanical Room

QUANTITY: 1 LS ***REPAIR COST:*** **$135,800** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

SYSTEM SUB-TOTAL **HVAC** **$253,500** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$10.63**

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Metal Door

106 the exit doors on both sides of the building are badly weathered on the exterior surfaces. Unchecked this could lead to deterioration of the metal. All doors should be power brushed, a rust inhibiting primer and 2 coats of enamel applied to the doors and frames.

4 ea 30- x 7-0; 6 ea 6-0 x 7-0

Both side of building

QUANTITY: 10 EA ***REPAIR COST:*** **$4,800** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 12 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

30 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Canopy

108 The underside of 2 metal canopies exhibit badly peeling paint all over. A close inspection indicates that the metal surface may have been improperly prepared, quite likely without prepping the metal or applying a primer. All loose paint should be thoroughly scraped and the entire surface power brushed. A rust inhibiting primer and 2 coats of enamel should then be applied to all surfaces.

Both side of the front entry area to the building

QUANTITY: 900 SF ***REPAIR COST:*** **$3,500** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$8,300** **AV. SEVERITY SCORE =** **35** **COST PER BLDG GSF=** **$0.35**

100 **Roof** **Improvement** Roof Ladder

107 Install retractable roof ladder grab bar extender on top of roof ladder for safety.

Roof ladder to the middle roof

QUANTITY: 1 EA ***REPAIR COST:*** **$475** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 38 ***Planning Priority:*** **A-Health/Safety Issue**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

60 **Roof** **Annual PM** Roof Drains

105 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 12 EA ***REPAIR COST:*** **$1,200** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

113 The single-ply membrane on this building contains minor amounts of leaf and other debris, and the surface has some dirty areas. As more debris and dirt accumulate, it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. An assessment of relatively clean areas of the membrane revealed no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 21,865 SF ***REPAIR COST:*** **$7,900** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract

Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

103 There are minor amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface on all three levels

QUANTITY: 21,865 SF ***REPAIR COST:*** **$675** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$10,250** **AV. SEVERITY SCORE =** **63** **COST PER BLDG GSF=** **$0.43**

20 **Site** **Non-Annual Recurring Maintenance** Tree

101 One tree that overhangs the west side of the lower roof and allows excessive debris to build up on the roof needs to be cut back from over the roof.

West side of lower roof

QUANTITY: 1 LS ***REPAIR COST:*** **$750** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Site** **$750** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.03**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

100 There is minor spalling of surface concrete on the building, both on the columns and on the parapet base. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 35 SF ***REPAIR COST:*** **$2,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$2,400**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.10**
FACILITY TOTALS	**COST TOTAL =**	**$522,500**	**AV. SEVERITY SCORE =**	**52**	**COST PER BLDG GSF=**	**$21.91**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**900**	**Auditorium**	Roof							
		Roof Drains	12 EA							
105		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$1,200						
40	**900**	**Auditorium**	Roof							
		Roof Membrane	21,865 SF							
103		There are minor amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface on all three levels*		$675						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$1,875**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,875**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
100	**900**	**Auditorium**	Roof							
		Roof Ladder	1 EA							
107		Install retractable roof ladder grab bar extender on top of roof ladder for safety. *Roof ladder to the middle roof*			$475					
50	**900**	**Auditorium**	Exterior Closure							
		Concrete Parapet	990 LF							
102		A number of places on the top of the concrete parapets on the upper, middle and lower roofs exhibit spalling of concrete, which can potentially allow water to penetrate the concrete, causing further deterioration. All spalling concrete should be removed and the affected areas power brushed to remove all debris. To prevent future damage a metal parapet cap should be installed on all three roofs. *Entire parapet on upper, middle, and lower roofs*					$38,000			
20	**900**	**Auditorium**	Electrical							
		Light Fixtures	341 EA							
109		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*							$19,500	
TOTAL: Improvement			***AV. SEVER. SCORE =*** **57**	**$0**	**$475**	**$0**	**$38,000**	**$0**	**$19,500**	**$57,975**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**900**	**Auditorium**	Roof							
		Single-Ply Roof Membrane	21,865 SF							
113		The single-ply membrane on this building contains minor amounts of leaf and other debris, and the surface has some dirty areas. As more debris and dirt accumulate, it will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. An assessment of relatively clean areas of the membrane revealed no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$7,900			
40	**900**	**Auditorium**	Paint/Finish							
		Exterior Metal Door	10 EA							
106		the exit doors on both sides of the building are badly weathered on the exterior surfaces. Unchecked this could lead to deterioration of the metal. All doors should be power brushed, a rust inhibiting primer and 2 coats of enamel applied to the doors and frames. *Both side of building*			$4,800					
30	**900**	**Auditorium**	Paint/Finish							
		Metal Canopy	900 SF							
108		The underside of 2 metal canopies exhibit badly peeling paint all over. A close inspection indicates that the metal surface may have been improperly prepared, quite likely without prepping the metal or applying a primer. All loose paint should be thoroughly scraped and the entire surface power brushed. A rust inhibiting primer and 2 coats of enamel should then be applied to all surfaces. *Both side of the front entry area to the building*		$3,500						

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
20	**900**	**Auditorium**	Site							
		Tree	1 LS							
101		One tree that overhangs the west side of the lower roof and allows excessive debris to build up on the roof needs to be cut back from over the roof. *West side of lower roof*			$750					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **35**	**$3,500**	**$5,550**	**$0**	**$7,900**	**$0**	**$0**	**$16,950**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**900**	**Auditorium**	Structural							
		Concrete Columns and Beams	35 SF							
100		There is minor spalling of surface concrete on the building, both on the columns and on the parapet base. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$2,400					
TOTAL:		**Repair/Maintenance**	*AV. SEVER. SCORE =* **50**	**$0**	**$2,400**	**$0**	**$0**	**$0**	**$0**	**$2,400**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**900**	**Auditorium**	HVAC							
		HVAC Equipment	1 LS							
112		The hot water boiler appears to be original, which would make it 48 years old, well past its expected service life of 35 years. Maintaining the boiler going forward will be increasingly costly, and some deterioration is evident. If the college intends to keep this facility longer that another 3 to 5 years the boiler will definitely need to be replaced. The boiler is located in the basement and any replacement boiler must either be able to pass through a standard-width doorway or would require major structural demo work to walls, which would be very costly. Utilizing the available doorway would require the replacement equipment to be multiple packaged boilers piped in parallel. *Mechanical Room*					$117,700				
68	**900**	**Auditorium**	HVAC							
		HVAC Equipment	1 LS							
110		Except for the air handler that serves the main seating area, which appears to have been replaced in the recent past, the building HVAC equipment appears to be original, which would make it 48 years old. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered if this building will be retained by the college for longer than five years. Replacement would be recommended for the air handler that serves the lobby and stage areas, the return/exhaust fans that serve the seating area, lobby and stage, and one small exhaust fan. *Mechanical Room*								$135,800	

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**900**	**Auditorium**	Electrical							
		Distribution Switchboard and Circuit Breaker Panels	1 LS							
111		The main distribution switchboard and circuit breaker panelboards are original to the building and are approximately 48 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced if the college intends to retain this building beyond another 5 years. *Various locations*						$150,800		
60	**900**	**Auditorium**	Exterior Closure							
		Aluminum/Glass Double Entry Door	4 EA							
104		The glass entry doors at the front of the building appear to be original. The finish is badly weathered, the closers and panic bars no longer operate properly and are of an age where repairs are no longer cost-effective. Weatherstripping is poor and glazing is not energy efficient. Replace the doors with anodized aluminum and glass doors with 1/2" thick tempered insulating glass, narrow stiles and jambs, hardware weatherstripping, panic hardware and closers. *Front of building*					$39,000			
TOTAL: Replacement/Renewal			***AV. SEVER. SCORE =*** **66**	**$0**	**$0**	**$0**	**$156,700**	**$0**	**$286,600**	**$443,300**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **52**	**$5,375**	**$8,425**	**$0**	**$202,600**	**$0**	**$306,100**	**$522,500**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

1100 Warehouse — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$98,400** — Cost Per Square Foot is **$11.86**

Facility Condition Rating = 93 (Good) — ***Average Severity Score = 45***

Repair Cost as a Percent of Facility Replacement Cost is 7 % — 7 Deficiencies Were Identified

PRIMARY USE: Warehouse — *FACILITY AGE:* *37* Yrs.

FACILITY SF: 8,300 *NO. OF STORIES:* 2.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $1,452,500

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **C**

Importance of Facility to Operations is High

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Average

Relative Facility Priority Score = 27 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1100 Warehouse 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	40	$400	
Annual PM		**1**	**40**	**$400**	**$0.05**
Improvement	Electrical	1	20	$5,200	
Improvement	Exterior Closure	1	50	$13,000	
Improvement		**2**	**35**	**$18,200**	**$2.19**
Non-Annual Recurring Maintenance	HVAC	1	20	$5,400	
Non-Annual Recurring Maintenance	Roof	1	50	$2,600	
Non-Annual Recurring Maintenance		**2**	**35**	**$8,000**	**$0.96**
Replacement/Renewal	HVAC	1	68	$67,800	
Replacement/Renewal	Plumbing	1	68	$4,000	
Replacement/Renewal		**2**	**68**	**$71,800**	**$8.65**

CONDITION SUMMARY:

This building was constructed for the college in 1978. It is a two-story structure constructed of concrete posts and steel beams with concrete infill wall sections, a plywood roof deck and wood trusses. Exterior walls are concrete. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in good condition, with no deficiencies observed. Interior maintenance likewise appears adequate. The 7 deficiencies identified were associated with HVAC, electrical, roof, plumbing and exterior closure/finish systems.

Roof maintenance on this building appears to be adequate. The roof membrane, which is 10 years old according to college records, is covered in some areas with debris and the membrane surface has some dirt on it. Leaves and debris should be cleaned off the roof surface at least once per year, and drains/sumps likewise cleaned at least once a year. It is recommended that in about 3 years the membrane should be power washed using a cleaning solution formulated for single-ply roof membranes. The membrane should then be cleaned about every four years to maintain and prolong the life of the membrane.

Several places on top of the concrete parapet exhibit spalling of concrete under where the rebar is located, leaving dimples that allow water to contact the rebar, resulting in oxidation. The installation of a metal parapet cap is recommended to alleviate this problem.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately

70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment, including some exhaust fans, should be programmed for replacement in about 5 years.

There is also some damper linkage on roof equipment that is rusted, a deteriorated aluminum exhaust fan, and an inoperative natural gas unit heater. These items should all be replaced. There is also deteriorated joint sealant on the metal roof ductwork that compromises the efficiency of the HVAC equipment and could allow water leakage into the ducts. The sealant should be replaced.

A domestic hot water heater and storage tank in the mezzanine are deteriorating and no longer c0st-effective to maintain. Replacement is warranted.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 Electrical Improvement Light Fixtures

103 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x4

Fixtures throughout building

QUANTITY: 91 EA ***REPAIR COST:*** **$5,200** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical $5,200 AV. SEVERITY SCORE = 20 COST PER BLDG GSF= $0.63**

50 Exterior Closure Improvement Concrete Parapet

101 A number of places on the top of the concrete parapet exhibit spalling of concrete under where rebar is located, leaving large dimples that allow rainwater to collect. This will result in rusting of the rebar. To prevent this problem the installation of a metal parapet cap is recommended.

8" w 4" drops

Entire parapet

Short Term Alternative Clean-out all loose material from dimpled areas and apply epoxy grout to seal and level dimples to surrounding surface. ($2,200)

QUANTITY: 314 LF ***REPAIR COST:*** **$13,000** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 54 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

SYSTEM SUB-TOTAL **Exterior Closure $13,000 AV. SEVERITY SCORE = 50 COST PER BLDG GSF= $1.57**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

104 The two packaged roof top air conditioning units with natural gas heat appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. One of two natural gas unit heaters is also inoperative and should be replaced at the same time.

Other items on the roof that require attention include damper linkage that is rusting and should be replaced, and one circular aluminum exhaust fan that appears original and should also be replaced.

Same as existing unless additional capacity is required

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$67,800** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

20 **HVAC** **Non-Annual Recurring Maintenance** HVAC Distribution Ductwork

102 The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed.

Roof

QUANTITY: 525 LF ***REPAIR COST:*** **$5,400** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **HVAC** **$73,200** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$8.82**

68 **Plumbing** **Replacement/Renewal** Domestic Water Heating and Storage Equipment

105 The domestic hot water heater and storage tank are nearing the end of their expected service life and appear to be deteriorating. Replacement is warranted Equipment includes approximately a 60 gallon storage tank and 140 MBH input natural gas heating capacity.

Same as existing unless additional capacity is required

Mezzanine Level

QUANTITY: 1 LS ***REPAIR COST:*** **$4,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2027 2037

SYSTEM SUB-TOTAL **Plumbing** **$4,000** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$0.48**

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

106 The single-ply membrane on this building contains minor amounts of debris, and some surface dirt. Increasing accumulations can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of the membrane indicated no apparent deficiencies. However, a thorough cleaning of the membrane surface is recommended in about three years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 6,000 SF ***REPAIR COST:*** **$2,600** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract

Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

100 There is a minor amount of debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. The overall condition of the roof membrane appears to be good. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 6,000 SF ***REPAIR COST:*** **$400** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$3,000**	**AV. SEVERITY SCORE =**	**45**	**COST PER BLDG GSF=**	**$0.36**
FACILITY TOTALS	**COST TOTAL =**	**$98,400**	**AV. SEVERITY SCORE =**	**45**	**COST PER BLDG GSF=**	**$11.86**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**1100**	**Warehouse**	Roof							
		Roof Membrane	6,000 SF							
100		There is a minor amount of debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. The overall condition of the roof membrane appears to be good. Debris should be cleaned off the roof at least once per year. *Roof surface*		$400						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **40**	**$400**	**$0**	**$0**	**$0**	**$0**	**$0**	**$400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**1100**	**Warehouse**	Exterior Closure							
		Concrete Parapet	314 LF							
101		A number of places on the top of the concrete parapet exhibit spalling of concrete under where rebar is located, leaving large dimples that allow rainwater to collect. This will result in rusting of the rebar. To prevent this problem the installation of a metal parapet cap is recommended. *Entire parapet*					$13,000			
20	**1100**	**Warehouse**	Electrical							
		Light Fixtures	91 EA							
103		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*						$5,200		
TOTAL:		**Improvement**	*AV. SEVER. SCORE =* **35**	**$0**	**$0**	**$0**	**$13,000**	**$5,200**	**$0**	**$18,200**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**1100**	**Warehouse**	Roof							
		Single-Ply Roof Membrane	6,000 SF							
106		The single-ply membrane on this building contains minor amounts of debris, and some surface dirt. Increasing accumulations can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An examination of the membrane indicated no apparent deficiencies. However, a thorough cleaning of the membrane surface is recommended in about three years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$2,600				
20	**1100**	**Warehouse**	HVAC							
		HVAC Distribution Ductwork	525 LF							
102		The joint sealant on the metal ductwork on the roof is gradually deteriorating, allowing hot and cold air to escape to the outside, and allowing water to potentially leak into the ducts. This can deteriorate the ductwork and wastes energy. The existing sealant should be removed and the joints resealed. *Roof*				$5,400				
TOTAL:		**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =* **35**	**$0**	**$0**	**$5,400**	**$2,600**	**$0**	**$0**	**$8,000**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**1100**	**Warehouse**	Plumbing							
		Domestic Water Heating and Storage Equipment	1 LS							
105		The domestic hot water heater and storage tank are nearing the end of their expected service life and appear to be deteriorating. Replacement is warranted Equipment includes approximately a 60 gallon storage tank and 140 MBH input natural gas heating capacity. *Mezzanine Level*				$4,000				
68	**1100**	**Warehouse**	HVAC							
		HVAC Equipment	1 LS							
104		The two packaged roof top air conditioning units with natural gas heat appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. One of two natural gas unit heaters is also inoperative and should be replaced at the same time. Other items on the roof that require attention include damper linkage that is rusting and should be replaced, and one circular aluminum exhaust fan that appears original and should also be replaced. *Roof*							$67,800	
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **68**	**$0**	**$0**	**$4,000**	**$0**	**$0**	**$67,800**	**$71,800**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **45**	**$400**	**$0**	**$9,400**	**$15,600**	**$5,200**	**$67,800**	**$98,400**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

1200 Maintenance — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$126,600** — Cost Per Square Foot is **$20.27**

Facility Condition Rating = 88 (Fair) — ***Average Severity Score = 54***

Repair Cost as a Percent of Facility Replacement Cost is 12 % — 3 Deficiencies Were Identified

PRIMARY USE: Maintenance Support — *FACILITY AGE:* *50* Yrs.

FACILITY SF: 6,247 *NO. OF STORIES:* 1.0 *LAST RENOVATED:* 1968

Current Facility Replacement Cost is Approximately $1,093,225

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is High

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Marginal

Facility Construction Quality is Low

Relative Facility Priority Score = 22 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1200 Maintenance 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Improvement	Electrical	1	20	$4,700	
Improvement		**1**	**20**	**$4,700**	**$0.75**
Replacement/Renewal	HVAC	1	68	$52,000	
Replacement/Renewal	Roof	1	75	$69,900	
Replacement/Renewal		**2**	**71**	**$121,900**	**$19.51**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original buildings on the campus. It is a steel-frame structure with corrugated metal roof and wall panels built on a concrete slab. There is also some T1-11 paneling on the exterior.

The interior of the building was found to be in adequate condition for the use of the building, with no deficiencies observed. Interior maintenance likewise appears adequate for building use. The 4 deficiencies identified were associated with HVAC, electrical and roof systems.

From inside the building extensive evidence rusting and leaks was observed on the corrugated metal roof panels. Numerous small holes were also visible. Discussion with maintenance personnel indicates that the roof is old, and may be original. Strong consideration should be given to replacing the roof, especially if the building is to be retained beyond another three to five years, as the problems will only worsen. A standing seam metal roof is the recommended option.

The rooftop HVAC equipment appears to have been replaced in 2001, making it 14 years old. This is approximately 70% of the 20 year life expectancy of the equipment. As increasing maintenance/repair costs are likely going forward, the equipment, including a natural gas unit heater and a window air conditioner, should be programmed for replacement in about 5 years.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures

101 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x4

Fixtures throughout building

QUANTITY: 82 EA ***REPAIR COST:*** **$4,700** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$4,700** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.75**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

102 The two packaged roof top air conditioning units with natural gas heat appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. One natural gas unit heater and one window air conditioner are also deteriorating and should be replaced at the same time.

Same as existing unless additional capacity is required

Roof and various locations inside

QUANTITY: 1 LS ***REPAIR COST:*** **$52,000** **Deferrable** **Est. Remaining Life = 5 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

SYSTEM SUB-TOTAL **HVAC** **$52,000** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$8.32**

75 **Roof** **Replacement/Renewal** Corrugated Metal Roof Panels

100 From inside the building there is extensive evidence of rusting and leaks in the corrugated metal roof along two transverse roof beams 35' to 40' long. Numerous small holes are also visible. Discussion with maintenance personnel indicated that there are leaks in other areas as well, though these areas are obscured from easy view inside the building. Further discussion indicates that the roof is very old, and may even be original to the building (1965 or 1968).

Strong consideration should be given to replacing the roof if this building is to be retained beyond another four to five years, as the problem will only worsen. A standing seam metal roof may be a better option.

Entire roof

Short Term Alternative Power wire brush and prime areas of surface rust, epoxy patch small holes and apply two coats of neoprene over the entire roof surface. ($26,500)

QUANTITY: 65 SQ ***REPAIR COST:*** **$69,900** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 49 ***Planning Priority:*** **B-Prevent Facility Use Disruption**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL	**Roof**	**$69,900**	**AV. SEVERITY SCORE =**	**75**	**COST PER BLDG GSF=**	**$11.19**
FACILITY TOTALS	**COST TOTAL =**	**$126,600**	**AV. SEVERITY SCORE =**	**54**	**COST PER BLDG GSF=**	**$20.27**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1200**	**Maintenance**	Electrical							
		Light Fixtures	82 EA							
101		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Fixtures throughout building*						$4,700		
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$0**	**$4,700**	**$0**	**$4,700**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
75	**1200**	**Maintenance**	Roof							
		Corrugated Metal Roof Panels	65 SQ							
100		From inside the building there is extensive evidence of rusting and leaks in the corrugated metal roof along two transverse roof beams 35' to 40' long. Numerous small holes are also visible. Discussion with maintenance personnel indicated that there are leaks in other areas as well, though these areas are obscured from easy view inside the building. Further discussion indicates that the roof is very old, and may even be original to the building (1965 or 1968). Strong consideration should be given to replacing the roof if this building is to be retained beyond another four to five years, as the problem will only worsen. A standing seam metal roof may be a better option. *Entire roof*				$69,900				
68	**1200**	**Maintenance**	HVAC							
		HVAC Equipment	1 LS							
102		The two packaged roof top air conditioning units with natural gas heat appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. One natural gas unit heater and one window air conditioner are also deteriorating and should be replaced at the same time. *Roof and various locations inside*							$52,000	
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **71**	**$0**	**$0**	**$69,900**	**$0**	**$0**	**$52,000**	**$121,900**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **54**	**$0**	**$0**	**$69,900**	**$0**	**$4,700**	**$52,000**	**$126,600**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1250 Auto Maintenance 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$75,450** Cost Per Square Foot is **$134.73**

Facility Condition Rating = 23 (Failed) ***Average Severity Score = 52***

Repair Cost as a Percent of Facility Replacement Cost is 77 % 3 Deficiencies Were Identified

PRIMARY USE: Maintenance Support *FACILITY AGE:* *47* Yrs.

FACILITY SF: 560 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $98,000

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **C**

Importance of Facility to Operations is Moderate

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Marginal

Facility Construction Quality is Average

Relative Facility Priority Score = 21 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1250 Auto Maintenance 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Improvement	Electrical	1	20	$2,650	
Improvement		**1**	**20**	**$2,650**	**$4.73**
Replacement/Renewal	Electrical	1	68	$31,200	
Replacement/Renewal	HVAC	1	68	$41,600	
Replacement/Renewal		**2**	**68**	**$72,800**	**$130.00**

CONDITION SUMMARY:

This building was constructed for the college in 1968. It is a steel-frame structure with corrugated metal roof and wall panels built on a concrete slab.

The interior of the building was found to be in adequate condition for the use of the building, with no deficiencies observed. Interior maintenance likewise appears adequate for building use. The 3 deficiencies identified were associated with HVAC and electrical systems.

The split system heat pump serving the main office is deteriorating and no longer considered cost-effective to repair or maintain. Replacement is recommended. An evaporative cooler and two unit heaters are showing similar signs of deterioration and should also be replaced.

The circuit breaker panels are approximately 47 years old. They are still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the equipment for circuit protection due to its age. All the panels should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

68 **Electrical** **Replacement/Renewal** Circuit Breaker Panels

102 The circuit breaker panelboards are original to the building and are now approximately 44 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Interior

QUANTITY: 1 LS ***REPAIR COST:*** **$31,200** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018

20 **Electrical** **Improvement** Light Fixtures

100 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building

QUANTITY: 46 EA ***REPAIR COST:*** **$2,650** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$33,850** **AV. SEVERITY SCORE =** **44** **COST PER BLDG GSF=** **$60.45**

68 **HVAC** **Replacement/Renewal** HVAC Equipment

101 A split system heat pump serving the main office is deteriorating and no longer considered cost-effective to repair or maintain. Replacement is warranted. An evaporative cooler and two unit heaters are also deteriorating and should be replaced at the same time.

Same as existing unless additional capacity is required

Interior and exterior of main office area

QUANTITY: 1 LS ***REPAIR COST:*** **$41,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL	**HVAC**	**$41,600**	**AV. SEVERITY SCORE =**	**68**	**COST PER BLDG GSF=**	**$74.29**
FACILITY TOTALS	**COST TOTAL =**	**$75,450**	**AV. SEVERITY SCORE =**	**52**	**COST PER BLDG GSF=**	**$134.73**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1250**	**Auto Maintenance**	Electrical							
		Light Fixtures	46 EA							
100		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$2,650		
TOTAL: Improvement			*AV. SEVER. SCORE =* **20**	**$0**	**$0**	**$0**	**$0**	**$2,650**	**$0**	**$2,650**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**1250**	**Auto Maintenance**	HVAC							
		HVAC Equipment	1 LS							
101		A split system heat pump serving the main office is deteriorating and no longer considered cost-effective to repair or maintain. Replacement is warranted. An evaporative cooler and two unit heaters are also deteriorating and should be replaced at the same time. *Interior and exterior of main office area*				$41,600				
68	**1250**	**Auto Maintenance**	Electrical							
		Circuit Breaker Panels	1 LS							
102		The circuit breaker panelboards are original to the building and are now approximately 44 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Interior*					$31,200			
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **68**	**$0**	**$0**	**$41,600**	**$31,200**	**$0**	**$0**	**$72,800**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **52**	**$0**	**$0**	**$41,600**	**$31,200**	**$2,650**	**$0**	**$75,450**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1400 Cesar Chavez-Administration 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$182,150** Cost Per Square Foot is **$3.45**

Facility Condition Rating = 99 (Excellent) ***Average Severity Score = 52***

Repair Cost as a Percent of Facility Replacement Cost is 1 % 8 Deficiencies Were Identified

PRIMARY USE: Administration *FACILITY AGE:* *50* Yrs.

FACILITY SF: 52,780 *NO. OF STORIES:* 2.0 *LAST RENOVATED:* 2003

Current Facility Replacement Cost is Approximately $16,097,900

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1400 Cesar Chavez-Administration 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$1,600	
Annual PM		**2**	**50**	**$1,600**	**$0.03**
Improvement	Electrical	1	20	$46,600	
Improvement		**1**	**20**	**$46,600**	**$0.88**
Non-Annual Recurring Maintenance	Roof	1	50	$8,400	
Non-Annual Recurring Maintenance		**1**	**50**	**$8,400**	**$0.16**
Repair/Maintenance	HVAC	1	68	$17,500	
Repair/Maintenance	Paint/Finish	1	46	$550	
Repair/Maintenance		**2**	**57**	**$18,050**	**$0.34**
Replacement/Renewal	HVAC	1	68	$97,400	
Replacement/Renewal	Plumbing	1	68	$10,100	
Replacement/Renewal		**2**	**68**	**$107,500**	**$2.04**

CONDITION SUMMARY:

This building was constructed for the college in 1965 as one of the original facilities on the campus. It is a two-story structure constructed of cast concrete columns and beams with aluminum window wall infill panels and decorative cast concrete roof parapets. The roof is a single-ply membrane, likely hypalon, on a wood roof deck. The facility was extensively renovated in 2003, with additional service area upgrades completed in 2011.

The interior of the building was found to be in very good condition, with no deficiencies observed. Interior maintenance likewise appears very adequate. The 8 deficiencies identified were associated with HVAC, electrical, plumbing, roof and exterior closure/finish systems. Structurally the building appears well constructed and is in good condition.

Roof maintenance on this building appears to be poor on the lower roof portions, though the upper roof area is relatively clean. The lower roofs are covered with leaves and other debris and the membrane surface is very dirty, making it difficult to determine overall condition. Leaves and debris should be cleaned off the roof surface at least once per year. Once the roof debris has been removed the first time, the membrane should be power washed using a cleaning solution formulated for single-ply roof membranes. The membrane should be cleaned about every four years to maintain and prolong the life of the membrane. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. An assessment of the membrane surface indicated no apparent deficiencies.

Southwestern College SURVEY DATE: 8/15

1400 Cesar Chavez-Administration 900 Otay Lakes Rd.

The caulking in the joints of the metal parapet caps is deteriorating, creating potential for moisture to leak into joints onto the parapet. All joint caulking should be replaced.

Two large packaged rooftop HVAC units serve the building, and appear to be in good condition. However, as the units age, repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next five years to properly maintain and extend equipment life.

Two packaged rooftop air conditioners are slowly deteriorating and nearing the end of their expected service life. Maintenance and repairs will be more costly going forward, so this equipment should be programmed for replacement in about five years. In addition, the hot water heating equipment and steel support frames on the roof are oxidizing and should be re-finished. There are also two domestic hot water heater and storage tanks inside the building that are slowly deteriorating and should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures

103 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2, metal halide, sconces

Light fixtures throughout building

QUANTITY: 815 EA ***REPAIR COST:*** **$46,600** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$46,600** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.88**

68 **HVAC** **Repair/Maintenance** HVAC Equipment

104 Two large packaged roof top HVAC units serve this building and the equipment appears to still be in good condition. However, as the units age repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the units and extend their life.

Same as existing unless additional capacity is required

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$17,500** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

68 **HVAC** **Replacement/Renewal** HVAC Equipment

106 Two packaged roof top air conditioners appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out.

One natural gas unit heater and one window air conditioner are also deteriorating and should be replaced at the same time. In addition, the hot water heating equipment and steel support frames on the roof are badly oxidized and should be re-finished.

Same as existing unless additional capacity is required

Roof

QUANTITY: 1 LS ***REPAIR COST:*** **$97,400** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 47 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019

SYSTEM SUB-TOTAL **HVAC** **$114,900** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$2.18**

46 **Paint/Finish** **Repair/Maintenance** Metal Parapet Cap Joints

102 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 77 LF ***REPAIR COST:*** **$550** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$550** **AV. SEVERITY SCORE =** **46** **COST PER BLDG GSF=** **$0.01**

68 **Plumbing** **Replacement/Renewal** Domestic Water Heating and Storage Equipment

105 There are two domestic hot water heater and storage tanks within the building that appear to be slowly deteriorating and nearing the end of their service life. Replacement is recommended. Both tanks are electric; one has a 3 kW element and the other has a 9 kW element and operate on 480 volts three phase.

Same as existing unless additional capacity is required

Interior

QUANTITY: 1 LS ***REPAIR COST:*** **$10,100** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2027 2037

SYSTEM SUB-TOTAL **Plumbing** **$10,100** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$0.19**

60 **Roof** **Annual PM** Roof Drains

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 8 EA ***REPAIR COST:*** **$750** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

107 The single-ply membrane on this building contains significant amounts of debris on the lower roofs, and the membrane has some dirty areas. This can shorten the life of the membrane, though overall roof condition appears good. Thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 24,333 SF ***REPAIR COST:*** **$8,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

100 There are significant amounts of leaves and debris on the lower roof. The upper roof, however, is free of debris. Debris can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Lower perimeter roof surface

QUANTITY: 24,333 SF ***REPAIR COST:*** **$850** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$10,000**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.19**
FACILITY TOTALS	**COST TOTAL =**	**$182,150**	**AV. SEVERITY SCORE =**	**52**	**COST PER BLDG GSF=**	**$3.45**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**1400**	**Cesar Chavez-Administration**	Roof							
		Roof Drains	8 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$750						
40	**1400**	**Cesar Chavez-Administration**	Roof							
		Roof Membrane	24,333 SF							
100		There are significant amounts of leaves and debris on the lower roof. The upper roof, however, is free of debris. Debris can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Lower perimeter roof surface*		$850						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$1,600**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,600**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1400**	**Cesar Chavez-Administration**	Electrical							
		Light Fixtures	815 EA							
103		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$46,600		
TOTAL: Improvement			*AV. SEVER. SCORE =* **20**	**$0**	**$0**	**$0**	**$0**	**$46,600**	**$0**	**$46,600**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**1400**	**Cesar Chavez-Administration**	Roof							
		Single-Ply Roof Membrane	24,333 SF							
107		The single-ply membrane on this building contains significant amounts of debris on the lower roofs, and the membrane has some dirty areas. This can shorten the life of the membrane, though overall roof condition appears good. Thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$8,400					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **50**	**$0**	**$8,400**	**$0**	**$0**	**$0**	**$0**	**$8,400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**1400**	**Cesar Chavez-Administration**	HVAC							
		HVAC Equipment	1 LS							
104		Two large packaged roof top HVAC units serve this building and the equipment appears to still be in good condition. However, as the units age repair and maintenance requirements will become more frequent. An allowance should be budgeted for repairs/maintenance that may be required over the next 5 years in order to properly maintain the units and extend their life.			$17,500					
		Roof								
46	**1400**	**Cesar Chavez-Administration**	Paint/Finish							
		Metal Parapet Cap Joints	77 LF							
102		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.				$550				
		Parapet caps on roof								
TOTAL:		**Repair/Maintenance**	***AV. SEVER. SCORE =*** **57**	**$0**	**$17,500**	**$550**	**$0**	**$0**	**$0**	**$18,050**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**1400**	**Cesar Chavez-Administration**	Plumbing							
		Domestic Water Heating and Storage Equipment	1 LS							
105		There are two domestic hot water heater and storage tanks within the building that appear to be slowly deteriorating and nearing the end of their service life. Replacement is recommended. Both tanks are electric; one has a 3 kW element and the other has a 9 kW element and operate on 480 volts three phase. *Interior*				$10,100				
68	**1400**	**Cesar Chavez-Administration**	HVAC							
		HVAC Equipment	1 LS							
106		Two packaged roof top air conditioners appear to have been replaced in 2001 and are now 14 years old, which is approximately 70% of the generally accepted 20 year service life of the equipment. At this point, increasing maintenance and repair costs can be anticipated going forward, and replacement programming should be considered for approximately five years out. One natural gas unit heater and one window air conditioner are also deteriorating and should be replaced at the same time. In addition, the hot water heating equipment and steel support frames on the roof are badly oxidized and should be re-finished. *Roof*							$97,400		
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **68**	**$0**	**$0**	**$10,100**	**$0**	**$97,400**	**$0**	**$107,500**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **52**	**$1,600**	**$25,900**	**$10,650**	**$0**	**$144,000**	**$0**	**$182,150**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1505 Snack Bar 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$2,260** Cost Per Square Foot is **$4.04**

Facility Condition Rating = 98 (Excellent) ***Average Severity Score = 31***

Repair Cost as a Percent of Facility Replacement Cost is 2 % 3 Deficiencies Were Identified

PRIMARY USE: Snack Bar *FACILITY AGE:* *47* Yrs.

FACILITY SF: 560 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $98,000

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Low

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 24 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1505 Snack Bar 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Improvement	Electrical	1	20	$1,250	
Improvement		**1**	**20**	**$1,250**	**$2.23**
Non-Annual Recurring Maintenance	Paint/Finish	1	23	$260	
Non-Annual Recurring Maintenance		**1**	**23**	**$260**	**$0.46**
Repair/Maintenance	Structural	1	50	$750	
Repair/Maintenance		**1**	**50**	**$750**	**$1.34**

CONDITION SUMMARY:

This building was constructed for the college in 1968. It is a single-story structure constructed of cast concrete columns and beams with exposed aggregate concrete wall panels and decorative cast concrete roof parapets. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building was found to be in very good condition. Interior maintenance likewise appears very adequate, in keeping with the health considerations of a food serving establishment. The 3 deficiencies identified were associated with electrical and exterior closure/finish systems.

Structurally the building appears well constructed. The only structural concern noted was random spalling of concrete, some with exposed rebar, on the exterior columns and beams. All spalling concrete should be chipped out and the areas wire brushed. Any exposed rebar should be treated with a rust neutralizing coating, an epoxy bonding agent applied to all voids and a high strength epoxy-based patch cement applied. This spalling should be addressed on a recurring basis at least every three to four years.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt build-up, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a biologic agent to remove staining and any spalling concrete.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures

102 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, pendants

Light fixtures throughout building

QUANTITY: 22 EA ***REPAIR COST:*** **$1,250** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$1,250** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$2.23**

23 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Concrete Columns/Beams/Roof Parapets

100 The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are discolored due to weathering. This detracts from the overall appearance of the building. There is also minor spalling of the concrete surfaces on the beams. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete.

Perimeter of building

QUANTITY: 400 SF ***REPAIR COST:*** **$260** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$260** **AV. SEVERITY SCORE =** **23** **COST PER BLDG GSF=** **$0.46**

50 **Structural** **Repair/Maintenance** Concrete Columns and Beams

101 There is minor spalling of concrete on the beams of the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. All exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement.

It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years.

Perimeter of building

QUANTITY: 10 SF ***REPAIR COST:*** **$750** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL	**Structural**	**$750**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$1.34**
FACILITY TOTALS	**COST TOTAL =**	**$2,260**	**AV. SEVERITY SCORE =**	**31**	**COST PER BLDG GSF=**	**$4.04**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1505**	**Snack Bar**	Electrical							
		Light Fixtures	22 EA							
102		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$1,250		
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$0**	**$1,250**	**$0**	**$1,250**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
23	**1505**	**Snack Bar**	Paint/Finish							
		Exterior Concrete Columns/Beams/Roof Parapets	400 SF							
100		The smooth concrete surfaces on the building, and the surfaces on the roof parapets, are discolored due to weathering. This detracts from the overall appearance of the building. There is also minor spalling of the concrete surfaces on the beams. Pressure wash all surfaces with biologic agent to remove staining and any spalling concrete. *Perimeter of building*			$260					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **23**	**$0**	**$260**	**$0**	**$0**	**$0**	**$0**	**$260**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**1505**	**Snack Bar**	Structural							
		Concrete Columns and Beams	10 SF							
101		There is minor spalling of concrete on the beams of the building. All spalling concrete should be removed, spalled areas chipped, and exposed surfaces cleaned by power wire brushing. All exposed rebar should be treated with a rust neutralizing coating. An epoxy bonding agent should then be applied to all voids, and the voids filled with a high-strength epoxy-based patch cement. It is recommended that after the initial repairs new spalling be addressed on a recurring basis at least every three to four years. *Perimeter of building*			$750					
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **50**	**$0**	**$750**	**$0**	**$0**	**$0**	**$0**	**$750**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **31**	**$0**	**$1,010**	**$0**	**$0**	**$1,250**	**$0**	**$2,260**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

1600 Classroom-Modular — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$10,625** — Cost Per Square Foot is **$4.92**

Facility Condition Rating = 98 (Excellent) — ***Average Severity Score = 38***

Repair Cost as a Percent of Facility Replacement Cost is 2 % — 10 Deficiencies Were Identified

PRIMARY USE: Classroom — *FACILITY AGE:* *24* Yrs.

FACILITY SF: 2,160 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $658,800

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1600 Classroom-Modular 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$400	
Annual PM		**2**	**50**	**$400**	**$0.19**
Improvement	Electrical	1	20	$2,400	
Improvement		**1**	**20**	**$2,400**	**$1.11**
Non-Annual Recurring Maintenance	Exterior Closure	1	40	$750	
Non-Annual Recurring Maintenance	Paint/Finish	4	42	$4,475	
Non-Annual Recurring Maintenance	Roof	1	50	$1,500	
Non-Annual Recurring Maintenance		**6**	**43**	**$6,725**	**$3.11**
Replacement/Renewal	HVAC	1	5	$1,100	
Replacement/Renewal		**1**	**5**	**$1,100**	**$0.51**

CONDITION SUMMARY:

This building was constructed for the college in 1991. It is a single-story modular structure constructed of wood/metal framing with cement/stucco exterior walls and decorative roof parapets. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building is in good condition. Interior maintenance likewise appears very adequate. Only 1 interior deficiency was identified. The 10 deficiencies identified were associated with roof, HVAC, electrical and exterior closure/finish systems.

The bottom portion of the building fascia appears to be concrete, with joints every four feet. The mortar/sealant in the joints exhibist random deterioration and should be replaced. It is recommended that repairs be made every two to three years as issues arise.

Roof maintenance on this building appears to be average. The roof is covered with minor amounts of leaves and other debris, primarily in the corner areas, and the membrane surface has some dirty areas, making it somewhat difficult to determine overall condition. Leaves and debris should be cleaned off the roof surface at least once per year. In about 3 years the membrane should be power washed using a cleaning solution formulated for single-ply roof membranes. The membrane should then be cleaned about every four years to maintain and prolong the life of the membrane. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. An assessment of the membrane surface revealed no deficiencies.

The joint caulk on the metal roof parapet caps is deteriorating, and will result in moisture leaking into the tops of the parapets. The deteriorated caulk should be replaced.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1600 Classroom-Modular 900 Otay Lakes Rd.

The paint on the wood HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood is in good condition, and should be re-finished to preserve it. All surfaces should be scraped/sanded prior to re-finishing. Some re-nailing of boards where nails have partially backed out is also required. The paint on the sheet metal caps on the enclosures is peeling across much of the surface. The cap is in good condition and should be wire brushed and re-finished.

The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance is necessary every two to three years to replace deteriorating sealant.

Several HVAC supply perforated ceiling diffusers are badly stained and rusting, and should be replaced.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 Electrical **Improvement** Light Fixtures

107 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, 2 x 2

Light fixtures throughout building

QUANTITY: 42 EA ***REPAIR COST:*** **$2,400** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$2,400** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$1.11**

40 Exterior Closure **Non-Annual Recurring Maintenance** Concrete Fascia

105 The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years.

Upper perimeter of building

QUANTITY: 1 LS ***REPAIR COST:*** **$750** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 44 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Exterior Closure** **$750** **AV. SEVERITY SCORE =** **40** **COST PER BLDG GSF=** **$0.35**

5 **HVAC** **Replacement/Renewal** HVAC Ceiling Diffusers

108 HVAC supply perforated ceiling diffuser(s) are stained and rusty. Install new ceiling diffuser(s).
2 x 2

Ceiling throughout building

QUANTITY: 4 EA ***REPAIR COST:*** **$1,100** **Deferrable** **Est. Remaining Life = 4 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract
Benefit Score = 8 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2034

SYSTEM SUB-TOTAL **HVAC** **$1,100** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$0.51**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

100 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 48 LF ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Mounting Bracket Bolt Head Sealant

106 The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity.

Roof HVAC enclosures

QUANTITY: 1 LS ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure Metal Cap

104 The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel.

HVAC enclosures on roof

Long Term Alternative Replace caps with factory finished metal caps. Estimated cost is $3,700.

QUANTITY: 160 SF ***REPAIR COST:*** **$575** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure

103 The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required.

Roof

QUANTITY: 1,092 SF ***REPAIR COST:*** **$3,200** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$4,475** **AV. SEVERITY SCORE =** **42** **COST PER BLDG GSF=** **$2.07**

60 **Roof** **Annual PM** Roof Drains

102 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 2 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

109 The single-ply membrane on this building contains minor amounts of debris, and some dirt. However, the overall condition of the membrane appears good, with no apparent deficiencies identified. Increasing accumulations of debris and dirt will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about three years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 2,880 SF ***REPAIR COST:*** **$1,500** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

101 There are minor amounts of leaves and tree debris in the corners of the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 2,880 SF ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$1,900**	**AV. SEVERITY SCORE =** **50**	**COST PER BLDG GSF=**	**$0.88**
FACILITY TOTALS	**COST TOTAL =**	**$10,625**	**AV. SEVERITY SCORE =** **38**	**COST PER BLDG GSF=**	**$4.92**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
60	**1600**	**Classroom-Modular**	Roof							
		Roof Drains	2 EA							
102		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$200						
40	**1600**	**Classroom-Modular**	Roof							
		Roof Membrane	2,880 SF							
101		There are minor amounts of leaves and tree debris in the corners of the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$200						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$400**	**$0**	**$0**	**$0**	**$0**	**$0**	**$400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1600**	**Classroom-Modular**	Electrical							
		Light Fixtures	42 EA							
107		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$2,400		
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$0**	**$2,400**	**$0**	**$2,400**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**1600**	**Classroom-Modular**	Roof							
		Single-Ply Roof Membrane	2,880 SF							
109		The single-ply membrane on this building contains minor amounts of debris, and some dirt. However, the overall condition of the membrane appears good, with no apparent deficiencies identified. Increasing accumulations of debris and dirt will make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about three years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$1,500			
46	**1600**	**Classroom-Modular**	Paint/Finish							
		Metal Parapet Cap Joints	48 LF							
100		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*			$350					
40	**1600**	**Classroom-Modular**	Exterior Closure							
		Concrete Fascia	1 LS							
105		The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years. *Upper perimeter of building*			$750					

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**1600**	**Classroom-Modular**	Paint/Finish							
		Mounting Bracket Bolt Head Sealant	1 LS							
106		The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity. *Roof HVAC enclosures*			$350					
40	**1600**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure Metal Cap	160 SF							
104		The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel. *HVAC enclosures on roof*				$575				
40	**1600**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure	1,092 SF							
103		The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required. *Roof*				$3,200				
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **43**	**$0**	**$1,450**	**$3,775**	**$1,500**	**$0**	**$0**	**$6,725**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**1600**	**Classroom-Modular**	HVAC							
		HVAC Ceiling Diffusers	4 EA							
108		HVAC supply perforated ceiling diffuser(s) are stained and rusty. Install new ceiling diffuser(s). *Ceiling throughout building*						$1,100		
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **5**	**$0**	**$0**	**$0**	**$0**	**$1,100**	**$0**	**$1,100**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **38**	**$400**	**$1,450**	**$3,775**	**$1,500**	**$3,500**	**$0**	**$10,625**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1620 Classroom-Modular 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$8,175** Cost Per Square Foot is **$4.21**

Facility Condition Rating = 99 (Excellent) ***Average Severity Score = 40***

Repair Cost as a Percent of Facility Replacement Cost is 1 % 11 Deficiencies Were Identified

PRIMARY USE: Office *FACILITY AGE:* *24* Yrs.

FACILITY SF: 1,942 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $592,310

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 31 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1620 Classroom-Modular 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$400	
Annual PM		**2**	**50**	**$400**	**$0.21**
Improvement	Electrical	1	20	$1,850	
Improvement		**1**	**20**	**$1,850**	**$0.95**
Non-Annual Recurring Maintenance	Exterior Closure	1	40	$750	
Non-Annual Recurring Maintenance	Paint/Finish	5	41	$3,375	
Non-Annual Recurring Maintenance	Roof	1	50	$1,450	
Non-Annual Recurring Maintenance	Site	1	20	$350	
Non-Annual Recurring Maintenance		**8**	**40**	**$5,925**	**$3.05**

CONDITION SUMMARY:

This building was constructed for the college in 1991. It is a single-story modular structure constructed of wood/metal framing with cement/stucco exterior walls and decorative roof parapets. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building is in good condition. Interior maintenance likewise appears very adequate. The 11 deficiencies identified were associated with roof, electrical and exterior closure/finish systems.

The bottom portion of the building fascia appears to be concrete, with joints every four feet. The mortar/sealant in the joints exhibits random deterioration and should be replaced. It is recommended that repairs be made every two to three years as issues arise.

The steel strip at the base of the cement/stucco walls exhibits surface rust in several locations. The rusting areas should be wire brushed, primed and re-finished to prevent further oxidation.

Roof maintenance on this building appears to be average. The roof is covered with leaves and other debris, primarily in the corner areas, and the membrane surface has a few dirty spots. Leaves and debris should be cleaned off the roof surface at least once per year. In about 2 years the membrane should be power washed using a cleaning solution formulated for single-ply roof membranes. The membrane should then be cleaned about every four years to maintain and prolong the life of the membrane. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. An assessment of the membrane surface revealed no deficiencies

The joint caulk on the metal roof parapet caps is deteriorating, and will result in moisture leaking into the tops of the parapets. The deteriorated caulk should be replaced.

The paint on the wood HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood is in good condition, and should be re-finished to preserve it. All surfaces should be scraped/sanded prior

to re-finishing. Some re-nailing of boards where nails have partially backed out is also required. The paint on the sheet metal caps on the enclosures is peeling across much of the surface. The cap is in good condition and should be wire brushed and re-finished.

The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance is necessary every two to three years to replace deteriorating sealant.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

A tree that is overhanging the roof and allowing excessive leaf debris to build up on the roof needs to be cut back.

20 **Electrical** **Improvement** Light Fixtures

109 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building

QUANTITY: 32 EA ***REPAIR COST:*** **$1,850** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$1,850** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.95**

40 **Exterior Closure** **Non-Annual Recurring Maintenance** Concrete Fascia

105 The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years.

Upper perimeter of building

QUANTITY: 1 LS ***REPAIR COST:*** **$750** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 44 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Exterior Closure** **$750** **AV. SEVERITY SCORE =** **40** **COST PER BLDG GSF=** **$0.39**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

100 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 48 LF ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Mounting Bracket Bolt Head Sealant

108 The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity.

Roof HVAC enclosures

QUANTITY: 1 LS ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Base Edging

107 The metal strip at the base of the cement/stucco walls on the building exhibits surface rust in several locations around the building. The rusting areas should be wire brushed and cleaned and a primer and 2 coats of industrial enamel applied to the entire surface.

3 sides of the building

QUANTITY: 100 SF ***REPAIR COST:*** **$450** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure Metal Cap

104 The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel.

HVAC enclosures on roof

Long Term Alternative Replace caps with factory finished metal caps. Estimated cost is $2,200..

QUANTITY: 92 SF ***REPAIR COST:*** **$325** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure

103 The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required.

Roof

QUANTITY: 650 SF ***REPAIR COST:*** **$1,900** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$3,375** **AV. SEVERITY SCORE =** **41** **COST PER BLDG GSF=** **$1.74**

60 **Roof** **Annual PM** Roof Drains

102 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 2 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

110 The single-ply membrane on this building contains minor amounts of debris, and some dirt. However, the overall condition of the membrane appears good, with no apparent deficiencies identified. Increasing accumulations of debris and dirt can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 2 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 2,400 SF ***REPAIR COST:*** **$1,450** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

101 There are minor amounts of leaves and tree debris in the corners of the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 2,400 SF ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$1,850** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.95**

20 **Site** **Non-Annual Recurring Maintenance** Tree

106 A tree that is overhanging the roof and allowing excessive debris to build up on the roof needs to be cur back from over the roof.

West side of roof

QUANTITY: 1 LS ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL	**Site**	**$350**	**AV. SEVERITY SCORE =**	**20**	**COST PER BLDG GSF=**	**$0.18**
FACILITY TOTALS	**COST TOTAL =**	**$8,175**	**AV. SEVERITY SCORE =**	**40**	**COST PER BLDG GSF=**	**$4.21**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**1620**	**Classroom-Modular**	Roof							
		Roof Drains	2 EA							
102		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$200						
40	**1620**	**Classroom-Modular**	Roof							
		Roof Membrane	2,400 SF							
101		There are minor amounts of leaves and tree debris in the corners of the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$200						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$400**	**$0**	**$0**	**$0**	**$0**	**$0**	**$400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE / DEF. NO.	BLDG.	COMPONENT DEFICIENCY / LOCATION	SYSTEM / QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1620**	**Classroom-Modular**	Electrical							
		Light Fixtures	32 EA							
109		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$1,850		
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$0**	**$1,850**	**$0**	**$1,850**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**1620**	**Classroom-Modular**	Roof							
		Single-Ply Roof Membrane	2,400 SF							
110		The single-ply membrane on this building contains minor amounts of debris, and some dirt. However, the overall condition of the membrane appears good, with no apparent deficiencies identified. Increasing accumulations of debris and dirt can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 2 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*				$1,450				
46	**1620**	**Classroom-Modular**	Paint/Finish							
		Metal Parapet Cap Joints	48 LF							
100		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*			$350					
40	**1620**	**Classroom-Modular**	Paint/Finish							
		Mounting Bracket Bolt Head Sealant	1 LS							
108		The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity. *Roof HVAC enclosures*			$350					

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**1620**	**Classroom-Modular**	Exterior Closure							
		Concrete Fascia	1 LS							
105		The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years. *Upper perimeter of building*			$750					
40	**1620**	**Classroom-Modular**	Paint/Finish							
		Metal Base Edging	100 SF							
107		The metal strip at the base of the cement/stucco walls on the building exhibits surface rust in several locations around the building. The rusting areas should be wire brushed and cleaned and a primer and 2 coats of industrial enamel applied to the entire surface. *3 sides of the building*			$450					
40	**1620**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure Metal Cap	92 SF							
104		The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel. *HVAC enclosures on roof*				$325				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**1620**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure	650 SF							
103		The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required. *Roof*				$1,900				
20	**1620**	**Classroom-Modular**	Site							
		Tree	1 LS							
106		A tree that is overhanging the roof and allowing excessive debris to build up on the roof needs to be cur back from over the roof. *West side of roof*			$350					
TOTAL: Non-Annual Recurring Maintenance			***AV. SEVER. SCORE =*** **40**	**$0**	**$2,250**	**$3,675**	**$0**	**$0**	**$0**	**$5,925**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **40**	**$400**	**$2,250**	**$3,675**	**$0**	**$1,850**	**$0**	**$8,175**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1630 Classroom-Modular 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$7,425** Cost Per Square Foot is **$3.60**

Facility Condition Rating = 99 (Excellent) ***Average Severity Score = 42***

Repair Cost as a Percent of Facility Replacement Cost is 1 % 9 Deficiencies Were Identified

PRIMARY USE: Conference *FACILITY AGE:* *24* Yrs.

FACILITY SF: 2,063 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $629,215

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 26 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1630 Classroom-Modular 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$400	
Annual PM		**2**	**50**	**$400**	**$0.19**
Improvement	Electrical	1	20	$1,700	
Improvement		**1**	**20**	**$1,700**	**$0.82**
Non-Annual Recurring Maintenance	Exterior Closure	1	40	$750	
Non-Annual Recurring Maintenance	Paint/Finish	4	42	$2,825	
Non-Annual Recurring Maintenance	Roof	1	50	$1,750	
Non-Annual Recurring Maintenance		**6**	**43**	**$5,325**	**$2.58**

CONDITION SUMMARY:

This building was constructed for the college in 1991. It is a single-story modular structure constructed of wood/metal framing with cement/stucco exterior walls and decorative roof parapets. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building is in good condition. Interior maintenance likewise appears very adequate. The 11 deficiencies identified were associated with roof, electrical and exterior closure/finish systems.

The bottom portion of the building fascia appears to be concrete, with joints every four feet. The mortar/sealant in the joints exhibits random deterioration and should be replaced. It is recommended that repairs be made every two to three years as issues arise.

The steel strip at the base of the cement/stucco walls exhibits surface rust in several locations. The rusting areas should be wire brushed, primed and re-finished to prevent further oxidation.

Roof maintenance on this building appears to be somewhat poor. The roof is covered with leaves and other debris, and the membrane surface is very dirty, making it difficult to determine overall condition. Leaves and debris should be cleaned off the roof surface at least once per year. Once the roof debris has been removed the first time, the membrane should be power washed using a cleaning solution formulated for single-ply roof membranes. The membrane should be cleaned about every four years to maintain and prolong the life of the membrane. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. An assessment of the membrane where possible revealed no apparent deficiencies.

The joint caulk on the metal roof parapet caps is deteriorating, and will result in moisture leaking into the tops of the parapets. The deteriorated caulk should be replaced.

The paint on the wood HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood is in good condition, and should be re-finished to preserve it. All surfaces should be scraped/sanded prior

to re-finishing. Some re-nailing of boards where nails have partially backed out is also required. The paint on the sheet metal caps on the enclosures is peeling across much of the surface. The cap is in good condition and should be wire brushed and re-finished.

The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance is necessary every two to three years to replace deteriorating sealant.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

A tree that is overhanging the roof and allowing excessive leaf debris to build up on the roof needs to be cut back.

20 **Electrical** **Improvement** Light Fixtures

107 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building

QUANTITY: 30 EA ***REPAIR COST:*** **$1,700** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$1,700** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.82**

40 **Exterior Closure** **Non-Annual Recurring Maintenance** Concrete Fascia

105 The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years.

Upper perimeter of building

QUANTITY: 1 LS ***REPAIR COST:*** **$750** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 44 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Exterior Closure** **$750** **AV. SEVERITY SCORE =** **40** **COST PER BLDG GSF=** **$0.36**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

100 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 66 LF ***REPAIR COST:*** **$475** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Mounting Bracket Bolt Head Sealant

106 The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity.

Roof HVAC enclosures

QUANTITY: 1 LS ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure

103 The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required.

Roof

QUANTITY: 574 SF ***REPAIR COST:*** **$1,700** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure Metal Cap

104 The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel.

HVAC enclosures on roof

Long Term Alternative Replace caps with factory finished metal caps. Estimated cost is $1,900.

QUANTITY: 82 SF ***REPAIR COST:*** **$300** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,825** **AV. SEVERITY SCORE =** **42** **COST PER BLDG GSF=** **$1.37**

60 **Roof** **Annual PM** Roof Drains

102 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 3 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

108 The single-ply membrane on this building contains a significant amount of debris, and the membrane surface is very dirty in spots. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. No apparent deficiencies were identified on clean areas of the membrane. Thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 2,870 SF ***REPAIR COST:*** **$1,750** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

101 There are large amounts of leaves and tree debris in the corners of the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 2,870 SF ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$2,150**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$1.04**
FACILITY TOTALS	**COST TOTAL =**	**$7,425**	**AV. SEVERITY SCORE =**	**42**	**COST PER BLDG GSF=**	**$3.60**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**1630**	**Classroom-Modular**	Roof							
		Roof Drains	3 EA							
102		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$200						
40	**1630**	**Classroom-Modular**	Roof							
		Roof Membrane	2,870 SF							
101		There are large amounts of leaves and tree debris in the corners of the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$200						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$400**	**$0**	**$0**	**$0**	**$0**	**$0**	**$400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1630**	**Classroom-Modular**	Electrical							
		Light Fixtures	30 EA							
107		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$1,700		
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$0**	**$1,700**	**$0**	**$1,700**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**1630**	**Classroom-Modular**	Roof							
		Single-Ply Roof Membrane	2,870 SF							
108		The single-ply membrane on this building contains a significant amount of debris, and the membrane surface is very dirty in spots. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. No apparent deficiencies were identified on clean areas of the membrane. Thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$1,750					
46	**1630**	**Classroom-Modular**	Paint/Finish							
		Metal Parapet Cap Joints	66 LF							
100		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*			$475					
40	**1630**	**Classroom-Modular**	Exterior Closure							
		Concrete Fascia	1 LS							
105		The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years. *Upper perimeter of building*			$750					

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**1630**	**Classroom-Modular**	Paint/Finish							
		Mounting Bracket Bolt Head Sealant	1 LS							
106		The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity. *Roof HVAC enclosures*			$350					
40	**1630**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure	574 SF							
103		The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required. *Roof*				$1,700				
40	**1630**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure Metal Cap	82 SF							
104		The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel. *HVAC enclosures on roof*				$300				
TOTAL: Non-Annual Recurring Maintenance			***AV. SEVER. SCORE =*** **43**	**$0**	**$3,325**	**$2,000**	**$0**	**$0**	**$0**	**$5,325**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **42**	**$400**	**$3,325**	**$2,000**	**$0**	**$1,700**	**$0**	**$7,425**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1650 Classroom-Modular 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$14,725** Cost Per Square Foot is **$3.89**

Facility Condition Rating = 99 (Excellent) ***Average Severity Score = 40***

Repair Cost as a Percent of Facility Replacement Cost is 1 % 11 Deficiencies Were Identified

PRIMARY USE: Administration *FACILITY AGE:* *24* Yrs.

FACILITY SF: 3,786 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $1,154,730

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 28 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1650 Classroom-Modular 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$400	
Annual PM		**2**	**50**	**$400**	**$0.11**
Improvement	Electrical	1	20	$4,050	
Improvement		**1**	**20**	**$4,050**	**$1.07**
Non-Annual Recurring Maintenance	Exterior Closure	1	40	$750	
Non-Annual Recurring Maintenance	Paint/Finish	5	41	$6,625	
Non-Annual Recurring Maintenance	Roof	1	50	$2,400	
Non-Annual Recurring Maintenance	Site	1	20	$500	
Non-Annual Recurring Maintenance		**8**	**40**	**$10,275**	**$2.71**

CONDITION SUMMARY:

This building was constructed for the college in 1991. It is a single-story modular structure constructed of wood/metal framing with cement/stucco exterior walls and decorative roof parapets. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building is in good condition. Interior maintenance likewise appears very adequate. The 11 deficiencies identified were associated with roof, electrical and exterior closure/finish systems.

The bottom portion of the building fascia appears to be concrete, with joints every four feet. The mortar/sealant in the joints exhibits random deterioration and should be replaced. It is recommended that repairs be made every two to three years as issues arise.

The steel strip at the base of the cement/stucco walls exhibits surface rust in several locations. The rusting areas should be wire brushed, primed and re-finished to prevent further oxidation.

Roof maintenance on this building appears to be average. The roof has moderate amounts of debris on it, primarily in the corner areas, and the membrane surface has some dirty spots. Leaves and debris should be cleaned off the roof surface at least once per year. In about 3 years the membrane should be power washed using a cleaning solution formulated for single-ply roof membranes. The membrane should then be cleaned about every four years to maintain and prolong the life of the membrane. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. An assessment of the membrane surface revealed no apparent deficiencies.

The joint caulk on the metal roof parapet caps is deteriorating, and will result in moisture leaking into the tops of the parapets. The deteriorated caulk should be replaced.

The paint on the wood HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood is in good condition, and should be re-finished to preserve it. All surfaces should be scraped/sanded prior

to re-finishing. Some re-nailing of boards where nails have partially backed out is also required. The paint on the sheet metal caps on the enclosures is peeling across much of the surface. The cap is in good condition and should be wire brushed and re-finished.

The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance is necessary every two to three years to replace deteriorating sealant.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

Two trees that are overhanging the roof and allowing excessive leaf debris to build up on the roof need to be cut back.

20 Electrical **Improvement** Light Fixtures

109 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, 2 x 2

Light fixtures throughout building

QUANTITY: 71 EA ***REPAIR COST:*** **$4,050** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$4,050** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$1.07**

40 Exterior Closure **Non-Annual Recurring Maintenance** Concrete Fascia

105 The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years.

Upper perimeter of building

QUANTITY: 1 LS ***REPAIR COST:*** **$750** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 44 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Exterior Closure** **$750** **AV. SEVERITY SCORE =** **40** **COST PER BLDG GSF=** **$0.20**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

100 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 80 LF ***REPAIR COST:*** **$575** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Base Edging

107 The metal strip at the base of the cement/stucco walls on the building exhibits surface rust in several locations around the building. The rusting areas should be wire brushed and cleaned and a primer and 2 coats of industrial enamel applied to the entire surface.

3 sides of the building

QUANTITY: 121 SF ***REPAIR COST:*** **$500** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Mounting Bracket Bolt Head Sealant

108 The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity.

Roof HVAC enclosures

QUANTITY: 1 LS ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure Metal Cap

104 The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel.

HVAC enclosures on roof

Long Term Alternative Replace caps with factory finished metal caps. Estimated cost is $5,400.

QUANTITY: 228 SF ***REPAIR COST:*** **$600** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure

103 The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required.

Roof

QUANTITY: 1,600 SF ***REPAIR COST:*** **$4,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$6,625** **AV. SEVERITY SCORE =** **41** **COST PER BLDG GSF=** **$1.75**

60 **Roof** **Annual PM** Roof Drains

102 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 3 EA ***REPAIR COST:*** **$325** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

110 The single-ply membrane on this building contains minor amounts of leaf and other debris, and some dirty areas on the membrane. No apparent deficiencies were identified. However, increasing accumulations of debris and dirt can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 4,775 SF ***REPAIR COST:*** **$2,400** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

101 There are minor amounts of leaves and tree debris in the corners of the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 4,775 SF ***REPAIR COST:*** **$75** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$2,800** **AV. SEVERITY SCORE = 50** **COST PER BLDG GSF= $0.74**

20 **Site** **Non-Annual Recurring Maintenance** Tree

106 Two trees that are overhanging the roof and allowing excessive debris to build up on the roof needs to be cut back from over the roof.

Two sides of roof

QUANTITY: 1 LS ***REPAIR COST:*** **$500** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL	**Site**	**$500**	**AV. SEVERITY SCORE =**	**20**	**COST PER BLDG GSF=**	**$0.13**
FACILITY TOTALS	**COST TOTAL =**	**$14,725**	**AV. SEVERITY SCORE =**	**40**	**COST PER BLDG GSF=**	**$3.89**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**1650**	**Classroom-Modular**	Roof							
		Roof Drains	3 EA							
102		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$325						
40	**1650**	**Classroom-Modular**	Roof							
		Roof Membrane	4,775 SF							
101		There are minor amounts of leaves and tree debris in the corners of the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$75						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$400**	**$0**	**$0**	**$0**	**$0**	**$0**	**$400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1650**	**Classroom-Modular**	Electrical							
		Light Fixtures	71 EA							
109		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$4,050		
TOTAL: Improvement			*AV. SEVER. SCORE =* **20**	**$0**	**$0**	**$0**	**$0**	**$4,050**	**$0**	**$4,050**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**1650**	**Classroom-Modular**	Roof							
		Single-Ply Roof Membrane	4,775 SF							
110		The single-ply membrane on this building contains minor amounts of leaf and other debris, and some dirty areas on the membrane. No apparent deficiencies were identified. However, increasing accumulations of debris and dirt can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*					$2,400			
46	**1650**	**Classroom-Modular**	Paint/Finish							
		Metal Parapet Cap Joints	80 LF							
100		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*			$575					
40	**1650**	**Classroom-Modular**	Paint/Finish							
		Metal Base Edging	121 SF							
107		The metal strip at the base of the cement/stucco walls on the building exhibits surface rust in several locations around the building. The rusting areas should be wire brushed and cleaned and a primer and 2 coats of industrial enamel applied to the entire surface. *3 sides of the building*			$500					

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**1650**	**Classroom-Modular**	Exterior Closure							
		Concrete Fascia	1 LS							
105		The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years. *Upper perimeter of building*			$750					
40	**1650**	**Classroom-Modular**	Paint/Finish							
		Mounting Bracket Bolt Head Sealant	1 LS							
108		The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity. *Roof HVAC enclosures*			$350					
40	**1650**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure Metal Cap	228 SF							
104		The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel. *HVAC enclosures on roof*				$600				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**1650**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure	1,600 SF							
103		The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required. *Roof*				$4,600				
20	**1650**	**Classroom-Modular**	Site							
		Tree	1 LS							
106		Two trees that are overhanging the roof and allowing excessive debris to build up on the roof needs to be cut back from over the roof. *Two sides of roof*			$500					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **40**	**$0**	**$2,675**	**$5,200**	**$2,400**	**$0**	**$0**	**$10,275**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **40**	**$400**	**$2,675**	**$5,200**	**$2,400**	**$4,050**	**$0**	**$14,725**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1660 Classroom-Modular 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$9,925** Cost Per Square Foot is **$3.82**

Facility Condition Rating = 99 (Excellent) ***Average Severity Score = 42***

Repair Cost as a Percent of Facility Replacement Cost is 1 % 9 Deficiencies Were Identified

PRIMARY USE: Administration *FACILITY AGE:* *24* Yrs.

FACILITY SF: 2,601 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $793,305

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 28 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1660 Classroom-Modular 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$575	
Annual PM		**2**	**50**	**$575**	**$0.22**
Improvement	Electrical	1	20	$2,450	
Improvement		**1**	**20**	**$2,450**	**$0.94**
Non-Annual Recurring Maintenance	Exterior Closure	1	40	$750	
Non-Annual Recurring Maintenance	Paint/Finish	4	42	$4,400	
Non-Annual Recurring Maintenance	Roof	1	50	$1,750	
Non-Annual Recurring Maintenance		**6**	**43**	**$6,900**	**$2.65**

CONDITION SUMMARY:

This building was constructed for the college in 1991. It is a single-story modular structure constructed of wood/metal framing with cement/stucco exterior walls and decorative roof parapets. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building is in good condition. Interior maintenance likewise appears very adequate. The 9 deficiencies identified were associated with roof, electrical and exterior closure/finish systems.

The bottom portion of the building fascia appears to be concrete, with joints every four feet. The mortar/sealant in the joints exhibits random deterioration and should be replaced. It is recommended that repairs be made every two to three years as issues arise.

Roof maintenance on this building appears to be very poor. The roof is covered with a large quantity of leaves and other debris, and the membrane surface is very dirty, making it difficult to determine overall condition. Leaves and debris should be cleaned off the roof surface at least once per year. Once the roof debris has been removed the first time, the membrane should be power washed using a cleaning solution formulated for single-ply roof membranes. The membrane should be cleaned about every four years to maintain and prolong the life of the membrane. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. An assessment of the membrane where possible indicated no apparent deficiencies.

The joint caulk on the metal roof parapet caps is deteriorating, and will result in moisture leaking into the tops of the parapets. The deteriorated caulk should be replaced.

The paint on the wood HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood is in good condition, and should be re-finished to preserve it. All surfaces should be scraped/sanded prior to re-finishing. Some re-nailing of boards where nails have partially backed out is also required. The paint on the sheet metal caps on the enclosures is peeling across much of the surface. The cap is in good condition and should be wire brushed and re-finished.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1660 Classroom-Modular 900 Otay Lakes Rd.

The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance is necessary every two to three years to replace deteriorating sealant.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 Electrical **Improvement** Light Fixtures

107 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building

QUANTITY: 43 EA ***REPAIR COST:*** **$2,450** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$2,450** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.94**

40 Exterior Closure **Non-Annual Recurring Maintenance** Concrete Fascia

105 The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years.

Upper perimeter of building

QUANTITY: 1 LS ***REPAIR COST:*** **$750** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 44 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Exterior Closure** **$750** **AV. SEVERITY SCORE =** **40** **COST PER BLDG GSF=** **$0.29**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

100 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 20 LF ***REPAIR COST:*** **$150** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Mounting Bracket Bolt Head Sealant

106 The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity.

Roof HVAC enclosures

QUANTITY: 1 LS ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure Metal Cap

104 The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel.

HVAC enclosures on roof

Long Term Alternative Replace caps with factory finished metal caps. Estimated cost is $3,750.

QUANTITY: 160 SF ***REPAIR COST:*** **$600** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure

103 The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required.

Roof

QUANTITY: 1,120 SF ***REPAIR COST:*** **$3,300** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$4,400** **AV. SEVERITY SCORE =** **42** **COST PER BLDG GSF=** **$1.69**

60 **Roof** **Annual PM** Roof Drains

102 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 3 EA ***REPAIR COST:*** **$300** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

108 The single-ply membrane on this building contains significant amounts of leaves and other debris, and the surface is very dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. No apparent deficiencies were identified on clean areas of the membrane. Thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 2,876 SF ***REPAIR COST:*** **$1,750** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

101 There are large amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 2,876 SF ***REPAIR COST:*** **$275** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$2,325**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.89**
FACILITY TOTALS	**COST TOTAL =**	**$9,925**	**AV. SEVERITY SCORE =**	**42**	**COST PER BLDG GSF=**	**$3.82**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**1660**	**Classroom-Modular**	Roof							
		Roof Drains	3 EA							
102		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$300						
40	**1660**	**Classroom-Modular**	Roof							
		Roof Membrane	2,876 SF							
101		There are large amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$275						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$575**	**$0**	**$0**	**$0**	**$0**	**$0**	**$575**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1660**	**Classroom-Modular**	Electrical							
		Light Fixtures	43 EA							
107		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$2,450		
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$0**	**$2,450**	**$0**	**$2,450**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**1660**	**Classroom-Modular**	Roof							
		Single-Ply Roof Membrane	2,876 SF							
108		The single-ply membrane on this building contains significant amounts of leaves and other debris, and the surface is very dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. No apparent deficiencies were identified on clean areas of the membrane. Thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$1,750					
46	**1660**	**Classroom-Modular**	Paint/Finish							
		Metal Parapet Cap Joints	20 LF							
100		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*			$150					
40	**1660**	**Classroom-Modular**	Exterior Closure							
		Concrete Fascia	1 LS							
105		The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years. *Upper perimeter of building*			$750					

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**1660**	**Classroom-Modular**	Paint/Finish							
		Mounting Bracket Bolt Head Sealant	1 LS							
106		The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity. *Roof HVAC enclosures*			$350					
40	**1660**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure Metal Cap	160 SF							
104		The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel. *HVAC enclosures on roof*				$600				
40	**1660**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure	1,120 SF							
103		The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required. *Roof*				$3,300				
TOTAL: Non-Annual Recurring Maintenance			***AV. SEVER. SCORE =*** **43**	**$0**	**$3,000**	**$3,900**	**$0**	**$0**	**$0**	**$6,900**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **42**	**$575**	**$3,000**	**$3,900**	**$0**	**$2,450**	**$0**	**$9,925**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

1670 Classroom-Modular — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$7,235** — Cost Per Square Foot is **$4.19**

Facility Condition Rating = 99 (Excellent) — ***Average Severity Score = 42***

Repair Cost as a Percent of Facility Replacement Cost is 1 % — 9 Deficiencies Were Identified

PRIMARY USE: Human Resources — *FACILITY AGE:* *24* Yrs.

FACILITY SF: 1,728 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $527,040

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 28 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1670 Classroom-Modular 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$335	
Annual PM		**2**	**50**	**$335**	**$0.19**
Improvement	Electrical	1	20	$1,900	
Improvement		**1**	**20**	**$1,900**	**$1.10**
Non-Annual Recurring Maintenance	Exterior Closure	1	40	$750	
Non-Annual Recurring Maintenance	Paint/Finish	4	42	$2,800	
Non-Annual Recurring Maintenance	Roof	1	50	$1,450	
Non-Annual Recurring Maintenance		**6**	**43**	**$5,000**	**$2.89**

CONDITION SUMMARY:

This building was constructed for the college in 1991. It is a single-story modular structure constructed of wood/metal framing with cement/stucco exterior walls and decorative roof parapets. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building is in good condition. Interior maintenance likewise appears very adequate. The 9 deficiencies identified were associated with roof, electrical and exterior closure/finish systems.

The bottom portion of the building fascia appears to be concrete, with joints every four feet. The mortar/sealant in the joints exhibits random deterioration and should be replaced. It is recommended that repairs be made every two to three years as issues arise.

Roof maintenance on this building appears to be somewhat poor. The roof is covered with a large quantity of leaves and other debris, and the membrane surface is very dirty, making it difficult to determine overall condition. Leaves and debris should be cleaned off the roof surface at least once per year. Once the roof debris has been removed the first time, the membrane should be power washed using a cleaning solution formulated for single-ply roof membranes. The membrane should be cleaned about every four years to maintain and prolong the life of the membrane. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. An assessment of the roof membrane where possible revealed no deficiencies.

The joint caulk on the metal roof parapet caps is deteriorating, and will result in moisture leaking into the tops of the parapets. The deteriorated caulk should be replaced.

The paint on the wood HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood is in good condition, and should be re-finished to preserve it. All surfaces should be scraped/sanded prior to re-finishing. Some re-nailing of boards where nails have partially backed out is also required. The paint on the sheet metal caps on the enclosures is peeling across much of the surface. The cap is in good condition and should be wire brushed and re-finished.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1670 Classroom-Modular 900 Otay Lakes Rd.

The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance is necessary every two to three years to replace deteriorating sealant.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures

107 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building

QUANTITY: 33 EA ***REPAIR COST:*** **$1,900** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$1,900** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$1.10**

40 **Exterior Closure** **Non-Annual Recurring Maintenance** Concrete Fascia

105 The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years.

Upper perimeter of building

QUANTITY: 1 LS ***REPAIR COST:*** **$750** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 44 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Exterior Closure** **$750** **AV. SEVERITY SCORE =** **40** **COST PER BLDG GSF=** **$0.43**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

100 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 54 LF ***REPAIR COST:*** **$400** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Mounting Bracket Bolt Head Sealant

106 The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity.

Roof HVAC enclosures

QUANTITY: 1 LS ***REPAIR COST:*** **$350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure

103 The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required.

Roof

QUANTITY: 602 SF ***REPAIR COST:*** **$1,750** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** HVAC Equipment Enclosure Metal Cap

104 The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel.

HVAC enclosures on roof

Long Term Alternative Replace caps with factory finished metal caps. Estimated cost is $2,100.

QUANTITY: 86 SF ***REPAIR COST:*** **$300** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,800** **AV. SEVERITY SCORE =** **42** **COST PER BLDG GSF=** **$1.62**

60 **Roof** **Annual PM** Roof Drains

102 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 2 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

108 The single-ply membrane on this building contains significant amounts of leaf and other debris, and the surface is very dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. No apparent deficiencies were identified from an analysis of areas that were not too dirty and full of debris. However, a thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 2,000 SF ***REPAIR COST:*** **$1,450** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

101 There are large amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 2,000 SF ***REPAIR COST:*** **$135** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$1,785**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$1.03**
FACILITY TOTALS	**COST TOTAL =**	**$7,235**	**AV. SEVERITY SCORE =**	**42**	**COST PER BLDG GSF=**	**$4.19**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**1670**	**Classroom-Modular**	Roof							
		Roof Drains	2 EA							
102		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$200						
40	**1670**	**Classroom-Modular**	Roof							
		Roof Membrane	2,000 SF							
101		There are large amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$135						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$335**	**$0**	**$0**	**$0**	**$0**	**$0**	**$335**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1670**	**Classroom-Modular**	Electrical							
		Light Fixtures	33 EA							
107		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$1,900		
TOTAL: Improvement			*AV. SEVER. SCORE =* **20**	**$0**	**$0**	**$0**	**$0**	**$1,900**	**$0**	**$1,900**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**1670**	**Classroom-Modular**	Roof							
		Single-Ply Roof Membrane	2,000 SF							
108		The single-ply membrane on this building contains significant amounts of leaf and other debris, and the surface is very dirty. This makes it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. No apparent deficiencies were identified from an analysis of areas that were not too dirty and full of debris. However, a thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$1,450					
46	**1670**	**Classroom-Modular**	Paint/Finish							
		Metal Parapet Cap Joints	54 LF							
100		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*			$400					
40	**1670**	**Classroom-Modular**	Exterior Closure							
		Concrete Fascia	1 LS							
105		The bottom portion of the concrete building fascia has joints approximately every 4'. The mortar/sealant in these joints exhibits some random deterioration that should be addressed. Any loose/deteriorated mortar in the joints should be addressed on a recurring basis to prevent further deterioration and the opportunity for moisture penetration. An allowance is recommended for the building to address the issue every two to three years. *Upper perimeter of building*			$750					

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
40	**1670**	**Classroom-Modular**	Paint/Finish							
		Mounting Bracket Bolt Head Sealant	1 LS							
106		The sealant on the bolt heads on the HVAC enclosure roof mounting brackets exhibits varying degrees of deterioration, potentially allowing water to leak under the roof membrane. Sealant maintenance should be performed every two to three years to replace any sealant that has deteriorated. An allowance is being recommended for this maintenance activity. *Roof HVAC enclosures*			$350					
40	**1670**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure	602 SF							
103		The paint on the wood on the HVAC equipment enclosures on the roof is chalking and peeling across much of the surface. The wood itself appears to be in good condition, and should be re-finished to preserve it. Scrape/sand all surfaces on both sides of wood to remove deteriorating paint, then apply a primer and 2 coats of exterior latex. Some re-nailing of boards where nails are beginning to back-out will also be required. *Roof*				$1,750				
40	**1670**	**Classroom-Modular**	Paint/Finish							
		HVAC Equipment Enclosure Metal Cap	86 SF							
104		The paint on the sheet-metal cap on the HVAC equipment enclosures on the roof is peeling across much of the surface. The cap itself appears to be in good condition, and should be re-finished. Wire brush all exposed surfaces to remove deteriorating paint, then apply a primer and 2 coats of industrial enamel. *HVAC enclosures on roof*				$300				
TOTAL: Non-Annual Recurring Maintenance			***AV. SEVER. SCORE =*** **43**	**$0**	**$2,950**	**$2,050**	**$0**	**$0**	**$0**	**$5,000**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **42**	**$335**	**$2,950**	**$2,050**	**$0**	**$1,900**	**$0**	**$7,235**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

1800 Horticulture — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$7,000** — Cost Per Square Foot is **$3.13**

Facility Condition Rating = 99 (Excellent) — ***Average Severity Score = 36***

Repair Cost as a Percent of Facility Replacement Cost is 1 % — 7 Deficiencies Were Identified

PRIMARY USE: Classroom — *FACILITY AGE:* *29* Yrs.

FACILITY SF: 2,240 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $683,200

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is High

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Marginal

Facility Construction Quality is Average

Relative Facility Priority Score = 24 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1800 Horticulture 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$475	
Annual PM		**2**	**50**	**$475**	**$0.21**
Improvement	Electrical	1	20	$2,200	
Improvement		**1**	**20**	**$2,200**	**$0.98**
Non-Annual Recurring Maintenance	Paint/Finish	1	40	$1,550	
Non-Annual Recurring Maintenance	Roof	1	50	$1,600	
Non-Annual Recurring Maintenance	Site	1	20	$500	
Non-Annual Recurring Maintenance		**3**	**37**	**$3,650**	**$1.63**
Replacement/Renewal	Exterior Closure	1	20	$675	
Replacement/Renewal		**1**	**20**	**$675**	**$0.30**

CONDITION SUMMARY:

This building was constructed for the college in 1986. It is a single-story structure constructed of wood framing with cement/stucco exterior walls. The roof is a single-ply membrane, likely hypalon, on a wood roof deck.

The interior of the building is in average condition for its use, and has a very dated feel to it. However Interior maintenance appears very adequate and no interior deficiencies were identified. The 7 deficiencies identified were associated with roof, electrical and exterior closure/finish systems.

Roof maintenance on this building appears to be average. The roof is covered with a moderate quantity of leaves and other debris, and the membrane surface is somewhat dirty, making it difficult to determine overall condition. Leaves and debris should be cleaned off the roof surface at least once per year. Once the roof debris has been removed the first time, the membrane should be power washed using a cleaning solution formulated for single-ply roof membranes. The membrane should be cleaned about every four years to maintain and prolong the life of the membrane. Similarly the roof drains and sumps are badly clogged and should be cleaned at least once per year. As assessment of the roof membrane, where possible, revealed no deficiencies.

The plywood fascia boards on the building are extremely weathered, with extensive peeling paint. The wood should be scraped/sanded, primed and re-finished with two coats of latex. In addition, several of the wood trim boards on the bottom of the fascia are badly cracked and checked. These boards should be replaced and painted.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1800 Horticulture 900 Otay Lakes Rd.

Two trees that are overhanging the roof and allowing excessive leaf debris to build up on the roof need to be cut back.

20 **Electrical** **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building

QUANTITY: 38 EA ***REPAIR COST:*** **$2,200** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$2,200** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.98**

20 **Exterior Closure** **Replacement/Renewal** Wood Exterior Trim Boards

104 Several of the trim boards (7) on the bottom of the wood fascia are badly cracked and checked, and generally deteriorated. Replace the boards and prime and paint the new wood.

1x4

Perimeter of building

QUANTITY: 48 LF ***REPAIR COST:*** **$675** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 26 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

SYSTEM SUB-TOTAL **Exterior Closure** **$675** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.30**

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Plywood Fascia

103 Plywood fascia on the building is extremely weathered, with peeling paint on many areas. Scrape/sand wood and apply 1 coat of primer and 2 coats exterior latex to surface.

Perimeter of building

QUANTITY: 475 SF ***REPAIR COST:*** **$1,550** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$1,550** **AV. SEVERITY SCORE =** **40** **COST PER BLDG GSF=** **$0.69**

60 **Roof** **Annual PM** Roof Drains

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 2 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

106 The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface is very dirty in some areas. This makes it somewhat difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended. No apparent deficiencies were identified from an assessment of membrane areas that are relatively clean.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 2,800 SF ***REPAIR COST:*** **$1,600** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 2 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

100 There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 2,800 SF ***REPAIR COST:*** **$275** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL **Roof** **$2,075** **AV. SEVERITY SCORE =** **50** **COST PER BLDG GSF=** **$0.93**

20 **Site** **Non-Annual Recurring Maintenance** Tree

102 Two trees that are overhanging the roof and allowing excessive debris to build up on the roof needs to be cut back from over the roof.

North side of roof

QUANTITY: 1 LS ***REPAIR COST:*** **$500** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Site** **$500** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.22**

FACILITY TOTALS **COST TOTAL =** **$7,000** **AV. SEVERITY SCORE =** **36** **COST PER BLDG GSF=** **$3.13**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**1800**	**Horticulture**	Roof							
		Roof Drains	2 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$200						
40	**1800**	**Horticulture**	Roof							
		Roof Membrane	2,800 SF							
100		There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$275						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$475**	**$0**	**$0**	**$0**	**$0**	**$0**	**$475**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1800**	**Horticulture**	Electrical							
		Light Fixtures	38 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$2,200		
TOTAL: Improvement			*AV. SEVER. SCORE =* **20**	**$0**	**$0**	**$0**	**$0**	**$2,200**	**$0**	**$2,200**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**1800**	**Horticulture**	Roof							
		Single-Ply Roof Membrane	2,800 SF							
106		The single-ply membrane on this building contains moderate amounts of leaf and other debris, and the surface is very dirty in some areas. This makes it somewhat difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended. No apparent deficiencies were identified from an assessment of membrane areas that are relatively clean. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*			$1,600					
40	**1800**	**Horticulture**	Paint/Finish							
		Plywood Fascia	475 SF							
103		Plywood fascia on the building is extremely weathered, with peeling paint on many areas. Scrape/sand wood and apply 1 coat of primer and 2 coats exterior latex to surface. *Perimeter of building*			$1,550					
20	**1800**	**Horticulture**	Site							
		Tree	1 LS							
102		Two trees that are overhanging the roof and allowing excessive debris to build up on the roof needs to be cut back from over the roof. *North side of roof*			$500					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **37**	**$0**	**$3,650**	**$0**	**$0**	**$0**	**$0**	**$3,650**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
20	**1800**	**Horticulture**	Exterior Closure							
		Wood Exterior Trim Boards	48 LF							
104		Several of the trim boards (7) on the bottom of the wood fascia are badly cracked and checked, and generally deteriorated. Replace the boards and prime and paint the new wood. *Perimeter of building*			$675					
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **20**	**$0**	**$675**	**$0**	**$0**	**$0**	**$0**	**$675**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **36**	**$475**	**$4,325**	**$0**	**$0**	**$2,200**	**$0**	**$7,000**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1810 Greenhouse 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$1,925** Cost Per Square Foot is **$0.86**

Facility Condition Rating = 100 (Excellent) ***Average Severity Score = 27***

Repair Cost as a Percent of Facility Replacement Cost is 0 % 3 Deficiencies Were Identified

PRIMARY USE: Horticulture *FACILITY AGE:* *39* Yrs.

FACILITY SF: 2,240 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $392,000

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

Importance of Facility to Operations is Moderate

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Marginal

Facility Construction Quality is Low

Relative Facility Priority Score = 19 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

1810 Greenhouse 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	40	$200	
Annual PM		**1**	**40**	**$200**	**$0.09**
Improvement	Electrical	1	20	$1,200	
Improvement		**1**	**20**	**$1,200**	**$0.54**
Non-Annual Recurring Maintenance	Paint/Finish	1	20	$525	
Non-Annual Recurring Maintenance		**1**	**20**	**$525**	**$0.23**

CONDITION SUMMARY:

This facility was constructed for the college in 1976. It is a single-story structure constructed of metal framing with corrugated fiberglass roof and wall panels. The structure is in average condition for its age and use, and is reasonably well maintained. The 3 deficiencies identified are associated with roof, electrical, and finish systems.

There is a significant amount of debris on the fiberglass roof panels and in the gutters. The roof and gutters should be cleaned annually.

Two of the exterior HM doors have rust on exterior surfaces and weathered paint on interior surfaces. These doors and frames should be refinished.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures

102 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building

QUANTITY: 21 EA ***REPAIR COST:*** **$1,200** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$1,200** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.54**

20 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Metal Door

101 Two of the exterior HM doors have areas of rust on the exterior surface and weathered paint on the interior surface. Power brush/sand both sides of doors and frames and prime and paint with 2 coats of alkyd enamel.

Rear and west sides of building

QUANTITY: 2 EA ***REPAIR COST:*** **$525** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House

Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$525** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.23**

40 **Roof** **Annual PM** Roof and Gutters

100 There is a significant amount of debris on the fiberglass roof panels and in the gutters. Debris should be cleaned off the roof and out of the gutters at least once per year.

Roof surface and gutters

QUANTITY: 1 LS ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$200**	**AV. SEVERITY SCORE =**	**40**	**COST PER BLDG GSF=**	**$0.09**
FACILITY TOTALS	**COST TOTAL =**	**$1,925**	**AV. SEVERITY SCORE =**	**27**	**COST PER BLDG GSF=**	**$0.86**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
40	**1810**	**Greenhouse**	Roof							
		Roof and Gutters	1 LS							
100		There is a significant amount of debris on the fiberglass roof panels and in the gutters. Debris should be cleaned off the roof and out of the gutters at least once per year. *Roof surface and gutters*		$200						
TOTAL: Annual PM			***AV. SEVER. SCORE =*** **40**	**$200**	**$0**	**$0**	**$0**	**$0**	**$0**	**$200**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**1810**	**Greenhouse**	Electrical							
		Light Fixtures	21 EA							
102		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$1,200		
TOTAL: Improvement			*AV. SEVER. SCORE =* **20**	**$0**	**$0**	**$0**	**$0**	**$1,200**	**$0**	**$1,200**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
20	**1810**	**Greenhouse**	Paint/Finish							
		Exterior Metal Door	2 EA							
101		Two of the exterior HM doors have areas of rust on the exterior surface and weathered paint on the interior surface. Power brush/sand both sides of doors and frames and prime and paint with 2 coats of alkyd enamel. *Rear and west sides of building*			$525					
TOTAL: Non-Annual Recurring Maintenance			***AV. SEVER. SCORE =*** **20**	**$0**	**$525**	**$0**	**$0**	**$0**	**$0**	**$525**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **27**	**$200**	**$525**	**$0**	**$0**	**$1,200**	**$0**	**$1,925**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

2000 Child Development Center 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$32,125** Cost Per Square Foot is **$1.63**

Facility Condition Rating = 99 (Excellent) ***Average Severity Score = 47***

Repair Cost as a Percent of Facility Replacement Cost is 1 % 7 Deficiencies Were Identified

PRIMARY USE: Child Care/Classroom *FACILITY AGE:* *11* Yrs.

FACILITY SF: 19,672 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $5,999,960

1 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

2000 Child Development Center 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	40	$800	
Annual PM		**1**	**40**	**$800**	**$0.04**
Improvement	Electrical	1	20	$15,550	
Improvement		**1**	**20**	**$15,550**	**$0.79**
Non-Annual Recurring Maintenance	Paint/Finish	2	48	$4,875	
Non-Annual Recurring Maintenance	Roof	1	50	$5,600	
Non-Annual Recurring Maintenance		**3**	**49**	**$10,475**	**$0.53**
Repair/Maintenance	Exterior Closure	1	40	$1,500	
Repair/Maintenance	Roof	1	80	$3,800	
Repair/Maintenance		**2**	**60**	**$5,300**	**$0.27**

CONDITION SUMMARY:

This facility was constructed in 2004 and appears overall to be in good condition and reasonably well maintained. The six deficiencies identified in the facility are associated with electrical, roof and exterior finish systems. No interior deficiencies were observed.

There is a moderate amount of leaves and some debris on the membrane surface. Leaves and debris should be cleaned off the roof surface at least once per year. It is also strongly recommended that the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. In addition, the joint caulk on the metal roof parapet caps is deteriorating, and will result in moisture leaking into the tops of the parapets. The deteriorated caulk should be replaced. An assessment of the roof membrane revealed no apparent deficiencies.

The roof downspouts for the building are located in the central courtyard and are welded to steel columns that support the covered walkway around the courtyard onto which the building roofs drain. These 4" square downspouts terminate approximately 4" above the concrete of the walkway. Water coming off the downspouts flows against the bottom of the steel walkway support beams, and has caused several of the beams to rust at the base. The rust appears to vary in intensity, though it does not appear that any of the columns has been compromised as yet. However, if this deficiency is not corrected promptly column integrity could be compromised.

The base of all the columns should be power wire brushed to remove all rust, a rust inhibiting primer applied, followed by two coats epoxy paint. In addition, it is recommended that a deflector be welded at about a 45 degree angle to the bottom of each downspout where it terminates to prevent water from hitting the column. The deflectors should insure

that water is diverted away from the base of the columns and off the walkway.

The HVAC equipment enclosures on the roof a faced with EIFS, which is damaged in several area on two of the enclosures. All damaged EIFS should be repaired.

The exterior wood doors located around the central courtyard appear to have either had no protective finish originally applied, or it has totally weathered off. Weathering and water staining is evident on the exterior faces. These faces should be thoroughly sanded to remove as much staining as possible and two coats of a clear sealer should be applied. If staining cannot be adequately sanded out, a darker stain may first have to be applied.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 Electrical Improvement Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2, sconces

Light fixtures throughout building

QUANTITY: 272 EA ***REPAIR COST:*** **$15,550** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical $15,550 AV. SEVERITY SCORE = 20 COST PER BLDG GSF= $0.79**

40 Exterior Closure Repair/Maintenance HVAC Equipment Enclosure

102 The HVAC equipment enclosures on the roof are faced with EIFS, which is damaged in several areas, primarily on two of the enclosures. Repair all damaged EIFS.

Roof

QUANTITY: 25 SF ***REPAIR COST:*** **$1,500** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Exterior Closure $1,500 AV. SEVERITY SCORE = 40 COST PER BLDG GSF= $0.08**

50 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Glazed Wood Doors

103 The exterior wood doors located around the central courtyard are natural wood with no apparent protective finish. Significant weathering and water staining is evident on the face of the doors. The application of a clear sealer/urethane is recommended to protect the surfaces from further degradation. The outside door faces should be sanded and 2 coats of a clear sealer/urethane applied.

13 ea double doors x 22 SF of wood/door; 12 ea single w 11 SF of wood/door

Around interior courtyard

Short Term Alternative If the water staining cannot be adequately removed by sanding, a darker stain may first have to be applied. Estimated additional cost is $1,300.

QUANTITY: 38 EA ***REPAIR COST:*** **$4,050** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 46 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

100 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 116 LF ***REPAIR COST:*** **$825** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$4,875** **AV. SEVERITY SCORE =** **48** **COST PER BLDG GSF=** **$0.25**

80 **Roof** **Repair/Maintenance** Steel Downspouts

104 The roof downspouts for the building are located in the central courtyard and are welded to steel columns that support the covered walkway around the courtyard onto which the building roofs drain. These 4" square downspouts terminate approximately 4" above the concrete of the walkway. Water coming off the downspouts flows against the bottom of the steel walkway support beams, and has caused several of the beams to rust at the base. The rust appears to vary in intensity, though it does not appear that any of the columns has been compromised as yet. However, if this deficiency is not corrected promptly column integrity could be compromised.

The base of all the columns should be power wire brushed to remove all rust, a rust inhibiting primer applied, followed by two coats epoxy paint. In addition, it is recommended that a deflector be welded at about a 45 degree angle to the bottom of each downspout where it terminates to prevent water from hitting the column. The deflectors should insure that water is diverted away from the base of the columns and off the walkway.

On the covered walkways around the interior courtyard

QUANTITY: 16 EA ***REPAIR COST:*** **$3,800** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract
Benefit Score = 0 ***Planning Priority:*** **A-Health/Safety Issue**

Repair Additional Analysis or Study is Required

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

106 The single-ply membrane on this building contains leaf and other debris, and the surface is dirty in several areas, which can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An inspection of the clean areas of the membrane indicates that it is in good condition. However, a thorough cleaning of the membrane surface is recommended.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 18,460 SF ***REPAIR COST:*** **$5,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 4 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Annual PM** Roof Membrane

101 There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 18,460 SF ***REPAIR COST:*** **$800** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$10,200**	**AV. SEVERITY SCORE =**	**57**	**COST PER BLDG GSF=**	**$0.52**
FACILITY TOTALS	**COST TOTAL =**	**$32,125**	**AV. SEVERITY SCORE =**	**47**	**COST PER BLDG GSF=**	**$1.63**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
40	**2000**	**Child Development Center**	Roof							
		Roof Membrane	18,460 SF							
101		There are moderate amounts of leaves and tree debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$800						
TOTAL: Annual PM			***AV. SEVER. SCORE =*** **40**	**$800**	**$0**	**$0**	**$0**	**$0**	**$0**	**$800**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**2000**	**Child Development Center**	Electrical							
		Light Fixtures	272 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$15,550		
TOTAL: Improvement			*AV. SEVER. SCORE =* **20**	**$0**	**$0**	**$0**	**$0**	**$15,550**	**$0**	**$15,550**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**2000**	**Child Development Center**	Paint/Finish							
		Exterior Glazed Wood Doors	38 EA							
103		The exterior wood doors located around the central courtyard are natural wood with no apparent protective finish. Significant weathering and water staining is evident on the face of the doors. The application of a clear sealer/urethane is recommended to protect the surfaces from further degradation. The outside door faces should be sanded and 2 coats of a clear sealer/urethane applied. *Around interior courtyard*			$4,050					
50	**2000**	**Child Development Center**	Roof							
		Single-Ply Roof Membrane	18,460 SF							
106		The single-ply membrane on this building contains leaf and other debris, and the surface is dirty in several areas, which can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. An inspection of the clean areas of the membrane indicates that it is in good condition. However, a thorough cleaning of the membrane surface is recommended. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*				$5,600				
46	**2000**	**Child Development Center**	Paint/Finish							
		Metal Parapet Cap Joints	116 LF							
100		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*					$825			

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**49**	**$0**	**$4,050**	**$5,600**	**$825**	**$0**	**$0**	**$10,475**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
40	**2000**	**Child Development Center**	Exterior Closure							
		HVAC Equipment Enclosure	25 SF							
102		The HVAC equipment enclosures on the roof are faced with EIFS, which is damaged in several areas, primarily on two of the enclosures. Repair all damaged EIFS. *Roof*			$1,500					
TOTAL: Repair/Maintenance			***AV. SEVER. SCORE =*** **40**	**$0**	**$1,500**	**$0**	**$0**	**$0**	**$0**	**$1,500**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **41**	**$800**	**$5,550**	**$5,600**	**$825**	**$15,550**	**$0**	**$28,325**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

4000 Otay Mesa Higher Ed Center 8100 Gigantic St., SD

REPAIR COST ESTIMATE IS **$84,725** Cost Per Square Foot is **$1.12**

Facility Condition Rating = 100 (Excellent) ***Average Severity Score = 44***

Repair Cost as a Percent of Facility Replacement Cost is 0 % 18 Deficiencies Were Identified

PRIMARY USE: Classroom/Lab *FACILITY AGE:* *8* Yrs.

FACILITY SF: 75,415 *NO. OF STORIES:* 2.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $32,051,376

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

4000 Otay Mesa Higher Ed Center 8100 Gigantic St., SD

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	5	60	$2,950	
Annual PM		**5**	**60**	**$2,950**	**$0.04**
Improvement	Electrical	5	20	$62,700	
Improvement		**5**	**20**	**$62,700**	**$0.83**
Non-Annual Recurring Maintenance	Paint/Finish	3	46	$2,275	
Non-Annual Recurring Maintenance	Roof	5	50	$16,800	
Non-Annual Recurring Maintenance		**8**	**49**	**$19,075**	**$0.25**

CONDITION SUMMARY:

This facility, one of three off-campus higher education centers, is comprised of six buildings that were built in 2006 and 2007. The buildings appear to be constructed of steel framing on concrete slabs, with stucco/plaster exterior wall panels on metal framing, and single-ply PVC roof membranes on wood decks and some metal roof panels.

The building interiors were found to be in very good condition, with no deficiencies identified. Structurally the buildings appear to be soundly constructed, with no apparent problems. The exteriors of the buildings were likewise found to be in good condition, with no deficiencies identified. The 18 deficiencies identified in the five buildings are associated with electrical. Roof and exterior finish systems on the roofs.

The sealant in the metal parapet cap joints on bldgs. 4100, 4300 and 4400 is deteriorating, potentially allowing moisture to leak onto the parapet tops. All joint sealant should be replaced. It is also strongly recommended that the single-ply roof membranes be power washed in about 3 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the roof membrane revealed no apparent deficiencies.

The roof drains/sumps on all five buildings are clogged with debris, inhibiting proper drainage. The drains should be thoroughly cleaned out once a year.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 **Electrical** **Improvement** Light Fixtures - BLDG 4100

103 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2, sconces

Light fixtures throughout building 4100

QUANTITY: 292 EA ***REPAIR COST:*** **$16,700** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

20 **Electrical** **Improvement** Light Fixtures - BLDG 4200

103 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building 4200

QUANTITY: 90 EA ***REPAIR COST:*** **$5,150** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

20 **Electrical** **Improvement** Light Fixtures - BLDG 4300

103 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building 4300

QUANTITY: 483 EA ***REPAIR COST:*** **$12,100** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

20 **Electrical** **Improvement** Light Fixtures - BLDG 4500

103 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans

Light fixtures throughout building 4500

QUANTITY: 36 EA ***REPAIR COST:*** **$2,050** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

20 **Electrical** **Improvement** Light Fixtures - BLDG 4400

103 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, 2 x 2

Light fixtures throughout building 4400

QUANTITY: 467 EA ***REPAIR COST:*** **$26,700** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$62,700** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.83**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints - BLDG 4100

102 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof of Bldg. 4100

QUANTITY: 100 LF ***REPAIR COST:*** **$700** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints - BLDG 4300

102 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof of east and west wings of Bldg 4300

QUANTITY: 115 LF ***REPAIR COST:*** **$825** **Deferrable** **Est. Remaining Life = 4 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints - BLDG 4400

102 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof of east wing and separate center classroom of Bldg 4400

QUANTITY: 105 LF ***REPAIR COST:*** **$750** **Deferrable** **Est. Remaining Life = 4 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$2,275** **AV. SEVERITY SCORE =** **46** **COST PER BLDG GSF=** **$0.03**

60 **Roof** **Annual PM** Roof Drains - BLDG 4500

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter of Bldg 4500

QUANTITY: 2 EA ***REPAIR COST:*** **$200** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

60 **Roof** **Annual PM** Roof Drains - BLDG 4300

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter of Bldg 4300

QUANTITY: 7 EA ***REPAIR COST:*** **$650** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

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60 **Roof** **Annual PM** Roof Drains - BLDG 4400

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter of Bldg 4400

QUANTITY: 11 EA ***REPAIR COST:*** **$975** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

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60 **Roof** **Annual PM** Roof Drains - BLDG 4200

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter of Bldg 4200

QUANTITY: 4 EA ***REPAIR COST:*** **$375** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

60 **Roof** **Annual PM** Roof Drains - BLDG 4100

101 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter of Bldg 4100

QUANTITY: 8 EA ***REPAIR COST:*** **$750** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane - BLDG 4500

100 The single-ply membrane on the building contains no leaves or other debris, and the membrane is relatively clean. However, as debris and dirt accumulate going forward it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof of Bldg 4500

QUANTITY: 3,150 SF ***REPAIR COST:*** **$1,650** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 3 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 Roof **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane - BLDG 4200

100 The single-ply membrane on the building contains no leaves or other debris, and the membrane is relatively clean. However, as debris and dirt accumulate going forward it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof of Bldg 4200

QUANTITY: 4,490 SF ***REPAIR COST:*** **$2,150** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 3 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 Roof **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane - BLDG 4300

100 The single-ply membrane on the building contains no leaves or other debris, and the membrane is relatively clean. However, as debris and dirt accumulate going forward it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof of Bldg 4300

QUANTITY: 7,950 SF ***REPAIR COST:*** **$3,400** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 3 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 Roof **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane - BLDG 4400

100 The single-ply membrane on the building contains no leaves or other debris, and the membrane is relatively clean. However, as debris and dirt accumulate going forward it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof of Bldg 4400

QUANTITY: 14,800 SF ***REPAIR COST:*** **$5,500** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 3 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 Roof **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane - BLDG 4100

100 The single-ply membrane on the building contains no leaves or other debris, and the membrane is relatively clean. However, as debris and dirt accumulate going forward it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof of Bldg 4100

QUANTITY: 9,960 SF ***REPAIR COST:*** **$4,100** **Deferrable** **Est. Remaining Life = 3 Yrs.**
Life Expectancy New = 3 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$19,750**	**AV. SEVERITY SCORE =**	**55**	**COST PER BLDG GSF=**	**$0.26**
FACILITY TOTALS	**COST TOTAL =**	**$84,725**	**AV. SEVERITY SCORE =**	**44**	**COST PER BLDG GSF=**	**$1.12**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**4000**	**Otay Mesa Higher Ed Center**	Roof							
		Roof Drains - BLDG 4500	2 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter of Bldg 4500*		$200						
60	**4000**	**Otay Mesa Higher Ed Center**	Roof							
		Roof Drains - BLDG 4300	7 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter of Bldg 4300*		$650						
60	**4000**	**Otay Mesa Higher Ed Center**	Roof							
		Roof Drains - BLDG 4400	11 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter of Bldg 4400*		$975						
60	**4000**	**Otay Mesa Higher Ed Center**	Roof							
		Roof Drains - BLDG 4200	4 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter of Bldg 4200*		$375						
60	**4000**	**Otay Mesa Higher Ed Center**	Roof							
		Roof Drains - BLDG 4100	8 EA							
101		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter of Bldg 4100*		$750						

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL: Annual PM			*AV. SEVER. SCORE =* **60**	**$2,950**	**$0**	**$0**	**$0**	**$0**	**$0**	**$2,950**

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
20	**4000**	**Otay Mesa Higher Ed Center**	Electrical							
		Light Fixtures - BLDG 4500	36 EA							
103		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building 4500*						$2,050		
20	**4000**	**Otay Mesa Higher Ed Center**	Electrical							
		Light Fixtures - BLDG 4400	467 EA							
103		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building 4400*						$26,700		
20	**4000**	**Otay Mesa Higher Ed Center**	Electrical							
		Light Fixtures - BLDG 4300	483 EA							
103		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building 4300*						$12,100		
20	**4000**	**Otay Mesa Higher Ed Center**	Electrical							
		Light Fixtures - BLDG 4200	90 EA							
103		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building 4200*						$5,150		

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**4000**	**Otay Mesa Higher Ed Center**	Electrical							
		Light Fixtures - BLDG 4100	292 EA							
103		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building 4100*						$16,700		
TOTAL: Improvement			***AV. SEVER. SCORE =*** **20**	**$0**	**$0**	**$0**	**$0**	**$62,700**	**$0**	**$62,700**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**4000**	**Otay Mesa Higher Ed Center**	Roof							
		Single-Ply Roof Membrane - BLDG 4200	4,490 SF							
100		The single-ply membrane on the building contains no leaves or other debris, and the membrane is relatively clean. However, as debris and dirt accumulate going forward it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof of Bldg 4200*					$2,150				
50	**4000**	**Otay Mesa Higher Ed Center**	Roof							
		Single-Ply Roof Membrane - BLDG 4500	3,150 SF							
100		The single-ply membrane on the building contains no leaves or other debris, and the membrane is relatively clean. However, as debris and dirt accumulate going forward it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof of Bldg 4500*					$1,650				

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**4000**	**Otay Mesa Higher Ed Center**	Roof							
		Single-Ply Roof Membrane - BLDG 4300	7,950 SF							
100		The single-ply membrane on the building contains no leaves or other debris, and the membrane is relatively clean. However, as debris and dirt accumulate going forward it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof of Bldg 4300*					$3,400				
50	**4000**	**Otay Mesa Higher Ed Center**	Roof							
		Single-Ply Roof Membrane - BLDG 4400	14,800 SF							
100		The single-ply membrane on the building contains no leaves or other debris, and the membrane is relatively clean. However, as debris and dirt accumulate going forward it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof of Bldg 4400*					$5,500				

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**4000**	**Otay Mesa Higher Ed Center**	Roof							
		Single-Ply Roof Membrane - BLDG 4100	9,960 SF							
100		The single-ply membrane on the building contains no leaves or other debris, and the membrane is relatively clean. However, as debris and dirt accumulate going forward it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 3 years. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof of Bldg 4100*					$4,100			
46	**4000**	**Otay Mesa Higher Ed Center**	Paint/Finish							
		Metal Parapet Cap Joints - BLDG 4400	105 LF							
102		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof of east wing and separate center classroom of Bldg 4400*						$750		
46	**4000**	**Otay Mesa Higher Ed Center**	Paint/Finish							
		Metal Parapet Cap Joints - BLDG 4300	115 LF							
102		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof of east and west wings of Bldg 4300*						$825		

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
46	**4000**	**Otay Mesa Higher Ed Center**	Paint/Finish							
		Metal Parapet Cap Joints - BLDG 4100	100 LF							
102		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof of Bldg. 4100*						$700		
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **49**	**$0**	**$0**	**$0**	**$16,800**	**$2,275**	**$0**	**$19,075**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **44**	**$2,950**	**$0**	**$0**	**$16,800**	**$64,975**	**$0**	**$84,725**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

5000 San Ysidro Higher Ed Center 460 W San Ysidro Blvd.

REPAIR COST ESTIMATE IS **$45,600** Cost Per Square Foot is **$2.39**

Facility Condition Rating = 99 (Excellent) ***Average Severity Score = 47***

Repair Cost as a Percent of Facility Replacement Cost is 1 % 9 Deficiencies Were Identified

PRIMARY USE: Classroom/Lab *FACILITY AGE:* 7 Yrs.

FACILITY SF: 19,040 *NO. OF STORIES:* 2.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $8,092,000

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

5000 San Ysidro Higher Ed Center 460 W San Ysidro Blvd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	2	50	$700	
Annual PM		**2**	**50**	**$700**	**$0.04**
Improvement	Electrical	1	20	$15,600	
Improvement		**1**	**20**	**$15,600**	**$0.82**
Non-Annual Recurring Maintenance	Paint/Finish	2	43	$5,200	
Non-Annual Recurring Maintenance	Roof	1	50	$3,200	
Non-Annual Recurring Maintenance		**3**	**45**	**$8,400**	**$0.44**
Repair/Maintenance	HVAC	1	64	$10,000	
Repair/Maintenance	Plumbing	1	68	$10,500	
Repair/Maintenance	Roof	1	40	$400	
Repair/Maintenance		**3**	**57**	**$20,900**	**$1.10**

CONDITION SUMMARY:

This facility, one of three off-campus higher education centers, was built in 2008. The building appears constructed of steel framing on a concrete slab, with stucco/plaster exterior wall panels on metal studs, and a single-ply membrane, likely PVC, on a metal pan roof deck.

The interior and exterior of the building are in good overall condition. Interior and exterior maintenance are likewise considered good. The nine deficiencies identified in this building are associated with roof, HVAC, plumbing and exterior finish systems.

Roof maintenance, except for drains/sumps, appears to be generally adequate. There are small amounts of debris on the roof membrane, which can create a scouring action and clog roof drains. It is also strongly recommended that the roof membrane be power washed in about 2 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. The roof drains/sumps are clogged with significant amounts of debris, inhibiting drainage. All drains/sumps should be cleaned at least once a year. An assessment of the membrane revealed no apparent deficiencies.

The upper portion of one of the exterior downspouts has a badly rusted section that allows water to run along the outside of the downspout onto concrete below, creating potential concrete deterioration. The rusted section should be cut out and replaced.

The sealant in the metal parapet cap joints on the roof is deteriorating, providing the potential for moisture to penetrate

joints and deteriorated the parapet tops. All sealant should be replaced. In addition, the factory finish on the metal parapet caps is very unsatisfactory as the finish is peeling badly over the entire length of the caps. It appears the sheet metal may not have been properly primed. All peeling paint should be removed and the metal properly primed and re-finished.

Building occupants have complained that the classrooms are too cold during the heating season. The building design provided zone control for each classroom, which should provide adequate heat control. An allowance is provided to properly troubleshoot each classroom's control system and equipment to determine the cause of the problem.

Sewer gas odors have been observed in the first floor rest rooms. Some work has been performed by maintenance personnel, however, the root cause has apparently not been determined. An allowance is provided to properly troubleshoot the soil, drain, waste and vent systems to determine the root cause of the odors.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

20 Electrical **Improvement** Light Fixtures

105 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2

Light fixtures throughout building

QUANTITY: 272 EA ***REPAIR COST:*** **$15,600** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$15,600** **AV. SEVERITY SCORE =** **20** **COST PER BLDG GSF=** **$0.82**

64 HVAC **Repair/Maintenance** HVAC Equipment

106 Occupants complain that the classrooms are too cold during the heating season. The building design provided zone control for each classroom, which should provide adequate heating control. This deficiency provides an allowance to troubleshoot each classroom HVAC control system and equipment to determine the cause of the classrooms being too cold during the heating season.

Roof and Classrooms

QUANTITY: 1 EA ***REPAIR COST:*** **$10,000** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* In-House & Contract

Benefit Score = 49 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Repair

SYSTEM SUB-TOTAL **HVAC** **$10,000** **AV. SEVERITY SCORE =** **64** **COST PER BLDG GSF=** **$0.53**

46 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints

100 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints.

Parapet caps on roof

QUANTITY: 117 LF ***REPAIR COST:*** **$850** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 **Paint/Finish** **Non-Annual Recurring Maintenance** Metal Parapet Cap

103 The factory finish on the metal caps appears to be very unsatisfactory as the paint is peeling badly over the entire length of the caps. It appears that the sheet metal may not have been primed prior to being painted. The existing finish should be thoroughly sanded/power brushed and the metal primed with an appropriate primer, followed by application of 2 coats of an industrial enamel.

Roof parapet

QUANTITY: 639 SF ***REPAIR COST:*** **$4,350** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$5,200** **AV. SEVERITY SCORE = 43** **COST PER BLDG GSF= $0.27**

68 **Plumbing** **Repair/Maintenance** Soil, Drain, Waste, and Vent System

107 Sewer gas smells have been observed in the first floor restrooms. Some work has been performed, however, the root cause of the release of sewer gases into the first floor restrooms has not been determined. This deficiency provides an allowance to troubleshoot the soil, drain, waste, and vent system to determine the root cause of the sewer gases escaping into the first floor restrooms.

None

First Floor Restrooms

QUANTITY: 1 LS ***REPAIR COST:*** **$10,500** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 35 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 49 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

SYSTEM SUB-TOTAL **Plumbing** **$10,500** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=** **$0.55**

60 **Roof** **Annual PM** Roof Drains

102 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Roof perimeter

QUANTITY: 5 EA ***REPAIR COST:*** **$500** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

108 The single-ply membrane on this building contains a small amount of debris leaf and other debris, and the surface is dirty in a few small areas. However, as debris accumulates, it can make it more difficult to ascertain the condition of the membrane. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 2 years. An assessment of the roof membrane revealed no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 6,700 SF ***REPAIR COST:*** **$3,200** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 3 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

40 **Roof** **Repair/Maintenance** Downspout

104 The upper portion of one of the downspouts has a badly rusted section that allows rain water to run outside of the downspout onto the concrete below. The rusted section should be cut-out and replaced.
3"

North side of building at roof canopy over 2nd floor entry/exit door

Long Term Alternative Replace entire downspout ($650)

QUANTITY: 6 LF ***REPAIR COST:*** **$400** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* In-House
Benefit Score = 46 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Repair

40 **Roof** **Annual PM** Roof Membrane

101 There are small amounts of debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year.

Roof surface

QUANTITY: 6,700 SF ***REPAIR COST:*** **$200** **Deferrable** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House
Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$4,300**	**AV. SEVERITY SCORE =**	**48**	**COST PER BLDG GSF=**	**$0.23**
FACILITY TOTALS	**COST TOTAL =**	**$45,600**	**AV. SEVERITY SCORE =**	**47**	**COST PER BLDG GSF=**	**$2.39**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**5000**	**San Ysidro Higher Education Center**	Roof							
		Roof Drains	5 EA							
102		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Roof perimeter*		$500						
40	**5000**	**San Ysidro Higher Education Center**	Roof							
		Roof Membrane	6,700 SF							
101		There are small amounts of debris on the roof membrane surface. This can create a scouring action across the surface and seriously clog roof drains. Debris should be cleaned off the roof at least once per year. *Roof surface*		$200						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **50**	**$700**	**$0**	**$0**	**$0**	**$0**	**$0**	**$700**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**5000**	**San Ysidro Higher Education Center**	Electrical							
		Light Fixtures	272 EA							
105		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*						$15,600		
TOTAL: Improvement			*AV. SEVER. SCORE =* **20**	**$0**	**$0**	**$0**	**$0**	**$15,600**	**$0**	**$15,600**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**5000**	**San Ysidro Higher Ed Center**	Roof							
		Single-Ply Roof Membrane	6,700 SF							
108		The single-ply membrane on this building contains a small amount of debris leaf and other debris, and the surface is dirty in a few small areas. However, as debris accumulates, it can make it more difficult to ascertain the condition of the membrane. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 2 years. An assessment of the roof membrane revealed no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*				$3,200				
46	**5000**	**San Ysidro Higher Education Center**	Paint/Finish							
		Metal Parapet Cap Joints	117 LF							
100		The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. *Parapet caps on roof*				$850				
40	**5000**	**San Ysidro Higher Education Center**	Paint/Finish							
		Metal Parapet Cap	639 SF							
103		The factory finish on the metal caps appears to be very unsatisfactory as the paint is peeling badly over the entire length of the caps. It appears that the sheet metal may not have been primed prior to being painted. The existing finish should be thoroughly sanded/power brushed and the metal primed with an appropriate primer, followed by application of 2 coats of an industrial enamel. *Roof parapet*			$4,350					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**45**	**$0**	**$4,350**	**$4,050**	**$0**	**$0**	**$0**	**$8,400**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**5000**	**San Ysidro Higher Education Center**	Plumbing							
		Soil, Drain, Waste, and Vent System	1 LS							
107		Sewer gas smells have been observed in the first floor restrooms. Some work has been performed, however, the root cause of the release of sewer gases into the first floor restrooms has not been determined. This deficiency provides an allowance to troubleshoot the soil, drain, waste, and vent system to determine the root cause of the sewer gases escaping into the first floor restrooms. *First Floor Restrooms*			$10,500					
64	**5000**	**San Ysidro Higher Education Center**	HVAC							
		HVAC Equipment	1 EA							
106		Occupants complain that the classrooms are too cold during the heating season. The building design provided zone control for each classroom, which should provide adequate heating control. This deficiency provides an allowance to troubleshoot each classroom HVAC control system and equipment to determine the cause of the classrooms being too cold during the heating season. *Roof and Classrooms*			$10,000					
40	**5000**	**San Ysidro Higher Education Center**	Roof							
		Downspout	6 LF							
104		The upper portion of one of the downspouts has a badly rusted section that allows rain water to run outside of the downspout onto the concrete below. The rusted section should be cut-out and replaced. *North side of building at roof canopy over 2nd floor entry/exit door*		$400						
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **57**	**$400**	**$20,500**	**$0**	**$0**	**$0**	**$0**	**$20,900**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **47**	**$1,100**	**$24,850**	**$4,050**	**$0**	**$15,600**	**$0**	**$45,600**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

7000 National City Higher Ed Center 880 National City Blvd.

REPAIR COST ESTIMATE IS **$52,975** Cost Per Square Foot is **$1.10**

Facility Condition Rating = 100 (Excellent) ***Average Severity Score = 24***

Repair Cost as a Percent of Facility Replacement Cost is 0 % 7 Deficiencies Were Identified

PRIMARY USE: Classroom/Lab *FACILITY AGE:* *11* Yrs.

FACILITY SF: 48,248 *NO. OF STORIES:* 2.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $20,505,400

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Good

Facility Construction Quality is Good

Relative Facility Priority Score = 33 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

7000 National City Higher Ed Center 880 National City Blvd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Improvement	Electrical	1	5	$32,800	
Improvement		**1**	**5**	**$32,800**	**$0.68**
Non-Annual Recurring Maintenance	Paint/Finish	3	33	$3,175	
Non-Annual Recurring Maintenance	Roof	1	50	$8,500	
Non-Annual Recurring Maintenance		**4**	**38**	**$11,675**	**$0.24**
Replacement/Renewal	HVAC	1	5	$2,900	
Replacement/Renewal	Interior Closure	1	5	$5,600	
Replacement/Renewal		**2**	**5**	**$8,500**	**$0.18**

CONDITION SUMMARY:

This facility, one of three off-campus higher education centers, was built in 2004. The building appears constructed of steel framing on a concrete slab, with stucco/plaster exterior wall panels on metal studs, and a single-ply membrane, likely PVC, on a metal pan roof deck.

The interior and exterior of the building are in good overall condition. Two minor deficiencies have been identified inside the building. Interior and exterior maintenance are likewise considered good. The 7 deficiencies identified in this building are associated with roof, electrical, HVAC, interior closure and exterior finish systems.

Roof maintenance, except for drains/sumps, appears to be generally good, with no debris accumulation or dirty membrane areas . It is recommended that the roof membrane be power washed in about 2 years to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. All drains/sumps and the roof membrane should be cleaned at least once a year. An assessment of the membrane revealed no apparent deficiencies.

The joint sealant on the metal parapet caps on the roof is in various stages of deterioration, ranging from minor to significant. Failed sealant can lead to moisture penetration into the tops of the parapets. Two deficiencies have been prepared. Once is for sealant replacement that should be performed in the next year. The second is for replacement that can wait for 3 or 4 years.

HVAC supply perforated ceiling diffusers throughout the building are badly stained and rusting. They need to be replaced. On the first floor there are several rest room cubicles where the surface finish on the toilet partitions is damaged. These partitions should be replaced with high-pressure plastic laminate partitions.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

7000 National City Higher Ed Center 880 National City Blvd.

The finish on several exterior HM doors is badly weathered and scratched. These doors should be sanded, primed and re-finished.

5 Electrical Improvement Light Fixtures

103 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4, cans, 2 x 2

Light fixtures throughout building

QUANTITY: 574 EA ***REPAIR COST:*** **$32,800** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Electrical** **$32,800** **AV. SEVERITY SCORE = 5** **COST PER BLDG GSF= $0.68**

5 HVAC Replacement/Renewal HVAC Ceiling Diffusers

105 HVAC supply perforated ceiling diffuser(s) are stained and rusty. Install new ceiling diffuser(s).

2 x 2

Ceilings throughout building

QUANTITY: 27 EA ***REPAIR COST:*** **$2,900** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* Contract

Benefit Score = 8 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016

SYSTEM SUB-TOTAL **HVAC** **$2,900** **AV. SEVERITY SCORE = 5** **COST PER BLDG GSF= $0.06**

5 Interior Closure Replacement/Renewal Toilet Partitions

104 There are several cubicles where the surface finish on the partitions is damaged. Replace with new high pressure plastic laminate toilet partition(s).

6 cubicles

1044, 1043, 1041

QUANTITY: 6 EA ***REPAIR COST:*** **$5,600** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Abuse *Recommended Method of Repair:* Contract

Benefit Score = 8 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **Interior Closure $5,600** **AV. SEVERITY SCORE = 5** **COST PER BLDG GSF= $0.12**

40 Paint/Finish **Non-Annual Recurring Maintenance** Metal Parapet Cap

101 The joint caulking on the several of the metal cap joints has deteriorated extensively due to weathering. The caulking in these joints should be replaced within the next year. The existing caulk will have to be cut-out, the joints cleaned and new calk installed.

Eight joints on west side of upper roof

QUANTITY: 11 LF ***REPAIR COST:*** **$250** **Critical** **Est. Remaining Life = 0 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

40 Paint/Finish **Non-Annual Recurring Maintenance** Metal Parapet Cap

100 The joint caulking on the metal caps is starting to deteriorate in several places due to weathering. Though it is still in reasonable condition, it will likely be necessary to replace the caulking in four to five years. The existing caulk will have to be cut-out, the joints cleaned and new calk installed.

Perimeter of roof

QUANTITY: 140 LF ***REPAIR COST:*** **$1,000** **Deferrable** **Est. Remaining Life = 4 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 38 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

20 Paint/Finish **Non-Annual Recurring Maintenance** Exterior HM Doors

102 The finish on several exterior HM doors is badly weathered and scratched, detracting from the overall appearance of the building. These doors should be sanded, primed and re-finished with two coats of exterior enamel.
9 ea 3-0 x 7-0; 1 ea 6-0 x 7-0

Perimeter of building

QUANTITY: 10 EA ***REPAIR COST:*** **$1,925** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish $3,175** **AV. SEVERITY SCORE = 33** **COST PER BLDG GSF= $0.07**

50 Roof **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

106 The single-ply membrane on this building contains a small amount of debris and some minor dirty areas on the membrane. As debris and dirt accumulate, it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 2 years. An assessment of the roof membrane revealed no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Entire roof

QUANTITY: 24,500 SF ***REPAIR COST:*** **$8,500** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 3 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract
Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$8,500**	**AV. SEVERITY SCORE =**	**50**	**COST PER BLDG GSF=**	**$0.18**
FACILITY TOTALS	**COST TOTAL =**	**$52,975**	**AV. SEVERITY SCORE =**	**24**	**COST PER BLDG GSF=**	**$1.10**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**7000**	**National City Higher Education Center**	Electrical							
		Light Fixtures	574 EA							
103		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building*					$32,800			
TOTAL: Improvement			***AV. SEVER. SCORE =*** **5**	**$0**	**$0**	**$0**	**$32,800**	**$0**	**$0**	**$32,800**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**7000**	**National City Higher Ed Center**	Roof							
		Single-Ply Roof Membrane	24,500 SF							
106		The single-ply membrane on this building contains a small amount of debris and some minor dirty areas on the membrane. As debris and dirt accumulate, it can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in about 2 years. An assessment of the roof membrane revealed no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Entire roof*				$8,500				
40	**7000**	**National City Higher Education Center**	Paint/Finish							
		Metal Parapet Cap	11 LF							
101		The joint caulking on the several of the metal cap joints has deteriorated extensively due to weathering. The caulking in these joints should be replaced within the next year. The existing caulk will have to be cut-out, the joints cleaned and new calk installed. *Eight joints on west side of upper roof*		$250						
40	**7000**	**National City Higher Education Center**	Paint/Finish							
		Metal Parapet Cap	140 LF							
100		The joint caulking on the metal caps is starting to deteriorate in several places due to weathering. Though it is still in reasonable condition, it will likely be necessary to replace the caulking in four to five years. The existing caulk will have to be cut-out, the joints cleaned and new calk installed. *Perimeter of roof*						$1,000		

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**7000**	**National City Higher Education Center**	Paint/Finish							
		Exterior HM Doors	10 EA							
102		The finish on several exterior HM doors is badly weathered and scratched, detracting from the overall appearance of the building. These doors should be sanded, primed and re-finished with two coats of exterior enamel. *Perimeter of building*			$1,925					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **38**	**$250**	**$1,925**	**$8,500**	**$0**	**$1,000**	**$0**	**$11,675**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
5	**7000**	**National City Higher Education Center**	HVAC							
		HVAC Ceiling Diffusers	27 EA							
105		HVAC supply perforated ceiling diffuser(s) are stained and rusty. Install new ceiling diffuser(s). *Ceilings throughout building*			$2,900					
5	**7000**	**National City Higher Education Center**	Interior Closure							
		Toilet Partitions	6 EA							
104		There are several cubicles where the surface finish on the partitions is damaged. Replace with new high pressure plastic laminate toilet partition(s). *1044, 1043, 1041*				$5,600				
TOTAL: Replacement/Renewal			***AV. SEVER. SCORE =*** **5**	**$0**	**$2,900**	**$5,600**	**$0**	**$0**	**$0**	**$8,500**
TOTAL FOR ALL CATEGORIES			***AV. SEVER. SCORE =*** **24**	**$250**	**$4,825**	**$14,100**	**$32,800**	**$1,000**	**$0**	**$52,975**

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

9000 Crown Cove Aquatic Center 500 State Hwy 75, Coronado

REPAIR COST ESTIMATE IS **$107,975** Cost Per Square Foot is **$13.12**

Facility Condition Rating = 96 (Good) ***Average Severity Score = 44***

Repair Cost as a Percent of Facility Replacement Cost is 4 % 10 Deficiencies Were Identified

PRIMARY USE: Water Sport Instruction *FACILITY AGE:* *15* Yrs.

FACILITY SF: 8,228 *NO. OF STORIES:* 1.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $2,674,000

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is Moderate

Facility Use Intensity is Moderate

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Average

Relative Facility Priority Score = 24 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College SURVEY DATE: 8/15

9000 Crown Cove Aquatic Center 500 State Hwy 75, Coronado

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Annual PM	Roof	1	60	$325	
Annual PM		**1**	**60**	**$325**	**$0.04**
Improvement	Electrical	1	20	$4,250	
Improvement	Floor Cover	1	5	$22,700	
Improvement		**2**	**13**	**$26,950**	**$3.28**
Non-Annual Recurring Maintenance	Roof	1	50	$0	
Non-Annual Recurring Maintenance		**1**	**50**	**$0**	**$0.00**
Repair/Maintenance	Roof	1	75	$500	
Repair/Maintenance		**1**	**75**	**$500**	**$0.06**
Replacement/Renewal	Exterior Closure	1	50	$15,700	
Replacement/Renewal	HVAC	2		$29,700	
Replacement/Renewal	Plumbing	1		$9,800	
Replacement/Renewal	Roof	1	50	$25,000	
Replacement/Renewal		**5**	**50**	**$80,200**	**$9.75**

CONDITION SUMMARY:

This facility, comprised of two buildings, is located in Coronado along the bay in the Silver Strand Beach area. The facility leased by the college. The college is, however, responsible for providing all maintenance, except for the public rest room/shower facilities located in one of the buildings. One building houses offices and classrooms and the second house several equipment storage bays, public rest rooms and showers, and an office.

The two buildings were built in 2000 and appear constructed of metal and wood framing on concrete slabs with stucco/plaster exterior wall panels on the upper walls and brick facing on the lower walls. The roofs are single-ply membranes and cement tiles on wood decks.

Overall the interiors and exteriors of the buildings are in good condition, especially considering the exposure to a salt water environment. Maintenance appears to be average. However, as there are primarily water related activities occurring at these facilities, maintenance appears to be adequate for use. The 10 deficiencies identified are associated with electrical, HVAC, roof, exterior closure, plumbing and interior finish systems.

Southwestern College SURVEY DATE: 8/15

9000 Crown Cove Aquatic Center 500 State Hwy 75, Coronado

The single-ply roof membranes are relatively free of debris and there are only small areas of dirty membrane. Leaves and debris should be cleaned off the roof surface at least once per year as they accumulate. The roof drains and sumps, however, are badly clogged and should be cleaned at least once per year. It is also recommended that in 2 years the roof membrane be power washed to thoroughly clean the entire surface. This should include the use of a cleaning solution formulated for single-ply roof membranes, and should be performed at least every three to four years to prolong membrane life. An assessment of the membrane surface revealed no apparent deficiencies.

Several (10) broken cement roof tiles were observed on one of the buildings. The cause is unknown. However, the tiles should be replaced to prevent potential leaks. In addition to replacing he tiles, it is recommended that an annual allowance of $500 be allocated to replace broken tiles in the future.

The metal parapet caps on both buildings are totally rusted through in most spots and almost totally deteriorated due to salt water corrosion. The alternatives for replacement are either a stainless steel cap or a metal cap properly treated with a corrosion-resistant primer and epoxy-based industrial enamel.

The roof mounted circular exhaust fan on the office/classroom building is inoperative and appears to be deteriorated. Replacement is warranted. There are also two roof mounted exhaust fan, one of which is inoperative, and three wall mounted exhaust fans, also inoperative, which serve the equipment bays, that are deteriorating and do not appear cost-effective to repair. All of the fans should be replaced. These are important to provide ventilation in the bays when doors are closed as there is frequently wet equipment in the bays. The thermostat controlling the fans also needs troubleshooting of the control circuit. A large electric water heater serves the lavs and showers, and is deteriorating. Replacement is warranted.

Maintenance staff and programs managers have indicated that the existing fluorescent lighting should be replaced with LED lighting to provide greater energy efficiency. This retrofit of existing recessed, can and suspended light fixtures is viewed as an improvement.

The carpet in the office/classroom building is badly stained and dirty and no longer cost-effective to maintain. The vinyl flooring in the rest rooms in the building is also deteriorating and should be replaced. The slab should be waterproofed prior to installing new carpet. Non-slip tile should be considered an option to the carpet.

The metal flashing between the cement/stucco wall panels and the brick on both buildings is rusting extensively due to the salt water environment. Replacement alternatives include either stainless steel flashing or metal flashing coated with a rust-inhibiting primer and two coats of epoxy-based industrial enamel.

20 Electrical **Improvement** Light Fixtures

104 Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights.

2 x 4

Light fixtures throughout building. Main building, garage, CPR office

QUANTITY: 74 EA ***REPAIR COST:*** **$4,250** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Design *Recommended Method of Repair:* Contract

Benefit Score = 18 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2039

SYSTEM SUB-TOTAL **Electrical** **$4,250** **AV. SEVERITY SCORE = 20** **COST PER BLDG GSF= $0.52**

50 Exterior Closure **Replacement/Renewal** Metal Flashing

101 The metal flashing at the base of the cement/stucco wall panels on both buildings at the site is rusting extensively due to the salt environment. Replacement alternatives include either stainless steel flashing or a metal flashing that has been primed with a rust-inhibiting primer and finished with 2 coats of an epoxy-based industrial enamel. Cost provided is for replacement.

2"

Main building, warehouse/shop and CPR Office perimeter

QUANTITY: 554 LF ***REPAIR COST:*** **$15,700** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 42 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL **Exterior Closure** **$15,700** **AV. SEVERITY SCORE = 50** **COST PER BLDG GSF= $1.91**

5 **Floor Cover** **Improvement** Floor Coverings

105 Carpet is badly stained and dirty and is no longer cost-effective to maintain. It should be replaced. The vinyl flooring in the restrooms is also deteriorating and should be replaced. Before installing new carpet, waterproof the concrete slab. Install new low-pile high-wear commercial grade carpet using waterproof adhesive. Note that the cost estimate provide an option to install non-slip tile in lieu of carpet.

400 SY

Main building

QUANTITY: 400 SY ***REPAIR COST:*** **$22,700** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 15 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 8 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2034

SYSTEM SUB-TOTAL **Floor Cover** **$22,700** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=** **$2.76**

HVAC **Replacement/Renewal** Exhaust Fan

106 The roof mounted circular exhaust fan was inoperative and appears to be somewhat deteriorated. Replacement is recommended.

Same as existing

Roof of main building

QUANTITY: 1 EA ***REPAIR COST:*** **$3,000** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 49 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2036

HVAC **Replacement/Renewal** Exhaust Fan

107 There are two roof mounted circular exhaust fans. One is inoperative, but both are showing the effects of salt-water related weathering and deterioration. These fans should both be replaced. In addition there are three circular aluminum exhaust fans mounted horizontally in the wall that do also not appear to operational. From a cost-effectiveness standpoint these should be replaced as well. These fans appear to provide ventilation for the storage bay areas when the doors are closed, which many times have wet equipment in them.

A wall mounted cooling thermostat mounted on the wall inside the building appears to energize and de-energize the fans. Funds have been included in the cost of this deficiency to troubleshoot the control circuit for these fans.
Same as existing

Roof of storage

QUANTITY: 1 EA ***REPAIR COST:*** **$26,700** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 49 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SYSTEM SUB-TOTAL **HVAC** **$29,700** **AV. SEVERITY SCORE =** **COST PER BLDG GSF= $3.61**

Plumbing **Replacement/Renewal** Water Heater

108 There is a large electric water heater serving lav's and showers that is showing signs of deterioration and should be programmed for replacement. It is estimated to be a 100 gallon tank with a 7.5 kW element.
Same as existing

Plumbing chase in shell storage area

QUANTITY: 1 EA ***REPAIR COST:*** **$9,800** **Deferrable** **Est. Remaining Life = 2 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2027 2037

SYSTEM SUB-TOTAL **Plumbing** **$9,800** **AV. SEVERITY SCORE =** **COST PER BLDG GSF= $1.19**

75 **Roof** **Repair/Maintenance** Cement Tiles

102 Several broken cement roof tiles were observed on one of the buildings on the site. The cause is unknown. However, the tiles should be replaced to prevent potential water leaks. In addition to replacing the broken tiles (10), it is recommended that an annual allowance of $500 be allocated to replace broken tiles in the future (estimate 10 per year)

Roof of CPR Office

QUANTITY: 10 EA ***REPAIR COST:*** **$500** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 25 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Repair

60 **Roof** **Annual PM** Roof Drains

103 The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year.

Main building and CPR Office

QUANTITY: 3 EA ***REPAIR COST:*** **$325** **Critical** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 1 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

50 **Roof** **Replacement/Renewal** Metal Parapet Cap

100 The metal parapet cap in two locations on the site is totally rusted through in most spots due to the salt water environment, which has almost totally deteriorated the sheet metal cap. The alternatives for replacement are either a stainless steel cap or a metal cap that has been treated with corrosion-resistant primer and two coats of an epoxy-based industrial enamel.
18" cap

On the roof of the main building and on the CPR Office

QUANTITY: 470 LF ***REPAIR COST:*** **$25,000** **Deferrable** **Est. Remaining Life = 0 Yrs.**

Life Expectancy New = 20 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* Contract

Benefit Score = 34 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

50 **Roof** **Non-Annual Recurring Maintenance** Single-Ply Roof Membrane

109 The single-ply membranes on this facility are relatively free of debris and there are only small areas of dirty membrane. However, continued accumulation of dirt and debris can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in two years. An assessment of the roof membrane revealed no apparent deficiencies.

Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane.

Note: Use only bonded contractor with experience cleaning single-ply membranes.

Main building and CPR office

QUANTITY: SF ***REPAIR COST:*** **$0** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 3 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House & Contract

Benefit Score = 44 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$25,825**	**AV. SEVERITY SCORE =**	**59**	**COST PER BLDG GSF=**	**$3.14**
FACILITY TOTALS	**COST TOTAL =**	**$107,975**	**AV. SEVERITY SCORE =**	**44**	**COST PER BLDG GSF=**	**$13.12**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Annual PM** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
60	**9000**	**Crown Cove Aquatic Center**	Roof							
		Roof Drains	3 EA							
103		The roof drains and drain sumps are clogged with significant amounts of debris, inhibiting drainage. Drains should be thoroughly cleaned out at least once per year. *Main building and CPR Office*		$325						
TOTAL: Annual PM			*AV. SEVER. SCORE =* **60**	**$325**	**$0**	**$0**	**$0**	**$0**	**$0**	**$325**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Improvement** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
20	**9000**	**Crown Cove Aquatic Center**	Electrical							
		Light Fixtures	74 EA							
104		Maintenance staff and program managers have indicated they feel the existing fluorescent lighting is not as energy efficient as LED lighting and should be replaced with LED lighting. Retrofit existing fluorescent, recessed can fixtures and suspended light fixtures with energy efficient LED lights. *Light fixtures throughout building. Main building, garage, CPR office*						$4,250		
5	**9000**	**Crown Cove Aquatic Center**	Floor Cover							
		Floor Coverings	400 SY							
105		Carpet is badly stained and dirty and is no longer cost-effective to maintain. It should be replaced. The vinyl flooring in the restrooms is also deteriorating and should be replaced. Before installing new carpet, waterproof the concrete slab. Install new low-pile high-wear commercial grade carpet using waterproof adhesive. Note that the cost estimate provide an option to install non-slip tile in lieu of carpet. *Main building*						$22,700		
TOTAL: Improvement			***AV. SEVER. SCORE =*** **13**	**$0**	**$0**	**$0**	**$0**	**$26,950**	**$0**	**$26,950**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
50	**9000**	**Crown Cove Aquatic Center**	Roof							
		Single-Ply Roof Membrane	SF							
109		The single-ply membranes on this facility are relatively free of debris and there are only small areas of dirty membrane. However, continued accumulation of dirt and debris can make it very difficult to ascertain the condition of the roof and identify potential problems. It also can shorten the life of the membrane. Thorough cleaning of the membrane surface is recommended in two years. An assessment of the roof membrane revealed no apparent deficiencies. Remove all leaves/debris from the roof and clean downspouts and sumps. Power-wash the membrane using a cleaning solution formulated for single-ply roof membranes. The surface should be cleaned at least every three to four years to maintain and prolong the life of the membrane. Note: Use only bonded contractor with experience cleaning single-ply membranes. *Main building and CPR office*				$0					
TOTAL:		**Non-Annual Recurring Maintenance**	***AV. SEVER. SCORE =*** **50**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
75	**9000**	**Crown Cove Aquatic Center**	Roof							
		Cement Tiles	10 EA							
102		Several broken cement roof tiles were observed on one of the buildings on the site. The cause is unknown. However, the tiles should be replaced to prevent potential water leaks. In addition to replacing the broken tiles (10), it is recommended that an annual allowance of $500 be allocated to replace broken tiles in the future (estimate 10 per year) *Roof of CPR Office*		$500						
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **75**	**$500**	**$0**	**$0**	**$0**	**$0**	**$0**	**$500**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**9000**	**Crown Cove Aquatic Center**	Roof							
		Metal Parapet Cap	470 LF							
100		The metal parapet cap in two locations on the site is totally rusted through in most spots due to the salt water environment, which has almost totally deteriorated the sheet metal cap. The alternatives for replacement are either a stainless steel cap or a metal cap that has been treated with corrosion-resistant primer and two coats of an epoxy-based industrial enamel. *On the roof of the main building and on the CPR Office*		$25,000						
50	**9000**	**Crown Cove Aquatic Center**	Exterior Closure							
		Metal Flashing	554 LF							
101		The metal flashing at the base of the cement/stucco wall panels on both buildings at the site is rusting extensively due to the salt environment. Replacement alternatives include either stainless steel flashing or a metal flashing that has been primed with a rust-inhibiting primer and finished with 2 coats of an epoxy-based industrial enamel. Cost provided is for replacement. *Main building, warehouse/shop and CPR Office perimeter*					$15,700			
	9000	**Crown Cove Aquatic Center**	HVAC							
		Exhaust Fan	1 EA							
106		The roof mounted circular exhaust fan was inoperative and appears to be somewhat deteriorated. Replacement is recommended. *Roof of main building*			$3,000					
	9000	**Crown Cove Aquatic Center**	Plumbing							
		Water Heater	1 EA							
108		There is a large electric water heater serving lav's and showers that is showing signs of deterioration and should be programmed for replacement. It is estimated to be a 100 gallon tank with a 7.5 kW element. *Plumbing chase in shell storage area*				$9,800				

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
	9000	**Crown Cove Aquatic Center**	HVAC							
		Exhaust Fan	1 EA							
107		There are two roof mounted circular exhaust fans. One is inoperative, but both are showing the effects of salt-water related weathering and deterioration. These fans should both be replaced. In addition there are three circular aluminum exhaust fans mounted horizontally in the wall that do also not appear to operational. From a cost-effectiveness standpoint these should be replaced as well. These fans appear to provide ventilation for the storage bay areas when the doors are closed, which many times have wet equipment in them. A wall mounted cooling thermostat mounted on the wall inside the building appears to energize and de-energize the fans. Funds have been included in the cost of this deficiency to troubleshoot the control circuit for these fans. *Roof of storage*				$26,700				
TOTAL: Replacement/Renewal			*AV. SEVER. SCORE =* **50**	**$25,000**	**$3,000**	**$36,500**	**$15,700**	**$0**	**$0**	**$80,200**
TOTAL FOR ALL CATEGORIES			*AV. SEVER. SCORE =* **44**	**$25,825**	**$3,000**	**$36,500**	**$15,700**	**$26,950**	**$0**	**$107,975**

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

ST Site — 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS **$1,384,050** — Cost Per Square Foot is

Facility Condition Rating = #Error — ***Average Severity Score = 40***

Repair Cost as a Percent of Facility Replacement Cost is % — 24 Deficiencies Were Identified

PRIMARY USE: Building Site/Parking/Athletic Fields — *FACILITY AGE:* *50* Yrs.

FACILITY SF: 0 *NO. OF STORIES:* 0.0 *LAST RENOVATED:*

Current Facility Replacement Cost is Approximately $0

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **A**

Importance of Facility to Operations is High

Facility Use Intensity is High

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Average

Relative Facility Priority Score = 29 (Maximum Score = 33 Minimum Score = 11)

FACILITY CONDITION SUMMARY REPORT

Southwestern College — SURVEY DATE: 8/15

ST Site — 900 Otay Lakes Rd.

MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY

MAINT. CATEGORY/SYSTEM		*NO.OF DEF.*	*AVERAGE SEV. SCORE*	*DEFICIENCY COST*	*COST PER GSF*
Non-Annual Recurring Maintenance	Paint/Finish	5	24	$139,800	
Non-Annual Recurring Maintenance	Paving	11	50	$784,000	
Non-Annual Recurring Maintenance	Roof	1	40	$7,500	
Non-Annual Recurring Maintenance		**17**	**42**	**$931,300**	**#Div/0!**
Repair/Maintenance	Paving	3	13	$190,750	
Repair/Maintenance		**3**	**13**	**$190,750**	**#Div/0!**
Replacement/Renewal	Electrical	1	68	$52,000	
Replacement/Renewal	HVAC	1	68	$114,400	
Replacement/Renewal	Other	1	5	$11,900	
Replacement/Renewal	Plumbing	1	68	$83,700	
Replacement/Renewal		**4**	**52**	**$262,000**	**#Div/0!**

CONDITION SUMMARY:

Twenty-four site related deficiencies were identified. The deficiencies are associated with paving, interior/exterior closure, roof, HVAC, paint/finish and plumbing systems.

A distribution switchboard that serves buildings 700, 710, 800 and 810 is located outside behind Building 900. The equipment is original and approximately 50 years old. The switchboard is still functional, though obsolete. Replacement parts are expensive and either not readily available or very costly. There is also concern over the reliability of the switchboard for circuit protection due to its age. The switchboard should be replaced.

The hot water heating piping for buildings 100, 103 and 104 is routed from building 102 across the roof of the covered walkways. The piping insulation and protective jackets are deteriorating, causing excessive heat loss. The insulation and jackets need replacement. The fire protection and natural gas piping routed across the roofs of the covered walkways are heavily oxidized and not adequately protected from the elements. All exposed piping should be sanded, primed with a rust-inhibiting primer, and finished with an epoxy-based paint. Many of the supports for the fire protection and natural gas piping routed over the roofs of the covered walkways appear very inadequate and many are deteriorating. They are not considered industry standard and should be replaced with appropriate supports.

There is random weathering and minor damage on a number of exterior doors throughout the campus, the result of normal weathering and constant use. Annual maintenance funds should be budgeted to repair/re-finish approximately 25 doors each year. This funding should also include replacement of 25 sets of deteriorated door trim. There is also random marring and worn finishes on the interior wood doors in many buildings. Maintenance funds should be budgeted to refinish/repair approximately 35 doors every year.

There is random weathering and minor chipping on the exterior wood window frames on many of the buildings.

Southwestern College SURVEY DATE: 8/15

ST Site 900 Otay Lakes Rd.

Annual maintenance funds should be budgeted to refinish/repair approximately 30 frames per year. There is random weathering of the exterior wood panels on many of the buildings. Annual funding should also be budgeted to refinish/repair approximately 1000 SF of panels every two years.

Several plastic-coated metal benches located around the site are damaged, with frayed coatings and damaged metal seat webbing. These benches should be replaced.

The covered walkways, especially for the 100, 200, 300 and 400 areas, have extensive amounts of leaves and debris on the roofs. This makes it difficult to ascertain the condition of the membranes and conduit and piping on the roofs. In addition, the roof drains are badly clogged with leaves and debris, letting water run over the edges and down the faces of the main support beams and undersides of the decks. This debris should be cleaned off the roofs and out of the drains at least annually. An amount should be budgeted each year for this effort.

The 14 tennis courts all have generalized cracking of the playing surfaces, and many cracks appear to go through the underlying asphalt/concrete. The four south courts are the most problematic and the two bleacher courts are in the best condition. All courts should be restored by filling all cracks with a polymer modified cement containing silica sand, then applying a base coat acrylic resurfacer and two coats of acrylic color. The four worst courts should be addressed within the next two years, the two bleacher courts in five to six years, and the remaining courts in three to four years.

Eleven parking lots on the campus have moderate to significant problems, ranging from minor to moderate surface cracking, to alligatoring and base failure, to generalized deterioration of the asphalt surface. Parking Lots C and D are the worst in terms of overall condition. It is recommended that these lots be cold planed to remove 1/2" to 1" of the existing surface and a new 1" lift installed. Some base work will also be required. Lots B, J and L are in reasonably good condition, exhibiting only minor random surface wear. These lots should be seal-coated and re-striped in three to four years. The remaining lots (A, F, G, H, I and O) exhibit random surface cracking, but are otherwise in generally good condition. Cracks range in width from 1/4" to 3/4" wide. All cracks in these lots should be swept out, cleaned and sealed. The entire lot should then be seal-coated with 2 coats of petroleum-resistant emulsion and restriped.

68 **Electrical** **Replacement/Renewal** Electrical Distribution Switchboard

102 A distribution switchboard that serves Buildings 700, 710, 800, and 810 appears to be original and is thought to be approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced.

Same as existing unless additional capacity is required

Behind Building 900 Theater

QUANTITY: 1 LS ***REPAIR COST:*** **$52,000** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 50 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018

SYSTEM SUB-TOTAL **Electrical** **$52,000** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=**

68 **HVAC** **Replacement/Renewal** Covered Walkway Piping Insulation

103 The hot water heating piping for buildings 100, 103, & 104 are routed from building 102 across the roofs of the covered walks. The piping insulation and protective jackets on this piping are deteriorated, causing excessive heat loss. The insulation and protective jackets should be replaced.

Same as existing

Roofs of covered walkways

QUANTITY: 1 LS ***REPAIR COST:*** **$114,400** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 49 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016

SYSTEM SUB-TOTAL **HVAC** **$114,400** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=**

5 **Other** **Replacement/Renewal** Outside Bench

113 Several of the plastic coated benches located around the campus are damaged. The plastic coating is frayed/torn and the metal seat webbing is damaged. These benches should be replaced.

Campus wide

QUANTITY: 9 EA ***REPAIR COST:*** **$11,900** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 12 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Unknown *Recommended Method of Repair:* Contract

Benefit Score = 39 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2028 2040

SYSTEM SUB-TOTAL **Other** **$11,900** **AV. SEVERITY SCORE =** **5** **COST PER BLDG GSF=**

68 **Paint/Finish** **Non-Annual Recurring Maintenance** Covered Walkway Fire Protection and Natural Gas

105 It was observed that the surfaces of the fire protection and natural gas piping routed on the roofs of the covered walkways are heavily oxidized and not adequately protected from the elements. All exposed piping should be sanded, primed with a rust-inhibiting primer, and finished with an epoxy based paint.

Same as existing

Roofs of covered walkways

QUANTITY: 1 LS ***REPAIR COST:*** **$104,000** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Installation *Recommended Method of Repair:* Contract

Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Maintenance

13 Paint/Finish **Non-Annual Recurring Maintenance** Wood Interior Doors/Frames

111 There is random minor damage such as scratches/marring and worn finishes on a number of interior doors throughout the campus. This is largely the result of constant use/abuse. Repair of minor scratches/dings and refinishing of worn door and frame surfaces will significantly increase the life of the doors. This should be addressed as an annual maintenance expenditure for a set quantity of doors annually. It is recommended that maintenance funds be budgeted to refinish/repair approximately 35 doors every year.

Any peeling finish should be scraped/sanded/wire brushed and damaged wood/metal repaired using an exterior filler/putty and the repaired areas sanded. The doors should then be primed and re-finished with two coats of finish.

Campus wide

QUANTITY: 35 EA ***REPAIR COST:*** **$9,000** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

13 Paint/Finish **Non-Annual Recurring Maintenance** Exterior Wood Panel

110 There is random weathering and minor chipping on the exterior wood panels on many of the buildings. This should be addressed as an annual maintenance expenditure for a set quantity of panels annually. It is recommended that maintenance funds be budgeted to refinish/repair approximately 1000 SF of panels every two years.

Any peeling finish should be scraped/sanded, damaged wood repaired using an exterior wood filler/putty, and the repaired areas sanded. The panels should then be primed and re-finished with two coats of finish.

Campus wide

QUANTITY: 1,000 SF ***REPAIR COST:*** **$8,200** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

13 **Paint/Finish** **Non-Annual Recurring Maintenance** Wood Window Frame

109 There is random weathering and minor chipping on the exterior wood window frames on many of the buildings. This should be addressed as an annual maintenance expenditure for a set quantity of frames annually. It is recommended that maintenance funds be budgeted to refinish/repair approximately 30 frames per year.

Any peeling finish should be scraped/sanded, damaged wood repaired using an exterior wood filler/putty, and the repaired areas sanded. The frame should then be primed and re-finished with two coats of finish.

Campus wide

QUANTITY: 30 EA ***REPAIR COST:*** **$5,700** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 7 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

13 **Paint/Finish** **Non-Annual Recurring Maintenance** Exterior Doors/Frames

112 There is random weathering and minor damage on a number of exterior doors throughout the campus. This is largely the result of normal weathering and constant use. Repair of minor scratches/dings and refinishing of door and frame surfaces will significantly increase the life of the doors. This should be addressed as an annual maintenance expenditure for a set quantity of doors annually. It is recommended that maintenance funds be budgeted to refinish/repair approximately 25 doors every year.

Any peeling finish should be scraped/sanded/wire brushed and damaged areas repaired using an exterior filler/putty and the repaired areas sanded. The doors should then be primed and re-finished with two coats of finish.

This deficiency also includes the replacement and finishing of 25 door trim sets.

Campus wide

QUANTITY: 25 EA ***REPAIR COST:*** **$12,900** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Weather *Recommended Method of Repair:* In-House
Benefit Score = 28 ***Planning Priority:*** **E-Maintenance/Operating Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL **Paint/Finish** **$139,800** **AV. SEVERITY SCORE = 24** **COST PER BLDG GSF=**

50 **Paving** **Non-Annual Recurring Maintenance** Asphalt Parking Lot O

123 The asphalt paving in this lot exhibits random cracking, but is otherwise in generally good condition. Cracks range in width from 1/2" to 3/4" wide. All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped.

Lot O

QUANTITY: 11,500 SY ***REPAIR COST:*** **$58,000** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 51 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Paving** **Non-Annual Recurring Maintenance** Asphalt Parking Lot C

115 The asphalt paving in this lot exhibits significant areas of cracking and alligatoring. The 1/2" top placed over the original asphalt has resulted in deep and wide cracks. Minor repairs and sealing are no longer adequate. For much of the lot, and there is some base that also needs repair. It is recommended that the entire lot be cold-planed to remove the old top, base repairs performed where necessary, a new 1" lift installed, and the lot restriped.

Lot C

QUANTITY: 18,746 SY ***REPAIR COST:*** **$151,800** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 51 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Paving** **Non-Annual Recurring Maintenance** Asphalt Parking Lot D

116 The asphalt paving in this lot exhibits significant areas of cracking and alligatoring. The 1/2" top placed over the original asphalt has resulted in deep and wide cracks. Minor repairs and sealing are no longer adequate. For much of the lot. It is recommended that the entire lot be cold-planed to remove the old top, base repairs performed where necessary, a new 1" lift installed, and the lot restriped.

Lot D

QUANTITY: 28,118 SY ***REPAIR COST:*** **$218,300** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 51 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Paving** **Non-Annual Recurring Maintenance** Asphalt Parking Lot F

119 The asphalt paving in this lot exhibits random cracking, but is otherwise in reasonable condition. Cracks range in width from 1/4" to 3/4" wide. All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped.

Lot F

QUANTITY: 9,000 SY ***REPAIR COST:*** **$42,000** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 51 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Paving** **Non-Annual Recurring Maintenance** Asphalt Parking Lot A

100 The asphalt paving in this lot exhibits random cracking, but is otherwise in generally good condition. Cracks range in width from 1/4" to 3/4" wide. All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped.

Lot A

QUANTITY: 10,590 SY ***REPAIR COST:*** **$49,300** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 51 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Paving** **Non-Annual Recurring Maintenance** Asphalt Parking Lot L

118 The asphalt paving in this lot is in reasonably good condition, exhibiting only minor random surface wear. It is recommended that the entire lot be seal-coated with 2 coats of a petroleum resistant emulsion and restriped.

Lot L

QUANTITY: 6,730 SY ***REPAIR COST:*** **$27,400** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 51 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Paving** **Non-Annual Recurring Maintenance** Asphalt Parking Lot J

117 The asphalt paving in this lot is in reasonably good condition, exhibiting only minor random surface wear. It is recommended that the entire lot be seal-coated with 2 coats of a petroleum resistant emulsion and restriped.

Lot J

QUANTITY: 23,315 SY ***REPAIR COST:*** **$94,800** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 51 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Paving** **Non-Annual Recurring Maintenance** Asphalt Parking Lot H

121 The asphalt paving in this lot exhibits random cracking, but is otherwise in generally good condition. Cracks range in width from 1/8" to 1/2" wide. All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped.

Lot H

QUANTITY: 4,300 SY ***REPAIR COST:*** **$23,900** **Deferrable** **Est. Remaining Life = 3 Yrs.**

Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 51 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Paving** **Non-Annual Recurring Maintenance** Asphalt Parking Lot B

101 The asphalt paving in this lot is in reasonably good condition, exhibiting only minor random surface wear. It is recommended that the entire lot be seal-coated with 2 coats of a petroleum resistant emulsion and restriped.

Lot B

QUANTITY: 8,440 SY ***REPAIR COST:*** **$34,300** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 51 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Paving** **Non-Annual Recurring Maintenance** Asphalt Parking Lot I

122 The asphalt paving in this lot exhibits random cracking, but is otherwise in generally good condition. Cracks range in width from 1/8" to 1/2" wide. All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped.

Lot I

QUANTITY: 1,075 SY ***REPAIR COST:*** **$6,000** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 51 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

50 **Paving** **Non-Annual Recurring Maintenance** Asphalt Parking Lot G

120 The asphalt paving in this lot exhibits random hairline cracking, but is otherwise in generally good condition. Cracks range in width from 1/8" to 1/4". All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped.

Lot G

QUANTITY: 17,376 SY ***REPAIR COST:*** **$78,200** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 8 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 51 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

13 **Paving** **Repair/Maintenance** Tennis Court Surface

107 The 14 tennis courts all have generalized cracking of the playing surface. Many of these cracks appear to also be present in the underlying asphalt/concrete. The four south tennis courts are the most problematic and the two bleacher courts are in the best condition. This deficiency addresses the 4 courts in the worst shape.

The courts should first be cleaned with a pressure washer. After the court has dried all cracks should be cleaned, filled and smoothed using a polymer modified cement with silica sand to fill all cracks. The next step would be to apply a base coat acrylic resurfacer, followed by two coats of acrylic color. Finally, the court should be re-striped.

NOTE: Cost estimate does NOT include repair of "bird baths" or low spots, as this will require a more thorough assessment by a court repair professional.

Tennis court complex

Long Term Alternative Restore only the in-bounds playing surface (2,800 SF per court). Estimate is $30,600.

QUANTITY: 4 EA ***REPAIR COST:*** **$53,400** **Deferrable** **Est. Remaining Life = 2 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 42 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Repair

13 **Paving** **Repair/Maintenance** Tennis Court Surface

108 The 14 tennis courts all have generalized cracking of the playing surface. Many of these cracks appear to also be present in the underlying asphalt/concrete. The four south tennis courts are the most problematic and the two bleacher courts are in the best condition. This deficiency addresses the 8 remaining courts.

The courts should first be cleaned with a pressure washer. After the court has dried all cracks should be cleaned, filled and smoothed using a polymer modified cement with silica sand to fill all cracks. The next step would be to apply a base coat acrylic resurfacer, followed by two coats of acrylic color. Finally, the court should be re-striped.

NOTE: Cost estimate does NOT include repair of "bird baths" or low spots, as this will require a more thorough assessment by a court repair professional.

Tennis court complex

Long Term Alternative Restore only the in-bounds playing surface (2,800 SF per court). Estimate is $61,200.

QUANTITY: 8 EA ***REPAIR COST:*** **$112,000** **Deferrable** **Est. Remaining Life = 4 Yrs.**

Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract

Benefit Score = 42 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Repair

13 **Paving** **Repair/Maintenance** Tennis Court Surface

106 The 14 tennis courts all have generalized cracking of the playing surface. Many of these cracks appear to also be present in the underlying asphalt/concrete. The four south tennis courts are the most problematic and the two bleacher courts are in the best condition. This deficiency addresses the 2 courts in the best shape.

The courts should first be cleaned with a pressure washer. After the court has dried all cracks should be cleaned, filled and smoothed using a polymer modified cement with silica sand to fill all cracks. The next step would be to apply a base coat acrylic resurfacer, followed by two coats of acrylic color. Finally, the court should be re-striped.

NOTE: Cost estimate does NOT include repair of "bird baths" or low spots, as this will require a more thorough assessment by a court repair professional.

Tennis court complex

Long Term Alternative Restore only the in-bounds playing surface (2,800 SF per court). Estimate is $15,300.

QUANTITY: 2 EA ***REPAIR COST:*** **$25,350** **Deferrable** **Est. Remaining Life = 5 Yrs.**
Life Expectancy New = 10 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Age/Wear *Recommended Method of Repair:* Contract
Benefit Score = 42 ***Planning Priority:*** **F-Occupant Comfort Enhancement**

Repair

SYSTEM SUB-TOTAL **Paving** **$974,750** **AV. SEVERITY SCORE =** **42** **COST PER BLDG GSF=**

68 **Plumbing** **Replacement/Renewal** Covered Walkway Fire Protection and Natural Gas

104 It was observed that many of the supports for the fire protection and natural gas piping routed on the roofs of the covered walkways are not per industry standard and appear very inadequate. Many are also deteriorating. These supports should be replaced with at least industry standard supports.

Same as existing

Roofs of covered walkways

QUANTITY: 1 LS ***REPAIR COST:*** **$83,700** **Deferrable** **Est. Remaining Life = 1 Yrs.**
Life Expectancy New = 30 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is Installation *Recommended Method of Repair:* Contract
Benefit Score = 36 ***Planning Priority:*** **C-Prevent Bldg. System Failure**

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016

SYSTEM SUB-TOTAL **Plumbing** **$83,700** **AV. SEVERITY SCORE =** **68** **COST PER BLDG GSF=**

40 **Roof** **Non-Annual Recurring Maintenance** Covered Walkway Roof

114 The covered walkways, especially those for the 100, 200, 300 and 400 areas, have extensive amounts of leaves and debris on the surface. This makes it difficult to ascertain the condition of the membrane and roof-mounted items such as electrical conduit and various types of piping.

An assessment of the walkway roofs revealed that the majority of the roof drain inlets were badly clogged with debris. This forces rain water over the edges of the walkways and down the faces of the walkway support beams and the underside of the decks. This in turn leads to premature deterioration of the wood on those surfaces. This situation was observed during the first couple of days of the survey in July, which followed a period of intense rain that had allowed significant amounts of water to collect on the roofs, which was not able to drain adequately through the roof drains.

The leaves and debris should be cleaned off these roofs on a scheduled basis using powered leaf blowers, every two years as a minimum. At the same time the roof drain screens and inlets should be thoroughly cleaned of debris. An amount should be budgeted to cover this recurring maintenance requirement to address half of the walkways every year. It is estimated that about 120 hours per year would significantly enhance the maintenance of the walkway roofs.

Campus walkway roofs

QUANTITY: 1 LS ***REPAIR COST:*** **$7,500** **Deferrable** **Est. Remaining Life = 1 Yrs.**

Life Expectancy New = 2 Yrs. *Estimate Date:* 2015 *Deficiency Data Source:* Condition Survey

Deficiency Cause is No Maintenance *Recommended Method of Repair:* In-House

Benefit Score = 26 ***Planning Priority:*** **D-Escalating Repair Cost Reduction**

Maintenance

SYSTEM SUB-TOTAL	**Roof**	**$7,500**	**AV. SEVERITY SCORE =**	**40**	**COST PER BLDG GSF=**
FACILITY TOTALS	**COST TOTAL =**	**$1,384,050**	**AV. SEVERITY SCORE =**	**40**	**COST PER BLDG GSF=**

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**ST**	**Site**	Paint/Finish							
		Covered Walkway Fire Protection and Natural Gas Roof	1 LS							
105		It was observed that the surfaces of the fire protection and natural gas piping routed on the roofs of the covered walkways are heavily oxidized and not adequately protected from the elements. All exposed piping should be sanded, primed with a rust-inhibiting primer, and finished with an epoxy based paint. *Roofs of covered walkways*			$104,000					
50	**ST**	**Site**	Paving							
		Asphalt Parking Lot C	18,746 SY							
115		The asphalt paving in this lot exhibits significant areas of cracking and alligatoring. The 1/2" top placed over the original asphalt has resulted in deep and wide cracks. Minor repairs and sealing are no longer adequate. For much of the lot, and there is some base that also needs repair. It is recommended that the entire lot be cold-planed to remove the old top, base repairs performed where necessary, a new 1" lift installed, and the lot restriped. *Lot C*			$151,800					
50	**ST**	**Site**	Paving							
		Asphalt Parking Lot D	28,118 SY							
116		The asphalt paving in this lot exhibits significant areas of cracking and alligatoring. The 1/2" top placed over the original asphalt has resulted in deep and wide cracks. Minor repairs and sealing are no longer adequate. For much of the lot. It is recommended that the entire lot be cold-planed to remove the old top, base repairs performed where necessary, a new 1" lift installed, and the lot restriped. *Lot D*			$218,300					

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**ST**	**Site**	Paving							
		Asphalt Parking Lot O	11,500 SY							
123		The asphalt paving in this lot exhibits random cracking, but is otherwise in generally good condition. Cracks range in width from 1/2" to 3/4" wide. All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped. *Lot O*			$58,000					
50	**ST**	**Site**	Paving							
		Asphalt Parking Lot A	10,590 SY							
100		The asphalt paving in this lot exhibits random cracking, but is otherwise in generally good condition. Cracks range in width from 1/4" to 3/4" wide. All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped. *Lot A*				$49,300				
50	**ST**	**Site**	Paving							
		Asphalt Parking Lot F	9,000 SY							
119		The asphalt paving in this lot exhibits random cracking, but is otherwise in reasonable condition. Cracks range in width from 1/4" to 3/4" wide. All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped. *Lot F*				$42,000				
50	**ST**	**Site**	Paving							
		Asphalt Parking Lot J	23,315 SY							
117		The asphalt paving in this lot is in reasonably good condition, exhibiting only minor random surface wear. It is recommended that the entire lot be seal-coated with 2 coats of a petroleum resistant emulsion and restriped. *Lot J*					$94,800			

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**ST**	**Site**	Paving							
		Asphalt Parking Lot L	6,730 SY							
118		The asphalt paving in this lot is in reasonably good condition, exhibiting only minor random surface wear. It is recommended that the entire lot be seal-coated with 2 coats of a petroleum resistant emulsion and restriped. *Lot L*					$27,400			
50	**ST**	**Site**	Paving							
		Asphalt Parking Lot H	4,300 SY							
121		The asphalt paving in this lot exhibits random cracking, but is otherwise in generally good condition. Cracks range in width from 1/8" to 1/2" wide. All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped. *Lot H*					$23,900			
50	**ST**	**Site**	Paving							
		Asphalt Parking Lot B	8,440 SY							
101		The asphalt paving in this lot is in reasonably good condition, exhibiting only minor random surface wear. It is recommended that the entire lot be seal-coated with 2 coats of a petroleum resistant emulsion and restriped. *Lot B*						$34,300		
50	**ST**	**Site**	Paving							
		Asphalt Parking Lot I	1,075 SY							
122		The asphalt paving in this lot exhibits random cracking, but is otherwise in generally good condition. Cracks range in width from 1/8" to 1/2" wide. All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped. *Lot I*						$6,000		

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
50	**ST**	**Site**	Paving							
		Asphalt Parking Lot G	17,376 SY							
120		The asphalt paving in this lot exhibits random hairline cracking, but is otherwise in generally good condition. Cracks range in width from 1/8" to 1/4". All cracks should be swept out and cleaned, then sealed. The entire lot should then be seal-coated with 2 coats of a petroleum resistant emulsion and restriped. *Lot G*						$78,200		
40	**ST**	**Site**	Roof							
		Covered Walkway Roof	1 LS							
114		The covered walkways, especially those for the 100, 200, 300 and 400 areas, have extensive amounts of leaves and debris on the surface. This makes it difficult to ascertain the condition of the membrane and roof-mounted items such as electrical conduit and various types of piping. An assessment of the walkway roofs revealed that the majority of the roof drain inlets were badly clogged with debris. This forces rain water over the edges of the walkways and down the faces of the walkway support beams and the underside of the decks. This in turn leads to premature deterioration of the wood on those surfaces. This situation was observed during the first couple of days of the survey in July, which followed a period of intense rain that had allowed significant amounts of water to collect on the roofs, which was not able to drain adequately through the roof drains. The leaves and debris should be cleaned off these roofs on a scheduled basis using powered leaf blowers, every two years as a minimum. At the same time the roof drain screens and inlets should be thoroughly cleaned of debris. An amount should be budgeted to cover this recurring maintenance requirement to address half of the walkways every year. It is estimated that about 120 hours per year would significantly enhance the maintenance of the walkway roofs. *Campus walkway roofs*			$7,500					

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
13	**ST**	**Site**	Paint/Finish							
		Wood Window Frame	30 EA							
109		There is random weathering and minor chipping on the exterior wood window frames on many of the buildings. This should be addressed as an annual maintenance expenditure for a set quantity of frames annually. It is recommended that maintenance funds be budgeted to refinish/repair approximately 30 frames per year. Any peeling finish should be scraped/sanded, damaged wood repaired using an exterior wood filler/putty, and the repaired areas sanded. The frame should then be primed and re-finished with two coats of finish. *Campus wide*			$5,700					
13	**ST**	**Site**	Paint/Finish							
		Exterior Wood Panel	1,000 SF							
110		There is random weathering and minor chipping on the exterior wood panels on many of the buildings. This should be addressed as an annual maintenance expenditure for a set quantity of panels annually. It is recommended that maintenance funds be budgeted to refinish/repair approximately 1000 SF of panels every two years. Any peeling finish should be scraped/sanded, damaged wood repaired using an exterior wood filler/putty, and the repaired areas sanded. The panels should then be primed and re-finished with two coats of finish. *Campus wide*			$8,200					

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
13	**ST**	**Site**	Paint/Finish							
		Wood Interior Doors/Frames	35 EA							
111		There is random minor damage such as scratches/marring and worn finishes on a number of interior doors throughout the campus. This is largely the result of constant use/abuse. Repair of minor scratches/dings and refinishing of worn door and frame surfaces will significantly increase the life of the doors. This should be addressed as an annual maintenance expenditure for a set quantity of doors annually. It is recommended that maintenance funds be budgeted to refinish/repair approximately 35 doors every year. Any peeling finish should be scraped/sanded/wire brushed and damaged wood/metal repaired using an exterior filler/putty and the repaired areas sanded. The doors should then be primed and re-finished with two coats of finish. *Campus wide*			$9,000					
13	**ST**	**Site**	Paint/Finish							
		Exterior Doors/Frames	25 EA							
112		There is random weathering and minor damage on a number of exterior doors throughout the campus. This is largely the result of normal weathering and constant use. Repair of minor scratches/dings and refinishing of door and frame surfaces will significantly increase the life of the doors. This should be addressed as an annual maintenance expenditure for a set quantity of doors annually. It is recommended that maintenance funds be budgeted to refinish/repair approximately 25 doors every year. Any peeling finish should be scraped/sanded/wire brushed and damaged areas repaired using an exterior filler/putty and the repaired areas sanded. The doors should then be primed and re-finished with two coats of finish. This deficiency also includes the replacement and finishing of 25 door trim sets. *Campus wide*			$12,900					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Non-Annual Recurring Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL:	**Non-Annual Recurring Maintenance**	*AV. SEVER. SCORE =*	**42**	**$0**	**$575,400**	**$91,300**	**$146,100**	**$118,500**	**$0**	**$931,300**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
13	**ST**	**Site**	Paving							
		Tennis Court Surface	4 EA							
107		The 14 tennis courts all have generalized cracking of the playing surface. Many of these cracks appear to also be present in the underlying asphalt/concrete. The four south tennis courts are the most problematic and the two bleacher courts are in the best condition. This deficiency addresses the 4 courts in the worst shape. The courts should first be cleaned with a pressure washer. After the court has dried all cracks should be cleaned, filled and smoothed using a polymer modified cement with silica sand to fill all cracks. The next step would be to apply a base coat acrylic resurfacer, followed by two coats of acrylic color. Finally, the court should be re-striped. NOTE: Cost estimate does NOT include repair of "bird baths" or low spots, as this will require a more thorough assessment by a court repair professional. *Tennis court complex*				$53,400				
13	**ST**	**Site**	Paving							
		Tennis Court Surface	8 EA							
108		The 14 tennis courts all have generalized cracking of the playing surface. Many of these cracks appear to also be present in the underlying asphalt/concrete. The four south tennis courts are the most problematic and the two bleacher courts are in the best condition. This deficiency addresses the 8 remaining courts. The courts should first be cleaned with a pressure washer. After the court has dried all cracks should be cleaned, filled and smoothed using a polymer modified cement with silica sand to fill all cracks. The next step would be to apply a base coat acrylic resurfacer, followed by two coats of acrylic color. Finally, the court should be re-striped. NOTE: Cost estimate does NOT include repair of "bird baths" or low spots, as this will require a more thorough assessment by a court repair professional. *Tennis court complex*							$112,000		

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Repair/Maintenance** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
13	**ST**	**Site**	Paving							
		Tennis Court Surface	2 EA							
106		The 14 tennis courts all have generalized cracking of the playing surface. Many of these cracks appear to also be present in the underlying asphalt/concrete. The four south tennis courts are the most problematic and the two bleacher courts are in the best condition. This deficiency addresses the 2 courts in the best shape. The courts should first be cleaned with a pressure washer. After the court has dried all cracks should be cleaned, filled and smoothed using a polymer modified cement with silica sand to fill all cracks. The next step would be to apply a base coat acrylic resurfacer, followed by two coats of acrylic color. Finally, the court should be re-striped. NOTE: Cost estimate does NOT include repair of "bird baths" or low spots, as this will require a more thorough assessment by a court repair professional. *Tennis court complex*							$25,350	
TOTAL: Repair/Maintenance			*AV. SEVER. SCORE =* **13**	**$0**	**$0**	**$53,400**	**$0**	**$112,000**	**$25,350**	**$190,750**

SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
68	**ST**	**Site**	HVAC							
		Covered Walkway Piping Insulation	1 LS							
103		The hot water heating piping for buildings 100, 103, & 104 are routed from building 102 across the roofs of the covered walks. The piping insulation and protective jackets on this piping are deteriorated, causing excessive heat loss. The insulation and protective jackets should be replaced. *Roofs of covered walkways*			$114,400					
68	**ST**	**Site**	Plumbing							
		Covered Walkway Fire Protection and Natural Gas Piping	1 LS							
104		It was observed that many of the supports for the fire protection and natural gas piping routed on the roofs of the covered walkways are not per industry standard and appear very inadequate. Many are also deteriorating. These supports should be replaced with at least industry standard supports. *Roofs of covered walkways*			$83,700					
68	**ST**	**Site**	Electrical							
		Electrical Distribution Switchboard	1 LS							
102		A distribution switchboard that serves Buildings 700, 710, 800, and 810 appears to be original and is thought to be approximately 50 years old. Although the equipment is still functional, it is obsolete, replacement parts are expensive and not readily available, and the equipment is at the end of its generally accepted service life. There is also a concern with the reliability of the equipment as it provides protection of the circuits connected to each breaker. It is recommended that this equipment be replaced. *Behind Building 900 Theater*					$52,000			
5	**ST**	**Site**	Other							
		Outside Bench	9 EA							
113		Several of the plastic coated benches located around the campus are damaged. The plastic coating is frayed/torn and the metal seat webbing is damaged. These benches should be replaced. *Campus wide*			$11,900					

FACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY

MAINTENANCE CATEGORY: **Replacement/Renewal** *SURVEY DATE:* 8/15

SEVER. SCORE DEF. NO.	*BLDG.*	*COMPONENT DEFICIENCY LOCATION*	*SYSTEM QUANTITY*	*CRITICAL COST 2015*	*YR. 1 COST 2016*	*YR. 2 COST 2017*	*YR. 3 COST 2018*	*YR. 4 COST 2019*	*YR. 5 COST 2020*	*TOTAL COST YR. 0-5*
TOTAL: Replacement/Renewal		*AV. SEVER. SCORE =*	**52**	**$0**	**$210,000**	**$0**	**$52,000**	**$0**	**$0**	**$262,000**
TOTAL FOR ALL CATEGORIES		*AV. SEVER. SCORE =*	**40**	**$0**	**$785,400**	**$144,700**	**$198,100**	**$230,500**	**$25,350**	**$1,384,050**

Bldg 103 - Badly rusted electrical conduit on roof

Bldg 220 - Deteriorating covered walkway roof support beam

Bldg 315 - Deteriorating BUR

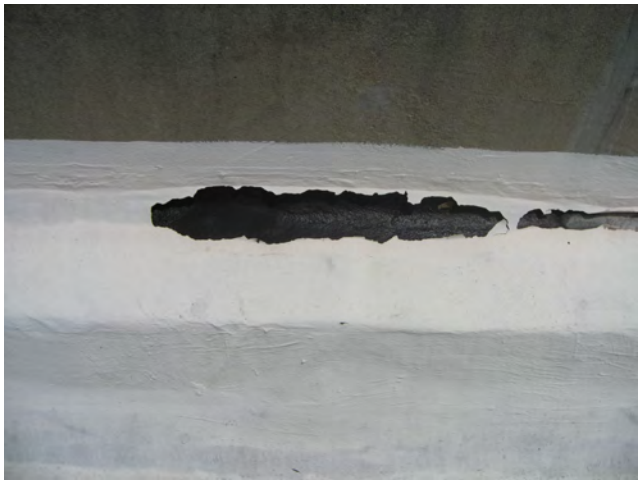
Bldg 315 - Badly deteriorated fascia/trim boards

Bldg - 316 Deteriorated swamp cooler

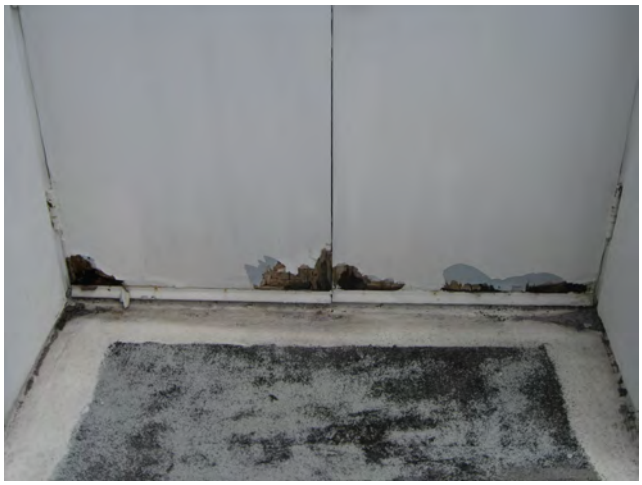
Bldg 340 - Deteriorated wood parapet

Bldg 381 - Deteriorated roof membrane

Bldg 381 - Deteriorating parapet wall joint mortar



Bldg 381 - Deteriorating membrane flashing on parapet



Bldg 381– Deteriorated wood doors on rooftop enclosure

Bldg - 381 Rotted walkway roof support beam

Bldg 381 - 2nd badly deteriorated walkway roof support beam

Bldg 381 - Rusting metal stringer on exterior stairway

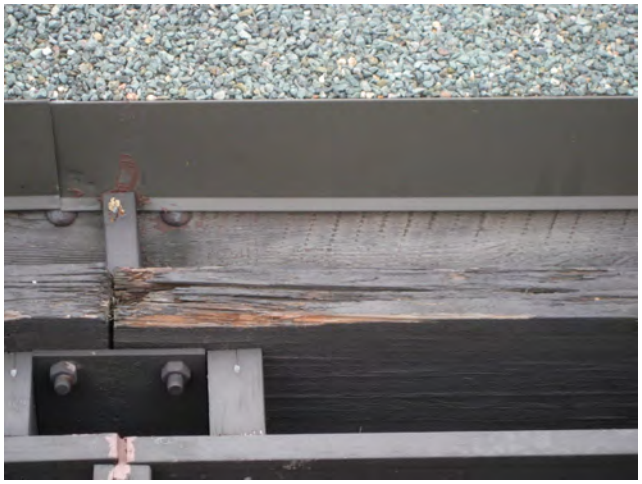
Bldg 381 - Badly cracked concrete patio area slab

Bldg 381 - Dangerous lifting concrete walk slab

Bldg 420– Deteriorated packaged rooftop A/C units

Bldg - 430 Deteriorated rooftop gas boiler and Circulating pumps

Bldg 430 - Deteriorating covered walkway roof support beam



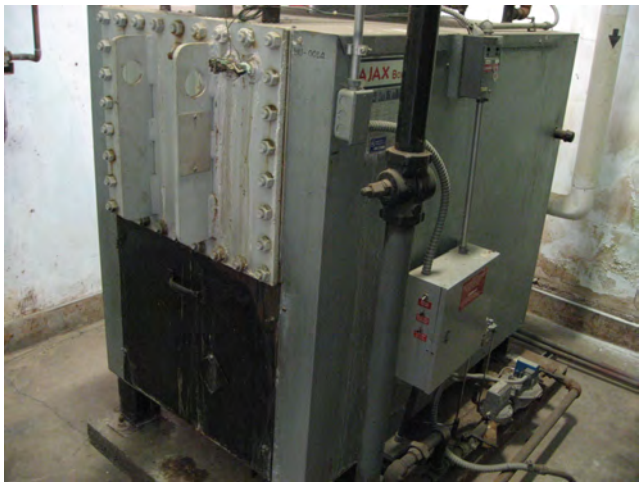
Bldg 560 - Deteriorating covered walkway wood support beam

Bldg 560 - 2nd bad covered walkway wood support beam

Bldg 590 - Badly deteriorated rooftop exhaust fan

Bldg 600 – Badly rusting rooftop HVAC duct seams

Bldg 600 - Badly rusting rooftop HVAC duct joints



Bldg 610 - Deteriorating hot water boiler

Bldg 610 - Deteriorating hot water storage tank

Bldg 610 - Weathered finish on exterior wood panels

Bldg 620 - Badly deteriorated rooftop hot water heater

Bldg 620 – Damage on roof parapet top

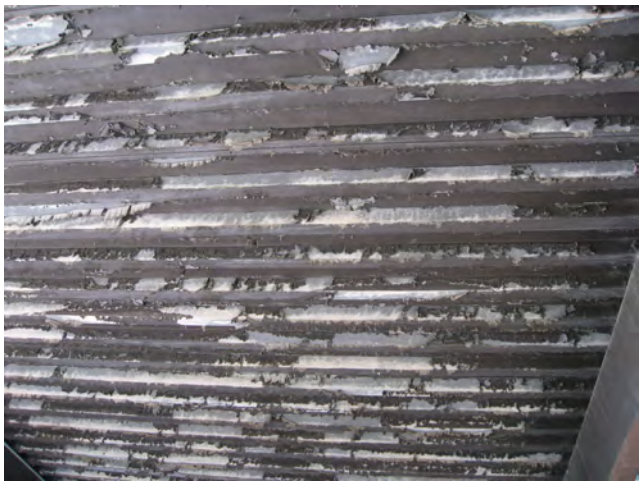
Bldg 620 - Badly rusting rooftop HVAC duct seams

Bldg 630-660 - Typical deteriorating boards on Rooftop HVAC enclosures

Bldg 710 - Deteriorating air handler

Bldg 750 - Badly deteriorated wood roof fascia

Bldg 750 - Badly deteriorated covered walkway
Roof beam



Bldg 900 – Badly peeling paint on underside of canopies near front entrance

Bldg 1100 - Concrete spalling on roof parapet
Exposing rebar

Bldg 1200 - Typical metal roof panel deterioration

Bldg 1200 - Typical metal roof panel deterioration

1600 Bldgs - Typical peeling paint on roof Parapet caps

1600 Bldgs - Typical finish deterioration on rooftop HVAC enclosures

1600 Bldgs – Typical rusting on metal at base of buildings

1600 Bldgs - Typical mortar deterioration at base Of roof parapets

Bldg 2000 - Typical rusting of base of steel walkway Roof support columns

Bldg 2000 - Typical badly weathered exterior Door finish

Bldg 2000 - Typical EIFS damage on rooftop HVAC enclosures

Bldg 5000 (San Ysidro) - Badly rusted/split steel downspout

Bldg 9000 (Crown Cove) – Typical totally deteriorated metal parapet cap flashing

Typical deteriorated rooftop foam pipe insulation

Typical deteriorated rooftop jacketed pipe insulation

Typical air handler in mechanical room

Typical air handler in mechanical room

Typical aging/deteriorating boiler

Typical old/obsolete electrical switchgear

Typical old/obsolete electrical switchgear

Typical old/obsolete electrical switchgear

Typical old/obsolete electrical switchgear

Typical deteriorating hot water boiler

Typical deteriorating hot water boiler

Typical older rooftop HVAC units w gaspaks

Typical older rooftop condensing units

Typical older rooftop packaged HVAC units

Typical older rooftop exhaust fans

Typical deteriorating rooftop ductwork
Seam sealant

Typical deteriorating rooftop ductwork
seam sealant

Typical concrete structural beam spalling

Typical concrete column spalling

Typical concrete column spalling

Typical exterior wood window frame finish deterioration

Typical exterior wood wall panel finish deterioration

Typical exterior wood wall panel finish deterioration

Typical exterior wood door frame finish deterioration

Typical dirty single-ply membrane surface

Typical roof debris build-up

Typical roof debris build-up

Typical clogged roof drains

Typical clogged roof drains/sumps

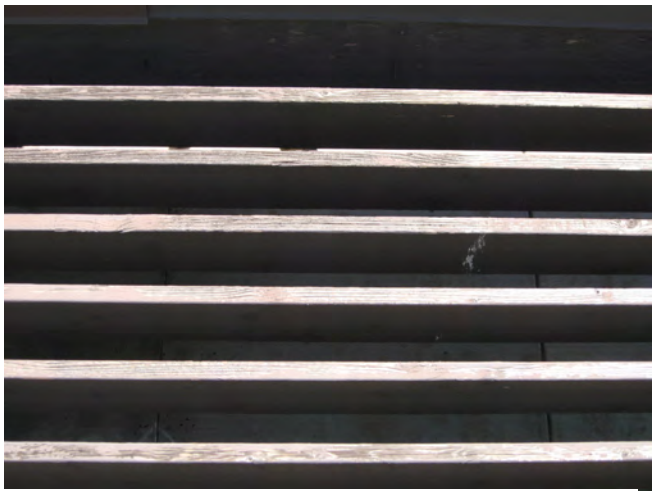
Typical deteriorating roof parapet cap joint sealant

Typical roof patch on older single-ply membranes

Typical roof patch on older single-ply membranes

Typical tree overhang on roof

Typical tree overhang on roof



Typical deterioration on tops of sunscreen boards

Typical deterioration on tops of sunscreen boards

Typical failing roof hatch

Typical concrete walkway cracks

Typical tennis court surface cracks

Parking lot paving deterioration-failure of old lift

Typical parking lot paving alligatoring

Typical failing parking lot paving wear layer

Typical larger area cracking in parking lot paving

Typical smaller cracks in parking lot paving

Typical paking lot paving surface crazing and hairline cracks

Parking lot paving slumping

Typical parking lot paving surface wear

Typical failing parking lot paving wear layer