2015 FACILITY CONDITION SURVEY

SOUTHWESTERN COLLEGE

SURVEY CONDUCTED BY:

Pack & Associates, LLC 2715 185th Ave. NE Redond, WA 98052



REQUESTED BY:

Proposition R Bond Program Southwestern College Chula Vista, California

ACKNOWLEDGMENTS

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

Southwestern College

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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.

<u>Deficiency Severity/Corrective Action Benefit Scoring</u>

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 resealed 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 refinishing 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 epoxybased 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 powerwashed 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.

- 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 twodozen 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.

Southwestern College

SURVEY DATE: 8/15

100 Administration

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$229,175

Facility Condition Rating = 84 (Fair)

Repair Cost as a Percent of Facility Replacement Cost is 16 %

Cost Per Square Foot is \$47.72

Average Severity Score = 51

14 Deficiencies Were Identified



PRIMARY USE: Administration

FACILITY SF:

NO. OF STORIES: 1.0

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

FACILITY AGE: 50 Yrs.

LAST RENOVATED:

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

4,802

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)

Southwestern College

SURVEY DATE: 8/15

100 Administration

900 Otay Lakes Rd.

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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	\$44.3

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.

Southwestern College

SURVEY DATE: 8/15

100 Administration

900 Otay Lakes Rd.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt buildup, 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

Southwestern College

SURVEY DATE: 8/15

100 Administration

900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 100 Administration

68 Electrical Replacement/Renewal

Circuit Breaker Panels

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 100 Administration

68 HVAC Replacement/Renewal

HVAC Equipment

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 100 Administration

40 Paint/Finish Repair/Maintenance Wall Finish

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

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

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

SURVEY DATE. Page 4 SITE: Southwestern College 8/15

FACILITY: 100 Administration

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

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

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

Deficiency Cause is Unknown

Recommended Method of Repair: Contract

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

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

Recommended Method of Repair: Contract Deficiency Cause is No Maintenance

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 100 Administration

68 Roof Replacement/Renewal Roof Drains

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 100 Administration

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 7

FACILITY: 100 Administration

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

	MAINTENANCE CATEGORY: Annual PM			SURVEY DATE: 8/15							Page 1
SEVEI SCOR DEF. I	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Adm	inistration	Roof								
	Roof Drains		2 EA								
04		ng drainage. Drains shoul year.	gged with significant amounts of d be thoroughly cleaned out at	\$200 						. — — — — —	
10	100 Adm	inistration	Roof								
	Roof Membrar	e	5,000 SF								
103	membrane sur surface and se	face. This can create a so criously clog roof drains. C	and tree debris on the roof couring action across the Once the roof membrane has I off the roof at least once per						\$350		

AIN I ENANCE CAT	MAINTENANCE CATEGORY: Improvement			SURVEY DATE: 8/15						Page 2
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 100 A	dministration	Electrical								
Light Fixtur	es	59 EA								
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							

	NANCE CATE	GORY: Non-Annual Recurring	g Maintenance		Page						
SEVER. SCORE DEF. NO	. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 1	l00 Adı	ministration	Paint/Finish								
	Exterior Cond	crete Columns/Beams/Roof Para	apets 2,400 SF								
	Exterior Concrete Columns/Beams/Roof Parapets 2,400 SF 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.		eathering. This detracts There is also random ns and columns. Pressure		\$1,800						
		building									

MAINT	ENANCE C	ATEGORY: Repair/Maintenanc	e		SURVEY DA	ATE: 8/15					Page 4
SEVER SCORE DEF. N	Ī	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Hand	ller	1 EA								
112 	appears 15 years requirem budgeted years in	nandling unit in the mechanical root to still be in good condition. Its rest. However, as the unit ages reparents will become more frequent. Its for repairs/maintenance that ma order to properly maintain the air ical Room	emaining life is estimated at ir and maintenance An allowance should be y be required over the next 5		\$5,200 						
50	100	Administration	Structural								
	Concrete	e Columns and Beams	30 SF								
101	from min spalling exposed should b agent sh	random spalling of surface concretor spalling to significant spalling to concrete should be removed, spalling surfaces cleaned by power wire the treated with a rust neutralizing could then be applied to all voids, a epoxy-based patch cement.	vith exposed rebar. All lled areas chipped, and brushing. Any exposed rebar coating. An epoxy bonding		\$2,100						
	addresse	mmended that after the initial repa ed on a recurring basis at least ev er of building	airs new spalling be ery three to four years.								
40	100	Administration	Paint/Finish			_ — — — —				. — — — — -	
	Wall Fini	ish	144 SF								
108	install 42	er on one wall is torn and stained. 2" high pressure plastic laminate (lut wall above wainscot.			\$2,650						

101D

AINTENANCE CA	TEGORY: Repair/Maintenance			SURVEY DA	NTE: 8/15				Pag
EVER. Core EF. No. BLDG	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	Administration	Paint/Finish							
Door		1 EA							
	oor finish is deteriorated/damaged. install 42" high-pressure plastic lam	•		\$350					

	TENANCE CATEGORY: Replacement/Renewal	FICIENCY REPAIR PR	SURVEY DATE: 8/15						
SEVER SCORE DEF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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, we safety hazard as there is no way to retard the document and with great force, which could cause serious in to close the hatch. It also makes the hatch very can also be very dangerous. Replace the hatch we dampers and side control handles. Roof access hatch	r from closing quickly njury to anyone trying lifficult to open, which	\$2,025						

FACILITY CONDITION SURVEY.	CRITICAL /5VR DEFICIENCY REPA	AIR PROGRAMMING DETAIL R	Y MAINTENANCE/REPLACEMENT CATEGORY
FACILITY CONDITION SURVEY	SKITICAL/31K. DEFICIENCT KEP/	AIR PROGRAININING DETAIL D	TIVIAINTENANCE/REPLACEIVIENT CATEGORT

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

Roof

MAINTEN	ANCE CAT	EGORY: Replacement/Re	enewal		SURVEY DA	ATE: 8/15					Page 7
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR 0-5	
	-		Roof								
113 Co m siç ex ap Tr fa ch de nu ag	D. BLDG. LOCATION 100 Administration Single-Ply Roof Membrane College records provided to the consultant indica membrane, which appears to be hypalon, is 15 y significant amount of debris on the roof and the rextremely dirty, making an assessment of condit apparent that maintenance has been badly lacking. The assessment conducted focused on membra fasteners and determining the condition of the such alking and crazing of the surface, which are indeterioration. Many areas of the seams appear finumber of fasteners that are "lifting" under the mage of the membrane, its apparent lack of mainter apparent condition, it is recommended that the magnetic programmed for replacement in 4 to 5 years. A complete removal of the existing membrane, flinsulation board are recommended. The roof de		on, is 15 years old. There is a f and the membrane surface is t of condition very difficult. It is adly lacking in recent times. In membrane seams and in of the surface relative to nich are indicators of appear frayed and there are a nider the membrane. Given the cof maintenance, and its that the membrane be					\$72,750			
in: to Ro po ra m	sulation be determin eplaceme olystyrene ated along nechanical	poard are recommended. The its condition and whether ent should include installation or similar insulation board.	ne roof deck should be evaluated any repairs are required. n of a new vapor barrier, of at least 2" thickness and R-10 proper drainage, a new 60 mil e, and metal parapet cap								

MAIN	ITENANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page 8
SEVEI SCOR DEF. I	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
111	Circuit Breaker Panels The circuit breaker panelboards are original to the bust approximately 50 years old. Although the equipment is obsolete, replacement parts are expensive and no and the equipment is at the end of its generally acce. There is also a concern with the reliability of the equipment is also a concern with the reliability of the equipment provides protection of the circuits connected to each recommended that this equipment be replaced. Various interior rooms	t is still functional, it t readily available, pted service life. pment as it			\$52,500					
68	100 Administration	Roof								
106	Roof Drains The roof drains were damaged when the hypalon me installed on the roof and they no longer can be kept the drain line. They should be replaced. This should roof membrane is next replaced. The roof drains also currently drain down through the under the slab. Maintenance personnel have identifithe drain piping inside some buildings in the past and deterioration may be occurring. It is recommended the drain lines be abandoned and new lines installed to a from below the drains to the exterior. This should be roof membrane is next replaced. At each roof drain	oroperly fastened to d be done when the e building and ed deterioration in d suspect additional hat the vertical flow horizontally					\$10,050			

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

IAIN	TENANCE C	ATEGORY: Replacement/R	enewal		SURVEY DA	NTE: 8/15				Pa
EVEI COR EF. I	E	COMPONENT DEFICIENCY . LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
8	100 HVAC Ed	Administration	HVAC 1 LS							
10	been replapproxim equipmer be anticip considere circular a 1965 equitme. Refrigera be replace	aced in 2001 and are now 14 ately 70% of the generally act. At this point, increasing meted going forward, and replet for approximately five year luminum exhaust fans on the ipment and should be sched	ccepted 20 year service life of the naintenance and repair costs can accement programming should be so out. There are also three roof that appear to be original uled for replacement at the same of is also deteriorated and should so are replaced. Sixty feet of						\$49,700	
)		Administration	Roof							
	Wood Su	nscreen Boards	3,875 LF							
05	elements exposes The suns design ar be replace hangers coated w applied w should signeral	, including rain. This deterior top and side wood surfaces to creens are an integral archited should be retained. It is reded with treated S4S douglas. The top surface of the 2x8 arth 2 coats of a low viscosity?	commended that the 2x8 boards fir browntone boards, and new nd 4xboards should then be 100%-solids epoxy resin coating d and low viscosity epoxy resin ne boards, retard constant aintenance costs.			\$26,100				
	. — — — –						. — — — —			- — — — — — —
				\$2,025	\$0	\$78,600	\$0	\$82,800	\$49,700	\$213,125

Southwestern College

SURVEY DATE: 8/15

102 Staff Lounge 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$271,245

Facility Condition Rating = 57 (Poor)

Repair Cost as a Percent of Facility Replacement Cost is 43 %

Cost Per Square Foot is \$131.29

Average Severity Score = 43

Deficiencies Were Identified



Staff Support PRIMARY USE:

FACILITY SF:

2,066

NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$630,130 FACILITY AGE:

50 Yrs.

LAST RENOVATED:

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)

Southwestern College SURVEY DATE: 8/15

102 Staff Lounge 900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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	\$129.8

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 buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 102 Staff Lounge

68 Electrical Replacement/Renewal

Circuit Breaker Panels and Distribution Swithboard

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 102 Staff Lounge

68 HVAC Replacement/Renewal HVAC Equipment

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 102 Staff Lounge

5 Interior Closure Replacement/Renewal

Toilet Partition

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

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

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

SURVEY DATE .. SITE: Southwestern College 8/15 Page 4

FACILITY: 102 Staff Lounge

20 Plumbing Replacement/Renewal Rest Room Lavatory

106 The layatories 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: REPAIR COST: 1 LS Est. Remaining Life = 1 Yrs. \$3,950 **Deferrable**

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

Deficiency Cause is Age/Wear

Recommended Method of Repair: Contract

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

SYSTEM SUB-TOTAL AV. SEVERITY SCORE = COST PER BLDG GSF= \$1.91 Plumbing \$3.950 20

75 Roof Replacement/Renewal

Single-Ply Roof Membrane

College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 113 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: Est. Remaining Life = 4 Yrs. \$36,600 Deferrable

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

Deficiency Cause is No Maintenance

Recommended Method of Repair: Contract

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

SITE: Southwestern College SURVEY DATE .. 8/15 Page 5

FACILITY: 102 Staff Lounge

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

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

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 102 Staff Lounge

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

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

SURVEY DATE .. Page 7 SITE: Southwestern College 8/15

FACILITY: 102 Staff Lounge

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

	ENANCE CATEGO	RY: Annual PM			SURVEY DA	ATE: 8/15				Pag
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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							
03		g drainage. Drains should year.	ged with significant amounts of be thoroughly cleaned out at	\$200						
10	102 Staff	Lounge	Roof							
	Roof Membran	е	2,250 SF							
	-	ficant amounts of leaves a	nd tree debris on the roof ouring action across the						\$200	

	ENANCE CATEGORY: Non-Annual Recurring Mainte	enance		SURVEY DA	ATE: 8/15				Page	
SEVER. SCORE DEF. NO.		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
	102 Staff Lounge	Paint/Finish								
Е	Exterior Concrete Columns/Beams/Roof Parapets	1,260 SF								
ro fr s w				\$825						
S	Perimeter of building									

<i>MAINTEN.</i>	ANCE CATEGORY: Repair/	Maintenance					I	Page			
EVER. CORE DEF. NO.	COMPONENT DEFICIENCY BLDG. LOCATION		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 10	2 Staff Lounge		Structural								
Co	oncrete Columns and Beam	s	25 SF								
fro sp ex sh ag	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.				\$1,700						
ac	is recommended that after t ddressed on a recurring bas terimeter of building										

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

IAINTE	NANCE CA	TEGORY: Replacement/Re	newal		SURVEY DA	ATE: 8/15				Page
EVER. CORE PEF. NO). BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 1	102	Staff Lounge	Roof							
	Single-Ply	Roof Membrane	23 SQ							
	membrane significant extremely	e, which appears to be hypalo amount of debris on the roof	ant indicate the single-ply roof on, is 15 years old. There is a and the membrane surface is of condition very difficult. It is adly lacking in recent times.					\$36,600		
	fasteners a chalking a deterioration number of age of the apparent of		n of the surface relative to ich are indicators of appear frayed and there are a der the membrane. Given the of maintenance, and its the membrane be							
	insulation to determi Replacem polystyren rated alon mechanica	ne its condition and whether a ent should include installatior e or similar insulation board o	ne roof deck should be evaluated any repairs are required. In of a new vapor barrier, of at least 2" thickness and R-10 proper drainage, a new 60 mil and metal parapet cap							
		cost estimate does not including including the stimate does not include th	de deck repairs needed, if any, or							
8 1	102	Staff Lounge	HVAC							
	HVAC Equ	uipment	1 LS							
	HP pump) be original	that serves buildings 100, 10 1965 equipment and is no lo r maintain. It should be repla	ring boiler (900 MBH input with 1 02, 103, and 104. It appears to onger considered cost-effective ced.		\$59,100					

MAIN	TENANCE CATE	GORY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page 5
SEVEF SCORI DEF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Sta	ff Lounge	Electrical								
	Circuit Break	er Panels and Distribution Swithboard	1 LS								
111	approximately is obsolete, ru and the equip There is also provides prot recommende This building 100, 102, 103 condition, wit this equipment	eaker panelboards are original to the buy 50 years old. Although the equipment eplacement parts are expensive and not oment is at the end of its generally accella concern with the reliability of the equipment of the circuits connected to each did that this equipment be replaced. also houses the main distribution switch and similar parts and reliability concerns. In the salso recommended.	is still functional, it treadily available, oted service life. pment as it breaker. It is agear for buildings similar age and			\$98,800					
68	102 Sta	ff Lounge	Roof							. — — — — -	
	Roof Drains		2 EA								
105	installed on th	ns were damaged when the hypalon me ne roof and they no longer can be kept p . They should be replaced.						\$5,000			
	under the sla the drain pipil deterioration drain lines be	ns also currently drain down through the b. Maintenance personnel have identifing inside some buildings in the past and may be occurring. It is recommended the abandoned and new lines installed to fine drains to the exterior drain	ed deterioration in I suspect additional nat the vertical								

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

	TENANOE CATEGORY D			0110115115	N.T.F. 6/45				
MAIN	ITENANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15				Page
SEVEI SCOR DEF. N	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
88	102 Staff Lounge	HVAC 1 LS							
110	HVAC Equipment The two packaged rooftop units appear to have be and are now 14 years old, which is approximately accepted 20 year service life of the equipment. A maintenance and repair costs can be anticipated replacement programming should be considered to years out. In addition, there are three circular aluit on the roof that appear to be original 1965 equipment scheduled for replacement at the same time. Roof	een replaced in 2001 70% of the generally this point, increasing going forward, and for approximately five minum exhaust fans						\$47,500	
40	102 Staff Lounge				_ — — — —				. — — — — — — —
	Wood Sunscreen Boards	2,025 LF							
104	The top surfaces of the sunscreen boards are con- elements, including rain. This deteriorates the pa exposes top and side wood surfaces to weather-control of the sunscreens are an integral architectural features design and should be retained. It is recommended be replaced with treated S4S douglas fir brownton hangers. The top surface of the 2x8 and 4x board coated with 2 coats of a low viscosity 100%-solids applied with a roller. The treated wood and low vishould significantly extend the life of the boards, reweathering and significantly reduce maintenance. All sunscreen boards on perimeter of building	Int fairly rapidly and aused deterioration. In the building did that the 2x8 boards are boards, and new also should then be epoxy resin coating secosity epoxy resinetard constant			\$12,950				
20	102 Staff Lounge	Electrical							
	Light Fixtures	44 EA							
107	Maintenance staff and program managers have in existing fluorescent lighting is not as energy efficie and should be replaced with LED lighting. Retrofit recessed can fixtures and suspended light fixtures LED lights. Light fixtures throughout building.	ent as LED lighting existing fluorescent,		\$2,420					

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

MAIN	TENANCE CATEG	ORY: Replacement/Ren	ewal		SURVEY DA	ATE: 8/15					Page 7
SEVEI SCOR DEF. I	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Sta	f Lounge	Plumbing								
	Rest Room La	•	1 LS								
106	deteriorating for cost-effective	to repair or maintain and s ories and new faucets set in tz countertop.	est room are old, with The components are no longer hould be replaced with under- n a high-pressure laminate or		\$3,950						
5	102 Stat	f Lounge	Interior Closure			_ — — — —				- — — — — — -	
	Toilet Partition	١	1 EA								
109		nish is damaged. Replace	n(s), and there are areas where with new high pressure plastic		\$650						
5	102 Stat	 f Lounge	HVAC	. — — — —						. — — — — —	
	HVAC Ceiling	Diffusers	5 EA								
100	new ceiling di		s) are stained and rusty. Install		\$1,350 ————	- — — —				. — — — — —	
08											

Southwestern College

SURVEY DATE: 8/15

103 Classroom 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$135,245

Facility Condition Rating = 87 (Fair)

Repair Cost as a Percent of Facility Replacement Cost is 13 %

Cost Per Square Foot is \$38.47

Average Severity Score = 57

Deficiencies Were Identified



PRIMARY USE: Classroom/Office

FACILITY SF:

3,516

NO. OF STORIES: 1.0

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

LAST RENOVATED:

50 Yrs.

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)

Southwestern College

SURVEY DATE: 8/15

103 Classroom

900 Otay Lakes Rd.

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 Maintenand	e	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	\$35.1

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.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 103 Classroom

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

Repair

68 Electrical Replacement/Renewal Circuit Breaker Panels

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 103 Classroom

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

64 HVAC Repair/Maintenance HVAC Equipment

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

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

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

SURVEY DATE .. SITE: Southwestern College 8/15 Page 3

FACILITY: 103 Classroom

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

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

Deficiency Cause is Unknown

Recommended Method of Repair: Contract

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

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.

REPAIR COST: QUANTITY: 39 SQ \$62.500 Est. Remaining Life = 4 Yrs. Deferrable

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

Deficiency Cause is No Maintenance Recommended Method of Repair: Contract

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 103 Classroom

68 Roof Replacement/Renewal

Roof Drains

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 103 Classroom

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

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

	ENANCE CATEGO	PRY: Annual PM			SURVEY DA	ATE: 8/15				Paç
SEVER SCORE DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Clas	sroom	Roof							
	Roof Drains		4 EA							
03		ig drainage. Drains should year.	ged with significant amounts of d be thoroughly cleaned out at	\$375 						
0	103 Clas	sroom	Roof							
	Roof Membran	е	3,750 SF							
		ificant amounts of leaves a face. This can create a sc	and tree debris on the roof couring action across the lance the roof membrane has						\$275	

IAINTENANCE CATE	EGORY: Improvement				Page					
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 103 C	lassroom	Electrical								
Light Fixture	es :	60 EA								
existing fluo and should recessed ca	S .			\$3,400						

IAINTENANCE CATE	GORY: Non-Annual Recurrin	g Maintenance	SURVEY DATE: 8/15						Pag
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
3 103 Cla	assroom	Paint/Finish							
Exterior Con	crete Columns/Beams/Roof Par	apets 1,500 SF							
roof parapet from the ove	concrete surfaces on the buildin s, are badly discolored due to we rall appearance of the building. agent to remove staining. building	eathering. This detracts		\$985					

MAIN	TENANCE CATEGORY: Repair/Maintenance			SURVEY DA	NTE: 8/15					Page 4
SEVEI SCOR DEF. I	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
2	103 Classroom	Electrical								
106	Conduit Replace badly rusted electrical conduit Roof	120 LF		\$1,360						
4	103 Classroom	HVAC			- — — — —					
80	HVAC Equipment A condensing unit on the roof appears to have the and is in good condition. The air handling unit it of this building was installed in 2001 and appead condition. However, as the unit ages repairs an requirements will become more frequent. An all budgeted for repairs/maintenance that may be repairs in order to properly maintain the air handle Mechanical Room	n the mechanical room rs to still be in good d maintenance lowance should be equired over the next 5		\$5,200						

FACILITY CONDITION SURVEY - CRITICAL/5	ACILITY CONDITION SURVEY - CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY									
MAINTENANCE CATEGORY: Replacement/Renew	val		Page 5							
SEVER. COMPONENT SCORE DEFICIENCY DEF. NO. BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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									
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								

FACILITY CONDITION SURVEY.	CRITICAL/SVR DEFICIENCY REPA	AIR PROGRAMMING DETAIL R	Y MAINTENANCE/REPLACEMENT CATEGORY
FACILITY CONDITION SURVEY	SKITICAL/31K. DEFICIENCT KEP/	AIR PROGRAININING DETAIL D	TIVIAINTENANCE/REPLACEIVIENT CATEGORT

Roof

AIN I ENA	IANCE CATEGORY: Replacement/Re	newai		SURVEY DA	41E. 0/13					Page 6
EVER. CORE EF. NO.	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
5 103	3 Classroom	Roof								
Sir	ingle-Ply Roof Membrane	39 SQ								
me sig ve ap Th fas ch de nu ag ap	college records provided to the consultanembrane, which appears to be hypaloignificant amount of debris on the roof ery dirty, making an assessment of corpparent that maintenance has been be the assessment conducted focused on asteners and determining the condition halking and crazing of the surface, whi eterioration. Many areas of the seams umber of fasteners that are "lifting" und ge of the membrane, its apparent lack pparent condition, it is recommended to regrammed for replacement in 4 to 5 years.	and the membrane surface is a cand the membrane surface is notition very difficult. It is adly lacking in recent times. In membrane seams and a of the surface relative to ich are indicators of appear frayed and there are a der the membrane. Given the of maintenance, and its that the membrane be rears.					\$62,500			
ins to Re po rat me	complete removal of the existing membraulation board are recommended. The determine its condition and whether a deplacement should include installation olystyrene or similar insulation board of a determine with tapered insulation for prechanically attached PVC membrane, ashing. Roof drain inlets will also have	e roof deck should be evaluated any repairs are required. In of a new vapor barrier, If at least 2" thickness and R-10 proper drainage, a new 60 mile, and metal parapet cap								
	lote: The cost estimate does not includ	le deck repairs needed, if any, or								

MAIN	ENANCE CATE	GORY: Replacement/	Renewal		SURVEY DA	ATE: 8/15					Page 7
SEVER SCORE DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 CI	assroom	Electrical								
	Circuit Breal	ker Panels	1 LS								
109	approximate is obsolete, and the equ There is also provides pro	ely 50 years old. Although replacement parts are ex- ipment is at the end of its to a concern with the reliant of the circuits cortion of the circuits cortion of the circuits cortion that this equipment be	original to the building and are now h the equipment is still functional, it kpensive and not readily available, is generally accepted service life. It is nected to each breaker. It is e replaced.			\$38,500					
68	103 CI	assroom	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.							\$10,000			
	under the sla the drain pip deterioration	ab. Maintenance person ping inside some building n may be occurring. It is	lown through the building and and anel have identified deterioration in as in the past and suspect additional recommended that the vertical nes installed to flow horizontally								

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

from below the drains to the exterior

At each roof drain

MAINTENANCE CATEGORY: Replacement/Renewal			SURVEY DATE: 8/15						
EVER. COMPONENT CORE DEFICIENCY EF. NO. BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 103 Classroom	Roof								
Wood Sunscreen Boards	1,572 LF								
elements, including rain. This deterioral exposes top and side wood surfaces to The sunscreens are an integral architect design and should be retained. It is received be replaced with treated S4S douglas find hangers. The top surface of the 2x8 and coated with 2 coats of a low viscosity 10 applied with a roller. The treated wood should significantly extend the life of the weathering and significantly reduce material and significantly reduce material sunscreen boards on perimeter of boards.	weather-caused deterioration. Etural feature of the building commended that the 2x8 boards or browntone boards, and new d 4x boards should then be 00%-solids epoxy resin coating and low viscosity epoxy resin boards, retard constant of the boards.				. — — — —			- — — — — — — -	
OTAL: Replacement/Renewal	AV. SEVER. SCORE = 70	\$2,050	\$0	\$49,100	\$0	\$72,500	\$0	\$123,650	

Southwestern College

SURVEY DATE: 8/15

104 **Academic Senate** 900 Otay Lakes Rd.

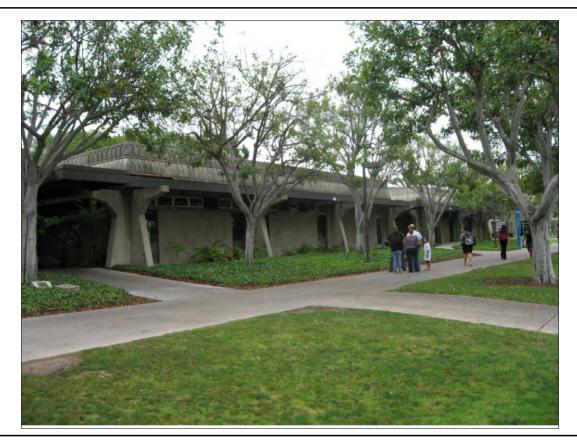
REPAIR COST ESTIMATE IS \$130,175

Facility Condition Rating = 78 (Fair)

Repair Cost as a Percent of Facility Replacement Cost is 22 % Cost Per Square Foot is \$67.91

Average Severity Score = 52

Deficiencies Were Identified



Conference PRIMARY USE:

FACILITY SF:

NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$584,685

FACILITY AGE: 50 Yrs.

LAST RENOVATED:

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

1,917

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)

Southwestern College

SURVEY DATE: 8/15

104 Academic Senate

900 Otay Lakes Rd.

INAI	NTENANCE CATEGORY/BU				
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 Maintenanc	е	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	\$60.6

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

Southwestern College

SURVEY DATE: 8/15

104 Academic Senate

900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 104 Academic Senate

68 Electrical Replacement/Renewal

Circuit Breaker Panels

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 104 Academic Senate

68 HVAC Replacement/Renewal

HVAC Equipment

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

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

SURVEY DATE. SITE: Southwestern College 8/15 Page 3

FACILITY: **Academic Senate** 104

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: REPAIR COST: 1,260 SF \$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

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

Maintenance

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

Replacement/Renewal Single-Ply Roof Membrane 75 Roof

College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon, is 109 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.

REPAIR COST: \$34,900 QUANTITY: 24 SQ Deferrable Est. Remaining Life = 4 Yrs.

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

Recommended Method of Repair: Contract Deficiency Cause is No Maintenance

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 104 Academic Senate

68 Roof Replacement/Renewal

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

Roof Drains

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 104 Academic Senate

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

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

Maintenance

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 104 Academic Senate

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

	ENANCE CATE	GORY: Annual PM			SURVEY DA	ATE: 8/15				Page
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0	104 Ac	ademic Senate	Roof							
	Roof Drains		2 EA							
		ting drainage. Drains should er year.	ged with significant amounts of I be thoroughly cleaned out at	\$200 						
0	104 Ac	ademic Senate	Roof							
	Roof Membra	ane	2,250 SF							
	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		

AIN I ENANCE CA	TEGORY: Improvement		SURVEY DATE: 8/15							
EVER. CORE EF. NO. BLDG	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 104	Academic Senate	Electrical								
Light Fixt	ıres	21 EA								
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							

	ENANCE CATEGO	DRY: Non-Annual Recurrin	g Maintenance		Page						
SEVER. SCORE DEF. NO). BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Acad	demic Senate	Paint/Finish								
	Exterior Concre	ete Columns/Beams/Roof Par	apets 1,260 SF								
	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.			\$825							
		uilding									

MAIN	TENANCE CA	TEGORY: Repair/Maintenance			SURVEY DA	NTE: 8/15					Page 4
SEVE SCOR DEF.	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Air Handle	Academic Senate	HVAC 1 EA								
108	appears to 15 years. requirement budgeted to	ndling unit in the mechanical room still be in good condition. Its remathor has been as the unit ages repair and the will become more frequent. And for repairs/maintenance that may be der to properly maintain the air har all Room	aining life is estimated at nd maintenance allowance should be e required over the next 5		\$10,400						
0	-	Academic Senate Columns and Beams	Structural								
110	There is ra from minor spalling co exposed s should be agent shou	and beams and beams andom spalling of surface concrete repalling to significant spalling with uncrete should be removed, spalled urfaces cleaned by power wire bru- treated with a rust neutralizing coa all then be applied to all voids, and boxy-based patch cement.	on the building. It ranges exposed rebar. All I areas chipped, and shing. Any exposed rebar ting. An epoxy bonding		\$1,375						
	addressed	mended that after the initial repairs on a recurring basis at least every of building	s new spalling be three to four years.								

FACILITY CONDITION SURVEY.	CRITICAL/SVR DEFICIENCY REPA	AIR PROGRAMMING DETAIL R	Y MAINTENANCE/REPLACEMENT CATEGORY
FACILITY CONDITION SURVEY	SKITICAL/31K. DEFICIENCT KEP/	AIR PROGRAMMMING DETAIL D	TIVIAINTENANCE/REPLACEIVIENT CATEGORT

Roof

AIN I ENA	ANCE CATE	GORY: Replacement/Rene	ewai		SURVEY DA	4 <i>1E:</i> 8/15					Page 5
EVER. CORE EF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
5 104	4 Aca	ademic Senate	Roof								
Sir	ngle-Ply Ro	oof Membrane	24 SQ								
ex ve ap Th fas ch de nu ag ap	etensive amery dirty, management that operant that operant that operant and alking and oterioration. It is operant concept and operant concept	count of debris on the roof an aking an assessment of conditional maintenance has been baddenent conducted focused on middetermining the condition of crazing of the surface, which Many areas of the seams agreement that are "lifting" undeterminent, its apparent lack of dition, it is recommended that for replacement in 4 to 5 year.	ition very difficult. It is by lacking in recent times. In the surface relative to a are indicators of opear frayed and there are a remembrane. Given the final maintenance, and its at the membrane be ars.								
ins to Re po rat me	sulation boa determine eplacement blystyrene c ted along w echanically	its condition and whether and should include installation o	roof deck should be evaluated y repairs are required. f a new vapor barrier, at least 2" thickness and R-10 per drainage, a new 60 mil nd metal parapet cap								
		st estimate does not include nent removal/reset.	deck repairs needed, if any, or								

MAIN	TENANC	CE CATEGORY: Replacement/Renew	al		SURVEY D	A <i>TE:</i> 8/15					Page 6
SEVE SCOR DEF. I	E	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
	Circu	iit Breaker Panels	1 LS								
107	approise of approximately appr	circuit breaker panelboards are original eximately 50 years old. Although the expensive solete, replacement parts are expensive the equipment is at the end of its general is also a concern with the reliability of des protection of the circuits connected mmended that this equipment be replaced to the control of the circuits.	quipment is still functional, it e and not readily available, ally accepted service life. the equipment as it to each breaker. It is		· — — — —	\$36,500 					
68	104	Academic Senate	Roof								
	Roof	Drains	2 EA								
102	instal	roof drains were damaged when the hy lled on the roof and they no longer can rain line. They should be replaced.						\$5,000			
	under the dr deteri drain	roof drains also currently drain down the rathe slab. Maintenance personnel have rain piping inside some buildings in the rioration may be occurring. It is recommal lines be abandoned and new lines instead below the drains to the exterior	re identified deterioration in past and suspect additional nended that the vertical								

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

At each roof drain

AINTENA	ANCE CATE	EGORY: Replacement/Ren	newal		SURVEY DA	NTE: 8/15				Page
EVER. CORE EF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
3 104	4 A	cademic Senate	HVAC							
H۱	/AC Equi	oment	1 LS							
20 ge ind for ap Re be	001 and	re now 14 years old, which is ecepted 20 year service life o naintenance and repair costs d replacement programming ely five years out.	f the equipment. At this point, can be anticipated going should be considered for also deteriorated and should are replaced. Seventy - five						\$28,100	
104	4 A	cademic Senate	Roof				- — — —			- — — — — — — —
W	ood Suns	creen Boards	1,680 LF							
ele ex Th de be ha co ap sh	ements, ir poses top ne sunscresign and e replaced ingers. The pated with polied with pould significathering	acluding rain. This deteriorate and side wood surfaces to veens are an integral architect should be retained. It is recount treated S4S douglas firm top surface of the 2x8 and 2 coats of a low viscosity 100	browntone boards, and new I 4x boards should then be 0%-solids epoxy resin coating and low viscosity epoxy resin boards, retard constant intenance costs.			\$11,800				
TAI.	Replace	ment/Renewal	AV. SEVER. SCORE = 64	\$0	\$0	\$48,300	\$0	\$39,900	\$28,100	\$116,300

Southwestern College

SURVEY DATE: 8/15

105 Classroom 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$256,875

Facility Condition Rating = 87 (Fair)

Repair Cost as a Percent of Facility Replacement Cost is 13 % Cost Per Square Foot is \$38.23

Average Severity Score = 55

Deficiencies Were Identified



1.0

PRIMARY USE: Campus Police

FACILITY SF:

6,720 NO. OF STORIES:

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

LAST RENOVATED:

44 Yrs.

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)

Southwestern College

SURVEY DATE: 8/15

105 Classroom 900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/BU	ILDING STSTEM C	OOT GOMMANT		
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	\$34.5

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.

Southwestern College

900 Otay Lakes Rd.

SURVEY DATE: 8/15

105 Classroom

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 105 Classroom

68 Electrical Replacement/Renewal

Circuit Breaker Panels

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 105 Classroom

68 HVAC Replacement/Renewal

HVAC Equipment

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 105 Classroom

20 HVAC Non-Annual Recurring Maintenance HVAC Distribution Ductwork

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

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

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

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

SURVEY DATE. SITE: Southwestern College 8/15 Page 4

FACILITY: 105 Classroom

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.

REPAIR COST: QUANTITY: 68 SQ \$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

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

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.

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

Deficiency Cause is Design Recommended Method of Repair: Contract

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 105 Classroom

60 Roof Annual PM Roof Drains

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

Maintenance

40 Roof Replacement/Renewal Wo

Wood Sunscreen Boards

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

,,	EGORY: Annual PM			SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 105 C	lassroom	Roof							
Roof Drains	3	4 EA							
	ains and drain sumps are clogge biting drainage. Drains should b per year.		\$375						

	TENANCE CATEGORY: Improvement			SURVEY DA	ATE: 8/15					Page 2
SEVER SCOR DEF. N	DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
00	105 Classroom	Roof								
	Roof Ladder	1 EA								
05	Install retractable roof ladder grab bar extender on t safety. <i>Roof ladder</i>	op of roof ladder for		\$525						
20	105 Classroom	Electrical	- — — — —						- — — — — — —	
	Light Fixtures	117 EA								
106	Maintenance staff and program managers have indi existing fluorescent lighting is not as energy efficien and should be replaced with LED lighting. Retrofit e recessed can fixtures and suspended light fixtures v LED lights. Light fixtures throughout building	t as LED lighting xisting fluorescent,		\$6,700						

	TENANCE (CATEGORY: Non-Annual Recurring Ma	aintenance		SURVEY DA	ATE: 8/15					Page 3
SEVEF SCORI DEF. N		COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	s 2,100 SF								
	from the with biol	apets, are badly discolored due to weather overall appearance of the building. Prestogic agent to remove staining. er of building	sure wash all surfaces	- — — —			<u> </u>				
20	405	01									
20	1 05	Classroom Distribution Ductwork	HVAC 750 LF								

	NANCE CATEGORY: Repair/Maintenance			SURVEY DA	NTE: 8/15					Page 4
SEVER. SCORE DEF. NO.	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
4 1	05 Classroom	HVAC								
/	Air Handler	1 EA								
	The air handling unit in the mechanical room was appears to still be in good condition. Its remaining 15 years. However, as the unit ages repair and managements will become more frequent. An allowed budgeted for repairs/maintenance that may be received as in order to properly maintain the air handler	g life is estimated at naintenance wance should be quired over the next 5		\$10,400						

FACILITY CONDITION SURVEY.	CRITICAL/SVR DEFICIENCY REPA	AIR PROGRAMMING DETAIL R	Y MAINTENANCE/REPLACEMENT CATEGORY
FACILITY CONDITION SURVEY	SKITICAL/31K. DEFICIENCT KEP/	AIR PROGRAMMMING DETAIL D	TIVIAINTENANCE/REPLACEIVIENT CATEGORT

Electrical Room and various locations

MAINT	ENANCE CAT	EGORY: Replacement/Ren	newal		SURVEY DA	ATE: 8/15				F	Page 5
SEVER SCORE DEF. N	Ī	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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		lassroom	Roof								
110	College rec		68 SQ ant indicate the single-ply roof n, is 15 years old. There is no dirty in spots.						\$94,200		
	fasteners a chalking ar deterioration number of age of the in apparent co	sment conducted focused on and determining the condition and crazing of the surface, which is many areas of the seams a fasteners that are "lifting" und membrane, its apparent lack condition, it is recommended the for replacement in 4 to 5 years.	of the surface relative to ch are indicators of appear frayed and there are a er the membrane. Given the of maintenance, and its nat the membrane be								
	insulation be to determing Replacement polystyrene rated along mechanica	e its condition and whether a ent should include installation	e roof deck should be evaluated ny repairs are required. of a new vapor barrier, f at least 2" thickness and R-10 oper drainage, a new 60 mil and metal parapet cap								
		cost estimate does not include pment removal/reset.	e deck repairs needed, if any, or								
68	105 C	lassroom	Electrical								
		aker Panels	1 LS								
108	approximat is obsolete and the equ There is als provides pr	ely 44 years old. Although th	y of the equipment as it cted to each breaker. It is					\$58,200			

MAINT	ENANCE CAT	EGORY: Replacement/Renew	al		SURVEY DA	ATE: 8/15				Page 6	i
SEVER SCORE DEF. N	Ī	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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		lassroom	Roof								
104	installed on	s ains were damaged when the hy the roof and they no longer can ne. They should be replaced.						\$10,000			
	under the s the drain pi deterioration drain lines	ains also currently drain down th lab. Maintenance personnel hav ping inside some buildings in the in may be occurring. It is recomr be abandoned and new lines insi the drains to the exterior of drain	ve identified deterioration in e past and suspect additional mended that the vertical								
68	105 C	lassroom	HVAC								
107	2001 and a generally a increasing forward, an approximat Refrigerant be replaced	pment indensing units on the roof appeare now 14 years old, which is ap ccepted 20 year service life of the maintenance and repair costs can deplacement programming should be appeared by five years out. piping insulation on the roof is and when the condensing units are lation has been included in the condensing units are	proximately 70% of the e equipment. At this point, in be anticipated going ould be considered for also deteriorated and should replaced. Seventy - five						\$47,200		

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

MAINTENANCE CATEGORY: Replacement/Renewal		newal	SURVEY DATE: 8/15								
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Clas	ssroom	Roof								
	Wood Sunscr	een Boards	3,200 LF								
102		ces of the sunscreen boar				\$22,500					
- — -	elements, inclexposes top a The sunscree design and she replaced whangers. The coated with 2 applied with a should signific weathering ar	uding rain. This deterioral and side wood surfaces to use are an integral architectould be retained. It is receit treated S4S douglas fire top surface of the 2x8 and coats of a low viscosity 10	tes the paint fairly rapidly and weather-caused deterioration. stural feature of the building ommended that the 2x8 boards in browntone boards, and new d 4x boards should then be 20%-solids epoxy resin coating and low viscosity epoxy resine boards, retard constant intenance costs.			\$22,500					

Southwestern College

SURVEY DATE: 8/15

200 **Business** 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$238,725

Facility Condition Rating = 91

Repair Cost as a Percent of Facility Replacement Cost is

Cost Per Square Foot is \$27.96

Average Severity Score = 44

Deficiencies Were Identified



PRIMARY USE: Classroom

FACILITY SF:

NO. OF STORIES: 1.0

8,538

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

FACILITY AGE: 50 Yrs. LAST RENOVATED:

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)

Southwestern College

SURVEY DATE: 8/15

200 Business

900 Otay Lakes Rd.

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	\$24.4

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

Southwestern College SURVEY DATE: 8/15

200 Business 900 Otay Lakes Rd.

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 buildup, 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

Southwestern College SURVEY DATE: 8/15

200 Business 900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 200 Business

68 Electrical Replacement/Renewal

Circuit Breaker Panels and Distribution Swithboard

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 Recomme

Recommended Method of Repair: Contract

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 Electrical Improvement

Light Fixtures

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

SURVEY DATE. 8/15 Page 2 SITE: Southwestern College

FACILITY: 200 **Business**

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

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

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

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

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

Repair

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 200 Business

20 HVAC Non-Annual Recurring Maintenance HVAC Distribution Ductwork

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

Maintenance

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

5 Interior Closure Replacement/Renewal

Toilet Partition

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 200 Business

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

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

Maintenance

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

68 Roof Replacement/Renewal Roof Drains

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 200 Business

60 Roof Annual PM Roof Drains

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

Maintenance

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 200 Business

40 Roof Annual PM Roof Membrane

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 7

FACILITY: 200 Business

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

	INTENANCE CATEGORY: Annual PM				SURVEY DA	NTE: 8/15					Page 1
SEVER SCORI DEF. N	DEFI	ONENT CIENCY TION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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		rain sumps are clogged witnage. Drains should be the		\$400							
	200 Business		Roof								
10	200 Busiliess										
40	Roof Membrane		8,550 SF								

IAINTENANCE CATE	GORY: Improvement		SURVEY DATE: 8/15							Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 200 Bu	siness	Electrical								
Light Fixtures	3	162 EA								
09 Maintenance existing fluor and should b recessed car LED lights.		\$9,300								

//AIN7	TENANCE CATI	EGORY: Non-Annual Recu	rring Maintenance		SURVEY DA	NTE: 8/15					Page 3
SEVER SCORE DEF. N	=	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 B	usiness	Roof								
	Single-Ply F	Roof Membrane	8,600 SF								
13	of leaf and of can makes identify pote membrane. to be in reasonemembrane. Remove all sumps. Por formulated to cleaned at I life of the membrane.	other debris, and the surface it very difficult to ascertain the ential problems. It also can so An assessment of the mem conable condition. However, surface is recommended. Ileaves/debris from the roof a wer-wash the membrane using for single-ply roof membrane east every three to four years embrane. In the surface is a surface in the surface is recommended.	horten the life of the brane indicates that it appears a thorough cleaning of the and clean downspouts and a cleaning solution		\$3,700						
16	200 B	 usiness		. — — — —						- — — — — –	
	Metal Parap	et Cap Joints	50 LF								
07	providing th	top. Remove failing caulk ar	ak into the joints and deteriorate			\$375					
23	200 B		Paint/Finish							- — — — — —	
	Exterior Cor	ncrete Columns/Beams/Roof	Parapets 2,460 SF								
00	roof parape from the ove spalling of t	ts, are badly discolored due t erall appearance of the buildi	ng. There is also random beams and columns. Pressure		\$1,850						

NAIN I ENANCE	CATEGORY: Non-Annual Recurring Ma	aintenance	SURVEY DATE: 8/15							Page 4
SEVER. SCORE DEF. NO. BLI	COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
200	Business	HVAC								
HVAC	Distribution Ductwork	40 LF								
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					

MAIN	TENANCE CAT	EGORY: Repair/Maintenance	е		SURVEY DA	ATE: 8/15					Page 5
SEVE SCOR DEF. I	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
4	200 B	usiness	HVAC 1 EA								
112	The air han appears to 15 years. It requirement budgeted for	adling unit in the mechanical roc still be in good condition. Its re However, as the unit ages repaints will become more frequent. or repairs/maintenance that mander to properly maintain the air l	om was installed in 2001 and emaining life is estimated at r and maintenance An allowance should be y be required over the next 5		\$10,400						
0	200 B	usiness	Structural			_ — — — —					
	Concrete C	columns and Beams	50 SF								
01	from minor spalling cor exposed su should be t agent shou	ndom spalling of surface concre spalling to significant spalling wancrete should be removed, spal urfaces cleaned by power wire be reated with a rust neutralizing of lid then be applied to all voids, a poxy-based patch cement.	vith exposed rebar. All led areas chipped, and brushing. Any exposed rebar coating. An epoxy bonding		\$3,400						
	addressed	mended that after the initial repa on a recurring basis at least ev of building									

MAINT	ENANCE (CATEGORY: Replacement/Rene	ewal		SURVEY DA	ATE: 8/15					Page 6
SEVER SCORE DEF. N	Ī	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 E	Breaker Panels and Distribution Sy	withboard 1 LS								
	approxir is obsole and the There is provides recomm This bui building with sim equipme	ruit breaker panelboards are originately 50 years old. Although the ete, replacement parts are expensive equipment is at the end of its gensials a concern with the reliability is protection of the circuits connected that this equipment be replaced that this equipment be replaced and 220. This equipment is illar parts and reliability concerns. Each is also recommended.	e equipment is still functional, it sive and not readily available, terally accepted service life. To f the equipment as it ted to each breaker. It is laced. main distribution switchgear for of a similar age and condition,			\$124,800					
68	200	Business		- — — — —						- — — — — -	
	Roof Dra	ains	4 EA								
106	installed	f drains were damaged when the last on the roof and they no longer can line. They should be replaced.						\$10,000			
	under the the drain deteriors drain lin from bel	f drains also currently drain down ne slab. Maintenance personnel he piping inside some buildings in tation may be occurring. It is record to be abandoned and new lines in low the drains to the exterior roof drain	nave identified deterioration in the past and suspect additional mmended that the vertical								

MAIN	TENANCE (CATEGORY: Replacement/Re	newal		SURVEY DA	ATE: 8/15				Page 7
SEVEF SCOR DEF. N	E	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
8	200	Business	HVAC							
	HVAC E	quipment	1 LS							
110	now 14 y 20 year mainten	service life of the equipment. A ance and repair costs can be a ment programming should be co	ly 70% of the generally accepted this point, increasing						\$32,900	
	replaced	ant piping insulation on the roof d when the condensing units are n has been included in the cost	e replaced. Fifty feet of							
40	200	Business	Roof							
	Wood S	unscreen Boards	5,346 LF							
105	element exposes The sun design a be repla hangers coated v applied should s weather	s, including rain. This deteriora top and side wood surfaces to screens are an integral archited	weather-caused deterioration. ctural feature of the building commended that the 2x8 boards or browntone boards, and new d 4x boards should then be 20%-solids epoxy resin coating and low viscosity epoxy resine boards, retard constant intenance costs.			\$37,900				
5	200	Business	Interior Closure			- — — — —				
	Toilet Pa		3 EA							
108	the surfa	ace finish is damaged. Replace toilet partition(s).	on(s), and there are areas where with new high pressure plastic		\$2,800					

AINTENANCE CATEGORY:	Replacement/Renewa	al		SURVEY DA	ATE: 8/15				Page
CORE DEF	MPONENT FICIENCY PATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
TAL: Replacement/Re	enewal	AV. SEVER. SCORE = 50	\$0	\$2,800	\$162,700	\$0	\$10,000	\$32,900	\$208,400

Southwestern College

SURVEY DATE: 8/15

210 Administration

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$117,075

Facility Condition Rating = 97 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 3 %

Cost Per Square Foot is \$9.77

Average Severity Score = 43

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)

Southwestern College

SURVEY DATE: 8/15

210 Administration

900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/BU	IILDING SYSTEM C	OST 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 buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 210 Administration

20 Electrical Improvement Light Fixtures

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 210 Administration

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

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 210 Administration

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

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

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

IAM I ENAMOL OF	TEGORY: Annual PM			SURVEY DA	ATE: 8/15				Page
EVER. CORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 210	Administration	Roof							
Roof Drai	ns	6 EA							
debris, inl	drains and drain sumps are clogge nibiting drainage. Drains should be per year. meter		\$575						

AINTENANOL	MAINTENANCE CATEGORY: Improvement				NTE: 8/15				Page
EVER. CORE EF. NO. BLD	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 210	Administration	Electrical							
Light Fix	tures	189 EA							
existing and sho recesse	ance staff and program managers fluorescent lighting is not as energold be replaced with LED lighting. It can fixtures and suspended light ts. Under throughout building	gy efficient as LED lighting Retrofit existing fluorescent,		\$10,800					

VIAIN .	AINTENANCE CATEGORY: Non-Annual Recurring Maintenance			SURVEY DATE: 8/15							Page 3
SEVER SCORI DEF. N	=	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	210 Admi	nistration	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				. — — — —						- — — — — —	
		te Columns/Beams/Roof Pa	rapets 2,760 SF								
	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						

MAIN	TENANCE (CATEGORY: Replacement/Ren	ewal		SURVEY DA	ATE: 8/15				Page 4
SEVER SCOR DEF. N	₹	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
3	210	Administration	HVAC							
04		quipment ackaged roof top air conditioning	1 LS						\$80,200	
	year ser and repa program There an appear t	s old, which is approximately 70% vice life of the equipment. At this air costs can be anticipated going aming should be considered for a re also four circular aluminum exto be original 1965 equipment and ment at the same time.	s point, increasing maintenance of forward, and replacement oproximately five years out. haust fans on the roof that							
0	210	Administration	Roof							
	Wood S	unscreen Boards	2,570 LF							
02	element exposes The sun design a be repla hangers coated v applied should s weather	surfaces of the sunscreen boards s, including rain. This deteriorate is top and side wood surfaces to wiscreens are an integral architecturand should be retained. It is reconced with treated S4S douglas fir is. The top surface of the 2x8 and with 2 coats of a low viscosity 100 with a roller. The treated wood an significantly extend the life of the bing and significantly reduce mainscreen boards on perimeter of building and significantly on perimeter of building and significantly on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen building and significantly reduce mainscreen boards on perimeter of building and significantly reduce mainscreen building and significantly re	es the paint fairly rapidly and reather-caused deterioration. Fural feature of the building mmended that the 2x8 boards browntone boards, and new 4x boards should then be 1%-solids epoxy resin coating and low viscosity epoxy resin boards, retard constant tenance costs.			\$18,000				
		acement/Renewal	AV. SEVER. SCORE = 54	\$0	\$0	\$18,000	\$0	\$0	\$80,200	\$98,200

Southwestern College

SURVEY DATE: 8/15

220 **Business** 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$229,675

Facility Condition Rating = 91

Repair Cost as a Percent of Facility Replacement Cost is 9 % Cost Per Square Foot is \$26.90

Average Severity Score = 43

Deficiencies Were Identified



PRIMARY USE: Classroom

FACILITY SF:

NO. OF STORIES: 1.0

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

49 Yrs. LAST RENOVATED:

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is A

8,538

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)

Southwestern College

SURVEY DATE: 8/15

220 Business

900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/BU	ILDING SYSTEM C	OST 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	
				4007.005	***

CONDITION SUMMARY:

Replacement/Renewal

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.

3

38

\$207,300

\$24.28

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 buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 220 Business

68 Electrical Replacement/Renewal

Circuit Breaker Panels and Distribution Swithboard

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 Reco

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 220 Business

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.

adhesive.

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

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

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

S/TE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 220 Business

70 Roof Repair/Maintenance

Walkway Roof Support Beam

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 220 Business

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

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

Maintenance

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 220 Business

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

MINITERIAL OF	EGORY: Annual PM			SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 220 E	Business	Roof							
Roof Drain	S	4 EA							
	ains and drain sumps are clogge biting drainage. Drains should b per year. neter		\$375						

IAINTENANCE CATI	EGORY: Improvement			SURVEY DA	ATE: 8/15				Pag
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 220 B	usiness	Electrical							
Light Fixture	es e	223							
existing fluc and should recessed ca	DEFICIENCY BLDG. LOCATION SYSTEM QUANTITY Business Electrical	y efficient as LED lighting Retrofit existing fluorescent,		\$12,750					

MAINT	ENANCE	CATEGORY: Non-Annual Rec	urring Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	220	Business	Roof								
	Single-I	Ply Roof Membrane	8,600 SF								
	make it potentia Thoroug years.	some surface dirt. As debris ar very difficult to ascertain the coral problems. It also can shorten gh cleaning of the membrane su	ndition of the roof and identify the life of the membrane. rface is recommended in 2 to 3								
	sumps. formula cleaned	e all leaves/debris from the roof a Power-wash the membrane using ted for single-ply roof membraned at least every three to four year membrane.	ng a cleaning solution es. The surface should be								
	Note: U membra Entire r		experience cleaning single-ply								
3	220	Business	Paint/Finish				- — — —			- — — — — -	
	Exterior	Concrete Columns/Beams/Roo	f Parapets 2,460 SF								
	roof par from the spalling wash al spalling	ooth concrete surfaces on the becapets, are badly discolored due to overall appearance of the build of the concrete surfaces on the surfaces with biologic agent to concrete. Iter of building	to weathering. This detracts ling. There is also random beams and columns. Pressure		\$1,850						

//AIN	TENANCE CATEGOR	Y: Repair/Maintenance			SURVEY DA	ATE: 8/15					Page 4
SEVER SCORI DEF. N	 E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	220 Busine		Roof								
101	has a large area beam. This bear deterioration from walkway. The be	ed walkway support beams where the wood is deterior in should be considered for potentially compromising am should be replaced with NOTE: Though beams of			\$1,500						
0	220 Busine		Structural							- — — — — —	
02	from minor spalling spalling concrete exposed surfaces should be treated agent should the	spalling of surface concre- ng to significant spalling w should be removed, spall- s cleaned by power wire but with a rust neutralizing co	ed areas chipped, and rushing. Any exposed rebar		\$2,200						
	It is recommende addressed on a r Perimeter of build	ed that after the initial repa ecurring basis at least eve ding	irs new spalling be ry three to four years.								

	ENANCE CAT	TEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page 5
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 E	Business	Electrical								
	Circuit Brea	aker Panels and Distribution Swithboard	1 LS								
	is obsolete and the eq There is als provides pr recommen	tely 49 years old. Although the equipment replacement parts are expensive and not uipment is at the end of its generally accepts a concern with the reliability of the equipment of the circuits connected to each ded that this equipment be replaced.	readily available, oted service life. oment as it breaker. It is								
	building 20 and conditi of this equi	ng also houses a 600 amp distribution swit to that serves building 220. This equipmention, with similar parts and reliability concer ipment is also recommended. Room and various locations	t is of a similar age								
	building 20 and conditi of this equi Electrical F	io that serves building 220. This equipmention, with similar parts and reliability concer ipment is also recommended.	t is of a similar age	. — — — —			. — — — .				
40	building 20 and conditi of this equi Electrical F	0 that serves building 220. This equipmention, with similar parts and reliability concertipment is also recommended. Room and various locations	t is of a similar age ns. Replacement				. — — — —			- — — — — -	

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

MAIN	TENANCE CATEG	ORY: Replacement/Rene	wal		SURVEY DA	ATE: 8/15					Page
SEVEI SCOR DEF. I	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
;	220 Bus	iness	Floor Cover								
	Carpet		960 SY								
106	should be repl	oof adhesive.					\$47,100			. — — — — —	
<u></u>	AL: Replaceme	ent/Renewal	AV. SEVER. SCORE = 38	\$ 0	\$ 0	\$48,800	\$158,500	\$ 0	\$0	\$207,300	

Southwestern College

SURVEY DATE: 8/15

315 Animal Storage

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$125,760

Facility Condition Rating = 39 (Failed)

Repair Cost as a Percent of Facility Replacement Cost is 61 %

Cost Per Square Foot is \$184.94

Average Severity Score = 44

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)

Southwestern College

SURVEY DATE: 8/15

315 Animal Storage

900 Otay Lakes Rd.

WA	NTENANCE CATEGORY/BUILI				
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	9	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.

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

Southwestern College

SURVEY DATE: 8/15

315 Animal Storage

900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 315 Animal Storage

68 Electrical Replacement/Renewal

Circuit Breaker Panels and Distribution Swithboard

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

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

Wood Fascia

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 315 Animal Storage

23 Exterior Closure Replacement/Renewal

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

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

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 315 Animal Storage

60 Roof Annual PM Roof Drains

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

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

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

MAINT	ENANCE CA	TEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Drain	ns	1 EA								
'()1	The roof d	drains and drain sumns are clo	aged with significant amounts of	¢125							
		nibiting drainage. Drains shou e per year.	egged with significant amounts of Id be thoroughly cleaned out at	\$125 						. — — — — —	
	debris, inh least once Roof perin	nibiting drainage. Drains shou e per year.		\$125 — — — —	. — — — —						
	debris, inh least once Roof perin	nibiting drainage. Drains shou e per year. meter 	ld be thoroughly cleaned out at	\$125 	. — — — —	- — — —		———-		- — — — — —	

AINTENANCE OF	TEGORY: Improvement			SURVEY DA	ATE: 8/15				Pag
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 315	Animal Storage	Electrical							
Light Fixto	ires	8 EA							
existing fl and shou	nce staff and program managers corescent lighting is not as ener d be replaced with LED lighting. can fixtures and suspended ligh	gy efficient as LED lighting Retrofit existing fluorescent,		\$460					

MAINTENANCE CATE	GORY: Non-Annual Recurr	ing Maintenance		SURVEY DA	ATE: 8/15				Page
GEVER. GCORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 315 Ani	mal Storage	Paint/Finish							
Wood Exterio	r Panels	440 SF							
	the exterior wood panels is fa Power wash and refinish pa apets on upper part of buildin	nels with a clear sealer or				\$1,800			

MAINTE	ENANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page 4
SEVER. SCORE DEF. NO.	DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 3	315 Animal Storage	Roof								
I	Built-Up Roof	8 SQ								
; 	The built-up roof membrane on the building is bad surfacing is worn off and the exposed asphalt is verbadly worn in some spots. The existing material is the concrete roof deck thoroughly cleaned and a risheet roof membrane installed. Entire roof	ery dry and brittle, and hould be removed,		\$9,500						
8 3	315 Animal Storage	Electrical							- — — — — — —	
(Circuit Breaker Panels and Distribution Swithboard	1 LS								
; ; ;	The circuit breaker panelboards are original to the approximately 50 years old. Although the equipme is obsolete, replacement parts are expensive and and the equipment is at the end of its generally at There is also a concern with the reliability of the exprovides protection of the circuits connected to ea recommended that this equipment be replaced.	ent is still functional, it not readily available, cepted service life. quipment as it			\$113,000					
 	This building also houses the main distribution sw buildings. This equipment is of a similar age and c parts and reliability concerns. Replacement of this recommended. Electrical Room	ondition, with similar								
23 3	315 Animal Storage	Exterior Closure			- — — —					
	Wood Fascia	112 SF								
(The wood fascia/trim boards on one side of the budeteriorated and should be replaced. West upper side	ilding are badly		\$800						

MAINTENANCE CATE	GORY: 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. SCOR	E= 44	\$200	\$10,760	\$113,000	\$1,800	\$0	\$0	\$125,760

Southwestern College

SURVEY DATE: 8/15

Greenhouse 316

900 Otay Lakes Rd.

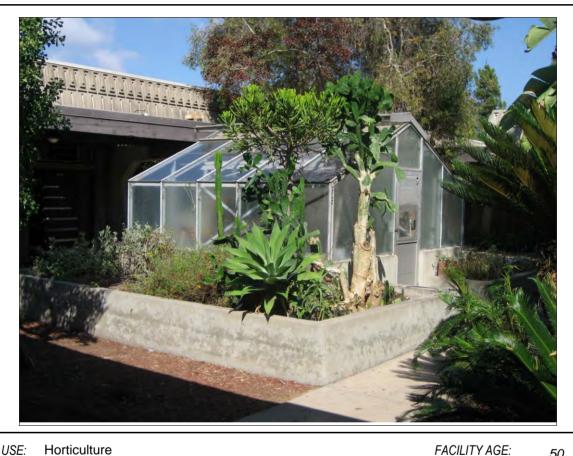
REPAIR COST ESTIMATE IS \$24,725

Facility Condition Rating = 19 (Failed)

Repair Cost as a Percent of Facility Replacement Cost is 81 %

Cost Per Square Foot is \$141.29 Average Severity Score = 52

Deficiencies Were Identified



Horticulture PRIMARY USE:

> NO. OF STORIES: 1.0

FACILITY SF: 175 Current Facility Replacement Cost is Approximately \$30,625

50 Yrs. LAST RENOVATED:

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	ON SUMMARY I	REPORT		
Southwestern College 316 Greenhouse		90	00 Otay Lakes		E: 8/15
	MAINTENANCE CATEGORY/E	BUILDING SYSTEM C	OST SUMMARY		
MAINT. CATEGORY/SYSTEM	hwestern College Greenhouse MAINTENANCE CATEGORY/BUILDING SYSTEM COST SUMMARY NO.OF AVERAGE DEFICIENCY DEF. SEV. SCORE COST Overment Electrical 1 20 \$225		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	

CONDITION SUMMARY:

Replacement/Renewal

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.

2

68

\$24,500

\$140.00

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 316 Greenhouse

equipment be replaced.

68 Electrical Replacement/Renewal

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

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 Electrical Improvement

Light Fixtures

Circuit Breaker Panel

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 316 Greenhouse

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

IAINTENANCE CATE	GORY: Improvement		SURVEY DATE: 8/15							Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 316 Gi	reenhouse	Electrical								
Light Fixture	s	4 EA								
existing fluo and should recessed ca					\$225					

MAIN	TENANCE CATEGO	RY: Replacement/Re	newal		SURVEY DA	NTE: 8/15					Page :
SEVEI SCOR DEF. I	Ξ	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
8	316 Gree	nhouse	HVAC								
	HVAC Equipme	ent	1 LS								
01		e cooler is badly deterior air. It is recommended to	ated and no longer cost- be replaced.		\$1,300						
8	316 Gree	nhouse	Electrical								
	Circuit Breaker	Panel	1 LS								
102	approximately sis obsolete, repand the equipm There is also a provides protect	50 years old. Although the lacement parts are expendent is at the end of its go concern with the reliability.	cted to each breaker. It is			\$23,200					
		nt/Renewal	AV. SEVER. SCORE = 68	\$0	\$1,300	\$23,200	\$ 0	\$ 0	\$ 0	\$24,500	

Southwestern College

SURVEY DATE: 8/15

340 **Physics** 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$197,550

Facility Condition Rating = 92 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 8 % Cost Per Square Foot is \$32.47

Average Severity Score = 49

Deficiencies Were Identified



PRIMARY USE: Classroom/Lab

FACILITY SF:

NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$2,586,125 LAST RENOVATED:

50 Yrs.

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is A

6,085

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)

Southwestern College

SURVEY DATE: 8/15

340 **Physics** 900 Otay Lakes Rd.

MAINT. CATEGORY/SYSTEM		NO.OF DEF.	AVERAGE SEV. SCORE	DEFICIENCY COST	COST PER GSF
MAINT. GATEGORI/GTGTEIII					
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	\$28.8

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

Southwestern College SURVEY DATE: 8/15

340 Physics 900 Otay Lakes Rd.

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 buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 340 Physics

68 Electrical Replacement/Renewal

Circuit Breaker Panels

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 340 Physics

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

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

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016

68 HVAC Replacement/Renewal

HVAC Equipment

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

FACILITY CONDITION SURVEY DEFICIENCY DETAIL BY BUILDING AND SYSTEM IN DECLINING SEVERITY SCORE ORDER SURVEY DATE .. 8/15 Page 3 SITE: Southwestern College FACILITY: 340 **Physics** 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: REPAIR COST: 1 EA \$10,400 Deferrable Est. Remaining Life = 1 Yrs. Life Expectancy New = 35 Yrs. Estimate Date: 2015 Deficiency Data Source: Condition Survey Recommended Method of Repair: In-House & Contract Deficiency Cause is Age/Wear Planning Priority: D-Escalating Repair Cost Reduction Benefit Score = 38 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: REPAIR COST: 120 LF Est. Remaining Life = 2 Yrs. \$1,450 Deferrable Life Expectancy New = 15 Yrs. Estimate Date: 2015 Deficiency Data Source: Condition Survey Deficiency Cause is Unknown Recommended Method of Repair: Contract Planning Priority: E-Maintenance/Operating Cost Reduction Benefit Score = 34 Maintenance AV. SEVERITY SCORE = SYSTEM SUB-TOTAL **HVAC** \$56,150 55 COST PER BLDG GSF= \$9.23 Paint/Finish **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints 46 102 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: REPAIR COST: 25 LF \$200 Est. Remaining Life = 2 Yrs. Deferrable Deficiency Data Source: Life Expectancy New = 15 Yrs. Estimate Date: 2015 Condition Survey

Deficiency Cause is Weather

Recommended Method of Repair: Contract

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

Maintenance

SURVEY DATE .. SITE: Southwestern College 8/15 Page 4

FACILITY: **Physics** 340

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

REPAIR COST: \$1,400 QUANTITY: 1,885 SF 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

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

Maintenance

SYSTEM SUB-TOTAL Paint/Finish \$1,600 AV. SEVERITY SCORE = COST PER BLDG GSF= \$0.26

Replacement/Renewal Single-Ply Roof Membrane 75 Roof

College records provided to the consultant indicate the single-ply roof membrane, which appears to be hypalon. is 113 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.

REPAIR COST: QUANTITY: 59 SQ \$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

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 340 Physics

60 Roof Annual PM Roof Drains

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

Maintenance

40 Roof Annual PM Roof Membrane

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

Maintenance

40 Roof Replacement/Renewal Wood Sunscreen Boards

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 340 Physics

SYSTEM SUB-TOTAL Roof \$90,700 AV. SEVERITY SCORE = 54 COST PER BLDG GSF= \$14.91

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

IVIAINI	ENANCE CATE	EGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER SCORE DEF. N	Ī	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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		hysics	Roof								
	Roof Drains		5 EA								
104			ged with significant amounts of	\$450							
	debris, inhib least once p Roof perime	•	I be thoroughly cleaned out at							. — — — — —	
10	least once p	per year.	I be thoroughly cleaned out at Roof			- — — —				. — — — — —	
 40	least once p	per year. eter ——————————————————————————————————				- — — —		— — — -		.—————	

IAINTENANCE CATE	ECATEGORY: Improvement SURVEY DATE: 8/15									Page 2
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 340 Ph	ysics	Electrical								
Light Fixtures	3	128 EA								
existing fluore and should b recessed car	•			\$7,300						

MAIN1	ENANCE CA	TEGORY: Non-Annual Re	curring Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER SCORE DEF. N	·	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
16	340	Physics	Paint/Finish								
	Metal Para	apet Cap Joints	25 LF								
102	providing the parape		parapet caps is deteriorating, leak into the joints and deteriorate and re-caulk all joints.			\$200					
3	340	Physics	Paint/Finish								
	Exterior C	oncrete Columns/Beams/Ro	of Parapets 1,885 SF								
00	roof parap from the o minor spa Pressure any spallir	ets, are badly discolored du verall appearance of the bui lling of the concrete surfaces	building, and the surfaces on the e to weathering. This detracts lding. There is also random s on the beams and columns. ic agent to remove staining and		\$1,400						
0	340	Physics	HVAC							- — — — — — —	
	HVAC Dis	tribution Ductwork	120 LF								
06	deteriorati allowing w ductwork	ater to potentially leak into t	k on the roof is gradually to escape to the outside, and he ducts. This can deteriorate the sting sealant should be removed			\$1,450					

<i>IAINT</i>	ENANCE CAT	EGORY: Repair/Maintenan	ce		SURVEY DA	ATE: 8/15					Page 4
EVER CORE DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
4	340 P Air Handler	hysics	HVAC 1 EA								
11	appears to 15 years. Frequirement budgeted for	still be in good condition. Its However, as the unit ages reputs will become more frequent or repairs/maintenance that moder to properly maintain the ai	air and maintenance An allowance should be ay be required over the next 5		\$10,400						
0	340 P	hysics	Structural								
	Concrete C	olumns and Beams	10 SF								
01	from minor spalling cor exposed su should be to agent shou	spalling to significant spalling ncrete should be removed, sp irfaces cleaned by power wire reated with a rust neutralizing	alled areas chipped, and brushing. Any exposed rebar		\$700						
	addressed	mended that after the initial re on a recurring basis at least end building									

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

FACILITY CONDITION SURVEY.	CRITICAL /5VR DEFICIENCY REPA	AIR PROGRAMMING DETAIL R	Y MAINTENANCE/REPLACEMENT CATEGORY
FACILITY CONDITION SURVEY	SKITICAL/31K. DEFICIENCT KEP/	AIR PROGRAMMINING DETAIL D	TIVIAINTENANCE/REPLACEIVIENT CATEGORT

Roof

AINTENA	NCE CATE	GORY: Replacement/R	enewal		SURVEY DA	ATE: 8/15				Page
VER. ORE F. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
340) Ph	ysics	Roof							
3 Co me an dirt	llege reco embrane, extensive ty, making	which appears to be hypa a amount of debris on the	Iltant indicate the single-ply roof lon, is over 15 years old. There is roof and the membrane is very ion very difficult. It is apparent ling in recent times.					\$77,600		
fas cha det nur age app	steners an alking and terioration mber of fa e of the m parent cor	d crazing of the surface, was. Many areas of the seam asteners that are "lifting" u	on of the surface relative to hich are indicators of as appear frayed and there are a nder the membrane. Given the ck of maintenance, and its that the membrane be							
ins to d Re pol rate me	ulation bodetermine placemen lystyrene ed along vechanically	pard are recommended. The its condition and whethen the should include installation or similar insulation board with tapered insulation for	embrane, flashings and any The roof deck should be evaluated or any repairs are required. on of a new vapor barrier, of at least 2" thickness and R-10 proper drainage, a new 60 mil e, and metal parapet cap we to be reset.							
HV		ment removal/reset, but o	ude deck repairs needed, if any, or loes include removal/reset of 150							

MAIN	TENANCE	CATEGORY: Replacement/Renew	al		SURVEY DA	ATE: 8/15					Page 6
SEVER SCORI DEF. N	E	COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 I	Heating Water Piping Insulation	1 LS								
112	on the i	of water heating piping insulation and or roof has deteriorated badly and should usage. One hundred and fifty feet of etermined to require replacement of its	d be replaced to reduce one inch diameter piping		\$6,900						
68	340	Physics	Electrical								
	Circuit I	Breaker Panels	1 LS								
110	approxi is obso and the There is provide recomn	cuit breaker panelboards are original imately 50 years old. Although the explete, replacement parts are expensive equipment is at the end of its general is also a concern with the reliability of es protection of the circuits connected mended that this equipment be replaced locations	quipment is still functional, it and not readily available, ally accepted service life. the equipment as it to each breaker. It is			\$38,600					
68	340	Physics	HVAC								
	HVAC I	Equipment	1 LS								
109	which is life of the receive vibrate costs ca	o condensing units are dated 2001an s approximately 70% of the generally he equipment. Maintenance staff has complaints from faculty that the concexcessively. At this point, increasing can be anticipated going forward, and be considered for approximately five	accepted 20 year service s also reported that they densing units are noisy and maintenance and repair replacement programming						\$37,400		
46	340	Physics	Exterior Closure			_ — — — —				. — — — — — —	
	Wood F	Parapet	120 SF								
107	evidend	ood parapet is badly deteriorated with ce of some rot. Replace the entire panical room				\$2,500					

IAINTENANCE	CATEGORY: Replacement/Re	enewal		SURVEY DA	ATE: 8/15					Page
EVER. CORE EF. NO. BL	COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 340	Physics	Roof								
Wood	Sunscreen Boards	1,760 LF								
	surfaces of the sunscreen boa				\$12,300					
elemer expose The su design be repl hanger coated applied should weathe	nts, including rain. This deteriora es top and side wood surfaces to nscreens are an integral archite	ates the paint fairly rapidly and a weather-caused deterioration. Ctural feature of the building commended that the 2x8 boards ir browntone boards, and new and 4x boards should then be 00%-solids epoxy resin coating and low viscosity epoxy resin e boards, retard constant uintenance costs.								

Southwestern College

SURVEY DATE: 8/15

381 Exhibit Hall

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$102,900

Facility Condition Rating = 85 (Fair)

Repair Cost as a Percent of Facility Replacement Cost is 15 %

Cost Per Square Foot is \$62.03

Average Severity Score = 58

LAST RENOVATED:

12 Deficiencies Were Identified



PRIMARY USE: Exhibits FACILITY AGE: 48 Yrs.

FACILITY SF: 1,659 NO. OF STORIES: 1.0

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)

Southwestern College SURVEY DATE: 8/15

381 Exhibit Hall 900 Otay Lakes Rd.

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	\$55.5

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 remortared.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt buildup, 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

Southwestern College SURVEY DATE: 8/15

381 Exhibit Hall 900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 381 Exhibit Hall

68 Electrical Replacement/Renewal

Circuit Breaker Panel

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 381 Exhibit Hall

60 Exterior Closure Replacement/Renewal

Wood Exterior Doors

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

50 Exterior Closure Repair/Maintenance

Parapet Joints

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 381 Exhibit Hall

64 HVAC Repair/Maintenance Air Handler

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 381 Exhibit Hall

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 381 Exhibit Hall

75 Roof Replacement/Renewal

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.

Built-Up Roof

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

70 Roof Replacement/Renewal Walkway Roof Support Beam

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 381 Exhibit Hall

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

MINITENANCE CAT	EGORY: Improvement			SURVEY DA	NTE: 8/15					Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 381 E	xhibit Hall	Electrical								
Light Fixture	es	24 EA								
existing fluc and should	e staff and program managers prescent lighting is not as ener be replaced with LED lighting. an fixtures and suspended ligh	gy efficient as LED lighting Retrofit existing fluorescent,		\$1,375						

<i>IAINTE</i>	ENANCE CAT	TEGORY: Non-Annual Recurr	ing Maintenance		SURVEY DA	ATE: 8/15					Page 2
SEVER. SCORE DEF. NO	·	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 3	381 E	Exhibit Hall	Paint/Finish								
			90 SF								
06	badly rustir	I stringers on the exterior stairs a ing and rusted metal is flaking of	nd the landing frame are f the surface. Metal should	\$1,825							
06	The metal badly rusting be thoroug two coats of Exterior sta	stringers on the exterior stairs a	nd the landing frame are f the surface. Metal should	\$1,825 							
106	The metal badly rusting be thoroug two coats of Exterior states.	I stringers on the exterior stairs a ing and rusted metal is flaking of ghly scraped and sanded, a rust of epoxy-based paint applied. tairs at side of building	nd the landing frame are f the surface. Metal should inhibiting primer applied, and Paint/Finish	\$1,825 · — — — —			<u> </u>				

	ENANCE CATE	GORY: Repair/Maintenand	ce		SURVEY DA	ATE: 8/15					Page 3
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Ex	hibit Hall	HVAC								
11	appears to s 15 years. He requirements budgeted for	till be in good condition. Its repowever, as the unit ages repairs will become more frequent. repairs/maintenance that may re to properly maintain the air	air and maintenance An allowance should be ay be required over the next 5		\$5,200						
60	381 Ex	hibit Hall	Exterior Closure								
	Parapet Join	ts	52 LF								
		n some of the joints of the pa . Clean-out/chip existing mo			\$1,050						

MAIN	TENANCE	CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15				F	Page 4
SEVER SCOR DEF. N	E	COMPONENT DEFICIENCY OG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
	Concre	te Walkway	75 SF								
107	concret lifting d	ots are lifting and badly cracking/breaking walkway slab. Replace slab and grind ue to roots to eliminate trip hazards. ide of building		\$2,900							
75	381	Exhibit Hall	Roof								
	Built-Up	Roof	15 SQ								
102	Surfacir and bac remove		alt is very dry and brittle, aterial should be apor barrier and			\$16,750					
70	381	Exhibit Hall	Roof								
	Walkwa	y Roof Support Beam	40 LF								
105	wood is conside compro be repla	the covered walkway support beams hat deteriorating on the face of the beam. Fired for replacement to prevent deterioral mising the integrity of the covered walkway ared with a S4S treated browntone doug beams of this size are available, they nays	These beams should be ation from potentially way. The beams should glas fir beams. NOTE:		\$3,000						

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

					_						
MAIN	TENANCE C	ATEGORY: Replacement/Ren	newal		SURVEY DA	A <i>TE:</i> 8/15					Page 5
SEVER SCORI DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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		Exhibit Hall	Electrical								
	Circuit Br	eaker Panel	1 LS								
110	approxim is obsole and the e There is a provides	uit breaker panelboard is origina pately 48 years old. Although the te, replacement parts are exper equipment is at the end of its ge also a concern with the reliability protection of the circuits connect ended that this equipment be rep	e equipment is still functional, it nsive and not readily available, nerally accepted service life. y of the equipment as it cted to each breaker. It is			\$21,300					
68	381	Exhibit Hall	HVAC								
	HVAC Ed	quipment	1 LS								
109	old, which service lift repair cos	h is approximately 70% of the g	nt, increasing maintenance and ward, and replacement						\$34,500		
60	381	Exhibit Hall	Exterior Closure								
	Wood Ex	terior Doors	1 EA								
104	deteriora	d double doors to the space on ted, as is the frame. The face is Replace the door and frame we.	s delaminating from the rest of	\$5,300							

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

Structure on top of the roof

MAINTENANCE CATEGORY: Replacement/Ren	ewal		SURVEY DA	ATE: 8/15					Page
EVER. COMPONENT CORE DEFICIENCY DEF. NO. BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 381 Exhibit Hall	Roof								
Wood Sunscreen Boards	1,300 LF								
exposes top and side wood surfaces to w	veather-caused deterioration.								
The sunscreens are an integral architectudesign and should be retained. It is recobe replaced with treated S4S douglas fir hangers. The top surface of the 2x8 and coated with 2 coats of a low viscosity 100 applied with a roller. The treated wood a should significantly extend the life of the least weathering and significantly reduce main All sunscreen boards on perimeter of built	ural feature of the building mmended that the 2x8 boards browntone boards, and new 4x boards should then be 0%-solids epoxy resin coating nd low viscosity epoxy resin boards, retard constant tenance costs.								

Southwestern College

SURVEY DATE: 8/15

382 Planetarium

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$97,950

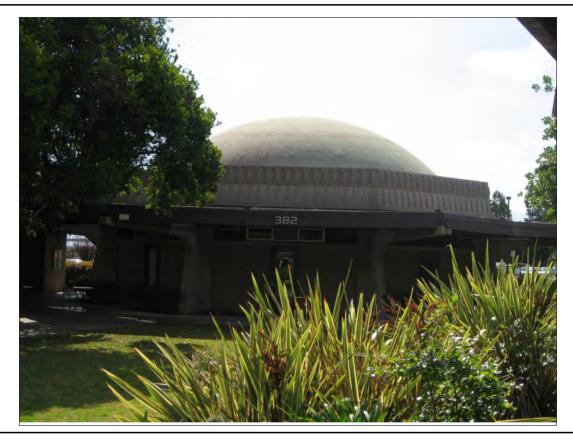
Facility Condition Rating = 86 (Fair)

Repair Cost as a Percent of Facility Replacement Cost is 14 %

Cost Per Square Foot is \$59.04

Average Severity Score = 43

8 Deficiencies Were Identified



PRIMARY USE: Planetarium/Classroom

FACILITY SF: 1,659 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$705,075

FACILITY AGE: 48 Yrs.

LAST RENOVATED:

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)

Southwestern College SURVEY DATE: 8/15

382 Planetarium 900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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	\$50.1

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 remortared.

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt buildup, 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.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 382 Planetarium

68 Electrical Replacement/Renewal Circuit Breaker Panel

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

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

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

FACILITY CONDITION SURVEY DEFICIENCY DETAIL BY	BUILDING AND SYSTEM IN	DECLINING SEVERITY	SCORE ORDER
SITE: Southwestern College FACILITY: 382 Planetarium	SURVEY DATE::	8/15	Page 2

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 382 Planetarium

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 382 Planetarium

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

	ENANCE	CATEGORY: Improvement			SURVEY DA	ATE: 8/15					Page
SEVER SCORI DEF. N	Ī	COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Fi	xtures	29 EA								
	and sho recesse LED lig	fluorescent lighting is not as energial be replaced with LED lighting at can fixtures and suspended lights. Stures throughout building	. Retrofit existing fluorescent,	. — — —							
5	382	Planetarium	Floor Cover								
	Carpet		220 SY								
	replace	is badly stained, very dirty, deteriond. Before installing new carpet, we lew low pile high wear commerciate.	aterproof the concrete slab.				\$10,800				

MAINTENANCE CATEGORY: Non-Annual Recurring Maintenance		ng Maintenance		SURVEY DATE: 8/15					Pag
EEVER. CORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
	etarium	Paint/Finish							
00 The smooth co roof parapets, from the overa	ete Columns/Beams/Roof Par oncrete surfaces on the buildir are badly discolored due to w Il appearance of the building. gent to remove staining and a uilding	ng, and the surfaces on the eathering. This detracts Pressure wash all surfaces		\$1,300					

MAINTENANCE CATE	GORY: Repair/Maintenance			SURVEY DA	ATE: 8/15				Page
EEVER. CORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 382 PI	anetarium	Exterior Closure							
Concrete Pa	rapets	52 LF							
should be re	n the joints of the concrete para placed. Chip/remove all mortar e of a flexible sealant is recomm	and install new joint			\$1,000				

MAINTE	ENANCE CAT	EGORY: Replacement/Rep	newal		SURVEY DA	ATE: 8/15					Page 4
SEVER. SCORE DEF. NO). BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 3	382 P	lanetarium	Roof								
	Walkway R	oof Support Beam	20 LF								
	has a large beam. This deterioratio walkway. I douglas fir	area where the wood is dete s beam should be considered in from potentially compromis The beam should be replaced			\$1,400						
68 3	382 P	lanetarium	Electrical								
	Circuit Brea	aker Panel	1 LS								
	approximat is obsolete and the equal There is als provides pr	, replacement parts are expe	ne equipment is still functional, it insive and not readily available, enerally accepted service life. It is of the equipment as it cted to each breaker. It is					\$26,600			
68 3	382 P	anetarium	HVAC			_ — — — —					
	HVAC Equi	pment	1 LS								
	old, which is service life repair costs	s approximately 70% of the g	int, increasing maintenance and ward, and replacement						\$46,800		

Roof

elements, including rai exposes top and side v	NCY ON	SYSTEM QUANTITY Roof 1,300 LF	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
Wood Sunscreen Boar The top surfaces of the elements, including rai exposes top and side v	sunscreen boards are cons	1,300 LF								
1 The top surfaces of the elements, including rai exposes top and side v	sunscreen boards are cons	·								
elements, including rai exposes top and side v		stantly exposed to the								
design and should be replaced with treate hangers. The top surfaceated with 2 coats of applied with a roller. The should significantly ext	rood surfaces to weather-cal integral architectural feature etained. It is recommended S4S douglas fir browntoned of the 2x8 and 4x boards a low viscosity 100%-solids the treated wood and low viscond the life of the boards, reantly reduce maintenance on perimeter of building	re of the building d that the 2x8 boards e boards, and new ls should then be epoxy resin coating scosity epoxy resin etard constant								

Southwestern College

SURVEY DATE: 8/15

400 Office

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$202,400

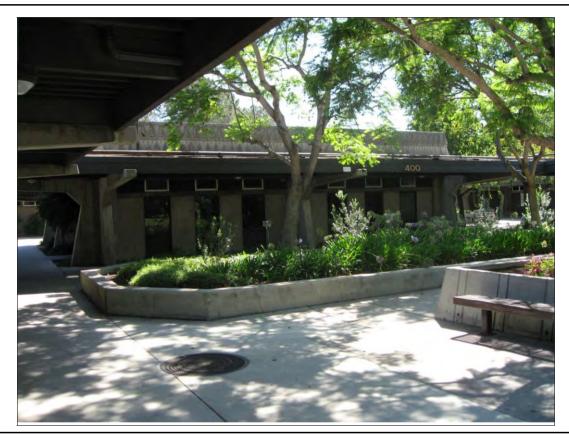
Facility Condition Rating = 76 (Fair

Repair Cost as a Percent of Facility Replacement Cost is 24 %

Cost Per Square Foot is \$74.08

Average Severity Score = 40

13 Deficiencies Were Identified



PRIMARY USE: Faculty Offices

FACILITY SF:

cuity Offices

NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$833,260

FACILITY AGE: 50 Yrs.

LAST RENOVATED:

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

2,732

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)

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				
mprovement		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				

CONDITION SUMMARY:

Replacement/Renewal

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.

6

42

\$189,675

\$69.43

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

Southwestern College SURVEY DATE: 8/15

400 Office 900 Otay Lakes Rd.

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 buildup, 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.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 400 Office

68 Electrical Replacement/Renewal

Circuit Breaker Panel and Distribution Swithboard

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 400 Office

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

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 400 Office

64 HVAC Repair/Maintenance Air Handler

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 400 Office

5 Plumbing Replacement/Renewal

Rest Room Lavatory

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 =

COST PER BLDG GSF= \$1.64

68 Roof Replacement/Renewal

Roof Drains

5

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

Planning Priority: C-Prevent Bldg. System Failure

Deferrable

Est. Remaining Life = 4 Yrs.

Life Expectancy New = 25 Yrs. Estimate Date: 2015 Deficie

Deficiency Data Source:

Condition Survey

Deficiency Cause is Design

Benefit Score = 0

Recommended Method of Repair: Contract

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 400 Office

60 Roof Annual PM Roof Drains

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

Maintenance

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 400 Office

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 7

FACILITY: 400 Office

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

ANTENANOE GATEG	ORY: Annual PM			SURVEY DA	NTE: 8/15				Page
EEVER. CORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 400 Offi	ce	Roof							
Roof Drains		2 EA							
	ng drainage. Drains should b	ed with significant amounts of be thoroughly cleaned out at	\$200						

AIITI EITAITOE VAIE	GORY: Improvement			SURVEY DA	ATE: 8/15				Pag
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
400 Off	iice	Electrical							
Light Fixture:	S	31 EA							
existing fluor and should b recessed car	9				\$1,800				

	ENANCE CATE	GORY: Non-Annual Recurring Main	tenance		SURVEY DA	ATE: 8/15					Page 3
SEVER SCORE DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	400 Of	fice	Roof								
	Single-Ply R	oof Membrane	2,400 SF								
	as debris an the condition cleaning of t Remove all I sumps. Pov formulated for cleaned at le life of the me	only bonded contractor with experience	ifficult to ascertain wear. A thorough in about three years. ownspouts and ag solution ace should be n and prolong the							· — . — . — . — . —	
	400 Of	fice	Paint/Finish								
23		crete Columns/Beams/Roof Parapets	1,400 SF								
23		concrete surfaces on the building, and									

VIAIN I EI	NANCE CATEGORY:	Repair/Maintenance	•		SURVEY DA	ATE: 8/15					Page 4
SEVER. SCORE DEF. NO.	DEFIC	ONENT IENCY TION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
4 4	00 Office		HVAC								
A	Air Handler		1 EA								
6 1 r k	appears to still be in on the still be in one of the still be in graphs. However, a requirements will becoming the still be appeared for repairs/repai	ood condition. Its reast the unit ages repair one more frequent. In anite may	m was installed in 2001 and maining life is estimated at and maintenance An allowance should be be required over the next 5 andler and extend its life.		\$5,000						
0 4	00 Office		Structural								
(Concrete Columns ar	d Beams	50 SF								
f 8 8 8	from minor spalling to spalling concrete sho exposed surfaces cle should be treated with agent should then be strength epoxy-based	significant spalling wald be removed, spall aned by power wire be a rust neutralizing of applied to all voids, a patch cement.	te on the building. It ranges ith exposed rebar. All ed areas chipped, and rushing. Any exposed rebar pating. An epoxy bonding nd the voids filled with a high-		\$3,425						
a	It is recommended the addressed on a recur Perimeter of building		irs new spalling be ery three to four years.								
0 4	00 Office		Roof								
F	Roof Drip Edge		50 LF								
	drip edge.	ng on the roof of the	mechanical room. Install		\$200						

MAINT	ENANCE CATEGO	DRY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page 5
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Offic		Electrical								
	The circuit breapproximately is obsolete, rejand the equipr There is also a provides prote recommended This building a buildings. This		t is still functional, it t readily available, pted service life. pment as it breaker. It is ngear for the 400 dition, with similar			\$116,600					
68	400 Offic		Roof							. — — — —	
	installed on the the drain line. The roof drains under the slab the drain piping deterioration marginal lines be a	s were damaged when the hypalon meeroof and they no longer can be kept they should be replaced. Is also currently drain down through the Maintenance personnel have identifing inside some buildings in the past and they are the they are they are they are they are the they are the they are th	e building and ed deterioration in d suspect additional hat the vertical					\$5,700			

	CE CATEGORY: Replacement/Ren	ewal		SURVEY DA	ATE: 8/15					Page 6
SEVER. SCORE DEF. NO. E	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	C Equipment	1 LS								
gene increa forwa appro the ro same	201, and is now 14 years old, which is crally accepted 20 year service life of easing maintenance and repair costs and, and replacement programming stroking five years out. Two circulations also appear to be deteriorating at e time. Independent piping insulation on the roof is eplaced when the condensing units at	f the equipment. At this point, can be anticipated going should be considered for ar aluminum exhaust fans on and should be replaced at the s deteriorated and should also are replaced. Forty feet of								
	lation has been included in the cost of f	estimate.								
insula Roof		estimate. 							- — — — -	
insula Roof 40 400	f 		.———			.———			- — — — — -	

• 1	TENANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15				Pag
SEVER SCORE DEF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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							
	The lavatories and faucets in the staff rest room and deteriorating finishes and poor design. The composition cost-effective to repair or maintain and should be recounter lavatories and new faucets set in a high-pr synthetic quartz countertop. Staff toilets	nents are no longer eplaced with under-			\$4,475 - — — — —	. — — — —			
	400 Office	Floor Cover							
	Carpet	220 SY							
	On which the late of the state and a state of a late of the control of the state of	laced Refore				\$10,800			
06	Carpet is badly stained and dirty and should be repinstalling new carpet, waterproof the concrete slabhigh wear commercial grade carpet using waterpro Throughout building	Install new low pile							. — — — — — -

Southwestern College

SURVEY DATE: 8/15

410 **English** 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$143,300

Facility Condition Rating = 92 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 8 % Cost Per Square Foot is \$23.93

Average Severity Score = 48

Deficiencies Were Identified



PRIMARY USE: Classroom

FACILITY SF:

5,989 NO. OF STORIES: 1.0

LAST RENOVATED:

50 Yrs.

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)

Southwestern College

SURVEY DATE: 8/15

410 English

900 Otay Lakes Rd.

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	
		_	_		A400

CONDITION SUMMARY:

Replacement/Renewal

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.

5

59

\$112,800

\$18.83

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

Southwestern College SURVEY DATE: 8/15

410 English 900 Otay Lakes Rd.

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 buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 410 English

68 Electrical Replacement/Renewal

Circuit Breaker Panels

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

5 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 410 English

50 Exterior Closure Replacement/Renewal

Wood Parapet

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 410 English

64 HVAC Repair/Maintenance Air Handler

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

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 410 English

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

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

Repair

60 Roof Annual PM Roof Drains

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 410 English

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 410 English

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

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

	TENANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER SCORI DEF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	410 English	Roof								
	Roof Drains	5 EA								
03		are clogged with significant amounts of s should be thoroughly cleaned out at	\$450						. — — — — —	
_										
0	410 English	Roof								
10	410 English Roof Membrane	Roof 6,000 SF								

COMPONENT DEFICIENCY BLDG. LOCATION								
	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
English	Electrical							
nt Fixtures	187 EA							
ting fluorescent lighting is not as energy e should be replaced with LED lighting. Re	fficient as LED lighting rofit existing fluorescent,			\$10,700				
n t	t Fixtures Internance staff and program managers have ting fluorescent lighting is not as energy e should be replaced with LED lighting. Refused can fixtures and suspended light fixt lights.	t Fixtures 187 EA Internance staff and program managers have indicated they feel the ting fluorescent lighting is not as energy efficient as LED lighting should be replaced with LED lighting. Retrofit existing fluorescent, ssed can fixtures and suspended light fixtures with energy efficient lights.	t Fixtures 187 EA Internance staff and program managers have indicated they feel the ting fluorescent lighting is not as energy efficient as LED lighting should be replaced with LED lighting. Retrofit existing fluorescent, ssed can fixtures and suspended light fixtures with energy efficient lights.	t Fixtures 187 EA Internance staff and program managers have indicated they feel the ting fluorescent lighting is not as energy efficient as LED lighting should be replaced with LED lighting. Retrofit existing fluorescent, sseed can fixtures and suspended light fixtures with energy efficient lights.	t Fixtures 187 EA Internance staff and program managers have indicated they feel the sting fluorescent lighting is not as energy efficient as LED lighting should be replaced with LED lighting. Retrofit existing fluorescent, seed can fixtures and suspended light fixtures with energy efficient lights.	t Fixtures 187 EA Internance staff and program managers have indicated they feel the sting fluorescent lighting is not as energy efficient as LED lighting should be replaced with LED lighting. Retrofit existing fluorescent, seed can fixtures and suspended light fixtures with energy efficient lights.	t Fixtures 187 EA Internance staff and program managers have indicated they feel the sting fluorescent lighting is not as energy efficient as LED lighting should be replaced with LED lighting. Retrofit existing fluorescent, ssed can fixtures and suspended light fixtures with energy efficient lights.	t Fixtures 187 EA Internance staff and program managers have indicated they feel the sting fluorescent lighting is not as energy efficient as LED lighting should be replaced with LED lighting. Retrofit existing fluorescent, ssed can fixtures and suspended light fixtures with energy efficient lights.

MAIN'	TENANCE C	ATEGORY: Non-Annual Re	curring Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER SCORI DEF. N	E	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
1113	The sing other del ascertair also can areas of thorough Remove sumps. formulate cleaned life of the	bris, and the surface is fairly on the condition of the roof and shorten the life of the membrate the membrane indicated no an cleaning of the membrane surface all leaves/debris from the roo Power-wash the membrane used for single-ply roof membrar at least every three to four years membrane.	f and clean downspouts and sing a cleaning solution		\$2,700						
23	Entire ro — — — — 410										
		Concrete Columns/Beams/Ro									
100	roof para from the spalling of wash all spalling of	apets, are badly discolored du overall appearance of the bui of the concrete surfaces on th surfaces with biologic agent to	e beams and columns. Pressure		\$1,400						
20	410	English	HVAC								
	HVAC D	istribution Ductwork	40 LF								
106	deteriora allowing ductwork	water to potentially leak into the	k on the roof is gradually to escape to the outside, and he ducts. This can deteriorate the sting sealant should be removed			\$1,550					

MAINTENA	NCE CATE	GORY: Non-Annual Recurrin	g Maintenance		SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
	Non-Ann	ual Recurring Maintenance	AV. SEVER. SCORE = 31	\$ 0	\$4,100	\$1,550	\$0	\$ 0	\$0	\$5,650

,,,,		DITION CORVE	MITOAL, OTN. BLITOIL	INOTINEFAINTI				IIIOE/NEI EF	TOLINEIT O	AILOOKI		
MAIN	TENANCE C	ATEGORY: Repair/Ma	aintenance			SURVEY DA	NTE: 8/15					Page 5
SEVER SCOR DEF. N	E	COMPONENT DEFICIENCY LOCATION		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	partially of sound en deteriora application sealer-confollowed repair pro	deteriorated on the face ough that the deteriorated wood should be tho on of a 2-component, so insilidant applied by bruby the application of a 2-duct, either in putty or cured, the areas can be	rt beams has an area we of the beam. The beat ted wood can be repair toroughly removed, follow olvent-free, low viscosity ash to all affected areas 2-component epoxy restrowellable paste form. The sanded smooth and the s	am appears red. All wed by the y epoxy resin s. This should be sin structural Once the repair		\$550						
64	410	English		HVAC								
	Air Handl	er		1 EA								
111	appears to 15 years. requirement budgeted	to still be in good condit However, as the unit a ents will become more I for repairs/maintenand order to properly mainta	nanical room was instal tion. Its remaining life i ages repair and mainte frequent. An allowance ce that may be required ain the air handler and e	is estimated at nance e should be I over the next 5		\$10,400						
50	410	English		Structural	- — — —						- — — — — — -	
	Concrete	Columns and Beams		35 SF								
101	All spallir exposed agent sho	ng concrete should be re surfaces cleaned by po	ing of surface concrete emoved, spalled areas ower wire brushing. An all voids, and the voids nent.	chipped, and epoxy bonding		\$2,400						
	addresse		initial repairs new spal at least every three to f									

IAINTENANCE CATE	GORY: Repair/Maintenance			SURVEY D	ATE: 8/15				Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
OTAL: Repair/N	laintenance	AV. SEVER. SCORE = 61	\$0	\$13,350	\$0	\$0	\$0	\$0	\$13,350

IAINTE	ENANCE CATEGORY:	Replacement/Renewal			SURVEY DA	A <i>TE:</i> 8/15					Page 7
EVER. CORE EF. NO.	COMPO DEFICE BLDG. LOCAT	ENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
8 4	110 English		HVAC								
ŀ	HVAC Heating Water	Piping Insulation	1 LS								
c L t	on the roof has deterion usage. Two hundred	piping insulation and exporated and should be replored one inch diameter tof insulation and alur	aced to reduce energy piping was determined		\$9,200						
8 4	I10 English	· — — — — — — — ·	Electrical							- — — — — -	
(Circuit Breaker Panels		1 LS								
6 i 6 7 F r	approximately 48 year is obsolete, replaceme and the equipment is There is also a concel provides protection of	nelboards are original to to sold. Although the equipent parts are expensive as at the end of its generally n with the reliability of the the circuits connected to sequipment be replaced.	ment is still functional, it nd not readily available, accepted service life. equipment as it			\$47,400 				. — — — — -	
8 4	l10 English		HVAC								
09 T	which is approximately life of the equipment. receive complaints frow vibrate excessively. A costs can be anticipat	nits are dated 2001 and a 70% of the generally acomaintenance staff has also a faculty that the condent this point, increasing maded going forward, and reptor approximately five year Room	cepted 20 year service so reported that they sing units are noisy and aintenance and repair lacement programming						\$37,300		
0 4	I10 English		Exterior Closure	. — — — —			- — — — —				
\	Wood Parapet		120 SF								
6							\$1,300				

VER. ORE F. NO. BLDG. 410 Eng Wood Sunscr 4 The top surface	COMPONENT DEFICIENCY LOCATION Jlish	SYSTEM QUANTITY Roof	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST	YR. 3 COST	YR. 4 COST	YR. 5 COST	TOTAL COST YR.	
Wood Sunscr		Roof			2017	2018	2019	2020	0-5	
	een Boards	11001								
4 The top surface	CON BOUNDS	2,514 LF								
The sunscree design and she replaced whangers. The coated with 2 applied with a should signific weathering and should signific coated.	ens are an integral architectun nould be retained. It is recor vith treated S4S douglas fir be top surface of the 2x8 and	mmended that the 2x8 boards prowntone boards, and new 4x boards should then be %-solids epoxy resin coating and low viscosity epoxy resin poards, retard constant tenance costs.								
TAL: Replacem	ent/Renewal	AV. SEVER. SCORE = 59	\$0	\$9,200	\$65,000	\$1,300	\$0	\$37,300	\$112,800	

SURVEY DATE: 8/15 Southwestern College

420 **Academic Success Center** 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$163,850

Facility Condition Rating = 98 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 2 % Cost Per Square Foot is \$6.54

Average Severity Score = 38

Deficiencies Were Identified



Student Support PRIMARY USE:

FACILITY SF: 25,035 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$10,639,875

FACILITY AGE: 42 Yrs. LAST RENOVATED: 2005

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)

Southwestern College SURVEY DATE: 8/15

420 Academic Success Center 900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 420 Academic Success Center

5 Electrical Improvement Light Fixtures

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

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

Repair

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 420 Academic Success Center

68 HVAC Replacement/Renewal HVAC Equipment

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

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 420 Academic Success Center

SYSTEM SUB-TOTAL Paint/Finish \$5,900 AV. SEVERITY SCORE = 23 COST PER BLDG GSF= \$0.24

5 Plumbing Replacement/Renewal

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 guartz countertop.

Rest Room Lavatory

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 420 Academic Success Center

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 420 Academic Success Center

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

·

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

QUANTITY:

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

	TENANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVEF SCORI DEF. N	DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 debris, inhibiting drainage. Drains should be thor least once per year. Roof perimeter		\$1,350							
10	420 Academic Support Center	Roof								
	Roof Membrane	25,080 SF								
	There are moderate amounts of leaves and tree of	ebris on the roof	\$800							

AIITI EITAITOE OA	TEGORY: Improvement			SURVEY DA	ATE: 8/15					Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
420	Academic Success Center	Electrical								
Light Fixtu	res	462 EA								
existing flu	ce staff and program managers hav lorescent lighting is not as energy ef d be replaced with LED lighting. Retr can fixtures and suspended light fixto	ficient as LED lighting rofit existing fluorescent,			\$26,400					

MAIN	TENANCE CATEGORY: Nor	n-Annual Recurring Mainter	nance		SURVEY DA	ATE: 8/15					Page 3
SEVE SCOR DEF.	RE DEFICIENC		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Succ	cess Center	Roof								
	Single-Ply Roof Membran	e	25,100 SF								
151	of leaf and other debris, a very difficult to ascertain the problems. It also can should be considered as a second of cleaner areas of the meaning of the considered at leaves/debris sumps. Power-wash the formulated for single-ply recleaned at least every three life of the membrane.	on this building contains mond the surface is fairly dirty. he condition of the roof and intenthe life of the membrane embrane indicated no appare membrane surface is recommended from the roof and clean down membrane using a cleaning soof membranes. The surface to four years to maintain a contractor with experience cle	This makes it dentify potential e. An examination ent deficiencies. mended. Inspouts and solution e should be and prolong the			\$8,700					
23	420 Academic Sup		Paint/Finish	- — — —						. — — — — -	
	Exterior Concrete Column	•	7,900 SF								
100	roof parapets, are badly d from the overall appearan	aces on the building, and the iscolored due to weathering. ce of the building. Pressure ove staining and any spalling	This detracts wash all surfaces		\$5,900						
20	420 Academic Sup	port Center	HVAC								
	HVAC Distribution Ductwo	ork	790 LF								
104	deteriorating, allowing hot allowing water to potentia	netal ductwork on the roof is of and cold air to escape to the lay leak into the ducts. This orgy. The existing sealant sho	e outside, and an deteriorate the			\$8,100					

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

MAINTENA	AINTENANCE CATEGORY: Non-Annual Recurring Maintenance				SURVEY DA	ATE: 8/15				Pa
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
OTAL:	Non-Ann	ual Recurring Maintenance	AV. SEVER. SCORE = 31	\$0	\$5,900	\$16,800	\$0	\$0	\$0	\$22,700

	VANCE CATEGORY: Repair/Maintenance			SURVEY DA	<i>TE:</i> 8/15					Page :
SEVER. SCORE DEF. NO.	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
B 42	20 Academic Success Center	HVAC								
H	HVAC Equipment	1 LS								
w e c re	The air handling equipment is comprised of two lar with direct expansion cooling coils and natural gas equipment was inspected and appears to be in goo condition. However, as the units age repair and m equirements will become more frequent. An allow budgeted for repairs/maintenance that may be requears in order to properly maintain the equipment a	heat. The od operating aintenance rance should be uired over the next 5		\$36,400						

MAINT	ENANCE CA	TEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15				Page
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
8	420	Academic Success Center	HVAC							
	HVAC Equ	iipment	1 LS							
108	well past the escalate geffective to replaceme exhaust fa	ackaged roof top air conditioning unimeir expected service life of 20 years oing forward and the units are no lor orepair. It is recommended that they art. In addition, it is recommended that they are that are deteriorating and nearing ife also be replaced.	Repair costs will only ager considered cost- be scheduled for at two circular aluminum		\$51,700					
0	420	Academic Support Center	Roof							- — — — — — — -
	Wood Sun	screen Boards	3,115 LF							
103	elements, exposes to The sunso design and be replace hangers. coated with applied with should sign weathering	rfaces of the sunscreen boards are including rain. This deteriorates the pp and side wood surfaces to weather reens are an integral architectural fed should be retained. It is recommend with treated S4S douglas fir brown The top surface of the 2x8 and 4x both 2 coats of a low viscosity 100%-so the a roller. The treated wood and low nificantly extend the life of the board grand significantly reduce maintenant the poards on perimeter of building	paint fairly rapidly and er-caused deterioration. ature of the building add that the 2x8 boards tone boards, and new ards should then be lids epoxy resin coating viscosity epoxy resins, retard constant			\$21,500				
j	420	Academic Success Center	Plumbing							
	Rest Roon	n Lavatory	1 LS							
106	deterioration cost-effect counter law	ries and faucets in the staff rest rooring finishes and poor design. The colive to repair or maintain and should vatories and new faucets set in a high puartz countertop.	mponents are no longer be replaced with under-			\$3,000				

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

IAINTENANCE CATEGORY:	Replacement/Renewal			SURVEY DA	A <i>TE:</i> 8/15				Page
CORE DE	MPONENT FICIENCY CATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
OTAL: Replacement/R	enewal	AV. SEVER. SCORE = 38	\$0	\$51,700	\$24,500	\$0	\$0	\$0	\$76,200

Southwestern College

SURVEY DATE: 8/15

430 Classroom 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$130,800

Facility Condition Rating = 95

Repair Cost as a Percent of Facility Replacement Cost is 5 % Cost Per Square Foot is \$16.15

Average Severity Score = 45

Deficiencies Were Identified



1.0

PRIMARY USE: Classroom

FACILITY SF:

NO. OF STORIES:

LAST RENOVATED:

36 Yrs.

Current Facility Replacement Cost is Approximately \$2,469,585

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is A

8,097

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)

Southwestern College SURVEY DATE: 8/15

430 Classroom 900 Otay Lakes Rd.

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	\$13.9

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 buildup, 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

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 430 Classroom

5 Electrical Improvement

Light Fixtures

HVAC Equipment

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 430 Classroom

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

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 430 Classroom

60 Roof Annual PM Roof Drains

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

Maintenance

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 430 Classroom

40 Roof Annual PM Roof Membrane

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.

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 430 Classroom

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

MAINT	ENANCE (CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	430	Classroom	Roof								
	Roof Dra	raine	4 EA								
03				\$200							
03	The roof debris, i	of drains and drain sumps are clinhibiting drainage. Drains shouse per year.	ogged with significant amounts of uld be thoroughly cleaned out at	\$200							
	The roof debris, i least on	of drains and drain sumps are clinhibiting drainage. Drains shouse per year.	ogged with significant amounts of	\$200							
	The roof debris, i least on Roof pe	of drains and drain sumps are clinhibiting drainage. Drains shouse per year. erimeter	ogged with significant amounts of uld be thoroughly cleaned out at	\$200	. — — — —			———-		. — — — — —	

IAIN I ENANCE	CATEGORY: Improvement			SURVEY DA	ATE: 8/15					Page 2
EVER. CORE PEF. NO. BL	COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
430	Classroom	Electrical								
Light F	ixtures	173 EA								
existing and sh recess	nance staff and program managers h g fluorescent lighting is not as energy ould be replaced with LED lighting. R ed can fixtures and suspended light fi ghts.	efficient as LED lighting etrofit existing fluorescent,			\$9,900					

VAINT	ENANCE CATE	GORY: Non-Annual Recu	rring Maintenance		SURVEY DA	NTE: 8/15					Page 3
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0		assroom oof Membrane	Roof 8,000 S	:F							
	The single-p of leaf and of This makes identify pote membrane. relatively cle thorough cle Remove all sumps. Pow formulated ficleaned at le life of the me	oly membrane on this building other debris, and the surface it very difficult to ascertain the ntial problems. It also can so an examination of areas of the earling of the membrane surface of the earling of the membrane surface of the earling of the membrane using or single-ply roof membrane east every three to four years embrane.	g contains moderate amounts is fairly dirty in many areas. ie condition of the roof and horten the life of the the membrane that were ficiencies. However, a acce is recommended. Ind clean downspouts and ag a cleaning solution	5	\$3,275						
23	430 CI	assroom	Paint/Finish	_ — — — — —		_ — — — —				- — — — — —	
	Exterior Con	crete Columns/Beams/Roof	Parapets 3,580 S	F							
	roof parapet from the ove spalling of th wash all sur spalling con	s, are badly discolored due t erall appearance of the buildi ne concrete surfaces on the l faces with biologic agent to r	ng. There is also random peams and columns. Pressu		\$2,700						

<i>IAIN</i>	NTENANCE CATEGORY: Repair/Maintenance			SURVEY DA	ATE: 8/15					Page
SEVE SCOR DEF. I	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	430 Classroom	Structural								
	Concrete Columns and Beams	15 SF								
01	There is random minor spalling of surface conspalling concrete should be removed, spalled exposed surfaces cleaned by power wire brundled agent should then be applied to all voids, and strength epoxy-based patch cement.	d areas chipped, and shing. An epoxy bonding		\$1,025						
	It is recommended that after the initial repair addressed on a recurring basis at least every Perimeter of building									

MAINTEN	IANCE CATE	GORY: Replacement/Rene	wal		SURVEY DA	ATE: 8/15					Page 5
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 43	30 Cla	assroom	Roof								
V	/alkway Ro	of Support Beam	20 LF								
d w d m	eterioration ralkway. Th ouglas fir b nay have to	beam should be considered for from potentially compromising the beam should be replaced weam. NOTE: Though beams be custom milled.	g the integrity of the covered								
8 43	0 Cla	assroom	HVAC								
Н	VAC Equip	ment	1 LS								
a re (t re a	ppear to be ecommenderiple duty ver eplaced at the elief valve delso be repla	roof top natural gas boiler and at the end of their expected sed to be scheduled for replace alve, suction strainer, air separthe same time. There is also a discharge before it enters a draced. Support frame for the beed to be painted. There are for	service life and are ement. Pump appurtenances trate) are recommended to be a cooler that cools the boiler ain. This equipment should biler and pumps are						\$93,300		

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

fans and one square exhaust fan on the roof that are recommended to

be replaced. Roof

MAINTENANCE CATE	ORY: Replacement/Rene	ewal		SURVEY DA	ATE: 8/15				Pa
EEVER. CORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 430 Cla	ssroom	Roof							
Wood Sunsci	reen Boards	2,650 LF							
exposes top a The sunscree design and sl be replaced v	ens are an integral architectunould be retained. It is reconvith treated S4S douglas fir the top surface of the 2x8 and	eather-caused deterioration. Iral feature of the building Immended that the 2x8 boards Drowntone boards, and new 4x boards should then be %-solids epoxy resin coating							
coated with 2 applied with a should signifi weathering a	a roller. The treated wood and cantly extend the life of the band significantly reduce maint a boards on perimeter of built	poards, retard constant enance costs.							

Southwestern College

SURVEY DATE: 8/15

440 Language 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$139,900

Facility Condition Rating = 92 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 8 % Cost Per Square Foot is \$22.95

Average Severity Score = 49

Deficiencies Were Identified



1.0

PRIMARY USE: Classroom

FACILITY SF:

6,095 NO. OF STORIES:

Current Facility Replacement Cost is Approximately \$1,858,975 FACILITY AGE: 50 Yrs.

LAST RENOVATED:

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)

Southwestern College

SURVEY DATE: 8/15

440 Language

900 Otay Lakes Rd.

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	е	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	

CONDITION SUMMARY:

Replacement/Renewal

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.

4

61

\$115,300

\$18.92

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

900 Otay Lakes Rd.

SURVEY DATE: 8/15

440 Language

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 440 Language

68 Electrical Replacement/Renewal

Circuit Breaker Panels

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

5 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 440 Language

68 HVAC Replacement/Renewal

HVAC Heating Water Piping Insulation

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

68 HVAC Replacement/Renewal

HVAC Equipment

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

64 HVAC Repair/Maintenance

Air Handler

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 440 Language

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

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 440 Language

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

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 V

Wood Sunscreen Boards

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 440 Language

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

MAINT ENAMOL OATE	GORY: Annual PM			SURVEY DA	NTE: 8/15				Page
SEVER. SCORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 La	inguage	Roof							
Roof Drains		3 EA							
	ins and drain sumps are clogge iting drainage. Drains should b er year. eter		\$300						

IAINTENANCE CAT	EGORY: Improvement			SURVEY DA	ATE: 8/15				Pa
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
440 L	anguage	Electrical							
Light Fixtur	es	140 EA							
existing fluctions and should	ce staff and program managers prescent lighting is not as ener be replaced with LED lighting. an fixtures and suspended ligh	gy efficient as LED lighting Retrofit existing fluorescent,			\$8,000				

MAINT	ENANCE C	ATEGORY: Non-Annual Re	ecurring Maintenance		SURVEY DA	ATE: 8/15				Page 3
SEVER SCORE DEF. N	•	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 5,860 S	_						
109	The sing However future to problems of the micleaning measure Remove sumps. formulate cleaned life of the	ascertain the condition of the s. It also can shorten the life embrane indicates no appare of the membrane surface is it in about 3 years. all leaves/debris from the room Power-wash the membrane used for single-ply roof membra at least every three to four year membrane. se only bonded contractor witnes.	ding is currently debris-free. ate, it will become difficult in the eroof and identify potential of the membrane. An examination the deficiencies. A thorough recommended as a preventive of and clean downspouts and using a cleaning solution	on			\$2,400			
23	440	Language	Paint/Finish			_ — — — —	. — — — —			. — — — — — — -
		Concrete Columns/Beams/Ro	•							
100	roof para from the spalling wash all spalling	apets, are badly discolored du overall appearance of the bu	ne beams and columns. Pressui		\$1,400					

IAINTEN	ANCE CATI	EGORY: Repair/Maintenanc	ce		SURVEY DA	ATE: 8/15					Page 4
EVER. CORE PEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
4 44		anguage	HVAC								
Ai	r Handler		1 EA								
ar 15 re bu ye	ppears to so years. He quirement adgeted for	dling unit in the mechanical ro still be in good condition. Its rollowever, as the unit ages reparts will become more frequent. or repairs/maintenance that mader to properly maintain the air all Room	emaining life is estimated at air and maintenance An allowance should be ay be required over the next 5		\$10,400						
0 44	0 La	anguage	Structural								
Co	oncrete C	olumns and Beams	30 SF								
fro sp ex sh aq	om minor a calling con aposed su could be tr gent shoul	ndom spalling of surface concr spalling to significant spalling ncrete should be removed, spa infaces cleaned by power wire reated with a rust neutralizing Id then be applied to all voids, oxy-based patch cement.	with exposed rebar. All alled areas chipped, and brushing. Any exposed rebar		\$2,100						
	ldressed o	nended that after the initial rep on a recurring basis at least ev of building									

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

MAINT	ENANCE	E CATEGORY: Replac	cement/Renewal			SURVEY DA	ATE: 8/15					Page 5
SEVER. SCORE DEF. NO	Ī	COMPONENT DEFICIENCY LDG. LOCATION		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	on the reduce piping	roof has deteriorated e energy usage. One l	insulation and exposed all and is recommended to be nundred and fifty feet of on- quire replacement of its ins	replaced to e inch diameter		\$6,900						
68	440	Language		Electrical								
	Circuit	t Breaker Panels		1 LS								
106	approxis obsc and the There provide recom	ximately 50 years old. olete, replacement par le equipment is at the is also a concern with	ards are original to the build Although the equipment is ts are expensive and not reend of its generally accepte the reliability of the equipments connected to each broment be replaced.	still functional, it eadily available, ed service life. nent as it			\$52,000					
68	440	Language		HVAC							- — — — — -	
	HVAC	Equipment		1 LS								
105	which life of t receive vibrate costs of	is approximately 70% the equipment. Mainte e complaints from facue excessively. At this person be anticipated going	e dated 2001 and are now of the generally accepted 2 enance staff has also reporally that the condensing unipoint, increasing maintenaring forward, and replaceme proximately five years out.	20 year service ted that they ts are noisy and ace and repair						\$38,800		

Roof

MAINTENANCE CATEGORY	: Replacement/Rene	ewal		SURVEY DA	ATE: 8/15					Page
CORE D	OMPONENT EFICIENCY OCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 440 Langua	ge	Roof								
		0 = 4 = 1 =								
elements, includin	of the sunscreen boards	2,515 LF s are constantly exposed to the sthe paint fairly rapidly and			\$17,600					
O3 The top surfaces of elements, including exposes top and so the sunscreens and design and should be replaced with thangers. The top 2 coats of a low via roller. The treat significantly exten and significantly received.	of the sunscreen boards ag rain. This deteriorate side wood surfaces to ware an integral architectud be retained. It is recorreated S4S douglas fir be surface of the 2x8 boardscosity 100%-solids epiced wood and low viscosited sunscreen sunscreen boards.	is are constantly exposed to the set the paint fairly rapidly and reather-caused deterioration. It all feature of the building mmended that the 2x8 boards browntone boards, and new reds should then be coated with oxy resin coating applied with sity epoxy resin should retard constant weathering sts.			\$17,600					
O3 The top surfaces of elements, including exposes top and so the sunscreens and design and should be replaced with thangers. The top 2 coats of a low via roller. The treat significantly exten and significantly received.	of the sunscreen boards of rain. This deteriorate side wood surfaces to wore an integral architectud be retained. It is recorreated S4S douglas fir the surface of the 2x8 boards is cosity 100%-solids epided wood and low viscos of the life of the boards, educe maintenance cos	is are constantly exposed to the set the paint fairly rapidly and reather-caused deterioration. It all feature of the building mmended that the 2x8 boards browntone boards, and new reds should then be coated with oxy resin coating applied with sity epoxy resin should retard constant weathering sts.			\$17,600					

Southwestern College

SURVEY DATE: 8/15

450 Office 900 Otay Lakes Rd.

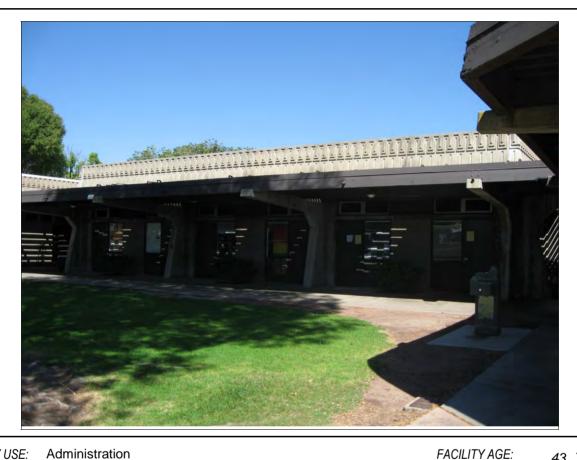
REPAIR COST ESTIMATE IS \$44,000

Facility Condition Rating = 91

Repair Cost as a Percent of Facility Replacement Cost is 9 % Cost Per Square Foot is \$28.39

Average Severity Score = 42

Deficiencies Were Identified



PRIMARY USE: Administration

FACILITY SF:

NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$472,750 LAST RENOVATED:

43 Yrs.

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

1,550

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)

Southwestern College

SURVEY DATE: 8/15

450 Office

900 Otay Lakes Rd.

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	9	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	\$25.6

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 buildup, 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

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: **450** Office

68 Electrical Replacement/Renewal

Circuit Breaker Panel

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 Electrical Improvement

Light Fixtures

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

SITE: FACILIT	Southweste Y: 450	rn College Office			SURVEY DATE::	8/15	Page 2
23 100	weathering.	concrete surfacts faces on the ling concrete.	from the overa beams and colu	Iding, an Il appear	ntenance Exterior Cond the surfaces on the roo ance of the building. The essure wash all surfaces	f parapets, are ere is also rand	om spalling of the
QUANTIT	1,00	56 SF v = 10 Yrs.	REPAIR COST: Estimate Date:	\$800 2015	Deferrable Deficiency Data Source:		paining Life = 1 Yrs. Survey
Benefi	ency Cause is t Score = 28 enance		g Priority: E-Ma		commended Method of Repa		
SYSTEM	1 SUB-TOTAL	Paint/Finish	\$800		AV. SEVERITY SCORE =	23 COST PER	R BLDG GSF= \$0.52
60 103		y cleaned out			Roof Drains gnificant amounts of debr	is, inhibiting dra	ainage. Drains should
QUANTIT	Y: xpectancy Nev	1 EA v = 1 Yrs.	REPAIR COST: Estimate Date:	\$125 2015	Critical Deficiency Data Source:		naining Life = 0 Yrs. Survey
	ency Cause is t Score = 36				commended Method of Repa	air: In-House	

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 450 Office

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

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

Maintenance

40 Roof Annual PM Roof Membrane

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 450 Office

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

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

	ITENANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVE SCOR DEF.	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 sign debris, inhibiting drainage. Drains should be those least once per year. Roof perimeter		\$125 							
40	450 Office	Roof								
40										
40	Roof Membrane	1,590 SF								

IAINTENANCE CATEG	ORY: Improvement		SURVEY DATE: 8/15						Page 2	
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
450 Offic	ce	Electrical								
Light Fixtures		24 EA								
existing fluore and should be recessed can	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					

<i>IAINTE</i>	NANCE CA	TEGORY: Non-Annual Re	curring Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER. SCORE DEF. NO	. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
		Office	Roof								
07	The single of leaf and consolidate ascertain the also can siclean area Thorough 2 years. Remove a sumps. Performulated cleaned at life of the residue of th	other debris, and the surfaction. Continued inattention whe condition of the roof and horten the life of the membras of the membrane indicate cleaning of the membrane soll leaves/debris from the roopwer-wash the membrane ultrained for single-ply roof membrane least every three to four yemembrane.	will make it very difficult to identify potential problems. It cane. Examination of relatively no apparent deficiencies. Surface is recommended in about of and clean downspouts and			\$1,100					
3 4	 150 (- — — — —		_ — — — —				- — — — — –	
	Exterior Co	oncrete Columns/Beams/Ro	oof Parapets 1,056 SF								
	roof parap from the o spalling of wash all su spalling co	ets, are badly discolored du verall appearance of the bui the concrete surfaces on th urfaces with biologic agent t	building, and the surfaces on the le to weathering. This detracts ilding. There is also random le beams and columns. Pressure o remove staining and any		\$800						

//AIN	NTENANCE CATEGORY: Repair/Mainte	enance		SURVEY DATE: 8/15						Page 4
SEVE SCOR DEF. I	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
)	450 Office	Structural								
	Concrete Columns and Beams	10 SF								
01	There is random minor spalling of su spalling concrete should be removed exposed surfaces cleaned by power agent should then be applied to all vestrength epoxy-based patch cement.	d, spalled areas chipped, and wire brushing. An epoxy bonding oids, and the voids filled with a high-		\$725						
	It is recommended that after the initial addressed on a recurring basis at least Perimeter of building									

COMPONENT DEFICIENCY DG. LOCATION Office Breaker Panel Cuit breaker panelboard is original climately 43 years old. Although the polete, replacement parts are expense equipment is at the end of its ger is also a concern with the reliability es protection of the circuits connectmended that this equipment be replacal Room Office Sunscreen Boards	e equipment is still functional, it sive and not readily available, nerally accepted service life. of the equipment as it ted to each breaker. It is placed. Roof 615 LF	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020 \$35,000	TOTAL COST YR. 0-5
Breaker Panel cuit breaker panelboard is original cimately 43 years old. Although the blete, replacement parts are expen- e equipment is at the end of its ger is also a concern with the reliability es protection of the circuits connec mended that this equipment be rep cal Room Office Sunscreen Boards	to the building and is now e equipment is still functional, it sive and not readily available, nerally accepted service life. of the equipment as it ted to each breaker. It is placed. Roof Roof 615 LF		. — — — —				\$35,000	
cuit breaker panelboard is original timately 43 years old. Although the olete, replacement parts are expense equipment is at the end of its ger is also a concern with the reliability es protection of the circuits connectmended that this equipment be replaced Room Office Sunscreen Boards	to the building and is now e equipment is still functional, it sive and not readily available, nerally accepted service life. of the equipment as it ted to each breaker. It is placed. Roof 615 LF		. — — — —				\$35,000	- — — — — — —
Sunscreen Boards	615 LF				. — — — —			- — — — — — — —
cantly extend the life of the boards, gnificantly reduce maintenance cos	es the paint fairly rapidly and veather-caused deterioration. Ural feature of the building mmended that the 2x8 boards browntone boards, and new rds should then be coated with oxy resin coating applied with sity epoxy resin should retard constant weathering sts.			\$4,700				
placement/Renewal	AV. SEVER. SCORE = 54	\$0	\$0	\$4,700	\$0	\$0	\$35,000	\$39,700
gr	The treated wood and low viscos antly extend the life of the boards, nificantly reduce maintenance concreen boards on perimeter of building.	The treated wood and low viscosity epoxy resin should antly extend the life of the boards, retard constant weathering nificantly reduce maintenance costs. Increen boards on perimeter of building	The treated wood and low viscosity epoxy resin should antly extend the life of the boards, retard constant weathering nificantly reduce maintenance costs.	The treated wood and low viscosity epoxy resin should antly extend the life of the boards, retard constant weathering inficantly reduce maintenance costs.	The treated wood and low viscosity epoxy resin should antly extend the life of the boards, retard constant weathering inficantly reduce maintenance costs.	The treated wood and low viscosity epoxy resin should antly extend the life of the boards, retard constant weathering inficantly reduce maintenance costs.	The treated wood and low viscosity epoxy resin should antly extend the life of the boards, retard constant weathering nificantly reduce maintenance costs.	The treated wood and low viscosity epoxy resin should antly extend the life of the boards, retard constant weathering inficantly reduce maintenance costs.

Southwestern College

SURVEY DATE: 8/15

460 **Behavioral Science** 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$210,250

Facility Condition Rating = 93 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 7 % Cost Per Square Foot is \$28.84

Average Severity Score = 46

Deficiencies Were Identified



PRIMARY USE: Classroom

7,290 FACILITY SF: NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$3,098,250 FACILITY AGE: 41 Yrs.

LAST RENOVATED:

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)

Southwestern College

SURVEY DATE: 8/15

460 Behavioral Science

900 Otay Lakes Rd.

MAINT. CATEGORY/SYSTEM		NO.OF DEF.	AVERAGE SEV. SCORE	DEFICIENCY COST	COST PER GSF
MAINT. CATEGORI/3131EM					
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	\$24.4

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.

SURVEY DATE: 8/15

Southwestern College

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 buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 460 Behavioral Science

68 Electrical Replacement/Renewal

Circuit Breaker Panel and Distribution Swithboard

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 460 Behavioral Science

68 HVAC Replacement/Renewal

HVAC Heating Water Piping Insulation

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

Benefit Score = 47

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

Planning Priority: C-Prevent Bldg. System Failure

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

68 HVAC Replacement/Renewal

HVAC Equipment

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 460 Behavioral Science

20 HVAC Non-Annual Recurring Maintenance HVAC Distribution Ductwork

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 460 Behavioral Science

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 460 Behavioral Science

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

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

IVIAINI	ENANCE CATEGOR	RY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER SCORE DEF. N	-	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Behav	rioral Science	Roof								
	Roof Drains 4 E The roof drains and drain sumps are clogged with significant amounts										
103	debris, inhibiting		e thoroughly cleaned out at	\$375							
	Roof perimeter	ear.		. — — — —		_ — — —				· — — — — —	
 10	Roof perimeter	ear. 		. — — — —						. — — — — —	
 40	Roof perimeter	rioral Science	Roof 7,200 SF	. — — —							

FAC	ILITY CONDIT	ION SURVEY - CRITICAL/5	YR. DEFICIENCY REPAIR PI	ROGRAMMIN	IG DETAIL BY	Y MAINTENA	NCE/REPLA	ACEMENT C	ATEGORY		
MAIN	TENANCE CATEG	GORY: Improvement		SURVEY DATE: 8/15						Pa	age 2
SEVER SCORE DEF. N	=	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Beh	navioral 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.					\$10,000					
		throughout building		_ — — — —		_ — — — —					
тоти	AL: Improvem	ent	AV. SEVER. SCORE = 5	\$0	\$0	\$10,000	\$0	\$0	\$0	\$10,000	

MAINTEN	IANCE CATEGO	ORY: Non-Annual Recurr	ing Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 46	60 Beha	avioral Science	Roof								
Si	ingle-Ply Roo	f Membrane	7,200 SF								
of it pr of de re Ri su fo cli lifi	f leaf and other very difficult to the problems. It all for relatively cleed ficiencies. To ecommended the problems. Power ormulated for eleaned at least fe of the mem	er debris, and the surface is to ascertain the condition of so can shorten the life of the ran areas of the membrane of thorough cleaning of the membrane stream the membrane using single-ply roof membranes. It every three to four years to brane.	d clean downspouts and a cleaning solution The surface should be		\$3,150						
23 46	60 Beha	avioral Science	Paint/Finish			_ — — — —				- — — — — —	
E	xterior Concre	ete Columns/Beams/Roof Pa	arapets 2,160 SF								
ro fro sp wa sp	oof parapets, om the overal palling of the	are badly discolored due to Il appearance of the building concrete surfaces on the be es with biologic agent to rer ete.	g. There is also random ams and columns. Pressure		\$1,600						

WAIN	ITENANCE CATEGORY: Non-Annual Recurr	ng Maintenance		SURVEY DA	ATE: 8/15					Page 4
SEVE SCOR DEF. I	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
05	The joint sealant on the metal ductwork on deteriorating, allowing hot and cold air to e allowing water to potentially leak into the ductwork and wastes energy. The existing and the joints resealed.	scape to the outside, and ucts. This can deteriorate the			\$5,125					

MAIN	ITENANCE CATEGORY: Repair/Maintenance			SURVEY DA	ATE: 8/15				F	Page 5
EVEI COR DEF. I	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
ļ	460 Behavioral Science	HVAC								
	Air Handler	1 EA								
09	The air handling unit in the mechanical room wa appears to still be in good condition. Its remaini 15 years. However, as the unit ages repair and requirements will become more frequent. An all budgeted for repairs/maintenance that may be reyears in order to properly maintain the air handle Mechanical Room	ng life is estimated at maintenance owance should be equired over the next 5		\$10,400 						
)	460 Behavioral Science	Structural								
	Concrete Columns and Beams	10 SF								
01	There is random minor spalling of surface concr spalling concrete should be removed, spalled ar exposed surfaces cleaned by power wire brushin agent should then be applied to all voids, and th strength epoxy-based patch cement.	eas chipped, and notes and notes and notes are also as a contract and a contract are as a contract and a contract are as a contract are		\$725						
	It is recommended that after the initial repairs ne addressed on a recurring basis at least every the Perimeter of building									

MAINTE	ENANCE CATE	EGORY: Replacement/Renewa	<u>ll</u>		SURVEY DA	ATE: 8/15					Page 6
SEVER. SCORE DEF. NO). BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
		ehavioral Science	HVAC								
	HVAC Heat	ing Water Piping Insulation	1 LS								
	on the roof l	ter heating piping insulation and e has deteriorated and is recomme rgy usage. Two hundred feet of c ined to require replacement of its	nded to be replaced to one inch diameter piping		\$9,200						
68 4	460 B	ehavioral Science	HVAC								
	HVAC Equip	pment	1 LS								
	condensing years and it within the no and one squ replaced. For should be refeet of insul	pment appears to have been replantistic are nearing the end of their is recommended that they be so ext 5 years. There are two aluminuare exhaust fan on the roof that Refrigerant piping insulation on the eplaced when the condensing unitation has been included in the condensical Room	r expected service life of 20 heduled for replacement num circular exhaust fans are recommended to be e roof is deteriorated and ts are replace. Forty - five						\$63,500		
8	460 B	ehavioral Science	Electrical								
	Circuit Brea	ker Panel and Distribution Swithb	ooard 1 LS								
	approximate switchgear. replacemen equipment i also a conce protection o	preaker panelboard is original to to the service of the circuits connected to each build build of the service o	so has main distribution unctional, it is obsolete, idily available, and the oted service life. There is oment as it provides						\$86,200		

Wood Sunso The top surf elements, in exposes top The sunscre design and s be replaced	COMPONENT DEFICIENCY LOCATION Phavioral Science creen Boards acces of the sunscreen boards acces of the sunscreen boards and side wood surfaces to we ens are an integral architecture	the paint fairly rapidly and ather-caused deterioration.	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017 \$19,500	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
Wood Sunso The top surf elements, in exposes top The sunscre design and s be replaced	creen Boards aces of the sunscreen boards cluding rain. This deteriorates and side wood surfaces to we ens are an integral architecture	2,600 LF are constantly exposed to the the paint fairly rapidly and eather-caused deterioration.			\$19,500				
Of the top surful elements, in exposes top the sunscreadesign and subtractions to the top	aces of the sunscreen boards a cluding rain. This deteriorates and side wood surfaces to we ens are an integral architecture.	are constantly exposed to the the paint fairly rapidly and eather-caused deterioration.			\$19,500				
elements, in exposes top The sunscre design and s be replaced	cluding rain. This deteriorates and side wood surfaces to we ens are an integral architectura	the paint fairly rapidly and ather-caused deterioration.			\$19,500				
coated with applied with should signi weathering a	should be retained. It is recome with treated S4S douglas fir brace top surface of the 2x8 and 42 coats of a low viscosity 100% a roller. The treated wood and ficantly extend the life of the board significantly reduce mainted to boards on perimeter of build.	mmended that the 2x8 boards rowntone boards, and new ex boards should then be 6-solids epoxy resin coating d low viscosity epoxy resin coards, retard constant enance costs.							· _
OTAL: Replace	ment/Renewal	AV. SEVER. SCORE = 61	\$0	\$9,200	\$19,500	\$0	\$0	\$149,700	\$178,400

Southwestern College

SURVEY DATE: 8/15

470 **Social Science** 900 Otay Lakes Rd.

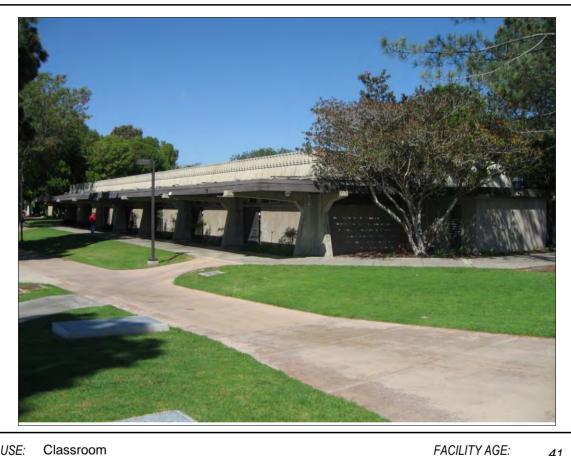
REPAIR COST ESTIMATE IS \$183,600

Facility Condition Rating = 94

Repair Cost as a Percent of Facility Replacement Cost is 6 % Cost Per Square Foot is \$17.42

Average Severity Score = 46

Deficiencies Were Identified



PRIMARY USE: Classroom

1.0

Current Facility Replacement Cost is Approximately \$3,215,310

NO. OF STORIES:

LAST RENOVATED:

41 Yrs.

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is A

10,542

Importance of Facility to Operations is High

Facility Use Intensity is High

FACILITY SF:

Facility Suitability for Current Use is Adequate

Facility Construction Quality is Good

Relative Facility Priority Score = 31

(Maximum Score = 33 Minimum Score = 11)

Southwestern College

SURVEY DATE: 8/15

470 Social Science

900 Otay Lakes Rd.

		NO.OF DEF.	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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	9	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	\$12.7

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

Southwestern College

900 Otay Lakes Rd.

SURVEY DATE: 8/15

470 Social Science

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 470 Social Science

68 Electrical Replacement/Renewal

Circuit Breaker Panels

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 470 Social Science

68 HVAC Replacement/Renewal

HVAC Heating Water Piping Insulation

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 470 Social Science

64 HVAC Repair/Maintenance Air Handler

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

Repair

20 HVAC Non-Annual Recurring Maintenance HVAC Distribution Ductwork

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 470 Social Science

SYSTEM SUB-TOTAL Paint/Finish \$2,100 AV. SEVERITY SCORE = 23 COST PER BLDG GSF= \$0.20

60 Roof Annual PM Roof Drains

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

Maintenance

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 470 Social Science

40 Roof Annual PM Roof Membrane

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

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

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

MAINT	ENANCE CAT	EGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER SCORE DEF. N	·	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 S	ocial Science	Roof								
	Roof Drains	S	5 EA								
				\$500							
		per year.	Id be thoroughly cleaned out at								
	debris, inhilleast once	biting drainage. Drains shou per year.									
102 	debris, inhilleast once	biting drainage. Drains shou per year. eter 	ld be thoroughly cleaned out at								

IAIN I ENANCE C	ATEGORY: Improvement			Page 2					
EVER. CORE PEF. NO. BLD	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
470	Social Science	Electrical							
Light Fix	tures	240 EA							
existing and sho recesse					\$13,750				

1AINT	ENANCE C	CATEGORY: Non-Annual Recui	rring Maintenance		SURVEY DA	ATE: 8/15					Page 3
EVER CORE DEF. N	₹	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	470	Social Science	Roof								
	Single-P	ly Roof Membrane	10,200 SF								
	and ther make it v potential examina apparen recomm. Remove sumps. formulat cleaned life of the	e all leaves/debris from the roof ar Power-wash the membrane using ed for single-ply roof membranes at least every three to four years e membrane. se only bonded contractor with ex- nes.	ce. Continued inattention will dition of the roof and identify the life of the membrane. An immembrane revealed noting of the membrane surface is and clean downspouts and grace a cleaning solution. The surface should be to maintain and prolong the		\$3,900						
23	470	Social Science								- — — — — -	
	Exterior	Concrete Columns/Beams/Roof I	Parapets 2,760 SF								
00	roof para from the with biol	poth concrete surfaces on the bui apets, are badly discolored due to overall appearance of the buildir ogic agent to remove staining and er of building	weathering. This detracts g. Pressure wash all surfaces		\$2,100						
20	470	Social Science	HVAC	- — —			<u> </u>				
	HVAC D	ristribution Ductwork	1,220 LF								
04	deteriora allowing ductwork	t sealant on the metal ductwork of ating, allowing hot and cold air to water to potentially leak into the k and wastes energy. The existing joints resealed.	escape to the outside, and ducts. This can deteriorate the			\$12,500					

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

MAINTENA	INTENANCE CATEGORY: Non-Annual Recurring Maintenance				SURVEY DATE: 8/15						
EVER. CORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
	Non-Ann	ual Recurring Maintenance	AV. SEVER. SCORE = 31	\$ 0	\$6,000	\$12,500	\$ 0	\$ 0	\$0	\$18,500	

	ENANCE CATEGORY: Repair/Maintenance			SURVEY DA	ATE: 8/15				Page
SEVER. SCORE DEF. NO.		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 4 ⁻	470 Social Science	HVAC							
P	Air Handler	1 EA							
a 1 r	Air Handler 1 EA 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. <i>Mechanical Room</i>							\$15,600	

MAINTE	NANCE (CATEGORY: Replacement/Renewa	l		SURVEY DA	ATE: 8/15				Page 6
SEVER. SCORE DEF. NO.	BLD	COMPONENT DEFICIENCY PG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 4°		Social Science	HVAC							
109 T c r v j;	The hot on the re educe e	Heating Water Piping Insulation water heating piping insulation and e oof has deteriorated and is recommer energy usage. Three hundred feet of termined to require replacement of its	nded to be replaced to one inch diameter piping		\$11,400					
68 4°	70	Social Science	Electrical							
C	Circuit E	Breaker Panels	1 LS							
a is a T p r	approxirs obsole and the There is provides ecomm	cuit breaker panelboards are original to mately 41 years old. Although the equate, replacement parts are expensive equipment is at the end of its general as also a concern with the reliability of the sprotection of the circuits connected to ended that this equipment be replaced to locations	uipment is still functional, it and not readily available, ly accepted service life. he equipment as it o each breaker. It is						\$55,500	
68 4°	70	Social Science	HVAC							
H	HVAC E	Equipment	1 LS							
v li c	which is ife of th costs ca should b	condensing units are dated 2001 and approximately 70% of the generally are equipment. At this point, increasing an be anticipated going forward, and robe considered for approximately five years also one circular aluminum exhaust	accepted 20 year service maintenance and repair eplacement programming ears out.						\$67,800	
a Ii b	appears n additi	is also one circular aluminum exhaust is to be deteriorating and should be region, the bare carbon steel duct supportished to minimize rusting.	olaced.							

MAINTENANCE CATEGORY:	Replacement/Renewa	al		SURVEY DA	ATE: 8/15					Page
SCORE DE	OMPONENT EFICIENCY OCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
470 Social S Wood Sunscreen E		Roof 0 LF								
100 TI					Φ0					
of the building, like the south side will programmed replacement at this feature of the build recommended that browntone boards, applied to the tops significantly reduced.	ly due to advanced deterible removed also. Uncertacement. However, no estaction in the sunscreens a ling design and should be	are an integral architectural e retained. It is with treated S4S douglas fir sity epoxy resin sealer stant weathering and			\$0					

Southwestern College

SURVEY DATE: 8/15

500 Graphics

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$207,700

Facility Condition Rating = 94 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 6 %

Cost Per Square Foot is \$23.95

Average Severity Score = 48

13 Deficiencies Were Identified



PRIMARY USE: Classroom/Lab

FACILITY SF: 8,674 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$3,686,450

FACILITY AGE: 50 Yrs.
LAST RENOVATED: 2010

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)

Southwestern College

Graphics

500

SURVEY DATE: 8/15

900 Otay Lakes Rd.

MAINTENANCE	CATEGORY/RIIII	DING SYSTEM	COST SUMMARY
WAINTENANCE	CATEGUR 1/DUIL	DING SISIEW	CUST SUIVINANT

MAII	NIENANCE CATEGORY/BU	JILDING SYSTEM C	USI SUMMARY		
MAINT. CATEGORY/SYSTEM		NO.OF DEF.	AVERAGE SEV. SCORE	DEFICIENCY COST	COST PER GSF
Annual PM	Roof	2	50	\$575	
Allitual I IVI	11001			ΨΟΙΟ	
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	9	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

Southwestern College SURVEY DATE: 8/15

500 Graphics 900 Otay Lakes Rd.

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 buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 500 Graphics

68 Electrical Replacement/Renewal

Circuit Breaker Panel

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

5 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 500 Graphics

68 HVAC Replacement/Renewal

HVAC Heating Water Piping Insulation

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

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 500 Graphics

64 HVAC Repair/Maintenance Air Handler

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

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

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 500 Graphics

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

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 500 Graphics

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

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 500 Graphics

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

SCORE = 52 COST PER BLDG GSF= \$0.59

50 Structural Repair/Maintenance Concrete Columns and Beams

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

MAINT	ENANCE C	CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER. SCORE DEF. NO	·	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Dra	-1	4 EA								
102				¢275							
103	The roof debris, in	f drains and drain sumps are clonhibiting drainage. Drains shouce per year.	ogged with significant amounts of	\$375						- 	
	The roof debris, in least one Roof per	f drains and drain sumps are clonhibiting drainage. Drains shouce per year.	ogged with significant amounts of	\$375 — — — —							- — — -
	The roof debris, in least one Roof per	f drains and drain sumps are clonhibiting drainage. Drains shouce per year. rimeter Graphics	ogged with significant amounts of lld be thoroughly cleaned out at	\$375 				———-			

AINTENANCE OA	EGORY: Improvement			SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
500	Graphics	Electrical							
Light Fixtu	res	153 EA							
existing flu and should recessed o	•					\$8,750			

MAIN	TENANCE (CATEGORY: Non-Annual Recu	urring Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER SCOR DEF. N	E	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
	•	Ply Roof Membrane	8,845 SF								
112	other de difficult t problem the very	gle-ply membrane on this buildin bris, and the surface is very dirt to ascertain the condition of the s. It also can shorten the life of few relatively clean areas indica th cleaning of the membrane sur	encrusted. This makes it very roof and identify potential the membrane. Examination of ated no apparent deficiencies.		\$3,175						
	sumps. formulat cleaned life of the	e all leaves/debris from the roof a Power-wash the membrane using ed for single-ply roof membrane at least every three to four year e membrane.	ng a cleaning solution es. The surface should be es to maintain and prolong the								
	membra Entire ro	ines.	experience cleaning single-ply								
23	500	Graphics	Paint/Finish							- — — — — —	
	Exterior	Concrete Columns/Beams/Roof	Parapets 2,475 SF								
100	roof para from the spalling wash all spalling	poth concrete surfaces on the budgets, are badly discolored due overall appearance of the build of the concrete surfaces on the surfaces with biologic agent to concrete.	to weathering. This detracts ing. There is also random beams and columns. Pressure		\$1,850						
20	500	Graphics	HVAC							- — — — — — —	
	HVAC D	Distribution Ductwork	220 LF								
105	deteriora allowing ductwork	t sealant on the metal ductwork ating, allowing hot and cold air to water to potentially leak into the k and wastes energy. The existi joints resealed.	e scape to the outside, and e ducts. This can deteriorate the			\$2,250					

IAINTENAN	NCE CATE	GORY: Non-Annual Recurrin	g Maintenance		SURVEY DA	ATE: 8/15				Р
EVER. CORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
OTAL: N	Non-Annı	ual Recurring Maintenance	AV. SEVER. SCORE = 31	\$0	\$5,025	\$2,250	\$0	\$ 0	\$0	\$7,275

MAIN	TENANCE CA	TEGORY: Repair/Maintenance			SURVEY DA	NTE: 8/15					Page 5
SEVE SCOR DEF. I	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Air Handle	Graphics r	HVAC 1 EA								
110	appears to 15 years. requireme budgeted	ndling unit in the mechanical room be still be in good condition. Its rem However, as the unit ages repair a nts will become more frequent. Ar for repairs/maintenance that may be der to properly maintain the air hat al Room	aining life is estimated at and maintenance and maintenance allowance should be be required over the next 5		\$10,400						
0		Graphics Columns and Beams	Structural							- — — — — —	
01	There is ra from mino spalling co exposed s should be agent sho	andom spalling of surface concrete r spalling to significant spalling with concrete should be removed, spalle urfaces cleaned by power wire bru treated with a rust neutralizing coa uld then be applied to all voids, an poxy-based patch cement.	h exposed rebar. All d areas chipped, and ushing. Any exposed rebar ating. An epoxy bonding		\$2,050						
	addressed	mended that after the initial repair on a recurring basis at least ever of building	s new spalling be y three to four years.								

FAC	CILITY CO	ONDITION SURVEY - CRITICA	L/5YR. DEFICIENCY REPAIR PR	OGRAMMII	NG DETAIL BY	MAINTENA	NCE/REPLA	ACEMENT C	ATEGORY		
MAIN	TENANCE	CATEGORY: Replacement/Re	enewal		SURVEY DA	NTE: 8/15					Page 6
SEVER SCOR DEF. N	E	COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
106	One of has sever beam seams beam. to be continuous to the seam of	reral areas where the wood is be hould be considered for replace stentially compromising the integ hould be replaced with a S4S tr	grity of the covered walkway. The		\$1,350						
68	500	Graphics	HVAC								
111	The hoton the reduce	Heating Water Piping Insulation water heating piping insulation roof has deteriorated and is receivenergy usage. Two hundred fetermined to require replacemen	and exposed aluminum jacket ommended to be replaced to set of one inch diameter piping		\$8,900						
68	500	Graphics	Electrical		. — — — —	- — — — —				- — — — — -	
	Circuit I	Breaker Panel	1 LS								
109	approxi is obso and the There is provide	mately 50 years old. Although	lity of the equipment as it ected to each breaker. It is			\$110,800					

Electrical Room

17111	ENANCE CATE	GORY: Replacement/Rene	wal		SURVEY DA	ATE: 8/15					Page 7
EVEI COR EF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
	500 Gr	aphics	HVAC								
	HVAC Equip	oment	1 LS								
	life of the eq costs can be should be co two circular and are reco Refrigerant should be re	proximately 70% of the general pulpment. At this point, increase anticipated going forward, an ensidered for approximately fivaluminum roof exhaust fans the entered to be replaced. Diping insulation on the roof is eplaced when the condensing that has been included in the cost	sing maintenance and repair and replacement programming by years out. There are also hat appear to be deteriorating deteriorated as well and units are replaced. Fifty feet								
		aphics	Roof	- — — — —						- — — — — —	
	Wood Sunso	creen Boards	0 LF								
)4	due to advar programmed replacement feature of th recommenda browntone b applied to th significantly	tens have been removed on all need deterioration. It is uncerted replacement. Therefore, not at this time. The sunscreens the building design and should been that the boards be replaced to boards, and 2 coats of a low visite top of the boards to retard coardinate maintenance costs.	tain if college has already estimate is provided for are an integral architectural pe retained. It is d with treated S4S douglas fir scosity epoxy resin sealer onstant weathering and			\$0					
_				- — — —							
									<u> </u>		

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

Southwestern College

SURVEY DATE: 8/15

510 Classroom

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$114,775

Facility Condition Rating = 94 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 6 %

Cost Per Square Foot is \$18.46

Average Severity Score = 44

B Deficiencies Were Identified



PRIMARY USE: Classroom

FACILITY SF: 6,219 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$1,896,795

FACILITY AGE: 44 Yrs.
LAST RENOVATED: 2011

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)

Southwestern College

SURVEY DATE: 8/15

510 Classroom

900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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	\$16.5

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 buildup, 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

900 Otay Lakes Rd.

SURVEY DATE: 8/15

510 Classroom

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 510 Classroom

68 Electrical Replacement/Renewal

Circuit Breaker Panels

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 510 Classroom

20 HVAC Non-Annual Recurring Maintenance HVAC Distribution Ductwork

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

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 510 Classroom

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

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

Maintenance

40 Roof Replacement/Renewal Wood Sunscreen Boards

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 510 Classroom

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

MAINTENANCE CATE	EGORY: Improvement			SURVEY DA	ATE: 8/15					Page 1
SEVER. SCORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
00 510 C	lassroom	Roof								
		1 EA								
02 The roof ac	r Extension cess ladder has no extension otential safety hazard. Instal s hatch	to extend above the hatch,	\$525							
02 The roof access	cess ladder has no extension otential safety hazard. Instal	to extend above the hatch,	\$525 - — — — —	. — — — —					. — — — — —	- — —
02 The roof access	cess ladder has no extension otential safety hazard. Instal s hatch	to extend above the hatch, I an extension bar for the	\$525 - — — — —						. — — — — —	- — —

FAC	ILITY CO	NDITION SURVEY - CRITICAL/	5YR. DEFICIENCY REPAIR PR	OGRAMMIN	IG DETAIL BY	MAINTENA	NCE/REPLA	ACEMENT C	ATEGORY		
MAIN	TENANCE C	CATEGORY: Non-Annual Recu	rring Maintenance		SURVEY DA	NTE: 8/15					Page 2
SEVEI SCOR DEF. N	E	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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-P	ly Roof Membrane	5,860 SF								
107	replacer extensiv membra recomm Remove sumps. formulat cleaned life of the		be allowed to accumulated can shorten the life of the embrane surface is and clean downspouts and g a cleaning solution to maintain and prolong the				\$2,400				
23	510	Classroom	— — — — — — — — — — — — — — — — — — —	. — — — —			. — — — —				
	Exterior	Concrete Columns/Beams/Roof	Parapets 1,885 SF								
100	roof para from the spalling wash all spalling	both concrete surfaces on the build apets, are badly discolored due to overall appearance of the building of the concrete surfaces on the building surfaces with biologic agent to reconcrete. Ber of building	o weathering. This detracts ng. There is also random reams and columns. Pressure		\$1,400						
20	510	Classroom	HVAC	· — — — —						- — — — — — -	
	HVAC D	istribution Ductwork	300 LF								
104	deteriora allowing ductworl	t sealant on the metal ductwork of ating, allowing hot and cold air to water to potentially leak into the k and wastes energy. The existing joints resealed.	escape to the outside, and ducts. This can deteriorate the			\$3,100					

MAINTENANCE CATI	EGORY: Non-Annual Recurrin	g Maintenance		SURVEY DA	ATE: 8/15				Page
SEVER. SCORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
OTAL: Non-Anı	nual Recurring Maintenance	AV. SEVER. SCORE = 31	\$ 0	\$1,400	\$3,100	\$2,400	\$0	\$0	\$6,900

MAIN	TENANCE CATEGORY:	epair/Maintenance			SURVEY DA	NTE: 8/15					Page
SEVE SCOR DEF. I	RE DEFICIE	NCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	510 Classroom		Structural								
	Concrete Columns and	Beams	10 SF								
01	spalling concrete shoul exposed surfaces clear	d be removed, spalle ned by power wire bro pplied to all voids, an	oncrete on the building. All areas chipped, and ushing. An epoxy bonding and the voids filled with a high-		\$700						
	It is recommended that addressed on a recurring Perimeter of building										

AINT	ENANCE CATE	GORY: Replacement/Ren	ewal		SURVEY DA	ATE: 8/15				Pa
EVER. CORE EF. NC		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
8	510 Cla	assroom	Electrical							
06	approximate is obsolete, and the equi There is also provides pro	reaker panelboards are originally 44 years old. Although the replacement parts are expension properties at the end of its gere a concern with the reliability tection of the circuits connected that this equipment be represented.	of the equipment as it ted to each breaker. It is						\$87,900	
)	510 Cla	assroom								
	Wood Sunso	reen Boards	1,655 LF							
	elements, in exposes top The sunscre design and s replaced with metal caps v boards to remaintenance	cluding rain. This deteriorate and side wood surfaces to wens are an integral architectuhould be retained. It is recontreated S4S douglas fir browith drip edges fabricated and ard constant weathering and	mmended that the boards be wntone boards, and sheet d installed on the tops of the I significantly reduce			\$15,250				
АТС	L: Replacer	nent/Renewal	AV. SEVER. SCORE = 54	\$0	\$0	\$15,250	\$0	\$0	\$87,900	\$103,150

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

Southwestern College

SURVEY DATE: 8/15

540 **Electronics** 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$1,507,750

Facility Condition Rating = 59

Repair Cost as a Percent of Facility Replacement Cost is

Cost Per Square Foot is \$174.39

Average Severity Score = 48

Deficiencies Were Identified



PRIMARY USE: Classroom/Lab

FACILITY SF:

8,646

NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$3,674,550 FACILITY AGE: 50 Yrs. LAST RENOVATED: 1978

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)

Southwestern College

SURVEY DATE: 8/15

540 Electronics

900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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 Maintenanc	e	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	\$170.0

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-

Southwestern College SURVEY DATE: 8/15

540 Electronics 900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 540 Electronics

68 Electrical Replacement/Renewal

Circuit Breaker Panel and Distribution Swithboar

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

5 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 540 Electronics

68 HVAC Replacement/Renewal

HVAC Heating Water Piping Insulation

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

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

FACILITY CONDITION SURVEY DEFICIENCY DETAIL BY BUILDING AND SYSTEM IN DECLINING SEVERITY SCORE ORDER SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 540 **Electronics** 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: REPAIR COST: 1 EA \$10,400 Deferrable Est. Remaining Life = 1 Yrs. Life Expectancy New = 30 Yrs. Estimate Date: 2015 Deficiency Data Source: Condition Survey Recommended Method of Repair: In-House & Contract Deficiency Cause is Age/Wear Planning Priority: D-Escalating Repair Cost Reduction Benefit Score = 38 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: REPAIR COST: 500 LF \$5,100 Est. Remaining Life = 2 Yrs. Deferrable Life Expectancy New = 15 Yrs. Estimate Date: 2015 Deficiency Data Source: Condition Survey Recommended Method of Repair: Contract Deficiency Cause is Unknown Planning Priority: E-Maintenance/Operating Cost Reduction Benefit Score = 34 Recommended 25 Yr. Sustainment Planning Replacement Years Replace in 2017 2032 SYSTEM SUB-TOTAL AV. SEVERITY SCORE = HVAC \$105,900 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: REPAIR COST: 31 LF \$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

Maintenance

SURVEY DATE .. SITE: Southwestern College 8/15 Page 4 FACILITY: 540 **Electronics** 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: REPAIR COST: 2,470 SF \$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: REPAIR COST: 6 EA Critical Est. Remaining Life = 0 Yrs. \$650 Deficiency Data Source: Life Expectancy New = 1 Yrs. Estimate Date: 2015 **Condition Survey**

Deficiency Cause is No Maintenance

Recommended Method of Repair: In-House

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 540 Electronics

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

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

Maintenance

40 Roof Annual PM Roof Membrane

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

Maintenance

SYSTEM SUB-TOTAL Roof \$4,575 AV. SEVERITY SCORE = 50 COST PER BLDG GSF= \$0.53

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 540 Electronics

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

IVIAIIVI	ENANCE CAT	TEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER SCORE DEF. N	Ī	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 E	Electronics	Roof								
	Roof Drain	IS	6 EA								
104			gged with significant amounts of	\$650							
	least once Roof perim	per year.	d be thoroughly cleaned out at								
10	least once Roof perim	per year.	d be thoroughly cleaned out at			- — — —					
40	least once Roof perim	per year. neter ———————————————————————————————————				- — — —				. — — — — —	_ — — -

,	TEGORY: Improvement		SURVEY DATE: 8/15							
EVER. CORE EF. NO. BLDG	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
540	Electronics	Electrical								
Light Fixt	ures	141 EA								
existing fl and shou recessed	Light Fixtures 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				

MAIN	TENANCE CATEG	ORY: Non-Annual Recurri	ng Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVEI SCOR DEF. I	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Elec	etronics	Paint/Finish								
	Metal Roof Pa	rapet Cap Joints	31 LF								
102	sealant will all	ap joint sealant is slowly dete ow moisture to enter cap joint ng sealant should be removed oof	s, penetrating to parapet				\$225				
50	540 Elec	etronics	Roof								
	Single-Ply Ro	of Membrane	8,760 SF								
	other debris, a difficult to asceptiblems. It a cleaning of the the few clean Remove all lessumps. Power formulated for cleaned at lea life of the men	membrane on this building cand the surface is very dirt endertain the condition of the rootalso can shorten the life of the emembrane surface is recompared of membrane indicated aves/debris from the roof and er-wash the membrane using a single-ply roof membranes. Ist every three to four years to onbrane.	crusted. This makes it very f and identify potential membrane. Thorough mended. An examination of no apparent deficiencies. clean downspouts and a cleaning solution The surface should be maintain and prolong the								
23		etronics	Paint/Finish								
100	The smooth coroof parapets, from the overa spalling of the		ng, and the surfaces on the veathering. This detracts There is also random ams and columns. Pressure		\$1,850						

MAINTENA	NCE CATE	GORY: Non-Annual Recurrin	g Maintenance		SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
TAL:	Non-Ann	ual Recurring Maintenance	AV. SEVER. SCORE = 44	\$ 0	\$5,500	\$ 0	\$225	\$ 0	\$ 0	\$5,725

MAIN	ITENANCE CATEGORY: Repair/Maintenance			SURVEY DA	<i>TE:</i> 8/15					Page 5
SEVER SCORI DEF. N	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 of appears to still be in good condition. Its remains 15 years. However, as the unit ages repair ar requirements will become more frequent. An budgeted for repairs/maintenance that may be years in order to properly maintain the air han Mechanical Room	ining life is estimated at and maintenance allowance should be required over the next 5		\$10,400						
0	540 Electronics	Structural	. — — — —			· — — — —			- — — — — —	
	Concrete Columns and Beams	30 SF								
01	There is random spalling of surface concrete of from minor spalling to significant spalling with spalling concrete should be removed, spalled exposed surfaces cleaned by power wire brus should be treated with a rust neutralizing coati agent should then be applied to all voids, and strength epoxy-based patch cement.	exposed rebar. All areas chipped, and hing. Any exposed rebar ing. An epoxy bonding		\$2,100						
	It is recommended that after the initial repairs addressed on a recurring basis at least every <i>Perimeter of building</i>									
20	540 Electronics	HVAC							- — — — — —	
	HVAC Distribution Ductwork	500 LF								
05	The joint sealant on the metal ductwork on the deteriorating, allowing hot and cold air to esca allowing water to potentially leak into the ducts ductwork and wastes energy. The existing se and the joints resealed. Roof	pe to the outside, and s. This can deteriorate the			\$5,100					

MAIN	TENANCE CATE	COPV. Poplessmant/Para	wol		SURVEY DA	1 <i>TE</i> : 0/1 <i>E</i>				ח	age 6
SEVER SCOR DEF. N	E	GORY: Replacement/Rene COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR.	age (
68	540 Ele	ectronics	Electrical								
	Circuit Break	er Panel and Distribution Swi	thboard 1 LS								
108	approximated distribution sequipment is expensive arits generally reliability of t	still functional, it is obsolete, and not readily available, and the accepted service life. There is the equipment as it provides potentials are accepted. It is recommendations are accepted to the accepted	also houses the main d 540 buildings. Although the replacement parts are ne equipment is at the end of s also a concern with the rotection of the circuits			#########	·				
68	540 Ele	ectronics	 HVAC	- — — — —		- — — — —					
	HVAC Heatir	ng Water Piping Insulation	1 LS								
110	on the roof h	er heating piping insulation an as deteriorated and is recoming gy usage. Two hundred feet of the to require replacement of	mended to be replaced to of one inch diameter piping					\$9,200			
68	540 Ele	ectronics		- — — — —						- — — — — — –	
	HVAC Equip	ment	1 LS								
107	unit are date 70% of the g this point, inc going forward approximate! Refrigerant p replaced who	creasing maintenance and rep	old, which is approximately vice life of the equipment. At pair costs can be anticipated ning should be considered for deteriorated and should be						\$81,200		

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

MAINTENANCE CATE	GORY: Replacement/Renewa	ıl		SURVEY DA	ATE: 8/15				Page
SEVER. SCORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
OTAL: Replacen	nent/Renewal	AV. SEVER. SCORE = 68	\$0	\$0	#########	\$0	\$9,200	\$81,200	\$1,475,400

Southwestern College

SURVEY DATE: 8/15

550 Tech/Human Services

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$255,000

Facility Condition Rating = 93 (Good

Repair Cost as a Percent of Facility Replacement Cost is 7 %

Cost Per Square Foot is \$29.87

Average Severity Score = 50

10 Deficiencies Were Identified



PRIMARY USE: Classroom

FACILITY SF:

8,538 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$3,627,375

FACILITY AGE: 41 Yrs.
LAST RENOVATED: 2010

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)

Southwestern College SURVEY DATE: 8/15

Tech/Human Services 900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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	\$26.5

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

Southwestern College SURVEY DATE: 8/15

Tech/Human Services 900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 550 Tech/Human Services

68 Electrical Replacement/Renewal

Circuit Breaker Panels

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 550 Tech/Human Services

68 HVAC Replacement/Renewal

HVAC Heating Water Piping Insulation

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019 2044

68 HVAC Replacement/Renewal

HVAC Equipment

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

SITE: Southwestern College
FACILITY: 550 Tech/Human Services

SURVEY DATE:: 8/15 Page 3

64 HVAC Repair/Maintenance Air Handler

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

Repair

20 HVAC Non-Annual Recurring Maintenance HVAC Distribution Ductwork

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

Maintenance

SYSTEM SUB-TOTAL HVAC \$123,600 AV. SEVERITY SCORE = 55 COST PER BLDG GSF= \$14.48

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 550 Tech/Human Services

70 Roof Replacement/Renewal

Walkway Roof Support Beam

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 550 Tech/Human Services

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

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

AINTLINANCE CA	TEGORY: Improvement		SURVEY DATE: 8/15							
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
550	Tech/Human Services	Electrical								
Light Fixtu	res	195 EA								
existing flu and should recessed	Light Fixtures 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 efficien LED lights. Light fixtures throughout building					\$11,150				

//AINT	ENANCE CAT	EGORY: Non-Annual Recurring	g Maintenance		SURVEY DA	ATE: 8/15					Page 2
EVER. CORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	550 T	ech/Human Services	Roof								
	Single-Ply	Roof Membrane	8,845 SF								
	allowed to the condition shorten the indicated in membrane Remove all sumps. Por formulated cleaned at life of the in	only bonded contractor with expe	e it very difficult to ascertain al problems. It also can sment of the membrane the cleaning of the transport of the transport of the transport of the transport of the cleaning solution. The surface should be maintain and prolong the								
20	_	ech/Human Services				_ — — — —				- — — — — -	
	HVAC Dist	ribution Ductwork	300 LF								
03	deteriorating allowing was ductwork a	ealant on the metal ductwork on the diage, allowing hot and cold air to escater to potentially leak into the duction and wastes energy. The existing sents resealed.	cape to the outside, and cts. This can deteriorate the			\$3,100					

AIN	TENANCE CA	TEGORY: Repair/Maintenance			SURVEY DA	ATE: 8/15					Page 3
EVER COR EF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
4	550	Tech/Human Services	HVAC								
	Air Handle	er	1 EA								
	appears to 15 years. requireme budgeted	andling unit in the mechanical room of still be in good condition. Its ren However, as the unit ages repair ents will become more frequent. A for repairs/maintenance that may rder to properly maintain the air ha al Room	naining life is estimated at and maintenance an allowance should be be required over the next 5		\$10,400 						
0	550	Tech/Human Services	Structural								
	Concrete	Columns and Beams	10 SF								
00	spalling co exposed s agent sho	andom minor spalling of surface concrete should be removed, spalle surfaces cleaned by power wire bruld then be applied to all voids, arepoxy-based patch cement.	ed areas chipped, and ushing. An epoxy bonding		\$700						
	addressed	nmended that after the initial repaid on a recurring basis at least ever of building			. — — — —						

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

MAINTENA	ANCE CATE	GORY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page 4
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	0 Te	ech/Human Services	Roof								
W	alkway Ro	oof Support Beam	100 LF								
the sh po be be to	e wood is nould be contentially		eams. These beams ent deterioration from overed walkway. The browntone douglas fir		\$6,900						
68 550	0 Te	ech/Human Services	HVAC								
Н١	VAC Heati	ng Water Piping Insulation	1 LS								
on red wa jad	n the roof l duce ener	er heating piping insulation and expnas deteriorated and is recommen rgy usage. Three hundred feet of ined to require replacement of its	ided to be replaced to one inch diameter piping					\$11,000			
68 550	— — — О Те			- — — — —			. — — —				
	VAC Equip	oment	1 LS								
un 70 thi go	nit are date Ow of the quick in the good of the good	idensing units and one packaged ed 2001 and are now 14 years old generally accepted 20 year service creasing maintenance and repair rd, and replacement programming ely five years out.	, which is approximately e life of the equipment. At costs can be anticipated						\$99,100		
be ins alu an	e replaced sulation ha uminum a nd are reco	piping insulation on the roof is also when the condensing units are reas been included in the cost. Then the five square exhaust fans that a symmended to be replaced.	placed. Fifty feet of re is also one circular								

MAINTENANCE CATEGORY: Replacement/Renewal			SURVEY DATE: 8/15						
E	R. COMPONENT E DEFICIENCY IO. BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
	550 Tech/Human Services	Electrical							
	Circuit Breaker Panels The circuit breaker panelboards are original to th approximately 41 years old. Although the equipn is growing obsolete, replacement parts are exper available, and the equipment is nearing the end of accepted service life. There is also a concern will equipment as it provides protection of the circuits breaker. It is recommended that this equipment Various locations	nent is still functional, it asive and not readily of its generally th the reliability of the connected to each						\$90,500	
•	550 Tech/Human Services	Roof							- — — — — — — —
	Wood Sunscreen Boards	2,435 LF							
-	The top surfaces of the sunscreen boards are co elements, including rain. This deteriorates the particle exposes top and side wood surfaces to weather. The sunscreens are an integral architectural feat design and should be retained. It is recommended be replaced with treated S4S douglas fir brownto hangers. The top surface of the 2x8 boards should coats of a low viscosity 100%-solids epoxy reside a roller. The treated wood and low viscosity epox significantly extend the life of the boards, retard of and significantly reduce maintenance costs. All sunscreen boards on perimeter of building	aint fairly rapidly and caused deterioration. Use of the building ed that the 2x8 boards ne boards, and new ald then be coated with a coating applied with any resin should			\$18,750				
4	AL: Replacement/Renewal	V. SEVER. SCORE = 63	\$0	\$6,900	\$18,750	\$0	\$11,000	\$189,600	\$226,250
	AL FOR ALL CATEGORIES AV. SEVER. SCO		\$0 \$0	\$6,900 \$18,000	\$18,750 \$21,850	\$0 \$14,550	\$11,000 \$11,000		\$189,600 \$189,600

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

Southwestern College

SURVEY DATE: 8/15

560 General Classroom

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$312,525

Facility Condition Rating = 88 (Fair)

Repair Cost as a Percent of Facility Replacement Cost is 12 %

Cost Per Square Foot is \$35.75

Average Severity Score = 53

13 Deficiencies Were Identified



PRIMARY USE: Classroom

FACILITY SF: 8,742 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$2,666,310

FACILITY AGE: 41 Yrs.
LAST RENOVATED: 2010

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)

Southwestern College

SURVEY DATE: 8/15

560 General Classroom

900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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	\$31.1

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 buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 560 General Classroom

68 Electrical Replacement/Renewal

Circuit Breaker Panel and Distribution Swithboard

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

5 Electrical Improvement

Light Fixtures

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

SURVEY DATE. 8/15 Page 2 SITE: Southwestern College FACILITY: 560 **General Classroom** 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 REPAIR COST: \$63,100 QUANTITY: 1 LS Deferrable Est. Remaining Life = 2 Yrs. Life Expectancy New = 30 Yrs. Estimate Date: 2015 Deficiency Data Source: **Condition Survey** Recommended Method of Repair: Contract Deficiency Cause is Age/Wear Planning Priority: C-Prevent Bldg. System Failure Benefit Score = 47 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** Recommended Method of Repair: Contract Deficiency Cause is Age/Wear

Planning Priority: C-Prevent Bldg. System Failure

Benefit Score = 47

Replace in 2020

Recommended 25 Yr. Sustainment Planning Replacement Years

SURVEY DATE .. 8/15 Page 3 SITE: Southwestern College FACILITY: 560 **General Classroom** 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: REPAIR COST: 1 LS \$31,900 Deferrable Est. Remaining Life = 5 Yrs. Deficiency Data Source: **Condition Survey** Life Expectancy New = 30 Yrs. Estimate Date: 2015 Recommended Method of Repair: Contract Deficiency Cause is Age/Wear Planning Priority: C-Prevent Bldg. System Failure Benefit Score = 47 Recommended 25 Yr. Sustainment Planning Replacement Years Replace in 2020 64 HVAC Air Handler Repair/Maintenance The air handling unit in the mechanical room was installed in 2001 and appears to still be in good condition. Its 107 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: REPAIR COST: 1 EA Est. Remaining Life = 1 Yrs. \$10.400 Deferrable Deficiency Data Source: Life Expectancy New = 30 Yrs. Estimate Date: 2015 **Condition Survey** Recommended Method of Repair: In-House & Contract Deficiency Cause is Age/Wear Benefit Score = 38 Planning Priority: D-Escalating Repair Cost Reduction Repair SYSTEM SUB-TOTAL AV. SEVERITY SCORE = HVAC \$161,000 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: REPAIR COST: 30 LF \$225 **Deferrable** Est. Remaining Life = 2 Yrs. Deficiency Data Source: Life Expectancy New = 15 Yrs. Estimate Date: 2015 Condition Survey

Recommended Method of Repair: Contract

Planning Priority: D-Escalating Repair Cost Reduction

Maintenance

Benefit Score = 38

Deficiency Cause is Weather

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4
FACILITY: 560 General Classroom

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

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

Maintenance

SYSTEM SUB-TOTAL Paint/Finish \$2,075 AV. SEVERITY SCORE = 34 COST PER BLDG GSF= \$0.24

68 Plumbing Replacement/Renewal Plumbing Equipment

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 560 General Classroom

70 Roof Repair/Maintenance

Covered Walkway Support Beams

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 560 General Classroom

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

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

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

Maintenance

SYSTEM SUB-TOTAL ROOf \$13,350 AV. SEVERITY SCORE = 53 COST PER BLDG GSF= \$1.53

SITE: Southwestern College SURVEY DATE:: 8/15 Page 7

FACILITY: 560 General Classroom

50 Structural Repair/Maintenance

Concrete Columns and Beams

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/S	5YR. DEFICIENCY REPAIR P	ROGRAMMIN	ROGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATEGORY						
MAINTENANCE CATEGORY: Annual PM				Page 1					
SEVER. COMPONENT SCORE DEFICIENCY DEF. NO. BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
There is a minor amounts of leaves and tr membrane surface. This can create a soc surface and seriously clog roof drains. Do roof at least once per year. Roof surface	ouring action across the	\$150							
TOTAL: Annual PM	AV. SEVER. SCORE = 40	\$150	\$0	\$0	\$0	 \$0	 \$0	\$150	

AIN LINANUL VAIL	EGORY: Improvement			Page	Page 2					
EVER. COMPONENT CORE DEFICIENCY EF. NO. BLDG. LOCATION SYSTEM QUANTI		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
560 G	eneral Classroom	Electrical								
Light Fixture	es	215 EA								
existing fluo and should	e staff and program managers rescent lighting is not as energ be replaced with LED lighting. In fixtures and suspended light	y efficient as LED lighting Retrofit existing fluorescent,				\$12,300				

MAIN	TENANCE CATE	GORY: Non-Annual Recu	rring Maintenance		SURVEY DA	<i>TE:</i> 8/15					Page 3
SEVEF SCORI DEF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Ge	eneral Classroom	Roof								
	Single-Ply R	oof Membrane	8,815 SF								
	leaf and othe assessment However, if very difficult problems. It cleaning of the Remove all sumps. Pow formulated for cleaned at leaf of the metals.	a also can shorten the life of the membrane surface is reconsidered. It is not always and the membrane using the surface is reconsidered. It is not always and the membrane using the surface of the surface is not always and the surface is not alwa	s a few dirty areas. An accumulate, it can make it the roof and identify potential he membrane. Thorough ammended in about 2 years. Ind clean downspouts and g a cleaning solution accumulate. The surface should be			\$3,300					
46	560 Ge	eneral Classroom	Paint/Finish							- — — — — — -	
	Metal Parap	et Cap Joints	30 LF								
103	providing the	top. Remove failing caulk an	k into the joints and deteriorate			\$225					
23	560 Ge	eneral Classroom	Paint/Finish								
	Exterior Con	crete Columns/Beams/Roof	Parapets 2,460 SF								
100	roof parapet from the ove spalling of th	s, are badly discolored due to erall appearance of the buildir ne concrete surfaces on the baces with biologic agent to re- crete.	ng. There is also random eams and columns. Pressure		\$1,850						

MAINTENANCE CA	ATEGORY: Non-Annual Recurrin	g Maintenance		SURVEY DA	ATE: 8/15				Page
SEVER. SCORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	DEFICIENCY		CRITICAL COST YR. 1 COST YR. 2 COST YR. 3 COST YR. 4 COST YR. 5 COST TOTAL COST Y 2015 2016 2017 2018 2019 2020 0-5					
OTAL: Non-A	nnual Recurring Maintenance	AV. SEVER. SCORE = 40	\$ 0	\$1,850	\$3,525	\$ 0	\$ 0	\$0	\$5,375

MAIN	TENANCE CA	TEGORY: Repair/Maintenand	ce		SURVEY DA	ATE: 8/15					Page 5
SEVEI SCOR DEF. I	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 V	Valkway Support Beams	1 LS								
104	sunscreen some woo to be 1/2" beams on restored b repairs. Two of the have large beams. T deteriorati walkway. douglas fir may have One outsichave ends The comp prevent popainted propainted propai	to 1". Similar deterioration is a the east side walkway. These y utilizing a wood epoxy filler are covered walkway support bear areas where the wood is deter hese beams should be considern from potentially compromising the beams should be replaced.	ang have several sections with and to depths of what to appear also evident on the outside damaged areas can be and sanding/painting the area of the walkway for the area for replacement to prevent any the integrity of the covered with a S4S treated browntone of this size are available, they also no longer be restored. The control of the walkway to the covered with a S4S treated browntone of the soft this size are available, they also no longer be restored. The control of the covered with new beams to we beams should be primed and the wise has extensively cracked, which potentially compromise	\$9,900							
64	560	General Classroom	 HVAC		- — — — — –	_ — — — —				- — — — — -	
	Air Handle		1 EA								
107	appears to 15 years. requireme budgeted	ndling unit in the mechanical robbstill be in good condition. Its robbstill be in good condition. Its robbstill become more frequent. Its robbstill become more frequent for repairs/maintenance that mander to properly maintain the air and Room.	emaining life is estimated at air and maintenance An allowance should be ay be required over the next 5		\$10,400						

Mechanical Room

1AIN	ITENANCE CATEGORY:	Repair/Maintenance			SURVEY DA	ATE: 8/15					Page
SEVE SCOF DEF.	RE DE	MPONENT FICIENCY CATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	560 General	Classroom	Structural								
	Concrete Columns	and Beams	25 SF								
01	All spalling concret exposed surfaces of	e should be removed, sp cleaned by power wire br be applied to all voids, ar	ce concrete on the building. called areas chipped, and ushing. An epoxy bonding and the voids filled with a high-		\$1,700						
		that after the initial repai curring basis at least eve ng									

MAIN	TENANCE C	ATEGORY: Replacement/Renew	<i>ı</i> al		SURVEY DA	ATE: 8/15				F	Page 7
SEVEF SCORI DEF. N	E	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	g Equipment	1 LS								
109	and stora storage. recomme	chanical room includes a domestic lage tank with 32 MBH input and application of the end of the end to be scheduled for replacer cal Room	pproximately 40 gallons of fits service life and is			\$3,000					
68	560	General Classroom	HVAC				- — — —				
	HVAC E	quipment	1 LS								
108	be deteri recomme	hanical room includes a hot water forating as water was observed lea ended that the boiler be scheduled cal Room	king from the boiler. It is			\$63,100					
68	560	General Classroom	HVAC	- — — — —						- — — — — — —	
	HVAC E	quipment	1 LS								
106	which is life of the costs car	condensing units are dated 2001 a approximately 70% of the generally equipment. At this point, increasing be anticipated going forward, and e considered for approximately five	y accepted 20 year service ng maintenance and repair I replacement programming						\$55,600		
	be replac	ant piping insulation on the roof is a ced when the condensing units are n has been included in the cost.									

Roof

	COMPONENT								
BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
Gen	eral Classroom	Electrical							
e circuit breatoroximately inibution switching in the circuit and generally acability of the inected to elaced.	aker panelboards are original to th 41 years old. This building also he itchgear for buildings 560 and 570 till functional, it is obsolete, replace not readily available, and the equi eccepted service life. There is also be equipment as it provides protection each breaker. It is recommended to	e building and are buses the main . Although the ement parts are pment is at the end of a concern with the on of the circuits						\$119,100	
		HVAC							
e hot water the roof has uce energy ve Building	heating piping insulation and exposed deteriorated and is recommended usage. This hot water heating pip 570. Six hundred feet of one inch	sed aluminum jacket d to be replaced to ing also appears to diameter piping was						\$31,900	
Replaceme	ent/Renewal	AV. SEVER. SCORE = 68	\$0	\$0	\$66,100	\$0	\$ 0	\$206,600	\$272,700
	General Breaker or circuit breaker or circuit breaker or circuit breaker or circuit breaker and generally acceptated to eaced. Control Room General Room AC Heating or hot water he roof has uce energy we Building ermined to of	General Classroom cuit Breaker Panel and Distribution Swithboard circuit breaker panelboards are original to the roximately 41 years old. This building also he ribution switchgear for buildings 560 and 570 ipment is still functional, it is obsolete, replace ensive and not readily available, and the equi- generally accepted service life. There is also ability of the equipment as it provides protection acced to each breaker. It is recommended to acced. Ctrical Room General Classroom AC Heating Water Piping Insulation Thot water heating piping insulation and expo- he roof has deteriorated and is recommended acce energy usage. This hot water heating pip acceded to require replacement of its insulation for the provided service of the sinsulation for the provided service of the pipe acceded to require replacement of its insulation for the provided service of the pipe acceded to the pipe of the pipe of the pipe acceded to the pipe of the p	General Classroom Electrical Full Breaker Panel and Distribution Swithboard 1 LS For circuit breaker panelboards are original to the building and are roximately 41 years old. This building also houses the main ribution switchgear for buildings 560 and 570. Although the ipment is still functional, it is obsolete, replacement parts are ensive and not readily available, and the equipment is at the end of generally accepted service life. There is also a concern with the ability of the equipment as it provides protection of the circuits nected to each breaker. It is recommended that this equipment be acced. Cetrical Room General Classroom HVAC AC Heating Water Piping Insulation 1 LS Thot water heating piping insulation and exposed aluminum jacket the roof has deteriorated and is recommended to be replaced to use energy usage. This hot water heating piping also appears to be Building 570. Six hundred feet of one inch diameter piping was ermined to require replacement of its insulation and aluminum jacket.	General Classroom Electrical Fuit Breaker Panel and Distribution Swithboard To circuit breaker panelboards are original to the building and are roximately 41 years old. This building also houses the main ribution switchgear for buildings 560 and 570. Although the ipment is still functional, it is obsolete, replacement parts are ensive and not readily available, and the equipment is at the end of generally accepted service life. There is also a concern with the ability of the equipment as it provides protection of the circuits nected to each breaker. It is recommended that this equipment be acced. Cetrical Room General Classroom HVAC AC Heating Water Piping Insulation 1 LS Thot water heating piping insulation and exposed aluminum jacket he roof has deteriorated and is recommended to be replaced to use energy usage. This hot water heating piping also appears to be Building 570. Six hundred feet of one inch diameter piping was emined to require replacement of its insulation and aluminum jacket.	General Classroom Electrical tuit Breaker Panel and Distribution Swithboard 1 LS circuit breaker panelboards are original to the building and are roximately 41 years old. This building also houses the main ribution switchgear for buildings 560 and 570 . Although the ipment is still functional, it is obsolete, replacement parts are ensive and not readily available, and the equipment is at the end of generally accepted service life. There is also a concern with the ability of the equipment as it provides protection of the circuits nected to each breaker. It is recommended that this equipment be acced. Cetrical Room HVAC AC Heating Water Piping Insulation 1 LS Thot water heating piping insulation and exposed aluminum jacket he roof has deteriorated and is recommended to be replaced to use energy usage. This hot water heating piping also appears to we Building 570. Six hundred feet of one inch diameter piping was ermined to require replacement of its insulation and aluminum jacket.	General Classroom Electrical circuit Breaker Panel and Distribution Swithboard 1 LS circuit breaker panelboards are original to the building and are roximately 41 years old. This building also houses the main ribution switchgear for buildings 560 and 570. Although the ipment is still functional, it is obsolete, replacement parts are ensive and not readily available, and the equipment is at the end of generally accepted service life. There is also a concern with the ability of the equipment as it provides protection of the circuits nected to each breaker. It is recommended that this equipment be aced. Circuit Room HVAC AC Heating Water Piping Insulation 1 LS thot water heating piping insulation and exposed aluminum jacket he roof has deteriorated and is recommended to be replaced to uce energy usage. This hot water heating piping also appears to be Building 570. Six hundred feet of one inch diameter piping was emined to require replacement of its insulation and aluminum jacket.	General Classroom Electrical with Breaker Panel and Distribution Swithboard 1 LS circuit breaker panelboards are original to the building and are roximately 41 years old. This building also houses the main ribution switchgear for buildings 560 and 570 . Although the ipment is still functional, it is obsolete, replacement parts are ensive and not readily available, and the equipment is at the end of generally accepted service life. There is also a concern with the ability of the equipment as it provides protection of the circuits needed to each breaker. It is recommended that this equipment be aced. Ctrical Room General Classroom HVAC AC Heating Water Piping Insulation 1 LS Thot water heating piping insulation and exposed aluminum jacket the roof has deteriorated and is recommended to be replaced to ucce energy usage. This hot water heating piping also appears to re Building 570. Six hundred feet of one inch diameter piping was ermined to require replacement of its insulation and aluminum jacket.	General Classroom Electrical ricit Breaker Panel and Distribution Swithboard 1 LS circuit breaker panelboards are original to the building and are roximately 41 years old. This building also houses the main ribution switchgear for buildings 560 and 570. Although the ipment is still functional, it is obsolete, replacement parts are ensive and not readily available, and the equipment is at the end of lenerally accepted service life. There is also a concern with the ability of the equipment as it provides protection of the circuits nected to each breaker. It is recommended that this equipment be aced. Ctrical Room General Classroom HVAC AC Heating Water Piping Insulation 1 LS hot water heating piping insulation and exposed aluminum jacket he roof has deteriorated and is recommended to be replaced to use energy usage. This hot water heating piping also appears to the Building 570. Six hundred feet of one inch diameter piping was armined to require replacement of its insulation and aluminum jacket.	General Classroom Electrical tuit Breaker Panel and Distribution Swithboard 1 LS circuit breaker panelboards are original to the building and are roximately 41 years old. This building also houses the main ribution switchgear for buildings 560 and 570. Although the ipment is still functional, it is obsolete, replacement parts are ensured to each breaker. It is recommended that this equipment be aced. Cheating Water Piping Insulation 1 LS HVAC Cheating Water Piping Insulation 1 LS HVAC Cheating Water Piping insulation 1 LS AC Heating Water Piping insulation and exposed aluminum jacket he roof has deteriorated and is recommended to be replaced to use energy usage. This hot water heating piping also appears to re Building 570. Six hundred feet of one inch diameter piping was armined to require replacement of its insulation and aluminum jacket.

Southwestern College

SURVEY DATE: 8/15

570 Photography Lab

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$26,950

Facility Condition Rating = 99 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 1 %

Cost Per Square Foot is \$3.08

Average Severity Score = 33

Deficiencies Were Identified



PRIMARY USE: Classroom/Lab

FACILITY SF: 8,742 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$3,715,350

FACILITY AGE: 37 Yrs.

LAST RENOVATED:

2011

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)

Southwestern College SURVEY DATE: 8/15

570 Photography Lab 900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/E	BUILDING SYSTEM C	OST 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

Southwestern College

SURVEY DATE: 8/15

570 Photography Lab

900 Otay Lakes Rd.

fixtures is viewed as an improvement.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 570 Photography Lab

20 Electrical Improvement Light Fixtures

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

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

Maintenance

SYSTEM SUB-TOTAL HVAC \$600 AV. SEVERITY SCORE = 20 COST PER BLDG GSF= \$0.07

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 570 Photography Lab

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

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

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

, 2,, 02 0,	TEGORY: Improvement			Page					
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 570	Photography Lab	Electrical							
Light Fixt	ıres	100 EA							
existing fl and shou	nce staff and program managers uorescent lighting is not as energ d be replaced with LED lighting. can fixtures and suspended ligh s.	gy efficient as LED lighting Retrofit existing fluorescent,				\$5,700			

1AIN1	TENANCE	CATEGORY: Non-Annual Recurr	ing Maintenance		SURVEY DA	NTE: 8/15					Page 2
EVER CORE DEF. N	Ε	COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	570	Photography Lab	Roof								
03	The sin However accumum roof and membra recommendicates Remove sumps. formula cleaned life of the		rty membrane. As more dirt ascertain the condition of the can shorten the life of the abrane surface is ment of the membrane I clean downspouts and a cleaning solution The surface should be a maintain and prolong the					\$3,250			
0	570	Photography Lab	- — — — — — — — — — HVAC			_ — — — —					
		Distribution Ductwork	60 LF								
00	deterior allowing ductwo	nt sealant on the metal ductwork on rating, allowing hot and cold air to ear water to potentially leak into the durk and wastes energy. The existing joints resealed.	scape to the outside, and ucts. This can deteriorate the			\$600					

	PRY: Replacement/Re	enewal	SURVEY DATE: 8/15							Page 3
VER. ORE F. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST YR. 3 COST YR. 4 COST YR. 5 COST TOTAL COST 2017 2018 2019 2020 ⁰⁻⁵				TOTAL COST YR. 0-5	YR.
570 Phot	ography Lab	Roof								
Wood Sunscre	en Boards	2,480 LF								
exposes top ar The sunscreen design and sho be replaced wi hangers. The coated with 2 o applied with a should significa weathering and	nd side wood surfaces to a are an integral archited build be retained. It is recath treated S4S douglas fit top surface of the 2x8 are coats of a low viscosity 1 coller. The treated wood									

Southwestern College

SURVEY DATE: 8/15

590 Automotive

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$462,300

Facility Condition Rating = 96 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 4 %

Cost Per Square Foot is \$17.20

Average Severity Score = 53

13 Deficiencies Were Identified



PRIMARY USE: Classroom/Lab

FACILITY SF: 26,877 NO. OF STORIES:

NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$11,422,725

FACILITY AGE: 45 Yrs.
LAST RENOVATED: 1985

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)

Southwestern College SURVEY DATE: 8/15

590 Automotive 900 Otay Lakes Rd.

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	\$15.7

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

Southwestern College SURVEY DATE: 8/15

590 Automotive 900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 590 Automotive-C

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 590 Automotive-C

68 Electrical Replacement/Renewal

Distribution Switchboard

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020

20 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 590 Automotive-C

20 Electrical Improvement Light Fixtures

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 590 Automotive-C

68 HVAC Replacement/Renewal

HVAC Equipment

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 590 Automotive-C

68 HVAC Replacement/Renewal HVAC Equipment

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

20 HVAC Non-Annual Recurring Maintenance HVAC Distribution Ductwork

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

Maintenance

SYSTEM SUB-TOTAL HVAC \$204,400 AV. SEVERITY SCORE = 56 COST PER BLDG GSF= \$7.61

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 590 Automotive-C

100 Roof Replacement/Renewal

Roof Access Hatch

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

60 Roof Annual PM

Roof Drains

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 7

FACILITY: 590 Automotive-C

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

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

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

	CATEGORY: Annual PM		SURVEY DATE: 8/15						Page
SEVER. SCORE DEF. NO. BLD	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
590	Automotive	Roof							
Roof Dra	ains	2 EA							
debris, i	drains and drain sumps are clogged hhibiting drainage. Drains should be be per year. timeter-Office bldg.		\$200						

AINT	TENANCE CATEGORY: Improvement			SURVEY DA	ATE: 8/15				P	age
EVER CORE EF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
)	590 Automotive-B	Electrical								
	Light Fixtures	156 EA								
04	Maintenance staff and program mana existing fluorescent lighting is not as and should be replaced with LED ligh recessed can fixtures and suspended LED lights. Fixtures throughout Lab B	energy efficient as LED lighting ting. Retrofit existing fluorescent,			\$8,900					
0	590 Automotive-A	Electrical	- — — — —							
	Light Fixtures	181 EA								
03	Maintenance staff and program mana existing fluorescent lighting is not as and should be replaced with LED ligh recessed can fixtures and suspended LED lights. Fixtures throughout Lab A	energy efficient as LED lighting ting. Retrofit existing fluorescent,			\$10,350					
)	590 Automotive-C	Electrical	- — — — —							
	Light Fixtures	181 EA								
05	Maintenance staff and program mana existing fluorescent lighting is not as and should be replaced with LED ligh recessed can fixtures and suspended LED lights. Fixtures throughout Lab C	energy efficient as LED lighting ting. Retrofit existing fluorescent,	·		\$10,350				· — — — — — -	
	AL: Improvement	AV. SEVER. SCORE = 20	\$0	\$0	\$29,600	\$0	\$0	\$0	\$29,600	

//AINT	ENANCE CA	ATEGORY: Non-Annual Recur	ring Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER SCORE DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	590	Automotive	Roof								
	Single-Ply	y Roof Membrane	20,245 SF								
	make it vipotential Thorough assessment Remove sumps. Formulate cleaned a life of the Note: Us membran	random areas. Continued accur ery difficult to ascertain the condi problems. It also can shorten the cleaning of the membrane surfa- ent of the membranes indicated r all leaves/debris from the roof an Power-wash the membrane using d for single-ply roof membranes. at least every three to four years membrane. e only bonded contractor with ex- les. membranes on A, B, C, and D	tion of the roof and identify elife of the membrane. Ice is recommended. An no apparent deficiencies. It describes the deficiencies and a cleaning solution. The surface should be to maintain and prolong the								
0	590	Automotive									
	HVAC Dis	stribution Ductwork	300 LF								
00	deteriorate allowing with ductwork	sealant on the metal ductwork or ting, allowing hot and cold air to e water to potentially leak into the c and wastes energy. The existing pints resealed.	escape to the outside, and lucts. This can deteriorate the			\$3,100					

MAIN	TENANCE CAT	EGORY: Replacement/Rei	newal		SURVEY DA	ATE: 8/15					Page 4
SEVER SCOR DEF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 A Roof Acces	utomotive	Roof 1 EA								
101	The roof ac properly, ponew unit wit	cess hatch is in very poor shosing a potential safety hazar th extension grab bar. s hatch on office/classroom	ape and no longer operates d. Replace the hatch with a	\$3,350							
68	590 A	utomotive-B	HVAC								
	HVAC Equi	pment	1 LS								
107	three packa which is applife of the eccosts can b	quipment. At this point, incre	units are now 14 years old, rally accepted 20 year service easing maintenance and repair and replacement programming						\$64,800		
		inal and should be replaced	ar exhaust fans on the roof that at the same time.								
68	590 A	utomotive-C	HVAC								
	HVAC Equi	pment	1 LS								
108	are now 14 accepted 20 maintenance	years old, which is approxim 0 year service life of the equi se and repair costs can be an at programming should be co	pment. At this point, increasing						\$76,000		

MAIN	TENANCE CATEG	ORY: Replacement/Renewa	al		SURVEY DA	NTE: 8/15				Page 5
SEVER SCOR DEF. N	Ē	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Aut	omotive-C	Electrical							
110	approximately is growing obsavailable, and accepted servequipment as	or panelboards are original to the 41 years old. Although the equipment parts are expected in the equipment is nearing the expected if the equipment is also a concert provides protection of the circument in the equipment is equipment.	uipment is still functional, it xpensive and not readily end of its generally in with the reliability of the cuits connected to each						\$59,800	
68		omotive-A	HVAC							
106	now 14 years 20 year service maintenance	nent aged roof top air conditioning u old, which is approximately 70° re life of the equipment. At this and repair costs can be anticipa orogramming should be conside	% of the generally accepted point, increasing ated going forward, and						\$60,500	
	deteriorating to be removed surfaces from	a utility set exhaust fan on the r wood support to be replaced an d, and the unit re-finished to pro the elements. In addition, a sr juires a surface coating to prote	nd surface rust on the unit otect the carbon steel mall amount of black steel							

IAINTEI	NANCE CATE	GORY: Replacement/Renew	al		SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
8 59	90 Au	tomotive-A	Electrical							
09 C a is a a e b	approximate s growing ob available, an accepted ser equipment a oreaker. It is next 8 to 10	er panelboards are original to t ly 41 years old. Although the e osolete, replacement parts are d the equipment is nearing the rvice life. There is also a conce is it provides protection of the co is recommended that this equipi	quipment is still functional, it expensive and not readily end of its generally ern with the reliability of the recuits connected to each						\$54,700	
B 59	90 Au	tomotive	Electrical							- — — — — — — -
11 T a y r e T p	area. They a vears old. A eplacement equipment is also provides projectommende	Switchboard o distribution switchboards that ppear original to the buildings a lithough the equipment is still furparts are expensive and not reparts are expensive and not repart aconcern with the reliability of tection of the circuits connected that this equipment be replaced that the sequipment of the circuits connected that this equipment be replaced that the sequipment be replaced to Labs A & C	and are approximately 45 nctional, it is obsolete, adily available, and the nerally accepted service life. If the equipment as it to each breaker. It is						\$104,000	
DTAL:	: Replacen	nent/Renewal	AV. SEVER. SCORE = 72	\$3,350	\$0	\$0	\$0	\$0	\$419,800	\$423,150
OTAL	FOR ALL C	CATEGORIES AV. SEVE	r. score = 53	\$3,550	\$0	\$38,950	\$0	\$0	\$419,800	\$462,300

Southwestern College SURVEY DATE: 8/15

600 ASO 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$289,525

Facility Condition Rating = 95 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 5 %

Cost Per Square Foot is \$17.16

Average Severity Score = 47

B Deficiencies Were Identified



PRIMARY USE: Student Union

FACILITY SF: 16,874 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$6,159,010

FACILITY AGE: 50 Yrs.
LAST RENOVATED: 2001

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)

Southwestern College

SURVEY DATE: 8/15

600 ASO

900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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 Maintenanc	е	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	\$16.2

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-

Southwestern College SURVEY DATE: 8/15

600 ASO 900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 600 ASO

20 Electrical Improvement Light Fixtures

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 600 ASO

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

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

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 600 ASO

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

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

Maintenance

40 Roof Annual PM Roof Membrane

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

Maintenance

SYSTEM SUB-TOTAL ROOf \$4,700 AV. SEVERITY SCORE = 50 COST PER BLDG GSF= \$0.28

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 600 ASO

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

	TENANCE CATEGO	RY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVEF SCORI DEF. N	- ፤	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	debris, inhibitin	g drainage. Drains should	led with significant amounts of be thoroughly cleaned out at	\$750							
	Roof perimeter			- — — — —						· — — — — —	
10						_ — — —				- — — — — —	_ — — -
40	Roof perimeter		Roof 9,605 SF	- — — —							

ry 2 EA	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
2 EA							
el the ting scent, ficient				\$6,400			
		. — — — —					
1	ing cent,	ing cent, ficient	ing cent, ficient	ing cent, ficient	ing cent, ficient	ing cent, ficient	ing cent, ficient

//AIN	TENAN	ICE CATE	GORY: Non-Annual Recurring	g Maintenance		SURVEY DA	<i>TE:</i> 8/15					Page 3
SEVER SCORE DEF. N	E	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	600	AS	O pof Membrane	Roof 9,605 SF								
07	The of le diffice problem clear defice of the clear sum form clear life of the clear men	single-pleaf and of cult to as blems. It aning of the tively cleaciencies. nove all leaps. Power and at leap of the me	y membrane on this building co ther debris, and the surface is v certain the condition of the roof also can shorten the life of the ne membrane surface is recomman areas of the membrane indice eaves/debris from the roof and of er-wash the membrane using a or single-ply roof membranes. The	entains significant amounts ery dirty. This makes it very and identify potential membrane. Thorough mended. An assessment of eated no apparent clean downspouts and cleaning solution The surface should be maintain and prolong the		\$3,750						
3	600	AS	- — — — — — — — — — — — — — — — — — — —				- — — — —					
		_	crete Columns/Beams/Roof Par									
00	to w build bear rem	reathering ding. The ms and c	concrete surfaces on the buildirg. This detracts from the overalere is also random spalling of tholumns. Pressure wash all suring and any spalling concrete. building	I appearance of the e concrete surfaces on the		\$2,600						

<i>IAIN</i>	TENANCE CATE	GORY: Repair/Maintenance			SURVEY DA	ATE: 8/15					Page
SEVEI SCOR DEF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	600 AS	0	Structural								
	Concrete Col	umns and Beams	15 SF								
01	spalling conc exposed surfa agent should	om light spalling of surface co rete should be removed, spalle aces cleaned by power wire br then be applied to all voids, and y-based patch cement.	ed areas chipped, and ushing. An epoxy bonding		\$1,025						
		ended that after the initial repain a recurring basis at least even building									

1AIN	TENANC	E CATEG	ORY: Replaceme	ent/Renewal		SURVEY DA	ATE: 8/15				Page
EVEF CORI DEF. N	E	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
8	600	ASC		Plumbing							
		bing Equ		1 LS							
06	and s storag	storage ta ge. It ap	ank with 75 MBH inp pears to be deteriora replacement.	domestic hot water natural gas heater but and approximately 75 gallons of rating and is recommended to be			\$6,200				
8	600	ASC		HVAC							
	HVAC	CEquipm	nent	1 LS							
05	eleve which life of costs	n package is appro the equi can be a	ged roof top air cond eximately 70% of the pment. At this point anticipated going for	have been replaced in 2001. The ditioning units are now 14 years old, be generally accepted 20 year service t, increasing maintenance and repair award, and replacement programming mately five years out.						\$268,600	
	also d	observed or replace iture.	. The cost estimate	ork joints and transition ductwork were eprovided includes amounts to repair and re-seal joint to minimize rusting in							
			ent/Renewal	AV. SEVER. SCORE = 68	\$0	\$0	\$6,200	\$0	\$0	\$268,600	\$274,800

Southwestern College

SURVEY DATE: 8/15

610 Student Union

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$515,675

Facility Condition Rating = 93 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 7

Cost Per Square Foot is \$23.81

Average Severity Score = 52

12 Deficiencies Were Identified



PRIMARY USE: Cafeteria/Dining

FACILITY SF: 21,660 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$7,905,900

FACILITY AGE: 50 Yrs.
LAST RENOVATED: 1988

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)

Southwestern College

SURVEY DATE: 8/15

610 Student Union

900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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.

Southwestern College

900 Otay Lakes Rd.

SURVEY DATE: 8/15

610 Student Union

The smooth concrete surfaces on the building and roof parapets are badly discolored due to weathering and dirt buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 610 Student Union

68 Electrical Replacement/Renewal

Circuit Breaker Panel and Distribution Swithboard

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 610 Student Union

68 HVAC Replacement/Renewal HVAC Equipment

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

68 HVAC Replacement/Renewal HVAC Equipment

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

68 HVAC Replacement/Renewal HVAC Equipment

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 610 Student Union

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

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

Maintenance

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

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

Maintenance

SYSTEM SUB-TOTAL Paint/Finish \$8,250 AV. SEVERITY SCORE = 31 COST PER BLDG GSF= \$0.38

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 610 Student Union

68 Plumbing Replacement/Renewal

Domestic Water Heating and Storage Equipment

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 610 Student Union

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

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

Maintenance

40 Roof Annual PM Roof Membrane

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

Maintenance

SYSTEM SUB-TOTAL Roof \$10,575 AV. SEVERITY SCORE = 50 COST PER BLDG GSF= \$0.49

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 610 Student Union

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

	TENANCE CA	TEGORY: Annual PM			SURVEY DA	NTE: 8/15					Page 1
SEVE SCOR DEF. I	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Drain	าร	12 EA								
03		nibiting drainage. Drains should per year.	ged with significant amounts of be thoroughly cleaned out at	\$1,100							
		- — — — — — — — — -									
0		Student Union		. — — — —						. — — — — —	
40		Student Union	Roof 26,130 SF								- <u></u> .

, 2, 0,	TEGORY: Improvement			SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO. BLDG	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 610	Student Union	Electrical							
Light Fixt	ıres	294 EA							
existing fl and shou recessed	610 Student Union Electrical					\$16,800			

MAINT	ENANCE CA	TEGORY: Non-Annual Recu	urring Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
	of leaf and assessme deficiencie very difficu problems. cleaning of Remove a sumps. Prormulated cleaned at life of the in	d other debris, and the surface ont of the membrane does not es. However, as debris continualt to ascertain the condition of It also can shorten the life of the membrane surface is recommended. It leaves/debris from the roof a cower-wash the membrane using for single-ply roof membrane treast every three to four year membrane.	indicate any apparent ues to accumulate it can make it the roof and identify potential the membrane. Thorough commended in about 3 years and clean downspouts and ng a cleaning solution s. The surface should be				\$9,200				
40			. — — — — — — — — — — — Paint/Finish				. — — — —				_ — — -
	Exterior W	ood Panels	6,350 SF								
	shape. Ho with an oil- deterioration	owever, the surfaces are weat based wood sealer to preven	of the building are in reasonable hering and should be re-finished t further weathering		\$5,300						
23	610	Student Union	Paint/Finish							- — — — — — —	
	Exterior Co	oncrete Columns/Beams/Roof	Parapets 3,950 SF								
	roof parap from the o spalling of wash all so spalling co	ets, are badly discolored due verall appearance of the build the concrete surfaces on the urfaces with biologic agent to	ing. There is also random beams and columns. Pressure		\$2,950						

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

MAINTENA	NCE CATE	GORY: Non-Annual Recurrin	g Maintenance		SURVEY DA	ATE: 8/15					Page 4
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
OTAL:	Non-Ann	ual Recurring Maintenance	AV. SEVER. SCORE = 38	\$0	\$8,250	\$0	\$9,200	\$0	\$0	\$17,450	

MAINTEN	NANCE CATEGORY: Repair/Maintenance			SURVEY DA	NTE: 8/15				I	Page
SEVER. SCORE DEF. NO.	COMPONENT DEFICIENCY - BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 61	S10 Student Union	Structural								
С	Concrete Columns and Beams	250 SF								
e. Of Co SI SI	There is minor random spalling of surface concrete except for the concrete beam that supports the par of the building. This beam has extensive face spal concrete should be removed, spalled areas chippe surfaces cleaned by power wire brushing. An epox should then be applied to all voids, and the voids fi strength epoxy-based patch cement.	apet wall at the rear ling. All spalling d, and exposed y bonding agent		\$15,700						
a	It is recommended that after the initial repairs new addressed on a recurring basis at least every three Perimeter of building									

MAINT	TENANCE C	ATEGORY: Replacement/Renew	al		SURVEY DA	ATE: 8/15					Page 6
SEVER SCORE DEF. N	=	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Circuit B	Student Union reaker Panel and Distribution Swith	Electrical board 1 LS								
106	approxim distribution equipme expensive its gener reliability		so houses the main others. Although the eplacement parts are equipment is at the end of also a concern with the election of the circuits			\$161,700					
68	610	Student Union	HVAC							- — — — — -	
	HVAC E	quipment	1 LS								
110	chilled w be fifty ye program	nandling unit appears to be an originater for cooling from the central planears old, and well past its expected med for replacement within the nextical Room	nt. As this unit would now service life, it should be			\$113,200					
68	610	Student Union	HVAC							- — — — — -	
	HVAC E	quipment	1 LS								
109	end of its	water boiler for comfort heating is do s expected service life. Replacement ant includes a 840 MBH output natur	nt is recommended.			\$60,300					

pump.

Mechanical Room

AINTENANCE CATEGORY: Replacement/Renewal			enewal		SURVEY DA	ATE: 8/15				Page
EVER CORE EF. N	Ī	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
8	610 St	udent Union	HVAC							
	HVAC Equip	oment	1 LS							
07	appear to be life. Equipm four circular more circular	e deteriorating and nearing tent includes two natural g aluminum exhaust fans th ir aluminum exhaust fans.	of mechanical equipment that go the end of their expected service gas-fired make-up units, two of the nat serve grease hoods, and two lt is recommended that this ent within the next 5 years.				\$80,750			
В	610 St	udent Union	Plumbing							
	Domestic W	ater Heating and Storage	Equipment 1 LS							
80	deteriorating recommend	ed to be replaced. Equipr fired boiler, a 1/2 hp, and	orage tank are slowly expected service life and are ment includes a 510 MBH output a 520 gallon storage tank.						\$48,400	

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

Southwestern College SURVEY DATE: 8/15

620 Learning Resource Center 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$281,100

Facility Condition Rating = 99 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 1 %

Cost Per Square Foot is \$2.93

Average Severity Score = 51

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)

Southwestern College SURVEY DATE: 8/15

Learning Resource Center 900 Otay Lakes Rd.

IMAII	NTENANCE CATEGORY/B	0.220			
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.

Southwestern College SURVEY DATE: 8/15

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 620 Learning Resource Center

20 Electrical Improvement Light Fixtures

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 620 Learning Resource Center

68 Plumbing Repair/Maintenance

Domestic Water Heating and Storage Equipment

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

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

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 620 Learning Resource Center

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

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

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

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

	ITENANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVEI SCOR DEF. N	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 camounts of debris, inhibiting drainage. Drains st cleaned out at least once per year. Roof perimeter		\$400							
10	620 Learning Resource Center	Roof								
	Roof Membrane	38,830 SF								
		embrane surface,	\$550							

	ATEGORY: Improvement			SURVEY DA	NTE: 8/15				Pa
SEVER. SCORE DEF. NO. BLDG	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
620	Learning Resource Center	Roof							
Stucco R	oof Parapet	1,015 LF							
stucco pa in parape	e a significant number of cracks and hearapets, which let water leak into the post damage and deterioration. Install mar of roof and circular central opening	arapets. This can result	. — — — —	\$48,000					
20 620	Learning Resource Center	Electrical							
Linds First	ures	1,301 EA							
Light Fixt		indicated they feel the				\$74,400			

	GORY: Non-Annual Recurring	Maintenance		SURVEY DA	ATE: 8/15					Page
SEVER. SCORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Lea	arning Resource Center	Roof								
Single-Ply Ro	oof Membrane	38,830 SF								
accumulation	r debris, and the surface is dirty in as of debris and dirt increase, it wil	Il make it very difficult to								
accumulation ascertain the also can sho membrane si of the membi Remove all le sumps. Pow formulated fo	as of debris and dirt increase, it will condition of the roof and identify present the life of the membrane. The urface in about 2 years is recommonane indicated no apparent deficience eaves/debris from the roof and cleer-wash the membrane using a clear single-ply roof membranes. The ast every three to four years to man	Il make it very difficult to potential problems. It crough cleaning of the ended. An assessment encies. an downspouts and eaning solution e surface should be								

MAIN	TENANCE (CATEGORY: Repa	air/Maintenance			SURVEY DA	NTE: 8/15					Page 4
SEVEI SCOR DEF. I	E	COMPONEN DEFICIENCY G. LOCATION		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
8	620	Learning Resou		Plumbing								
		J	nd Storage Equipment	1 LS								
105	be in go the exte is being	od operating condi rior surfaces of the recommended to p funds for repairs an	ater and storage tank or tion. However, surface equipment. A repair/morepare and paint exteriond maintenance of the e	rust is developing on aintenance allowance or surfaces as well as		\$10,400 						
8	620	Learning Resou	rce Center	HVAC								
	HVAC E	quipment		1 LS								
04	equipmo age rep An allow required	ent appears to still lair and maintenance should be bu	-top HVAC units serve to be in good condition. He be requirements will become ageted for repairs/main ars in order to properly	owever, as the units ome more frequent. tenance that may be		\$135,200						
	Also inc refinishi Roof	luded are one-time	repairs of rusting ductweating equipment and ex	ork and joints, and haust fan on the roof.	- — — — —		- — — — —				- — — — — —	:
		air/Maintenance	A1/	. SEVER. SCORE = 68	\$ 0	\$145,600	\$0	\$0	\$ 0	\$ 0	\$145,600	

Southwestern College

SURVEY DATE: 8/15

630 Bookstore

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$246,850

Facility Condition Rating = 90 (Good

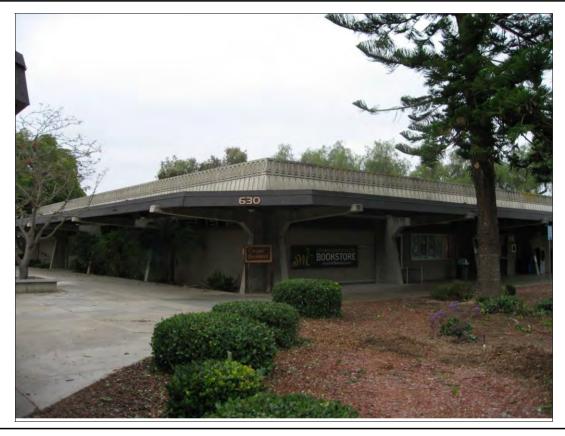
Repair Cost as a Percent of Facility Replacement Cost is 10 %

Cost Per Square Foot is \$29.39

Average Severity Score = 45

13 Deficiencies Were Identified

LAST RENOVATED:



PRIMARY USE: Bookstore FACILITY AGE: 34 Yrs.

FACILITY SF: 8,400 NO. OF STORIES: 1.0

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)

Southwestern College

SURVEY DATE: 8/15

630 Bookstore

900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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	\$27.3

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.

Southwestern College SURVEY DATE: 8/15

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 630 Bookstore

20 Electrical Improvement

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

Light Fixtures

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 630 Bookstore

68 HVAC Replacement/Renewal HVAC Equipment

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

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

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

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

SITE: FACILIT		ern College Bookstore			SURVEY DATE::	8/15 Page 3
SYSTE	M SUB-TOTAL	Paint/Finish	\$1,700	AV	/. SEVERITY SCORE = 23	COST PER BLDG GSF= \$0.20
40	Paving	Non-	Annual Recurrir	ng Mainter	nance Parking Area A	Asphalt
106	over the su	face. Failure t tensive repair/	o address this c	racking cou	uld result in more extens	numerous small to moderate crack sive deterioration, potentially sould be cleaned and have a seal-
	Behind buil	ding				
QUANTI		 528 SY	REPAIR COST:	\$4,700	Deferrable	Est. Remaining Life = 2 Yrs
ife E	xpectancy Ne	ew = 10 Yrs.	REPAIR COST: 9	2015	Deficiency Data Source:	Condition Survey
ife E Defici	`	ew = 10 Yrs. 	Estimate Date: 2	2015 Recom		Condition Survey
ife E Deficion Benef	expectancy Ne	ew = 10 Yrs. s Age/Wear Planning	Estimate Date: 2	2015 Recom	Deficiency Data Source: mended Method of Repair: pair Cost Reduction	Condition Survey Contract
Defici Benef	ixpectancy Neiency Cause is fit Score = 46 tenance Paving The concre	ew = 10 Yrs. S Age/Wear Planning	Estimate Date: ;	2015 	Deficiency Data Source: mended Method of Repair: epair Cost Reduction Concrete Walk	Condition Survey Contract
Life E Deficion Benef Maint	ixpectancy Neiency Cause is fit Score = 46 tenance Paving The concre	Repa	Estimate Date: ;	2015 	Deficiency Data Source: mended Method of Repair: epair Cost Reduction Concrete Walk	Condition Survey Contract way
Deficion Benef	ixpectancy Nembers 1	Repa	Estimate Date: 2 g Priority: D-Esc ir/Maintenance of the building hete.	2015 	Deficiency Data Source: mended Method of Repair: epair Cost Reduction Concrete Walk	Condition Survey Contract way

AV. SEVERITY SCORE =

40

COST PER BLDG GSF= \$0.74

Repair

Paving

\$6,225

SYSTEM SUB-TOTAL

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 630 Bookstore

68 Plumbing Replacement/Renewal

Domestic Water Heating and Storage Equipment

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

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

SURVEY DATE .. SITE: Southwestern College 8/15 Page 5

FACILITY: 630 **Bookstore**

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.

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

Deficiency Cause is No Maintenance

Recommended Method of Repair: Contract

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

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

REPAIR COST: QUANTITY. 6 EA \$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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 630 Bookstore

40 Roof Annual PM Roof Membrane

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

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

	NANCE CATEG	ORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 63	30 Boo	kstore	Roof								
103 T			6 EA ged with significant amounts of the thoroughly cleaned out at	\$650							
le	east once per Roof perimete	year.	, , , , , , , , , , , , , , , , , , , ,								
F	east once per Roof perimete	year.	Roof	. — — —		_ — — —					
10 63	east once per Roof perimete	year. 									

AINTENANCE CAT	EGORY: Improvement			SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 630 B	ookstore	Electrical							
Light Fixture	es	146 EA							
Light Fixtures 146 EA 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				

WAIN	ENANCE (CATEGORY: Non-Annual Recur	ring Maintenance		SURVEY DA	ATE: 8/15				Page	
SEVER SCORI DEF. N	Ī	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
	address potentia parking Behind I		e extensive deterioration, acement of asphalt. The entire e a seal-coat applied.	. — — —		- — — —				. — — — — —	
23	630	Bookstore	Paint/Finish								
100	The smo roof para from the	Concrete Columns/Beams/Roof Rooth concrete surfaces on the build apets, are badly discolored due to overall appearance of the building agent to remove staining and	Iding, and the surfaces on the oweathering. This detracts ag. Pressure wash all surfaces		\$1,700						

MAINTE	NANCE CA	TEGORY: Repair/Mainte	nance		SURVEY DA	ATE: 8/15				F
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
	630 E	Bookstore	Paving 125 LF							
05	The concre	ete walk in front of the build sealed to prevent further d	ding has a number of cracks that leterioration of the concrete.			\$1,525				

EAGUITY CONDITION OUR VEV	NOTION /EVO DEFINITION DEPAID DOODAMMINO DE	AU DV MAINTENANCE/DEDI ACEMENT CATECODY
FACILITY CONDITION SURVEY -	CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DET	AIL BY MAINTENANCE/REPLACEMENT CATEGORY

AINTENANCE CATE	GORY: Replacement/Ren	ewal		SURVEY DA	ATE: 8/15				Page
EVER. Core EF. No. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
00 630 Bo	okstore	Roof							
Roof Access	Hatch	1 EA							
hazard to any very difficult	yone trying to operate the ha to open, which can also be v new unit with dampers and s	hich creates a serious safety atch. It also makes the hatch rery dangerous. Replace the side control handles.							
5 630 Bo	okstore								
Single-Ply Ro	oof Membrane	86 SQ							
membrane, v moderate am making an as	which appears to be hypalon							\$98,900	
	nent conducted focused on r	membrane seams and							

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

MAIN	ITENANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page 6
SEVEI SCOR DEF. I	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 and should be programmed for replacement. Equipm approximately 15 gallon storage tank and 1500 wattrelectric heating elements. Mechanical Room	nent includes an			\$2,350					
68	630 Bookstore	HVAC								
	HVAC Equipment	1 LS								
110	three packaged roof top air conditioning units are now which is approximately 70% of the generally accepted life of the equipment. At this point, increasing mainted costs can be anticipated going forward, and replacen should be considered for approximately five years out A Restroom exhaust fan that appears to be original is recommended to be replaced at the same time.	w 14 years old, d 20 year service mance and repair nent programming t.						\$71,400		
	Roof								. — — — — — –	
40	630 Bookstore	Roof								
	Wood Sunscreen Boards	2,360 LF								
104	The top surfaces of the sunscreen boards are constated elements, including rain. This deteriorates the paint exposes top and side wood surfaces to weather-cause. The sunscreens are an integral architectural feature design and should be retained. It is recommended the replaced with treated S4S douglas fir browntone be hangers. The top surface of the 2x8, 4x15 and 6x14 be coated with 2 coats of a low viscosity 100%-solids coating applied with a roller. The treated wood and leaves in should significantly extend the life of the boards weathering and significantly reduce maintenance cost All sunscreen boards on perimeter of building	airly rapidly and sed deterioration. of the building nat the 2x8 boards coards, and new boards should then epoxy resin ow viscosity epoxy, retard constant			\$15,800					

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

//AIN	TENANCE CAT	EGORY: Replacement/R	Renewal		SURVEY DA	ATE: 8/15					Page
SEVEI SCOR DEF. I	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
i		Bookstore	HVAC								
09	HVAC supplement of the supplemental suppleme	ing Diffusers ply perforated ceiling diffuse g diffuser(s). roughout building	11 EA er(s) are stained and rusty. Install			\$2,950					
-	630 E	ookstore	Floor Cover							- — — — — —	
	Carpet		700 SY								
08	should be i waterproof grade carp	replaced with all carpet. Be	ew low pile high wear commercial	. — — —		\$36,300	. — — — —			. — — — — –	
	Al: Renlace	ement/Renewal	AV. SEVER. SCORE = 51	\$2,025	\$ 0	\$57,400	\$0	\$0	\$170,300	\$229,725	

Southwestern College

SURVEY DATE: 8/15

640 **Journalism** 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$88,375

Facility Condition Rating = 90 (Fair)

Repair Cost as a Percent of Facility Replacement Cost is

Cost Per Square Foot is \$30.84

Average Severity Score = 41

Deficiencies Were Identified



PRIMARY USE: Classroom/Office

2,866

FACILITY SF:

NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$874,130 FACILITY AGE: 16 Yrs.

LAST RENOVATED:

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)

Southwestern College SURVEY DATE: 8/15

640 Journalism 900 Otay Lakes Rd.

NO DE AVERAGE DESICIENCY COST DES									
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	\$29.1				

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

Southwestern College SURVEY DATE: 8/15

640 Journalism 900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 640 Journalism

20 Electrical Improvement Light Fixtures

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

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

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

FACILITY CONDITION SURVEY DEFICIENCY DETAIL BY BUILDING AND SYSTEM IN DECLINING SEVERITY SCORE ORDER SURVEY DATE .. 8/15 Page 2 SITE: Southwestern College FACILITY: 640 **Journalism** 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 **REPAIR COST:** \$17,200 QUANTITY: 350 SY Deferrable Est. Remaining Life = 2 Yrs.

Deficiency Data Source: Life Expectancy New = 15 Yrs. Estimate Date: 2015 **Condition Survey**

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

Planning Priority: F-Occupant Comfort Enhancement Benefit Score = 8

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2032

SYSTEM SUB-TOTAL Floor Cover AV. SEVERITY SCORE = COST PER BLDG GSF= \$6.00 5 \$17,200

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

The three packaged roof top air conditioning units appear to be around 15 years old. As such they have reached 105 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: REPAIR COST: 1 LS \$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

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

SYSTEM SUB-TOTAL HVAC AV. SEVERITY SCORE = COST PER BLDG GSF= \$19.61 \$56,200 68

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

The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak 101 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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 640 Journalism

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

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

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

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

	ORY: Annual PM			SURVEY DA	ATE: 8/15					Page
SEVER. SCORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 640 Jou	rnalism	Roof								
Roof Membra	ne	3,366 SF								
membrane su surface and s	or amounts of leaves and tre rface. This can create a sco- eriously clog roof drains. Del nce per year.		\$150							

AINTENANCE CATEGORY: Improvement				SURVEY DA	ATE: 8/15				1	Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 640 J	ournalism	Electrical								
Light Fixture	es	43 EA								
existing fluc and should	ce staff and program manager prescent lighting is not as ener be replaced with LED lighting an fixtures and suspended ligh	rgy efficient as LED lighting				\$2,450				

1AIN1	TENANCE CAT	EGORY: Non-Annual Recu	rring Maintenance		SURVEY DA	NTE: 8/15					Page 3
EVER CORE DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0		ournalism	Roof								
	Single-Ply	Roof Membrane	3,366 SF								
06	leaves and debris and condition of the life of the is recommended and the life of the is recommended. Remove all sumps. Por formulated cleaned at life of the interest and the life of	dirt accumulate it will make it if the roof and identify potentia he membrane. Thorough clea ended in about 3 years. An as indicated no apparent deficient leaves/debris from the roof a ower-wash the membrane usin for single-ply roof membranes least every three to four years nembrane.	n membrane surface. If more very difficult to ascertain the I problems. It also can shorten ning of the membrane surface sessment of clean areas of the ncies. Ind clean downspouts and g a cleaning solution are surface should be to maintain and prolong the				\$1,875				
	Note: Use membrane Entire roof		xperience cleaning single-ply								
6	640 J	ournalism	Paint/Finish								
	Metal Para	pet Cap Joints	56 LF								
01	providing the parape	ng in the joints of the metal par ne potential for moisture to lea t top. Remove failing caulk ar aps on roof	k into the joints and deteriorate			\$400					

COMPONENT DEFICIENCY BLDG. LOCATION 40 Journalism HVAC Equipment The three packaged roof top air conditioning unit 15 years old. As such they have reached approximately accepted 20 year service life. At this proper properties and repair costs can be anticipated eplacement programming should be considered rears out. Roof	ximately 70% of their point, increasing a going forward, and	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020 \$56,200	TOTAL COST YR. 0-5
HVAC Equipment The three packaged roof top air conditioning unit 5 years old. As such they have reached approximately accepted 20 year service life. At this period in the programming should be considered eplacement programming should be considered experts out. Roof	1 LS ts appear to be around ximately 70% of their point, increasing the going forward, and						\$56,200	
The three packaged roof top air conditioning unit 5 years old. As such they have reached approximately accepted 20 year service life. At this parameter and repair costs can be anticipated eplacement programming should be considered years out.	ts appear to be around ximately 70% of their point, increasing the going forward, and						\$56,200	
5 years old. As such they have reached appropression of the such that have reached appropression of the succepted 20 year service life. At this permaintenance and repair costs can be anticipated eplacement programming should be considered years out. Roof	ximately 70% of their point, increasing a going forward, and						\$56,200	
40				_ — — —				
40 Journalism	Exterior Closure							
HVAC Equipment Enclosure	1,067 LF							
and bottom rails and the 4x4 posts, are badly we cracked/checked. All of the wood on the enclose t is recommended that 5/4 Trex boards be used	eathered and ure should be replaced. to replace the 1x8s.				\$10,100			
40 Journalism	Floor Cover							
Carpet	350 SY							
eplaced. Before installing new carpet, waterproduction	of the concrete slab.			\$17,200 				. — — — — — —
: Replacement/Renewal	AV. SEVER. SCORE = 44	\$0	\$0	\$17,200	\$10,100	\$0	\$56,200	\$83,500
	the wood boards on the HVAC equipment enclored bottom rails and the 4x4 posts, are badly we racked/checked. All of the wood on the enclose is recommended that 5/4 Trex boards be used the new top/bottom 2x4 rails and 4x4 posts should primed and painted after installation. Tool Journalism arpet arpet is badly stained, dirty, generally deteriorately arpet is badly stained. Before installing new carpet, waterproductions are commercial grade directly are commercial grade. Replacement/Renewal	the wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and racked/checked. All of the wood on the enclosure should be replaced. 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. The state of the state	the wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and racked/checked. All of the wood on the enclosure should be replaced. 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. The state of the state	he wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and racked/checked. All of the wood on the enclosure should be replaced. 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. The state of the state	the wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and tracked/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. The state of the st	the wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and racked/checked. All of the wood on the enclosure should be replaced. 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. **Top Journalism** Floor Cover arpet 350 SY arpet is badly stained, dirty, generally deteriorating, and should be applaced. Before installing new carpet, waterproof the concrete slab. Install new low pile high wear commercial grade carpet using waterproof dhesive. **Throughout building** Replacement/Renewal** AV. SEVER. SCORE = 44 \$0 \$0 \$17,200 \$10,100	the wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and racked/checked. All of the wood on the enclosure should be replaced. 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. The state of the state	the wood boards on the HVAC equipment enclosure, including the top and bottom rails and the 4x4 posts, are badly weathered and racked/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. Toof 10 Journalism Floor Cover arpet is badly stained, dirty, generally deteriorating, and should be aplaced. Before installing new carpet, waterproof the concrete slab. Istall new low pile high wear commercial grade carpet using waterproof dhesive. Throughout building Replacement/Renewal AV. SEVER. SCORE = 44 \$0 \$0 \$17,200 \$10,100 \$0 \$56,200

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

Southwestern College

SURVEY DATE: 8/15

16 Yrs.

LAST RENOVATED:

650 **Resource TR** 900 Otay Lakes Rd.

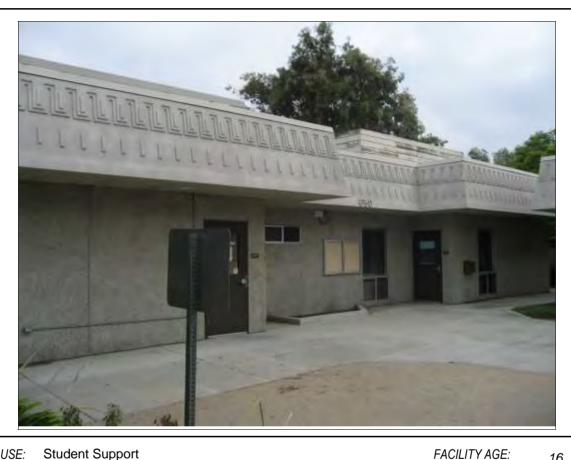
REPAIR COST ESTIMATE IS \$75,500

Facility Condition Rating = 90 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 10 % Cost Per Square Foot is \$30.08

Average Severity Score = 48

Deficiencies Were Identified



PRIMARY USE: Student Support

FACILITY SF: 2,510 NO. OF STORIES:

Current Facility Replacement Cost is Approximately \$765,559

1.0

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)

Southwestern College

SURVEY DATE: 8/15

650 Resource TR

900 Otay Lakes Rd.

		NO 05	AV/ED A O E	DEFICIENCY	0007.050
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 Maintenanc	e	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	\$27.6

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 650 Resource TR

20 Electrical Improvement Light Fixtures

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

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

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

UANTITY: 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

Repair

						LINING SEVERITY SCOI	
SITE: Southwes SACILITY: 650	tern College Resource	ГR		SURVEY DATE::	8/	15	Page 2
SYSTEM SUB-TOTAL	Exterior Clo	sure \$13,550	AV.	SEVERITY SCORE =	50	COST PER BLDG GSF= \$	5.40
approxima repair cost	packaged roof t tely 70% of thei	ir generally accep pated going forwa	ng units app oted 20 year	service life. At this	years point	t s old. As such they hav , increasing maintenand nould be considered for	
	1 LS ew = 20 Yrs.		56,200 2015	Deferrable Deficiency Data Source	 e:	Est. Remaining Life =	= : 5 Yrs.
Replace in 202 YSTEM SUB-TOTAL	. Sustainment Pla	g Priority: C-Preventing Replacement	Years	SEVERITY SCORE =	68	COST PER BLDG GSF= \$	 22.39
6 Paint/Finis 02 The caulkin	ng in the joints onts and deterior		pet caps is		ding th	e potential for moisture	to leak
6 Paint/Finis 02 The caulkir into the joir	ng in the joints on the sand deterior aps on roof 64 LF	of the metal para rate the parapet to REPAIR COST:	pet caps is op. Remov	deteriorating, provi	ding th	e potential for moisture	- — — —

AV. SEVERITY SCORE =

46

\$450

COST PER BLDG GSF= \$0.18

SYSTEM SUB-TOTAL Paint/Finish

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 650 Resource TR

60 Roof Annual PM Roof Drains

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

Maintenance

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 650 Resource TR

40 Roof Annual PM Roof Membrane

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

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

	TENANCE CATEGORY: Ann	ual PM		SURVEY DA	ATE: 8/15					Page 1
SEVER SCORI DEF. N	DEFICIENC)		CRITICAL COST 2015	YR. 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 E	ĒΑ							
101		umps are clogged with significant amounts Drains should be thoroughly cleaned out							. — — — — —	
40	650 Resource TR	Roof								
	Roof Membrane	3,216	SF							
		of leaves and tree debris on the roof	\$150							

IAINTEN	IANCE CATEG	ORY: Improvement			Page 2	Page 2					
EVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 65	50 Res	ource TR	Electrical								
L	ight Fixtures		44 EA								
e a re	xisting fluores	scent lighting is not as ener replaced with LED lighting.	s have indicated they feel the gy efficient as LED lighting Retrofit existing fluorescent, t fixtures with energy efficient				\$2,500				
F	ixtures throu	ghout building — — — — — — — — -		- — — — —		_ — — — —					

	TENANCE CATEGORY: Non-Annual Recurring Ma	aintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER SCORE DEF. N	DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
	debris. However, as more debris and dirt collect difficult to ascertain the condition of the roof and problems. It also can shorten the life of the mem cleaning of the membrane surface is recommend. An assessment of the membrane indicated no appropriate the condition of the membrane using a clean sumps. Power-wash the membrane using a clean sumps.	identify potential brane. Thorough led in about 3 years. parent deficiencies. downspouts and ning solution								
	formulated for single-ply roof membranes. The s cleaned at least every three to four years to main life of the membrane. Note: Use only bonded contractor with experience	tain and prolong the								
	cleaned at least every three to four years to main life of the membrane.	tain and prolong the								
 !6	cleaned at least every three to four years to main life of the membrane. Note: Use only bonded contractor with experience membranes.	tain and prolong the			- — — — —	———·			- — — — — —	. — — -
6	cleaned at least every three to four years to main life of the membrane. Note: Use only bonded contractor with experience membranes. Entire roof	tain and prolong the	. — — —			———·			- — — — — —	. — — .

AINTENANCE CATEGORY: Repair	r/Maintenance			SURVEY DA	ATE: 8/15				Page
EVER. COMPONENT CORE DEFICIENCY EF. NO. BLDG. LOCATION		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 650 Resource TR		Exterior Closure	•						
Stucco/Cement Wall		1 SF							
O4 Repair hole in wall resulting Adjacent to Bldg. 651	from damage.		\$350						

IAIN	TENANCE CATEGO	ORY: Replacement/R	enewal		SURVEY DA	ATE: 8/15				Page
EVER COR EF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
3	650 Reso	ource TR	HVAC							
	HVAC Equipm	ent	1 LS							
06	15 years old. generally accemaintenance a	As such they have reach pted 20 year service life and repair costs can be a	ioning units appear to be around ned approximately 70% of their e. At this point, increasing anticipated going forward, and considered for approximately five						\$56,200 	
0	650 Reso	ource TR	Exterior Closure							
	HVAC Equipm	ent Enclosure	1,775 LF							
03	and bottom rai cracked/check It is recommer The new top/b	ls and the 4x4 posts, are ed. All of the wood on to add that 5/4 Trex board	he enclosure should be replaced. s be used to replace the 1x8s. posts should be treated lumber				\$13,200			
ЭΤΛ	AL: Replaceme		AV. SEVER. SCORE = 64	\$0 \$1.150	\$0 \$0	\$0 \$450	\$13,200 \$17,700	\$0 \$0	\$56,200 \$56,200	\$69,400 \$75,500

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

Southwestern College

SURVEY DATE: 8/15

660 **Community Service** 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$90,800

Facility Condition Rating = 93

Repair Cost as a Percent of Facility Replacement Cost is 7 % Cost Per Square Foot is \$22.42

Average Severity Score = 49

Deficiencies Were Identified



Continuing Education PRIMARY USE: 4,050

FACILITY SF:

NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$1,235,250 FACILITY AGE: 16 Yrs.

LAST RENOVATED:

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)

Southwestern College

SURVEY DATE: 8/15

660 Community Service

900 Otay Lakes Rd.

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	9	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	\$20.6

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,

Southwestern College SURVEY DATE: 8/15

660 Community Service

900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 660 Community Service

20 Electrical Improvement Light Fixtures

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

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

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

FACILITY CONDITION SURVEY DEFICIENCY DETAIL BY BUILDING AND SYSTEM IN DECLINING SEVERITY SCORE ORDER SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 660 **Community Service** 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: REPAIR COST: 1 LS \$70,500 Deferrable Est. Remaining Life = 5 Yrs. Life Expectancy New = 20 Yrs. Estimate Date: 2015 Deficiency Data Source: Condition Survey Recommended Method of Repair: Contract Deficiency Cause is Age/Wear Planning Priority: C-Prevent Bldg. System Failure Benefit Score = 47 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 Metal Parapet Cap Joints 46 Paint/Finish Repair/Maintenance The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak 102 into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. Parapet caps on roof QUANTITY: REPAIR COST: 66 LF \$475 **Deferrable** Est. Remaining Life = 2 Yrs. Life Expectancy New = 15 Yrs. Estimate Date: 2015 Deficiency Data Source: **Condition Survey** Recommended Method of Repair: Contract Deficiency Cause is Weather Planning Priority: D-Escalating Repair Cost Reduction Benefit Score = 38 Maintenance SYSTEM SUB-TOTAL AV. SEVERITY SCORE = COST PER BLDG GSF= \$0.12 Paint/Finish \$475 46 60 **Annual PM Roof Drains** Roof

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

S/TE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 660 Community Service

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

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

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

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

	TENANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER SCORE DEF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 clogge debris, inhibiting drainage. Drains should b least once per year. Roof perimeter		\$650							
	.		. — — — —						· — — — — —	
40	660 Community Service									
40	660 Community Service Roof Membrane	Roof 4,815 SF								

	CILITY CONDITION SURVEY - CRITICAL/5YR.								D	
MAIN	TENANCE CATEGORY: Improvement		SURVEY DATE: 8/15						Page 2	
SEVER SCORE DEF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 existing fluorescent lighting is not as energy eff and should be replaced with LED lighting. Retre recessed can fixtures and suspended light fixtu LED lights.	icient as LED lighting of the cristing fluorescent,				\$3,150				
	Fixtures throughout building								. — — — — — -	
TOTA	AL: Improvement	AV. SEVER. SCORE = 20	\$ 0	\$ 0	\$ 0	\$3,150	\$ 0	\$ 0	\$3,150	

	VANCE CATE	GORY: Non-Annual Recurri	ng Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 60	60 Co	mmunty Service	Roof								
S	Single-Ply R	oof Membrane	4,815 SF								
	otential pro	blems. It also can shorten the	life of the membrane.								
3 d F s fo	s years. An leficiencies. Remove all I sumps. Pow ormulated fo	eaning of the membrane surfact assessment of the membrane eaves/debris from the roof and ver-wash the membrane using a or single-ply roof membranes.	indicated no apparent clean downspouts and a cleaning solution The surface should be								
3 d F s fe	s years. An leficiencies. Remove all I sumps. Pow ormulated fo	eaves/debris from the roof and ver-wash the membrane using a or single-ply roof membranes.	indicated no apparent clean downspouts and a cleaning solution The surface should be								
3 d F s f c li	s years. An leficiencies. Remove all I sumps. Pow ormulated folleaned at lefe of the me	eaves/debris from the roof and ver-wash the membrane using a or single-ply roof membranes. east every three to four years to embrane. nly bonded contractor with exp	indicated no apparent clean downspouts and a cleaning solution The surface should be maintain and prolong the								

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

	TEGORY: Repair/Maintenance			SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
6 660 (Community Service	Paint/Finish							
Metal Para	pet Cap Joints	66 LF							
	ng in the joints of the metal parap he potential for moisture to leak in				\$475				

//AIN	TENANCE CAT	EGORY: Replacement/Ren	ewal		SURVEY DA	ATE: 8/15				Page 5
SEVER SCORI DEF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
8	660 C	Community Service	HVAC							
05	15 years of generally a maintenant	ackaged roof top air conditionild. As such they have reached accepted 20 year service life. Accepted repair costs can be anticed to the control of the costs can be anticed to the costs of the costs can be anticed to the costs of the costs	d approximately 70% of their At this point, increasing						\$70,500	
0	660 C	Community Service	Exterior Closure							
03	The wood I and bottom cracked/ch It is recommended.	rails and the 4x4 posts, are b	enclosure should be replaced. be used to replace the 1x8s. sts should be treated lumber				\$13,200			
ОΤ	AL: Replace	ement/Renewal	AV. SEVER. SCORE = 64	\$0	\$0	\$0	\$13,200	\$0	\$70,500	\$83,700

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

Southwestern College SURVEY DATE: 8/15

700 Art 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$307,750

Facility Condition Rating = 88 (Fair)

Repair Cost as a Percent of Facility Replacement Cost is 12 %

Cost Per Square Foot is \$35.62

Average Severity Score = 56

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)

Southwestern College

SURVEY DATE: 8/15

700 Art

900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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 Maintenanc	e	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	\$32.6

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 buildup, detracting from the building's appearance. All smooth concrete surfaces should be pressure washed with a

Southwestern College SURVEY DATE: 8/15

700 Art 900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 700 Art

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017

20 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 700 Art

68 HVAC Replacement/Renewal

HVAC Equipment

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2040

68 HVAC Replacement/Renewal

HVAC Heating Water Piping Insulation

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

64 HVAC

Repair/Maintenance

Air Handler

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 700 Art

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

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

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

SURVEY DATE. SITE: Southwestern College 8/15 Page 4

FACILITY: 700 Art

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.

REPAIR COST: QUANTITY: 86 SQ \$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

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

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: REPAIR COST: 6 EA Critical Est. Remaining Life = 0 Yrs. \$650

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

SITE: Southwestern College SURVEY DATE::

FACILITY: 700 Art

40 Roof Annual PM

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

Roof Membrane

Maintenance

40 Roof Replacement/Renewal

Wood Sunscreen Boards

8/15

Page 5

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 700 Art

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

VIAIN	TENANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVEI SCOR DEF. N	DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	700 Art	Roof								
	Roof Drains	6 EA								
04	The roof drains and drain sumps are clogged with s debris, inhibiting drainage. Drains should be thorouleast once per year. Roof perimeter		\$650							
0	700 Art	Roof								
	Roof Membrane	8,580 SF								
103	There is a minor amount of leaves and tree debris of membrane surface, which should nevertheless be reshould be cleaned off the roof at least once per year Roof surface	emoved. Debris	\$275							

AINTENANCE CATEG	GORY: Improvement			SURVEY DATE: 8/15					
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 700 Art		Electrical							
Light Fixtures		200 EA							
existing fluore and should be	escent lighting is not as ener e replaced with LED lighting.	s have indicated they feel the rgy efficient as LED lighting . Retrofit existing fluorescent, at fixtures with energy efficient				\$11,450			

MAINTENANCE CATEGORY: Non-Annual Recurring Maintenance				SURVEY DATE: 8/15					Page 3		
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
:3	700 Art		Paint/Finish								
	Exterior Concr	ete Columns/Beams/Roof Par	rapets 2,430 SF								
Exterior Concrete Columns/Beams/Roof Parapet The smooth concrete surfaces on the building, a roof parapets, are badly discolored due to weath from the overall appearance of the building. The spalling of the concrete surfaces on the beams wash all surfaces with biologic agent to remove spalling concrete.		eathering. This detracts There is also random ms and columns. Pressure		\$1,825							
		uilding									

AIN I EIN	ANCE CATE	GORY: Repair/Maintenance)		SURVEY DA	ATE: 8/15					Page 4
EVER. CORE EF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
4 70	0 Art		HVAC								
Ai	r Handler		1 EA								
ap 15 re bu ye	ppears to st years. Ho quirements udgeted for	ing unit in the mechanical roo ill be in good condition. Its repowever, as the unit ages repair will become more frequent. A repairs/maintenance that may repairs maintenance that may repairs maintenance that may repairs/maintenance that may repair to properly maintain the air head repairs/maintenance that may repair to properly maintenance that may repair to properly may repair to properly maintenance that may repair to properly may repair to	maining life is estimated at r and maintenance An allowance should be r be required over the next 5		\$10,400						
70	0 Art		Structural								
Co	oncrete Col	umns and Beams	15 SF								
the co su tre the	e ends of a concrete shour of a concrete shour of a concrete should be applied to be a	om spalling of surface concre pproximately 8 beams, with exuld be removed, spalled areas ned by power wire brushing. It rust neutralizing coating. An ed to all voids, and the voids for patch cement.	xposed rebar. All spalling schipped, and exposed Any exposed rebar should be epoxy bonding agent should		\$1,000						
ac		ended that after the initial repa n a recurring basis at least even building									

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

FACILITY CONDITION SURVEY	- CRITICAL/5YR. DEFICIENCY REPAIR PRO	OGRAMMING DETAIL BY MAINTENANCE/REPLACEMENT CATE	GORY

Roof

MAINTE	ENANCE CATE	GORY: Replacement/Rene	ewal		SURVEY DA	ATE: 8/15				Page
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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			Roof							
102	serious safet cause seriou	ess hatch is broken off at the y hazard as the door cannot s injury to anyone trying to op hatch with a new unit with da	be properly opened and could pen or close the hatch.	\$2,000						
75	700 Art	 :					- — — —			
	Single-Ply Ro	oof Membrane	86 SQ							
	membrane, v		t indicate the single-ply roof is 15 years old. There is only the membrane is only dirty in a				\$100,500			
	fasteners and chalking and deterioration. number of fa- age of the ma apparent con	nent conducted focused on m d determining the condition o crazing of the surface, which Many areas of the seams ay steners that are "lifting" unde embrane, its apparent lack of adition, it is recommended that for replacement in 3 years.	f the surface relative to are indicators of opear frayed and there are a r the membrane. Given the maintenance, and its							
	insulation bost to determine Replacement polystyrene or rated along with mechanically	its condition and whether and the should include installation o	roof deck should be evaluated y repairs are required. f a new vapor barrier, at least 2" thickness and R-10 per drainage, a new 60 mil nd metal parapet cap							
		st estimate does not include ment removal/reset.	deck repairs needed, if any, or							

//AINT	TENANCE CATEGO	PRY: Replacement/Renewal			SURVEY DA	ATE: 8/15				Page
EVER CORE DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
8	700 Art	_	Electrical							
10	approximately is growing observational available, and accepted service equipment as i	panelboards are original to the buildi 50 years old. Although the equipmen blete, replacement parts are expensive the equipment is nearing the end of its ce life. There is also a concern with the theorem of the circuits coecommended that this equipment be a	t is still functional, it e and not readily s generally he reliability of the nnected to each			\$94,300				
8	700 Art		HVAC							- — — — — — — —
	HVAC Equipme	ent	1 LS							
07	are now 14 year of their general maintenance a replacement program out. Refand should be	nsing units appear to have been replants old. As such they have reached a lly accepted 20 year service life. At the nd repair costs can be anticipated go ogramming should be considered for rigerant piping insulation on the roof is replaced when the condensing units an has been included in the cost estimate.	approximately 70% nis point, increasing ing forward, and approximately five also deteriorated are replaced. Forty						\$50,900	
8	700 Art		HVAC							
	HVAC Heating	Water Piping Insulation	1 LS							
80	on the roof has reduce energy	neating piping insulation and exposed deteriorated and is recommended to usage. Three hundred and fifty feet of ermined to require replacement of its et.	be replaced to of one inch diameter						\$13,000	

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

AINTENANC	E CATEGORY: Replaceme	ent/Renewal		SURVEY DA	A <i>TE:</i> 8/15				1	Page 7
EVER. CORE EF. NO. B	COMPONENT DEFICIENCY LDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST / 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 700	Art	Roof								
Wood	Sunscreen Boards	3,024	l LF							
	op surfaces of the sunscree	teriorates the paint fairly rapidly a	and							
eleme expos The si desigr be rep hange coated applie should weath	ents, including rain. This de ses top and side wood surfa unscreens are an integral a n and should be retained. It blaced with treated S4S dou ers. The top surface of the 2 d with 2 coats of a low visco and with a roller. The treated		ion. g pards ew e ating							

Southwestern College

SURVEY DATE: 8/15

46 Yrs.

710 Art Gallery

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:

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)

Southwestern College

SURVEY DATE: 8/15

710 Art Gallery

900 Otay Lakes Rd.

NO.OF AVERAGE DEFICIENCY COST PER										
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 Maintenanc	е	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-

Southwestern College

SURVEY DATE: 8/15

710 Art Gallery

900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: **710** Art Gallery

68 Electrical Replacement/Renewal

Circuit Breaker Panels and Switchboard

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2019

20 Electrical Improvement

Light Fixtures

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 710 Art Gallery

64 HVAC Replacement/Renewal Air Handler

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

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

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

SURVEY DATE .. SITE: Southwestern College 8/15 Page 3

FACILITY: **Art Gallery** 710

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: REPAIR COST: 1 LS Est. Remaining Life = 2 Yrs. \$2,975 **Deferrable**

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

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

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2042

SYSTEM SUB-TOTAL AV. SEVERITY SCORE = COST PER BLDG GSF= \$0.41 Plumbing \$2.975 68

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: REPAIR COST: 75 SQ \$88,500 Est. Remaining Life = 1 Yrs. Deferrable

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

Recommended Method of Repair: Contract Deficiency Cause is No Maintenance

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 710 Art Gallery

60 Roof Annual PM Roof Drains

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

intenance Recommended Method of Repair: In-House

Maintenance

40 Roof Annual PM Roof Membrane

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

40 Roof Replacement/Renewal Wood Sunscreen Boards

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 710 Art Gallery

SYSTEM SUB-TOTAL Roof \$102,075 AV. SEVERITY SCORE = 54 COST PER BLDG GSF= \$14.18

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

MAINT	ENANCE CAT	EGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 A	rt Gallery	Roof								
	Roof Drains	3	4 EA								
I U.3	The roof dra	ains and drain sumps are clo	naged with significant amounts of	\$400							
		per year.	ogged with significant amounts of all be thoroughly cleaned out at	\$400 							
	debris, inhib least once p Roof perime	oiting drainage. Drains shou per year.		\$400 — — — —						. — — — — —	
	debris, inhib least once p Roof perime	oiting drainage. Drains shou per year. eter 	ıld be thoroughly cleaned out at	\$400 — — — —							- — — -

IAINTENANCE CATE	GORY: Improvement		SURVEY DATE: 8/15						Pag
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 710 Art	Gallery	Electrical							
Light Fixtures	3	248 EA							
existing fluor and should b recessed car	Light Fixtures 248 EA 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					\$14,200			

	IANCE CATEGORY: Non-Annual Recurring Mainte	nance		SURVEY DATE: 8/15						Page
SEVER. SCORE DEF. NO.	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
3 710	0 Art Gallery	Paint/Finish								
Ex	xterior Concrete Columns/Beams/Roof Parapets	2,200 SF								
roo fro sp	The smooth concrete surfaces on the building, and the pof parapets, are badly discolored due to weathering om the overall appearance of the building. There is palling of the concrete surfaces on the beams and corash all surfaces with biologic agent to remove staining concrete.	This detracts also random Dlumns. Pressure		\$1,650						

MAINT	TENANCE CATEGORY: Repair/Maintenance			SURVEY DATE: 8/15					
SEVER. SCORE DEF. NO	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0	710 Art Gallery	Structural							
	Concrete Columns and Beams	10 SF							
	There is random spalling of surface concrete on the from minor spalling to moderate spalling with expospalling concrete should be removed, spalled area exposed surfaces cleaned by power wire brushing should be treated with a rust neutralizing coating, agent should then be applied to all voids, and the strength epoxy-based patch cement.	osed rebar. All as chipped, and Any exposed rebar An epoxy bonding		\$700					
	It is recommended that after the initial repairs new addressed on a recurring basis at least every thre Perimeter of building								

FAC	CILITY CO	NDITION SURVEY - CRITIC	AL/5YR. DEFICIENCY REPAIR PR	OGRAMMIN	NG DETAIL BY	Y MAINTENA	ANCE/REPL	ACEMENT C	ATEGORY		
MAIN	TENANCE C	CATEGORY: Replacement/R	Renewal		SURVEY DA	ATE: 8/15					Page 5
SEVER SCORI DEF. N	E	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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-P	ly Roof Membrane	75 SQ								
109	membra extensive making a	ne, which appears to be hypa e amount of debris on the roo	ultant indicate the single-ply roof alon, is 15 years old. There is an of and the membrane is very dirty, ery difficult. It is apparent that in recent times.		\$88,500						
	fasteners chalking deteriora number Maintena of leaks. maintena	of fasteners that are "lifting" u ance has also reported that th Given the age of the membr	on of the surface relative to which are indicators of an appear frayed and there are a under the membrane. The roof has experienced a number trane, its apparent lack of ano, it is recommended that the								
	insulation to determ Replace polystyre rated along mechanic	nine its condition and whethe ment should include installation one or similar insulation board	The roof deck should be evaluated r any repairs are required. on of a new vapor barrier, d of at least 2" thickness and R-10 proper drainage, a new 60 mile, and metal parapet cap								
		ne cost estimate does not inclu quipment removal/reset.	ude deck repairs needed, if any, or								
68	710	Art Gallery	Plumbing							- — — — — — -	
	Domesti	c Water Heating and Storage	Equipment 1 LS								
108	no longe Equipme MBH Inp	er cost-effective to repair. Rep	40 gallon storage tank and 40			\$2,975					

Mechanical Room

MAIN	TENANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page 6
SEVER SCORI DEF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 switchboa power distribution to circuit breaker panels. The sw breaker panelboards are original to the building and 46 years old. Although the equipment is still function obsolete, replacement parts are expensive and not and the equipment is nearing the end of its general life. There is also a concern with the reliability of the provides protection of the circuits connected to each recommended that this equipment be replaced. Various locations	vitchboard and circuit d are approximately onal, it is growing readily available, lly accepted service ne equipment as it					\$87,700 		· 	
64	710 Art Gallery	HVAC								
	Air Handler	1 EA								
106	The air handling unit for this building appears to be system. The unit is deteriorated and is no longer c effective to repair or maintain. Replacement is rechas a chilled water cooling coil and is currently beir campus wide chilled water system and new central <i>Mechanical Room</i>	onsidered cost- ommended. The unit ng connected to the			\$100,700					
40	710 Art Gallery	Roof	- — — — —						. — — — — -	
	Wood Sunscreen Boards	1,835 LF								
104	The top surfaces of the sunscreen boards are conselements, including rain. This deteriorates the pair exposes top and side wood surfaces to weather-ca. The sunscreens are an integral architectural featured design and should be retained. It is recommended be replaced with treated S4S douglas fir browntone hangers. The top surface of the 2x8 and 4xboards coated with 2 coats of a low viscosity 100%-solids applied with a roller. The treated wood and low viscould significantly extend the life of the boards, reweathering and significantly reduce maintenance of All sunscreen boards on perimeter of building	nt fairly rapidly and sused deterioration. e of the building I that the 2x8 boards boards, and new should then be epoxy resin coating cosity epoxy resin tard constant			\$12,900					

IAINTENANCE CATEGOR	RY: Replacement/Renewal			SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
OTAL: Replacemen	nt/Renewal	AV. SEVER. SCORE = 63	\$0	\$88,500	\$116,575	\$0	\$87,700	\$0	\$292,775

Southwestern College SURVEY DATE: 8/15

750 Art 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$362,550

Facility Condition Rating = 95 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 5 %

Cost Per Square Foot is \$22.48

Average Severity Score = 52

10 Deficiencies Were Identified



PRIMARY USE: Classroom FACILITY AGE: 40 Yrs.

\$6,845,400

FACILITY SF: 16,128 NO. OF STORIES: 1.0 LAST RENOVATED:

0 Deficiencies Require Additional Study/Analysis

Current Facility Replacement Cost is Approximately

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)

Southwestern College SURVEY DATE: 8/15

750 Art 900 Otay Lakes Rd.

	MAINTENANCE CATEGORY/BUILL		JU. Julianian		
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	\$21.7

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.

SITE: Southwestern College SURVEY DATE::

FACILITY: **750** Art

20 Electrical Improvement

Light Fixtures

8/15

Page 1

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: **750** Art

64 HVAC Replacement/Renewal

HVAC Equipment

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

64 HVAC Replacement/Renewal

HVAC Equipment

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 Recommende

Recommended Method of Repair: In-House & Contract

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

SURVEY DATE. 8/15 Page 3 SITE: Southwestern College

FACILITY: 750 Art

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.

REPAIR COST: QUANTITY: 140 SQ **Deferrable** Est. Remaining Life = 5 Yrs. \$143,900

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

Deficiency Cause is No Maintenance

Recommended Method of Repair: Contract

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2020 2045

60 **Annual PM** Roof Drains Roof

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: Est. Remaining Life = 0 Yrs. \$650 Critical

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

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: **750** Art

60 Roof Replacement/Renewal

Covered Walkway Support Beam

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016 2041

40 Roof Repair/Maintenance

Single-Ply Roof Membrane

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: **750** Art

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

WAINIE	NANCE CATEGOR	Y: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER. SCORE DEF. NO.	i	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 7	'50 Art		Roof								
F	Roof Drains		6 EA								
			ed with significant amounts of be thoroughly cleaned out at	\$650							
I	least once per ye Roof perimeter									. — — — — —	
	least once per ye		- — — — — — — — — — Roof								
40 7	least once per ye Roof perimeter									. — — — — —	

IAINTENANCE CATE	GORY: Improvement		SURVEY DATE: 8/15						Pag
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 750 Ar	i e	Electrical							
Light Fixture	S	187 EA							
Light Fixtures Maintenance staff and program managers had existing fluorescent lighting is not as energy and should be replaced with LED lighting. Represent recessed can fixtures and suspended light fix LED lights. Fixtures throughout building		gy efficient as LED lighting Retrofit existing fluorescent,				\$10,700			

EAGUITY CONDITION OUR VEV	NOTION /EVO DEFINITION DEPAID DOODAMMINO DE	AU DV MAINTENANCE/DEDI ACEMENT CATECODY
FACILITY CONDITION SURVEY -	CRITICAL/5YR. DEFICIENCY REPAIR PROGRAMMING DET	AIL BY MAINTENANCE/REPLACEMENT CATEGORY

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

Roof

MAIN	TENA	NCE CATE	GORY: Replacement	/Renewal		SURVEY DA	ATE: 8/15				Page 3
SEVE SCOR DEF. I	E	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	Ar	rt	Roof							
	Sin	igle-Ply R	Roof Membrane	140 SQ							
109	me mo cor lac The fas cha det nur thre Give its	embrane, oderate de ndition so king in re e assessi ateners an alking and terioratior mber of faee cuts weren the agapparent ogrammed	which appears to be hypebris and dirt on the meromewhat difficult. It is appeared to the second determining the condition of the surface, asteners that are "lifting" are identified in the meroge of the membrane, its condition, it is recomme	sultant indicate the single-ply roof palon, is 15 years old. There is imbrane, making an assessment of oparent that maintenance has been don membrane seams and ition of the surface relative to which are indicators of ams appear frayed and there are a funder the membrane. In addition, imbrane in one area of the roof. apparent lack of maintenance, and ended that the membrane be ears. This includes the storage area						\$143,900	
	ins to d Re pol rate me	ulation bodetermine placemer lystyrene ed along echanicall	pard are recommended. the its condition and wheth the should include installation boa or similar insulation boa with tapered insulation for	membrane, flashings and any The roof deck should be evaluated her any repairs are required. hation of a new vapor barrier, hard of at least 2" thickness and R-10 hor proper drainage, a new 60 mil hane, and metal parapet cap have to be reset.							

MAINT	ENANCE CA	TEGORY: Replacement/Rer	newal		SURVEY DA	NTE: 8/15					Page 4
SEVER SCORE DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Equ	uipment	1 LS								
108	and requir increasing forward, a exhaust fa painted to In addition	maintenance and repair costs nd replacement should be con in should be replaced and thre retard oxidation of surfaces.	ance and repair. At this point, s can be anticipated going nsidered. One deteriorated roof			\$78,600					
64	750	Art	HVAC								
	HVAC Equ	uipment	1 EA								
107	multi-zone deck. Thi	e unit with a chilled water coolings unit appears fairly well deterion repair or maintain. It should ent.				\$103,300					
60	750	Art	Roof							- — — — — -	
	Covered V	Valkway Support Beam	12 LF								
104	corner of the deterioration of the service of the deterioration of the service of	his beam should be considere on from potentially compromis The beam should be replaced	ns with extensive wood hs of what to appear to be 1/2" d for replacement to prevent sing the integrity of the covered d with a S4S treated browntone hs of this size are available, they ainted prior to installation.		\$950						

AINT	TENANCE CAT	TEGORY: Replacement/Re	enewal		SURVEY D	ATE: 8/15					Page
EVER CORE EF. N	=	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	750 A	Art	Exterior Closure								
	Fascia Boa	ards	290 LF								
03	-	adly deteriorated wood fasci e of building	a boards.			\$1,800					
0	750 A	Art	Roof			_ — — — —				- — — — — — -	
	Wood Sun	screen Boards	3,136 LF								
. —	elements, exposes to The sunso design and be replace hangers. coated with applied with should sign weathering	including rain. This deteriors op and side wood surfaces to creens are an integral archited should be retained. It is read with treated S4S douglast The top surface of the 2x8 at 2 coats of a low viscosity 1	commended that the 2x8 boards fir browntone boards, and new and 4xboards should then be 00%-solids epoxy resin coating I and low viscosity epoxy resin boards, retard constant aintenance costs.			\$22,000					
OT.A	-	ement/Renewal	AV. SEVER. SCORE = 60 SEVER. SCORE = 54	\$0 \$1,050	\$950 \$950	\$205,700 \$205,700	\$0 \$10,700	\$0 \$0	\$143,900 \$143,900	\$350,550 \$362,300	

Southwestern College

SURVEY DATE: 8/15

800 Music

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$78,700

Facility Condition Rating = 98 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 2 %

Cost Per Square Foot is \$8.90

Average Severity Score = 52

10 Deficiencies Were Identified



PRIMARY USE: Classroom/Studio

FACILITY SF: 8,845 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$3,759,125

FACILITY AGE: 50 Yrs.
LAST RENOVATED: 2007

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)

Southwestern College

SURVEY DATE: 8/15

800 Music

900 Otay Lakes Rd.

MAI	NTENANCE CATEGORY/BU	IILDING SYSTEM C	OST 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	9	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-

Southwestern College SURVEY DATE: 8/15

800 Music 900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 800 Music

20 Electrical Improvement Light Fixtures

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

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

SITE: Southwestern College FACILITY: 800 Music

SURVEY DATE::

8/15

Page 2

64 HVAC Repair/Maintenance Air Handler

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 800 Music

SYSTEM SUB-TOTAL Paint/Finish \$2,350 AV. SEVERITY SCORE = 34 COST PER BLDG GSF= \$0.27

100 Roof Replacement/Renewal Roof Ladder

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2040

60 Roof Annual PM Roof Drains

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 800 Music

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

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

Maintenance

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 800 Music

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

MAINTENANCE CATE	GORY: Annual PM			SURVEY DA	NTE: 8/15				Page
EVER. CORE IEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 800 Mu	sic	Roof							
Roof Drains		10 EA							
debris, inhibi least once p	ting drainage. Drains should b	ed with significant amounts of be thoroughly cleaned out at	\$1,050						

NAIN I LIVANUL	CATEGORY: Improvement			Pag					
SEVER. SCORE DEF. NO. BL	COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 F	ixtures	135 EA							
existing and sh recess	Light Fixtures 135 EA 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			

MAINT	ENANCE C	ATEGORY: Non-Annual Rec	urring Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER SCORE DEF. N	Ī	COMPONENT DEFICIENCY C. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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-P	ly Roof Membrane	8,850 SF								
109	There do membrai it will ma identify per membrai recomme revealed Remove sumps. formulate cleaned life of the	ke it very difficult to ascertain the otential problems. It also can see the control of the mended in about 3 years. An assemble of the mended in about 3 years. An assemble of the mended in about 3 years. An assemble of the mended in about 3 years. An assemble of the mended in about 3 years. An assemble of the mended in about 3 years are membrane. The mended in t	on the surface, and the as debris and dirt accumulate, he condition of the roof and shorten the life of the hembrane surface is sessment of the membrane and clean downspouts and ng a cleaning solution as. The surface should be as to maintain and prolong the				\$4,100				
46	800	 Music	Paint/Finish								
	Metal Pa	rapet Cap Joints	72 LF								
105	providing the para	king in the joints of the metal page the potential for moisture to led top. Remove failing caulk a caps on roof	ak into the joints and deteriorate			\$500					
23	800		Paint/Finish			_ — — — —				. — — — — — -	
	Exterior	Concrete Columns/Beams/Roo	f Parapets 2,470 SF								
100	roof para from the spalling of wash all spalling of	pets, are badly discolored due overall appearance of the build of the concrete surfaces on the surfaces with biologic agent to	ling. There is also random beams and columns. Pressure		\$1,850						

IAINTENA	NCE CATE	GORY: Non-Annual Recurring	g Maintenance		SURVEY DA	ATE: 8/15				Pa
EVER. CORE EF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
OTAL:	Non-Ann	ual Recurring Maintenance	AV. SEVER. SCORE = 40	\$0	\$1,850	\$500	\$4,100	\$0	\$0	\$6,450

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	NTENANCE CATEGORY: Repair/Maintenance			SURVEY DA	ATE: 8/15					Page 5
EVEI COR DEF. I	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
4	800 Music	HVAC								
	Air Handler	1 EA								
08	The air handling unit in the mechanical room was appears to still be in good condition. Its remaining 15 years. However, as the unit ages repair and m requirements will become more frequent. An allow budgeted for repairs/maintenance that may be request in order to properly maintain the air handler Mechanical Room	life is estimated at aintenance vance should be uired over the next 5		\$10,000 						
0	800 Music	Structural								
	Concrete Columns and Beams	30 SF								
01	There is minor spalling of surface concrete on the concrete should be removed, spalled areas chippe surfaces cleaned by power wire brushing. An epo should then be applied to all voids, and the voids f strength epoxy-based patch cement.	ed, and exposed xy bonding agent		\$700						
	It is recommended that after the initial repairs new addressed on a recurring basis at least every three									

MAIN	TENANCE	CATEGORY: Replacement/Re	enewal		SURVEY DA	NTE: 8/15				Page 6
SEVEI SCOR DEF. I	E	COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 La	adder	1 EA							
102	somew ladder	of access ladder is wood and ap hat rickety to climb and does no with an aluminum roof ladder an ccess hatch	ot appear very safe. Replace this	\$2,200						
68	800	Music	HVAC							
	HVAC	Equipment	1 LS							
107	are now of their mainter replace years of Refrige be repl	nance and repair costs can be a ement programming should be co out.	ove reached approximately 70% vice life. At this point, increasing anticipated going forward, and considered for approximately five of is also deteriorated and should are replaced. Forty feet of						\$38,000	
40	800	Music	Roof							
	Wood 9	Sunscreen Boards	1,800 LF							
104	element expose The su design be repl hanger coated applied should weathe	nts, including rain. This deteriora es top and side wood surfaces to nscreens are an integral archite	o weather-caused deterioration. ctural feature of the building commended that the 2x8 boards ir browntone boards, and new and 4xboards should then be 00%-solids epoxy resin coating and low viscosity epoxy resin e boards, retard constant aintenance costs.			\$12,600				

SEVER. COMPONENT SCORE DEFICIENCY CRITICAL DEF. NO. BLDG. LOCATION SYSTEM COST YR. 1 COST YR. 2 COST YR. 3 COST YR. 4 COST YR. 5 COST TOTAL COST YR. QUANTITY 2015 2016 2017 2018 2019 2020 ⁰⁻⁵	
OTAL: Replacement/Renewal	

Southwestern College

SURVEY DATE: 8/15

850 Music

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$55,175

Facility Condition Rating = 98 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 2 %

Cost Per Square Foot is \$7.66

Average Severity Score = 48

13 Deficiencies Were Identified



PRIMARY USE: Classroom/Studio

FACILITY SF: 7,200 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$3,060,000

FACILITY AGE: 40 Yrs.

LAST RENOVATED: 2007

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)

Southwestern College

SURVEY DATE: 8/15

850 Music

900 Otay Lakes Rd.

MAI	NTENANCE CATEGORY/BU	ILDING SYSTEM C	OST 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 Maintenanc	e	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.

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 buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 850 Music

20 Electrical Improvement Light Fixtures

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

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

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

Maintenance

FACILITY CONDITION SURVEY DEFICIENCY DETAIL BY BUILDING AND SYSTEM IN DECLINING SEVERITY SCORE ORDER SURVEY DATE .. 8/15 Page 2 SITE: Southwestern College FACILITY: 850 Music SYSTEM SUB-TOTAL HVAC \$23,700 AV. SEVERITY SCORE = 42 COST PER BLDG GSF= \$3.29 Paint/Finish **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints 46 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak 107 into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. Parapet caps on roof QUANTITY: Est. Remaining Life = 2 Yrs. 84 LF REPAIR COST: \$600 **Deferrable** Life Expectancy New = 15 Yrs. Estimate Date: 2015 Deficiency Data Source: Condition Survey Deficiency Cause is Weather Recommended Method of Repair: Contract Planning Priority: D-Escalating Repair Cost Reduction Benefit Score = 38 Maintenance

23 Paint/Finish Exterior Concrete Columns/Beams/Roof Parapets **Non-Annual Recurring Maintenance** 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: REPAIR COST: 2,200 SF \$1.650 **Deferrable** Est. Remaining Life = 1 Yrs. Deficiency Data Source: Condition Survey Life Expectancy New = 10 Yrs. Estimate Date: 2015

Deficiency Cause is Weather

Recommended Method of Repair: Contract

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

Maintenance

SYSTE	M SUB-TOTAL	Paint/Finish	\$2,250	AV. SEVERITY SCORE =	34	COST PER BLDG GSF= \$0.31
70	Paving	Repair/N	laintenance	Concrete	Sidewa	alk
109	•	f the concrete side	walk on the sout	h side of the building is bad	dly brol	ken and should be replaced to

avoid tripping hazards.

South side of building

QUANTITY: REPAIR COST: 20 SF **Deferrable** Est. Remaining Life = 1 Yrs. \$750 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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 850 Music

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

Repair

SYSTEM SUB-TOTAL Paving \$1,050 AV. SEVERITY SCORE = 55 COST PER BLDG GSF= \$0.15

100 Roof Replacement/Renewal Roof Access Hatch

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

60 Roof Annual PM Roof Drains

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 850 Music

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

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 850 Music

40 Roof Replacement/Renewal

Wood Sunscreen Boards

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

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

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

MAINT	ENANCE CAT	TEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER. SCORE DEF. NO	Ī	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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		<i>f</i> lusic	Roof								
	Roof Drains	S	4 EA								
104	The roof dr	rains and drain sumps are clo	gged with significant amounts of	\$400							
104		ibiting drainage. Drains shoul per year.	gged with significant amounts of d be thoroughly cleaned out at	\$400						. — — — — —	
	debris, inhi least once Roof perim	ibiting drainage. Drains shoul per year.		\$400	- — — — —					. — — — — —	
	debris, inhi least once Roof perim	ibiting drainage. Drains shoul per year. neter ———————————————————————————————————	d be thoroughly cleaned out at	\$400						. — — — — —	_ — — -

IAINTENANCE CATE	GORY: Improvement			SURVEY DA	ATE: 8/15				Pag
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 850 Mu	sic	Electrical							
Light Fixtures		131 EA							
existing fluore and should be	escent lighting is not as ener e replaced with LED lighting.	s have indicated they feel the gy efficient as LED lighting . Retrofit existing fluorescent, at fixtures with energy efficient				\$7,500			

MAIN	TENANCE CATEG	ORY: Non-Annual Recu	ırring Maintenance		SURVEY DA	NTE: 8/15					Page 3
SEVEF SCOR DEF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Mus	sic	Roof								
	Single-Ply Ro	of Membrane	7,500 SF								
112	of leaf and off debris and dir ascertain the also can shor membrane su of the membrane sumps. Power formulated for cleaned at lealife of the mem	ner debris, and the surface to continue to accumulate, is condition of the roof and id ten the life of the membran arface is recommended in a cane revealed no apparent of aves/debris from the roof active as the membrane using single-ply roof membrane ast every three to four years of the continuation.	and clean downspouts and ng a cleaning solution			\$3,000					
46	850 Mus	 sic	Paint/Finish								
	Metal Parapet	t Cap Joints	84 LF								
107	providing the	potential for moisture to lea p. Remove failing caulk a	rapet caps is deteriorating, ak into the joints and deteriorate and re-caulk all joints.			\$600					
23	850 Mus	sic	Paint/Finish								
	Exterior Conc	rete Columns/Beams/Roof	Parapets 2,200 SF								
100	roof parapets from the overa spalling of the	, are badly discolored due to all appearance of the buildi e concrete surfaces on the aces with biologic agent to rete.	beams and columns. Pressure		\$1,650						

IVIAIIV	TENANCE CATEGORY: Non-Annual Recurring Mai	ntenance		SURVEY DATE: 8/15						Page 4
SEVER SCOR DEF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 roo deteriorating, allowing hot and cold air to escape to allowing water to potentially leak into the ducts. The ductwork and wastes energy. The existing sealant and the joints resealed. Roof	o the outside, and his can deteriorate the			\$13,700					

//AIN	TENANCE (CATEGORY: Repair/Maintena	nce		SURVEY DA	<i>TE:</i> 8/15					Page 5
SEVER SCORE DEF. N	=	COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	850	Music	Paving								
09	A portio badly br	te Sidewalk on of the concrete sidewalk on the roken and should be replaced to ride of building			\$750						
64	850	Music	HVAC			- — — —				- — — — — —	
11	appears 15 years requirer budgete years in	handling unit in the mechanical s to still be in good condition. Its s. However, as the unit ages rements will become more frequered for repairs/maintenance that repairs to properly maintain the anical Room	s remaining life is estimated at pair and maintenance at. An allowance should be may be required over the next 5		\$10,000						
50	850	Music	Structural								
01	There is concrete surfaces should t strength	te Columns and Beams is minor spalling of surface concr ie should be removed, spalled an is cleaned by power wire brushin then be applied to all voids, and in epoxy-based patch cement. commended that after the initial re	reas chipped, and exposed ag. An epoxy bonding agent the voids filled with a high-epairs new spalling be		\$700						
		sed on a recurring basis at least ter of building	every three to four years.			- — — — —				. — — — — —	
0	850	Music	Paving								
		te Walkway	25 LF								
80	that sho	ncrete walk on the west side of the ould be sealed to prevent further de of building	he building has several cracks deterioration of the concrete.			\$300					

MAINTENANCE CA	TEGORY: Repair/Maintenance			SURVEY D	A <i>TE:</i> 8/15					Page (
SEVER. SCORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
OTAL: Repair	/Maintenance	AV. SEVER. SCORE = 56	\$0	\$11,450	\$300	\$0	\$0	\$0	\$11,750	

	TENANCE CATEGORY: R	placement/Renewal			SURVEY DA	ATE: 8/15				Pag
SEVER SCOR DEF. N	E DEFICIE	CY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
00	850 Music		Roof							
	Roof Access Hatch		1 EA							
102	hatch is now covered by Access is now by exten over a 4-foot parapet we especially in inclement	access in this building. The HVAC ductwork and is no less to ladder, which then neces to access the roof. This ceather. A new access hat be bar should be installed.	onger useable. essitates climbing an be dangerous,	\$4,000						
0	850 Music		Roof	- — — — —			. — — — —			- — — — — — —
	Wood Sunscreen Board	;	1,760 LF							
105	elements, including rair exposes top and side were the sunscreens are an design and should be rebe replaced with treated hangers. The top surfacoated with 2 coats of a applied with a roller. The should significantly extends	unscreen boards are const This deteriorates the paint od surfaces to weather-cau ntegral architectural feature ained. It is recommended in S4S douglas fir browntone of the 2x8 and 4xboards in own viscosity 100%-solids en or treated wood and low visco ind the life of the boards, retaintly reduce maintenance con perimeter of building	fairly rapidly and used deterioration. of the building that the 2x8 boards boards, and new should then be poxy resin coating osity epoxy resin ard constant			\$12,300				

Southwestern College

SURVEY DATE: 8/15

900 Auditorium

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$522,500

Facility Condition Rating = 96 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 4 %

Cost Per Square Foot is \$21.91

Average Severity Score = 52

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)

Southwestern College **900** Auditorium

SURVEY DATE: 8/15

900 Otay Lakes Rd.

MAINTENANCE	CATEGODY/BIIII	DING SYSTEM	COST SUMMARY
WAINIENANGE	CA I EGUR 1/BUIL	.レルリ うすうしこい	CUSI SUIVIVIART

Annual PM Roof Annual PM Improvement Electrical	2 2 1 1 1	50 50 20 50	\$1,875 \$1,875 \$19,500	\$0.08
	1	20	\$19,500	\$0.08
Improvement Electrical	1		,	
	-	50	# 00 000	
Improvement Exterior Closure	1		\$38,000	
Improvement Roof		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.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 900 Auditorium

68 Electrical Replacement/Renewal

Distribution Switchboard and Circuit Breaker Panel

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 900 Auditorium

60 Exterior Closure Replacement/Renewal

Aluminum/Glass Double Entry Door

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2043

50 Exterior Closure Improvement

Concrete Parapet

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 900 Auditorium

68 HVAC Replacement/Renewal

HVAC Equipment

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 900 Auditorium

40 Paint/Finish Non-Annual Recurring Maintenance Exterior Metal Door

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 900 Auditorium

60 Roof Annual PM Roof Drains

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

Planning Priority: C-Prevent Bldg. System Failure

Maintenance

Benefit Score = 36

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

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

Maintenance

FACILITY CONDITION SURVEY DEFICIENCY DETAIL BY BUILDING AND SYSTEM IN DECLINING SEVERITY SCORE ORDER SITE: Southwestern College FACILITY: 900 Auditorium Page 6

SITE: FACILIT		ern College Auditorium			SURVEY DATE::	8/15	Page 6
40	Roof	Annu	al PM		Roof Memb	rane	
103							his can create a scouring f the roof at least once per
	Roof surfac	e on all three l	evels				
QUANTIT	TY: 21,8	865 SF	REPAIR COST:	\$675	Deferrable Deferrable	Est.	Remaining Life = 0 Yrs.
Life Ex	xpectancy Ne	w = 1 Yrs.	Estimate Date:	2015	Deficiency Data Source	: Cond	ition Survey
Deficie	ency Cause is	No Maintena	nce	Reco	mmended Method of Rep	pair: In-Hou	 se
Benefi	t Score = 34	Plannin	g Priority: C-Pr	event Bld	g. System Failure		
Maint	ononoo						
	enance						
SYSTE	/ SUB-TOTAL	Roof	\$10,250)	AV. SEVERITY SCORE =	63 COS	T PER BLDG GSF= \$0.43
20	Site	Non-	Annual Recurr	ing Maint	enance Tree		
101		at overhangs th ck from over th		the lower	roof and allows excess	ive debris to	o build up on the roof needs
	West side o	f 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

Maintenance

SYSTEM SUB-TOTAL Site \$750 AV. SEVERITY SCORE = 20 COST PER BLDG GSF= \$0.03

SITE: Southwestern College SURVEY DATE:: 8/15 Page 7

FACILITY: 900 Auditorium

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

	TENANCE CATEGORY: Annu	al PM		SURVEY D	ATE: 8/15					Page 1
SEVEI SCORI DEF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	2 EA							
105		umps are clogged with significant amount of the control of the con								
10	900 Auditorium	Roof								
40	900 Auditorium Roof Membrane	Roof 21,865	5 SF							

MAINT	ENANCE CA	ATEGORY: Improvement			SURVEY DA	NTE: 8/15				Page
SEVER SCORE DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
00		Auditorium	Roof							
	Roof Lad	der	1 EA							
07	safety.	ractable roof ladder grab bar of	extender on top of roof ladder for		\$475					
0	900	Auditorium	Exterior Closure							
	Concrete	Parapet	990 LF							
02	middle ar allow wat spalling of brushed to parapet of	nd lower roofs exhibit spalling	ent future damage a metal hree roofs.				\$38,000			
0	900	Auditorium	Electrical							
	Light Fixt	ures	341 EA							
09	existing fl and shou recessed LED light	uorescent lighting is not as er ld be replaced with LED lightic can fixtures and suspended I	ers have indicated they feel the nergy efficient as LED lighting ng. Retrofit existing fluorescent, ight fixtures with energy efficient						\$19,500	

MAIN	TENANCE CA	TEGORY: Non-Annual Rec	urring Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER SCORI DEF. N	 R. ≣	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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		Auditorium	Roof								
1113	The single leaf and or debris and condition of the life of the sumps. P formulated cleaned at life of the life and at life of the life and at life of the life life and at life of the life life and life life life life life life life life	I dirt accumulate, it will make of the roof and identify potention the membrane. Thorough clearended in about 3 years. An ane membrane revealed no appull leaves/debris from the roof a cower-wash the membrane using the for single-ply roof membrane to least every three to four year membrane.	as some dirty areas. As more it very difficult to ascertain the al problems. It also can shorten aning of the membrane surface assessment of relatively clean parent deficiencies. and clean downspouts and ing a cleaning solution				\$7,900				
40	900	Auditorium	Paint/Finish								
106	exterior su metal. All coats of e	oors on both sides of the building	ed, a rust inhibiting primer and 2		\$4,800						
30	900	Auditorium	Paint/Finish			<u></u>					
	Metal Can	ору	900 SF								
108	A close insimproperly a primer. surface poshould the	spection indicates that the me prepared, quite likely without All loose paint should be thore	t prepping the metal or applying oughly scraped and the entire g primer and 2 coats of enamel	\$3,500							

AINTENANCE C	ATEGORY: Non-Annual Recurri	ng Maintenance		SURVEY DA	ATE: 8/15				Pag
EVER. CORE EF. NO. BLD	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
900	Auditorium	Site							
Tree		1 LS							
excessive the roof.	that overhangs the west side of the edebris to build up on the roof needle of lower roof			\$750					

MAINTENA	ANCE CATEGORY: Repair/Maintenance			SURVEY DA	NTE: 8/15				Р	Page !
SEVER. SCORE DEF. NO.	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 900) Auditorium	Structural								
Co	oncrete Columns and Beams	35 SF								
col rer po to a	nere is minor spalling of surface concrete on the lumns and on the parapet base. All spalling comoved, spalled areas chipped, and exposed subwer wire brushing. An epoxy bonding agent shall voids, and the voids filled with a high-strengment.	oncrete should be urfaces cleaned by nould then be applied		\$2,400						
ad	is recommended that after the initial repairs ne Idressed on a recurring basis at least every three rimeter of building									

<i>MAINTEN</i>	NANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15				Pag
SEVER. SCORE DEF. NO.	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
8 90 0	00 Auditorium HVAC Equipment	HVAC 1 LS							
ye bo is	The hot water boiler appears to be original, which the boiler sold, well past its expected service life of 35 to oiler going forward will be increasingly costly, as evident. If the college intends to keep this facts to 5 years the boiler will definitely need to be respectively.	5 years. Maintaining the nd some deterioration ility longer that another				\$117,700			
eit re Ut ec	The boiler is located in the basement and any resistence be able to pass through a standard-width equire major structural demo work to walls, which still be available doorway would require the equipment to be multiple packaged boilers piped Mechanical Room	doorway or would ch would be very costly. replacement							
8 90	00 Auditorium	HVAC	· — — — —			. — — — —			
H,	IVAC Equipment	1 LS							
ap	except for the air handler that serves the main suppears to have been replaced in the recent pastiquipment appears to be original, which would not point, increasing maintenance and repair coloring forward, and replacement programming should be appeared to the	st, the building HVAC nake it 48 years old. At sts can be anticipated						\$135,800	

WAINT	ENANCE CAT	EGORY: Replacement/Rend	ewal		SURVEY D	A <i>TE:</i> 8/15					Page 7
SEVER SCORE DEF. N	Ī	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
88		uditorium Switchboard and Circuit Brea	Electrical								
111	original to the equipmexpensive as its generall reliability of connected replaced if years.	y accepted service life. There the equipment as it provides to each breaker. It is recomm the college intends to retain the	ately 48 years old. Although lete, replacement parts are the equipment is at the end of is also a concern with the protection of the circuits ended that this equipment be						\$150,800		
	Various loc	rations									
60	900 A	uditorium	Exterior Closure								
60 60	900 A	uditorium Glass Double Entry Door	4 EA								
	900 A Aluminum/0 The glass of the finish is operate pro	uditorium	4 EA puilding appear to be original. It is and panic bars no longer to repairs are no longer cost-				\$39,000				
104	900 A Aluminum/0 The glass of the finish i operate professive. V Replace the thick temperature of the control o	uditorium Glass Double Entry Door entry doors at the front of the best badly weathered, the closers operly and are of an age where weatherstripping is poor and general doors with anodized aluminulated insulating glass, narrow supping, panic hardware and clo	4 EA puilding appear to be original. It is and panic bars no longer expairs are no longer cost-glazing is not energy efficient. Jum and glass doors with 1/2" tiles and jambs, hardware				\$39,000				
	900 A Aluminum/0 The glass of the finish i operate proceffective. V Replace the thick tempe weatherstri	uditorium Glass Double Entry Door entry doors at the front of the best badly weathered, the closers operly and are of an age where weatherstripping is poor and general doors with anodized aluminulated insulating glass, narrow supping, panic hardware and clo	4 EA puilding appear to be original. It is and panic bars no longer expairs are no longer cost-glazing is not energy efficient. Jum and glass doors with 1/2" tiles and jambs, hardware				\$39,000				

Southwestern College

SURVEY DATE: 8/15

1100 Warehouse 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$98,400

Facility Condition Rating = 93

Repair Cost as a Percent of Facility Replacement Cost is 7 % Cost Per Square Foot is \$11.86

Average Severity Score = 45

Deficiencies Were Identified



Warehouse PRIMARY USE:

LAST RENOVATED:

37 Yrs.

FACILITY SF: 8,300 NO. OF STORIES: 2.0

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)

Southwestern College SURVEY DATE: 8/15

1100 Warehouse 900 Otay Lakes Rd.

mrui	NTENANCE CATEGORY/BUILL	JING STSTEW C	USI SUWWART		
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

Southwestern College SURVEY DATE: 8/15

1100 Warehouse 900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1100 Warehouse

20 Electrical Improvement Light Fixtures

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 1100 Warehouse

68 HVAC Replacement/Renewal

HVAC Equipment

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

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

Maintenance

SYSTEM SUB-TOTAL HVAC \$73,200 AV. SEVERITY SCORE = 44 COST PER BLDG GSF= \$8.82

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 1100 Warehouse

68 Plumbing Replacement/Renewal

Domestic Water Heating and Storage Equipment

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

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

Maintenance

SURVEY DATE:: Page 4 SITE: Southwestern College 8/15

FACILITY: 1100 Warehouse

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

REPAIR COST: \$400 QUANTITY: 6.000 SF Deferrable Est. Remaining Life = 0 Yrs.

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

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

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

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

=	ICE CATEGORY: Annual PM		SURVEY DA	ATE: 8/15				Pag	
SEVER. SCORE DEF. NO.	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 1100) Warehouse	Roof							
Roo	f Membrane	6,000 SF							
can	re is a minor amount of debris on the roof no create a scouring action across the surface ns. The overall condition of the roof membrous. Debris should be cleaned off the roof at	e and seriously clog roof rane appears to be	\$400						

IVIAIIV I	MAINTENANCE CATEGORY: Improvement			SURVEY DATE: 8/15							
SEVER SCORE DEF. N	Ī	COMPONENT DEFICIENCY PG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
	Concret	e Parapet	314 LF								
01	A numb	er of places on the top of the c	oncrete parapet exhibit spalling of				\$13.000				
	concrete rainwate this prob <i>Entire p</i>	e under where rebar is located er to collect. This will result in blem the installation of a metal earapet					\$13,000 — — — —			· 	<u> </u>
101	concrete rainwate this prob	e under where rebar is located. er to collect. This will result in a blem the installation of a metal earapet Warehouse	, leaving large dimples that allow rusting of the rebar. To prevent				\$13,000 			. — — — — .	

//AINT	ENANCE C	ATEGORY: Non-Annual Recur	AINTENANCE CATEGORY: Non-Annual Recurring Maintenance					SURVEY DATE: 8/15					
SEVER SCORE DEF. N	Ī	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5			
0	1100	Warehouse	Roof										
06	The sing debris, a very diffiproblems of the methorough three years Remove sumps. formulate cleaned life of the	all leaves/debris from the roof ar Power-wash the membrane using ed for single-ply roof membranes at least every three to four years e membrane. se only bonded contractor with expess.	accumulations can make it the roof and identify potential ne membrane. An examination deficiencies. However, a use is recommended in about and clean downspouts and g a cleaning solution. The surface should be to maintain and prolong the				\$2,600						
0	1100		 HVAC			_ — — — —	. — — — —			- — — — — -			
		istribution Ductwork	525 LF										
02	deteriora allowing ductwork	sealant on the metal ductwork outing, allowing hot and cold air to water to potentially leak into the cand wastes energy. The existing oints resealed.	escape to the outside, and ducts. This can deteriorate the			\$5,400							

MAIN'	TENANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15				Page
SEVER SCORI DEF. N	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
88	1100 Warehouse Domestic Water Heating and Storage Equipment	Plumbing 1 LS							
105	The domestic hot water heater and storage tank are their expected service life and appear to be deterioral is warranted Equipment includes approximately a 60 tank and 140 MBH input natural gas heating capacity. <i>Mezzanine Level</i>	nearing the end of ating. Replacement gallon storage			\$4,000				
8	1100 Warehouse	HVAC	- — — — —						- — — — — — — —
	HVAC Equipment	1 LS							
04	The two packaged roof top air conditioning units with appear to have been replaced in 2001 and are now 1 is approximately 70% of the generally accepted 20 y the equipment. At this point, increasing maintenance can be anticipated going forward, and replacement p be considered for approximately five years out. One unit heaters is also inoperative and should be replactime.	14 years old, which ear service life of e and repair costs orogramming should of two natural gas						\$67,800	
	Other items on the roof that require attention include that is rusting and should be replaced, and one circu exhaust fan that appears original and should also be Roof	lar aluminum	. — — — —						
	AL: Replacement/Renewal AV. S	EVER. SCORE = 68	\$0	\$0	\$4,000	\$0	\$0	\$67,800	\$71,800

Southwestern College

SURVEY DATE: 8/15

1200 Maintenance

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$126,600

Facility Condition Rating = 88 (Fair)

Repair Cost as a Percent of Facility Replacement Cost is 12 %

Cost Per Square Foot is \$20.27

Average Severity Score = 54

B Deficiencies Were Identified



PRIMARY USE: Maintenance Support

FACILITY SF: 6,247 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$1,093,225

FACILITY AGE: 50 Yrs.
LAST RENOVATED: 1968

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)

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1200 Maintenance

20 Electrical Improvement Light Fixtures

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 1200 Maintenance

75 Roof Replacement/Renewal

Corrugated Metal Roof Panels

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

IAINTENANCE CATE	GORY: Improvement			SURVEY DA	ATE: 8/15				Р
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 1200 Ma	intenance	Electrical							
Light Fixtures	3	82 EA							
existing fluor and should b	escent lighting is not as ener re replaced with LED lighting.	s have indicated they feel the rgy efficient as LED lighting . Retrofit existing fluorescent, at fixtures with energy efficient					\$4,700		

IAIN	ENANCE CATE	GORY: Replacement/Renew	val		SURVEY DA	ATE: 8/15					Page 2
EVER CORL DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	1200 Ma	intenance	Roof								
	Corrugated N	letal Roof Panels	65 SQ								
00	in the corrug long. Numer maintenance well, though building. Fur even be origi Strong consi building is to	he building there is extensive of ated metal roof along two transious small holes are also visible personnel indicated that there these areas are obscured from ther discussion indicates that the nal to the building (1965 or 1964) deration should be given to repose the retained beyond another for only worsen. A standing seam	everse roof beams 35' to 40' e. Discussion with are leaks in other areas as easy view inside the he roof is very old, and may 68). clacing the roof if this ur to five years, as the			\$69,900					
8	1200 Ma	intenance	HVAC								
	HVAC Equip	ment	1 LS								
. —	appear to ha is approxima the equipme can be antici be considere heater and o be replaced	taged roof top air conditioning we been replaced in 2001 and a tely 70% of the generally accept. At this point, increasing madeated going forward, and replad for approximately five years and the same time.	are now 14 years old, which oted 20 year service life of intenance and repair costs cement programming should out. One natural gas unit						\$52,000 		

Southwestern College

SURVEY DATE: 8/15

1250 **Auto Maintenance** 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$75,450

Facility Condition Rating = 23 (Failed)

Repair Cost as a Percent of Facility Replacement Cost is 77 %

Cost Per Square Foot is \$134.73

Average Severity Score = 52

Deficiencies Were Identified



PRIMARY USE: Maintenance Support

560

FACILITY SF:

NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$98,000

47 Yrs. LAST RENOVATED:

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)

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1250 Auto Maintenance

68 Electrical Replacement/Renewal

Circuit Breaker Panels

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018

20 Electrical Improvement

Light Fixtures

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 1250 Auto Maintenance

68 HVAC Replacement/Renewal

HVAC Equipment

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

AINTENANCE CATE	GORY: Improvement			Page	Page					
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 1250 Aut	o Maintenance	Electrical								
Light Fixtures		46 EA								
existing fluore and should be	staff and program managers escent lighting is not as energ e replaced with LED lighting. fixtures and suspended light	gy efficient as LED lighting					\$2,650			

IAIN	NTENANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page 2
EVEI COR EF. I		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
}	1250 Auto Maintenance	HVAC								
)1	HVAC Equipment A split system heat pump serving the main office longer considered cost-effective to repair or material warranted. An evaporative cooler and two unit deteriorating and should be replaced at the same linterior and exterior of main office area	intain. Replacement is heaters are also			\$41,600					
	1250 Auto Maintenance	Electrical								
02	Circuit Breaker Panels The circuit breaker panelboards are original to approximately 44 years old. Although the equipis obsolete, replacement parts are expensive a and the equipment is at the end of its generally There is also a concern with the reliability of the provides protection of the circuits connected to recommended that this equipment be replaced. Interior	oment is still functional, it nd not readily available, accepted service life. equipment as it each breaker. It is				\$31,200				
)T	ΓAL: Replacement/Renewal	AV. SEVER. SCORE = 68	\$0	\$0	\$41,600	\$31,200	\$0	\$0	\$72,800	

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

Southwestern College

SURVEY DATE: 8/15

1400 **Cesar Chavez-Administration** 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$182,150

Facility Condition Rating = 99 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 1 % Cost Per Square Foot is \$3.45

Average Severity Score = 52

Deficiencies Were Identified



PRIMARY USE: Administration

FACILITY SF:

NO. OF STORIES: 2.0

FACILITY AGE: 50 Yrs. LAST RENOVATED: 2003

Current Facility Replacement Cost is Approximately \$16,097,900

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is A

52,780

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)

Southwestern College SURVEY DATE: 8/15

1400 Cesar Chavez-Administration 900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/BU	IILDING SYSTEM C	OST 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1400 Cesar Chavez-Administration

20 Electrical Improvement Light Fixtures

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 1400 Cesar Chavez-Administration

68 HVAC Replacement/Renewal HVAC Equipment

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

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

SURVEY DATE .. SITE: Southwestern College 8/15 Page 3

FACILITY: 1400 **Cesar Chavez-Administration**

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

SYSTEM SUB-TOTAL

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

68

AV. SEVERITY SCORE =

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2027 2037

COST PER BLDG GSF= \$0.19 Plumbing \$10,100

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: REPAIR COST: 8 EA \$750 Critical Est. Remaining Life = 0 Yrs.

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

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

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 1400 Cesar Chavez-Administration

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

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

Maintenance

40 Roof Annual PM Roof Membrane

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

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

	NANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER. SCORE DEF. NO.	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
	400 Cesar Chavez-Administration	Roof								
R	Roof Drains	8 EA								
de le	The roof drains and drain sumps are clogged with debris, inhibiting drainage. Drains should be thore east once per year. Roof perimeter		\$750 							
0 14	400 Cesar Chavez-Administration	Roof								
R	Roof Membrane	24,333 SF								
	There are significant amounts of leaves and debri The upper roof, however, is free of debris. Debris action across the surface and seriously clog roof of the cleaned off the roof at least once per year.	can create a scouring	\$850							

AINTENANCE CATEGORY: Improvement				F	Page					
EVER. CORE EF. NO. BLD	COMPONENT DEFICIENCY IG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 1400	Cesar Chavez-Administration	Electrical								
Light Fi	xtures	815 EA								
existing and sho recesse	nance staff and program managers have fluorescent lighting is not as energy efficiently be replaced with LED lighting. Retroduced can fixtures and suspended light fixtures. Itures throughout building	cient as LED lighting fit existing fluorescent,					\$46,600			

MAINTENANCE CATEGORY: Non-Annual Recurring Maintenance		aintenance		SURVEY DATE: 8/15						Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 1400 Ce	sar Chavez-Administration	Roof								
Single-Ply R	oof Membrane	24,333 SF								
This can she	rten the life of the membrane, thou	sh avarall roof condition								
	d. Thorough cleaning of the membi									
appears goo recommende Remove all I sumps. Pow formulated fo	d. Thorough cleaning of the membined. eaves/debris from the roof and cleater-wash the membrane using a cleater single-ply roof membranes. The stast every three to four years to main	ane surface is n downspouts and aning solution surface should be								

MAINTENANCE CATEGORY: Repair/Maintenance		GORY: Repair/Maintenance			SURVEY DA	ATE: 8/15					Page
SEVER SCORI DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
8	1400 Ce	sar Chavez-Administration	HVAC								
	HVAC Equip	ment	1 LS								
		e should be budgeted for repairs/marthe next 5 years in order to proper neir life.	ly maintain the units	- — — —							
	4400 - 00	an Chaver Administration	Doint/Cinich								
16	1400 Ces Metal Parape	sar Chavez-Administration	Paint/Finish 77 LF								

MAIN	NTENANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page !
SEVER SCOR DEF. N	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
8	1400 Cesar Chavez-Administration	Plumbing								
	Domestic Water Heating and Storage Equipment	1 LS								
105	There are two domestic hot water heater and stora building that appear to be slowly deteriorating and their service life. Replacement is recommended. electric; one has a 3 kW element and the other had operate on 480 volts three phase. Interior	nearing the end of Both tanks are			\$10,100					
8	1400 Cesar Chavez-Administration	HVAC	- — — — —						- — — — — -	
	HVAC Equipment	1 LS								
06	Two packaged roof top air conditioners appear to 2001 and are now 14 years old, which is approxim generally accepted 20 year service life of the equi increasing maintenance and repair costs can be a forward, and replacement programming should be approximately five years out.	nately 70% of the pment. At this point, inticipated going					\$97,400			
	One natural gas unit heater and one window air condeteriorating and should be replaced at the same hot water heating equipment and steel support fra badly oxidized and should be re-finished. Roof	time. In addition, the								
	AL: Replacement/Renewal	/. SEVER. SCORE = 68	\$ 0	\$0	\$10,100	\$0	\$97,400	\$ 0	\$107,500	

Southwes	tern College				SURVEY DATE: 8/15
	Snack Bar			900 Otay	Lakes Rd.
REPAIR C	COST ESTIMATE IS \$2 ,	260		Со	st Per Square Foot is \$4.04
Facility C	Condition Rating = 98	(Excellent)		Av	rerage Severity Score = 31
•					

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)

Southwestern College SURVEY DATE: 8/15

1505 Snack Bar 900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/BU	ILDING SYSTEM C	OST 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 buildup, 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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1505 Snack Bar

20 Electrical Improvement

Light Fixtures

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

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

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:

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 1505 Snack Bar

50 Structural Repair/Maintenance

Concrete Columns and Beams

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

MAINTENANCE CATEGORY: Improvement			SURVEY DATE: 8/15						Page	
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 1505 Sna	ck Bar	Electrical								
Light Fixtures 22		22 EA								
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			

MAINTENANCE CATEGORY: Non-Annual Recurring Maintenance			SURVEY DATE: 8/15						Pag		
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5		
3 1505 Snac	ck Bar	Paint/Finish									
Exterior Concr	ete Columns/Beams/Roof Parapets	400 SF									
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								

INTENANCE CATEGORY: Repair/Mainte	enance		SURVEY DA	ATE: 8/15				Pa
VER. COMPONENT DRE DEFICIENCY F. NO. BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
1505 Snack Bar	Structural							
Concrete Columns and Beams	10 SF							
1 There is minor spalling of concrete of			\$750					
spalling concrete should be remove exposed surfaces cleaned by power should be treated with a rust neutra	d, spalled areas chipped, and r wire brushing. All exposed rebar lizing coating. An epoxy bonding roids, and the voids filled with a high-		\$ 7 50					
spalling concrete should be remove exposed surfaces cleaned by power should be treated with a rust neutra agent should then be applied to all v	d, spalled areas chipped, and r wire brushing. All exposed rebar lizing coating. An epoxy bonding voids, and the voids filled with a hight. ial repairs new spalling be		\$ 7 50					

Southwestern College

SURVEY DATE: 8/15

1600 Classroom-Modular

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$10,625

Facility Condition Rating = 98 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 2 %

Cost Per Square Foot is \$4.92

Average Severity Score = 38

10 Deficiencies Were Identified



PRIMARY USE: Classroom FACILITY AGE:

FACILITY SF: 2,160 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$658,800

LAST RENOVATED:

24 Yrs.

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)

Southwestern College SURVEY DATE: 8/15

1600 Classroom-Modular 900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/BUILL	DING SYSTEM C	OST 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.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1600 Classroom-Modular

20 Electrical Improvement Light Fixtures

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

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

Repair

SYSTEM SUB-TOTAL Exterior Closure \$750 AV. SEVERITY SCORE = 40 COST PER BLDG GSF= \$0.35

FACILITY CONDITION SURVEY DEFICIENCY DETAIL BY BUILDING AND SYSTEM IN DECLINING SEVERITY SCORE ORDER SURVEY DATE .. 8/15 Page 2 SITE: Southwestern College FACILITY: 1600 Classroom-Modular HVAC Replacement/Renewal **HVAC Ceiling Diffusers** HVAC supply perforated ceiling diffuser(s) are stained and rusty. Install new ceiling diffuser(s). 108 Ceiling throughout building QUANTITY. REPAIR COST: 4 EA **Deferrable** Est. Remaining Life = 4 Yrs. \$1,100 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** AV. SEVERITY SCORE = COST PER BLDG GSF= \$0.51 \$1.100 46 Paint/Finish **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak 100 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 Recommended Method of Repair: Contract Deficiency Cause is Weather Planning Priority: D-Escalating Repair Cost Reduction Benefit Score = 38 Maintenance Paint/Finish 40 **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

Life Expectancy New = 10 Yrs. Estimate Date: 2015

Deficiency Cause is Weather

1 LS

Recommended Method of Repair: In-House

DeferrableDeficiency Data Source:

Est. Remaining Life = 1 Yrs.

Condition Survey

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

\$350

REPAIR COST:

Maintenance

QUANTITY:

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 1600 Classroom-Modular

40 Paint/Finish Non-Annual Recurring Maintenance HVAC Equipment Enclosure Metal Cap

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 1600 Classroom-Modular

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

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

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

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

	TENANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER SCORE DEF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 debris, inhibiting drainage. Drains should be least once per year. Roof perimeter		\$200 - — — — —						. — — — — —	
10	1600 Classroom-Modular	Roof								
40	1600 Classroom-Modular Roof Membrane	Roof 2,880 SF								

IAINTENANCE CAT	EGORY: Improvement			SURVEY DA	ATE: 8/15					Page 2
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 1600 C	lassroom-Modular	Electrical								
Light Fixture	es	42 EA								
existing fluc and should	e staff and program managers l prescent lighting is not as energy be replaced with LED lighting. F an fixtures and suspended light	/ efficient as LED lighting Retrofit existing fluorescent,					\$2,400			

•			OTA. DEFICIENCY REFAIR FR								
MAIN	ENANCE CATEG	GORY: Non-Annual Recu	rring Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER SCORI DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Cla	ssroom-Modular	Roof								
	Single-Ply Ro	oof Membrane	2,880 SF								
109	debris, and si appears good accumulation the condition shorten the lif surface is reconstructed. Remove all les sumps. Power formulated for cleaned at lea life of the men	ome dirt. However, the over discounting the content of the roof and identify potential of the roof and identify potential of the membrane. Thorocommended in about three yeaves/debris from the roof a ter-wash the membrane using right single-ply roof membrane ast every three to four years mbrane.	te it very difficult to ascertain ential problems. It also can ugh cleaning of the membrane years. and clean downspouts and and a cleaning solution				\$1,500				
46	1600 Cla	ssroom-Modular	Paint/Finish								
	Metal Parape	t Cap Joints	48 LF								
100	providing the	op. Remove failing caulk ar	ak into the joints and deteriorate		\$350						
40	1600 Cla	ssroom-Modular	Exterior Closure		-		_				
	Concrete Fas	scia	1 LS								
105	approximately random deter mortar in the further deterior allowance is a two to three y	ioration that should be addi joints should be addressed oration and the opportunity recommended for the buildi	ng fascia has joints ant in these joints exhibits some ressed. Any loose/deteriorated on a recurring basis to prevent for moisture penetration. An ng to address the issue every		\$750						

MAINTE	VANCE CATE	GORY: Non-Annual Recurri	ng Maintenance		SURVEY DA	ATE: 8/15					Page 4
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 10	600 CI	assroom-Modular	Paint/Finish								
N	Nounting Br	acket Bolt Head Sealant	1 LS								
b w b d a	orackets extorater to lead to the performed teteriorated activity.	on the bolt heads on the HVAC nibits varying degrees of deterior under the roof membrane. Send every two to three years to red. An allowance is being recommendations and the send enclosures	ration, potentially allowing alant maintenance should place any sealant that has		\$350						
0 10	600 CI	assroom-Modular	Paint/Finish								
H	HVAC Equip	oment Enclosure Metal Cap	160 SF								
o a a	on the roof in the	n the sheet-metal cap on the HV s peeling across much of the subering good condition, and should surfaces to remove deterioration of industrial enamel.	rface. The cap itself be re-finished. Wire brush			\$575					
0 10	600 CI	 assroom-Modular	Paint/Finish								
F	HVAC Equip	oment Enclosure	1,092 SF								
is a it d S	s chalking a appears to b t. Scrape/s leteriorating	the wood on the HVAC equipment of the wood on the HVAC equipment of the period in good condition, and should and all surfaces on both sides of paint, then apply a primer and illing of boards where nails are buired.	surface. The wood itself be re-finished to preserve wood to remove coats of exterior latex.			\$3,200					

MAINTENANCE CATEGOR	Y: Replacement/Renew	al		SURVEY DA	ATE: 8/15				Pag
SCORE	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Classr	oom-Modular	HVAC							
HVAC Ceiling Di	ffusers	4 EA							
108 HVAC supply pe new ceiling diffus Ceiling througho	ser(s).	re stained and rusty. Install	- — — —		- — — —	<u> </u>	\$1,100 		. — — — — — -
OTAL: Replacemen	t/Renewal	AV. SEVER. SCORE = 5	\$ 0	\$0	\$0	\$0	\$1,100	\$0	\$1,100

Southwestern College

SURVEY DATE: 8/15

1620 Classroom-Modular

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$8,175

Facility Condition Rating = 99 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 1 %

Cost Per Square Foot is \$4.21

Average Severity Score = 40

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)

Southwestern College SURVEY DATE: 8/15

1620 Classroom-Modular 900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/BUILL	DING SYSTEM C	OST 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

Southwestern College Classroom-Modular

1620

SURVEY DATE: 8/15

900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1620 Classroom-Modular

20 Electrical Improvement Light Fixtures

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

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

Repair

SYSTEM SUB-TOTAL Exterior Closure \$750 AV. SEVERITY SCORE = 40 COST PER BLDG GSF= \$0.39

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 1620 Classroom-Modular

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

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

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

Maintenance

40 Paint/Finish Non-Annual Recurring Maintenance Metal Base Edging

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 1620 Classroom-Modular

40 Paint/Finish Non-Annual Recurring Maintenance HVAC Equipment Enclosure Metal Cap

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 1620 Classroom-Modular

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

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

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

Maintenance

SYSTEM SUB-TOTAL Roof \$1,850 AV. SEVERITY SCORE = 50 COST PER BLDG GSF= \$0.95

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 1620 Classroom-Modular

20 Site Non-Annual Recurring Maintenance Tree

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

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

	ENANCE CATEGORY: An	nual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER. SCORE DEF. NO	DEFICIEN	CY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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-Mo	odular	Roof								
	Roof Drains		2 EA								
102	The roof drains and drain debris, inhibiting drainagleast once per year. Roof perimeter			\$200							
10	1620 Classroom-Mc					_ — — — —					
40	`	. — — — — — — — odular	Roof 2,400 SF							- — — — — —	

AINTENANCE CATEGORY: Improvement				SURVEY DATE: 8/15					
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 1620 C	lassroom-Modular	Electrical							
Light Fixtur	es	32 EA							
existing fluctions and should	ce staff and program managers prescent lighting is not as energ be replaced with LED lighting. I an fixtures and suspended light	y efficient as LED lighting Retrofit existing fluorescent,					\$1,850		

MAINT	ENANCE CATE	GORY: Non-Annual Recui	ring Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Cla	ssroom-Modular	Roof								
	Single-Ply Ro	oof Membrane	2,400 SF								
110	debris, and sappears good accumulation the condition shorten the lisurface is recommended. Power all lesumps. Pow formulated for cleaned at lealife of the me	d, with no apparent deficience of debris and dirt can make of the roof and identify potential of the membrane. Thorous commended in about 2 years eaves/debris from the roof are rewash the membrane using a single-ply roof membranes ast every three to four years mbrane.	all condition of the membrane cles identified. Increasing e it very difficult to ascertain ntial problems. It also can agh cleaning of the membrane s. and clean downspouts and g a cleaning solution The surface should be			\$1,450					
46	1620 Cla	ssroom-Modular	Paint/Finish								
	Metal Parape	et Cap Joints	48 LF								
100	providing the	op. Remove failing caulk an	k into the joints and deteriorate		\$350						
40	1620 Cla	ssroom-Modular	Paint/Finish								
	Mounting Bra	acket Bolt Head Sealant	1 LS								
108	brackets exh water to leak be performed	under the roof membrane. It every two to three years to An allowance is being reco	AC enclosure roof mounting rioration, potentially allowing Sealant maintenance should replace any sealant that has mmended for this maintenance		\$350						

AA A (* !*	TENANOE OATEOODY N. A			OUDVEY 5	ATE: 0/45					D 4
SEVER SCORI DEF. N	RE DEFICIENCY	ing Maintenance SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	Page 4
40	1620 Classroom-Modular Concrete Fascia	Exterior Closure								
105	The bottom portion of the concrete building approximately every 4'. The mortar/sealan random deterioration that should be address mortar in the joints should be addressed or further deterioration and the opportunity for allowance is recommended for the building two to three years. Upper perimeter of building	fascia has joints t in these joints exhibits some ssed. Any loose/deteriorated a recurring basis to prevent moisture penetration. An		\$750						
40	1620 Classroom-Modular Metal Base Edging	Paint/Finish				_				
107	The metal strip at the base of the cement/s exhibits surface rust in several locations ar rusting areas should be wire brushed and coats of industrial enamel applied to the er 3 sides of the building	stucco walls on the building ound the building. The cleaned and a primer and 2		\$450						
40	1620 Classroom-Modular	Paint/Finish								
	HVAC Equipment Enclosure Metal Cap	92 SF								
104	The paint on the sheet-metal cap on the H ^o on the roof is peeling across much of the sappears to be in good condition, and shoul all exposed surfaces to remove deteriorating and 2 coats of industrial enamel. HVAC enclosures on roof	urface. The cap itself d be re-finished. Wire brush			\$325					

AINTENANCE	CATEGORY: Non-Annual Recurring	Maintenance		SURVEY DA	ATE: 8/15					Page 5
EVER. CORE EF. NO. BL	COMPONENT DEFICIENCY .DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
1620	Classroom-Modular	Paint/Finish								
HVAC	Equipment Enclosure	650 SF								
is chall appear it. Scr	aint on the wood on the HVAC equipme king and peeling across much of the su rs to be in good condition, and should b ape/sand all surfaces on both sides of	orface. The wood itself the re-finished to preserve wood to remove			\$1,900					
Some	prating paint, then apply a primer and 2 re-nailing of boards where nails are beg e required.									
Some also be Roof	re-nailing of boards where nails are beg		- — — —						- — — — — -	
Some also be Roof	re-nailing of boards where nails are beg e required.	ginning to back-out will								
Some also be Roof 1620 Tree A tree build u	re-nailing of boards where nails are beg e required.	ginning to back-out will		\$350					. — — — — -	

Southwestern College

SURVEY DATE: 8/15

1630 Classroom-Modular

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$7,425

Facility Condition Rating = 99 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 1 %

Cost Per Square Foot is \$3.60

Average Severity Score = 42

9 Deficiencies Were Identified



PRIMARY USE: Conference

FACILITY SF:

2,063 NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$629,215

FACILITY AGE: 24 Yrs.

LAST RENOVATED:

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)

Southwestern College SURVEY DATE: 8/15

1630 Classroom-Modular 900 Otay Lakes Rd.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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

Southwestern College

SURVEY DATE: 8/15

1630 Classroom-Modular

900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1630 Classroom-Modular

20 Electrical Improvement Light Fixtures

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

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

Repair

SYSTEM SUB-TOTAL Exterior Closure \$750 AV. SEVERITY SCORE = 40 COST PER BLDG GSF= \$0.36

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 1630 Classroom-Modular

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

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

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

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

SITE: Southwestern College
FACILITY: 1630 Classroom-Modular

Non-Appual Recurring Maintenance HVAC Equipment Englecure Metal Con

40 Paint/Finish Non-Annual Recurring Maintenance HVAC Equipment Enclosure Metal Cap

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 1630 Classroom-Modular

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

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

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

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

	TENANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER SCORE DEF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 debris, inhibiting drainage. Drains should be least once per year. Roof perimeter		\$200 							
	1630 Classroom-Modular	Roof								
10										
40	Roof Membrane	2,870 SF								

MAINTENANCE CATEGORY: Improvement				SURVEY DATE: 8/15						Page 2
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 1630	Classroom-Modular	Electrical								
Light Fixtu	ires	30 EA								
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			

			OTN. DEFICIENCY REPAIR FR		O DETAIL B	III/AIIVI EIV/	IIIOE/NEI EF	TOLINEIT O			
MAIN	TENANCE CA	TEGORY: Non-Annual Recur	ring Maintenance		SURVEY DA	NTE: 8/15					Page 3
SEVER SCORI DEF. N	=	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	of debris, it very diff problems deficienci	e-ply membrane on this building and the membrane surface is we icult to ascertain the condition o . It also can shorten the life of the es were identified on clean area of the membrane surface is reco	ery dirty in spots. This makes f the roof and identify potential ne membrane. No apparent s of the membrane. Thorough		\$1,750						
	sumps. F formulate cleaned a	all leaves/debris from the roof and construction and leaves and the membrane using doing to single-ply roof membranes are to four years membrane.	g a cleaning solution . The surface should be								
	Note: Us membran <i>Entire roc</i>		sperience cleaning single-ply								
46	1630	Classroom-Modular	Paint/Finish							- — — — — — -	
	Metal Par	apet Cap Joints	66 LF								
100	providing the parap	ting in the joints of the metal part the potential for moisture to lead et top. Remove failing caulk and taps on roof	c into the joints and deteriorate		\$475						
40	1630	Classroom-Modular	Exterior Closure								
	Concrete	Fascia	1 LS								
105	approximate random do mortar in further de allowance two to three	m portion of the concrete building ately every 4'. The mortar/seala eterioration that should be addressed of the joints should be addressed of terioration and the opportunity for is recommended for the building the events.	nt in these joints exhibits some essed. Any loose/deteriorated on a recurring basis to prevent or moisture penetration. An		\$750						

component DEFICIENCY LOCATION ssroom-Modular cket Bolt Head Sealant on the bolt heads on the HVAC elbits varying degrees of deteriora under the roof membrane. Sealal every two to three years to repla An allowance is being recomme enclosures ssroom-Modular ment Enclosure the wood on the HVAC equipment peeling across much of the su	tion, potentially allowing ant maintenance should ace any sealant that has ended for this maintenance Paint/Finish 574 SF	CRITICAL COST 2015	YR. 1 COST 2016 \$350	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
cket Bolt Head Sealant on the bolt heads on the HVAC el bits varying degrees of deteriora under the roof membrane. Seala l every two to three years to repla An allowance is being recomme enclosures ssroom-Modular ment Enclosure the wood on the HVAC equipment and peeling across much of the su	1 LS nclosure roof mounting tion, potentially allowing ant maintenance should ace any sealant that has ended for this maintenance Paint/Finish 574 SF		\$350					
on the bolt heads on the HVAC elbits varying degrees of deterioral under the roof membrane. Sealed every two to three years to replay An allowance is being recommended. Second	nclosure roof mounting tion, potentially allowing ant maintenance should ace any sealant that has ended for this maintenance Paint/Finish 574 SF		\$350 					
bits varying degrees of deteriora under the roof membrane. Seala every two to three years to replate An allowance is being recomme enclosures ssroom-Modular ment Enclosure the wood on the HVAC equipment peeling across much of the su	tion, potentially allowing ant maintenance should ace any sealant that has ended for this maintenance Paint/Finish 574 SF		\$350 ·					. — — — — —
ment Enclosure the wood on the HVAC equipment and peeling across much of the su	574 SF							
the wood on the HVAC equipment and peeling across much of the su								
nd peeling across much of the su	nt enclosures on the roof							
e in good condition, and should b nd all surfaces on both sides of v paint, then apply a primer and 2 ng of boards where nails are beg red.	rface. The wood itself to re-finished to preserve wood to remove coats of exterior latex.			\$1,700				
ssroom-Modular	Paint/Finish							
ment Enclosure Metal Cap	82 SF							
peeling across much of the surface in good condition, and should b	ace. The cap itself be re-finished. Wire brush			\$300				
i i i	paint, then apply a primer and 2 mg of boards where nails are begred. ———————————————————————————————————	paint, then apply a primer and 2 coats of exterior latex. In gof boards where nails are beginning to back-out will ed. Section 1	paint, then apply a primer and 2 coats of exterior latex. In one of boards where nails are beginning to back-out will ed. Seroom-Modular Paint/Finish Inent Enclosure Metal Cap 82 SF In the sheet-metal cap on the HVAC equipment enclosures peeling across much of the surface. The cap itself In in good condition, and should be re-finished. Wire brush surfaces to remove deteriorating paint, then apply a primer of industrial enamel.	paint, then apply a primer and 2 coats of exterior latex. In gof boards where nails are beginning to back-out will ed. Section of the surface. The cap itself in good condition, and should be re-finished. Wire brush curfaces to remove deteriorating paint, then apply a primer findustrial enamel.	paint, then apply a primer and 2 coats of exterior latex. In gof boards where nails are beginning to back-out will ed. Section 1	paint, then apply a primer and 2 coats of exterior latex. In gof boards where nails are beginning to back-out will ed. Section 1	paint, then apply a primer and 2 coats of exterior latex. Ing of boards where nails are beginning to back-out will ed. Section of the surface. The cap itself in good condition, and should be re-finished. Wire brush surfaces to remove deteriorating paint, then apply a primer findustrial enamel.	paint, then apply a primer and 2 coats of exterior latex. In gof boards where nails are beginning to back-out will ed. Sesroom-Modular Paint/Finish Inent Enclosure Metal Cap 82 SF In the sheet-metal cap on the HVAC equipment enclosures peeling across much of the surface. The cap itself in good condition, and should be re-finished. Wire brush furfaces to remove deteriorating paint, then apply a primer findustrial enamel.

Southwestern College

SURVEY DATE: 8/15

1650 Classroom-Modular

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$14,725

Facility Condition Rating = 99 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 1 %

Cost Per Square Foot is \$3.89

Average Severity Score = 40

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)

Southwestern College SURVEY DATE: 8/15

1650 Classroom-Modular 900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/BUILL	DING SYSTEM C	OST 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

Southwestern College SURVEY DATE: 8/15

1650 Classroom-Modular 900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1650 Classroom-Modular

20 Electrical Improvement Light Fixtures

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

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

Repair

SYSTEM SUB-TOTAL Exterior Closure \$750 AV. SEVERITY SCORE = 40 COST PER BLDG GSF= \$0.20

SURVEY DATE .. 8/15 Page 2 SITE: Southwestern College FACILITY: 1650 Classroom-Modular 46 Paint/Finish **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak 100 into the joints and deteriorate the parapet top. Remove failing caulk and re-caulk all joints. Parapet caps on roof QUANTITY: REPAIR COST: 80 LF \$575 Deferrable Est. Remaining Life = 1 Yrs. Life Expectancy New = 15 Yrs. Estimate Date: 2015 Deficiency Data Source: Condition Survey Recommended Method of Repair: Contract Deficiency Cause is Weather Planning Priority: D-Escalating Repair Cost Reduction Benefit Score = 38 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 OLIANTITY: REPAIR COST: 121 SF \$500 Deferrable Est. Remaining Life = 1 Yrs. Deficiency Data Source: Life Expectancy New = 15 Yrs. Estimate Date: 2015 Condition Survey Recommended Method of Repair: Contract Deficiency Cause is No Maintenance Planning Priority: D-Escalating Repair Cost Reduction Benefit Score = 28 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: REPAIR COST: Est. Remaining Life = 1 Yrs. 1 LS \$350 Deferrable Deficiency Data Source: Life Expectancy New = 10 Yrs. Estimate Date: 2015 Condition Survey Recommended Method of Repair: In-House **Deficiency Cause is Weather** Benefit Score = 38 Planning Priority: D-Escalating Repair Cost Reduction

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 1650 Classroom-Modular

40 Paint/Finish Non-Annual Recurring Maintenance HVAC Equipment Enclosure Metal Cap

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 1650 Classroom-Modular

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

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

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

Maintenance

SYSTEM SUB-TOTAL Roof \$2,800 AV. SEVERITY SCORE = 50 COST PER BLDG GSF= \$0.74

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 1650 Classroom-Modular

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.

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

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

	NANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER. SCORE DEF. NO.	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 16	650 Classroom-Modular	Roof								
R	Roof Drains	3 EA								
d€	The roof drains and drain sumps are clogged debris, inhibiting drainage. Drains should be bleast once per year.		\$325							
	Roof perimeter - — — — — — — — — — — — — — — — — — — —								- — — — — —	
R	• •	- — — — — — — — — Roof	. — — — —							
### R 	Roof perimeter 	Roof 4,775 SF				.———				·

AINTENANCE CATEGORY: Improvement				SURVEY DA	ATE: 8/15				Pag
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 1650 C	classroom-Modular	Electrical							
Light Fixtur	es	71 EA							
Light Fixtures 71 EA 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			

MAIN	TENANCE CAT	TEGORY: Non-Annual Recurr	ing Maintenance		SURVEY DA	ATE: 8/15					Page 3
SEVEF SCORI DEF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
	leaf and of apparent of accumulati the conditive shorten the surface is Remove all sumps. Por formulated cleaned at life of the r	only bonded contractor with expes.	on the membrane. No rever, increasing it very difficult to ascertain ial problems. It also can h cleaning of the membrane disclean downspouts and a cleaning solution. The surface should be a maintain and prolong the								
46	1650	Classroom-Modular	Paint/Finish							- — — — — -	
	Metal Para	pet Cap Joints	80 LF								
100	providing t	ng in the joints of the metal para he potential for moisture to leak et top. Remove failing caulk and aps on roof	into the joints and deteriorate		\$575						
40	1650	Classroom-Modular	Paint/Finish							- — — — — — -	
	Metal Base	e Edging	121 SF								
107	exhibits su rusting are coats of in-	strip at the base of the cement/s rface rust in several locations ar as should be wire brushed and of dustrial enamel applied to the en the building	ound the building. The cleaned and a primer and 2		\$500						

MAIN	TENANCE CATEGORY: Non-Annual Recurring Mainte	enance		SURVEY DA	ATE: 8/15					Page 4
SEVER SCORI DEF. N	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
105	Concrete Fascia The bottom portion of the concrete building fascia ha approximately every 4'. The mortar/sealant in these random deterioration that should be addressed. Any mortar in the joints should be addressed on a recurring further deterioration and the opportunity for moisture allowance is recommended for the building to address two to three years. Upper perimeter of building	joints exhibits some loose/deteriorated ng basis to prevent penetration. An		\$750						
40	1650 Classroom-Modular	Paint/Finish								
108	Mounting Bracket Bolt Head Sealant The sealant on the bolt heads on the HVAC enclosur brackets exhibits varying degrees of deterioration, powater to leak under the roof membrane. Sealant mai be performed every two to three years to replace any deteriorated. An allowance is being recommended for activity. Roof HVAC enclosures	otentially allowing intenance should or sealant that has		\$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 equip on the roof is peeling across much of the surface. The appears to be in good condition, and should be re-finall exposed surfaces to remove deteriorating paint, the and 2 coats of industrial enamel. HVAC enclosures on roof	ne cap itself iished. Wire brush			\$600					

	E CATEGORY: Non-Annual Recurring	Maintenance		SURVEY DA	ATE: 8/15					Page 5
EVER. CORE EF. NO. B	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
1650	Classroom-Modular	Paint/Finish								
HVAC	C Equipment Enclosure	1,600 SF								
is cha appea it. Sc deteri Some	paint on the wood on the HVAC equipmentalking and peeling across much of the subars to be in good condition, and should be trape/sand all surfaces on both sides of vitorating paint, then apply a primer and 2 to re-nailing of boards where nails are beginned and a required.	rface. The wood itself e re-finished to preserve wood to remove coats of exterior latex.			\$4,600					
1650	Classroom-Modular	Site								
1650 Tree	Classroom-Modular	Site 1 LS								
Tree 06 Two to to buil	Classroom-Modular Trees that are overhanging the roof and a lid up on the roof needs to be cut back from the sides of roof	1 LS llowing excessive debris		\$500						

Southwestern College

SURVEY DATE: 8/15

1660 Classroom-Modular 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$9,925

Facility Condition Rating = 99 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is % Cost Per Square Foot is \$3.82

Average Severity Score = 42

Deficiencies Were Identified



PRIMARY USE: Administration

FACILITY SF:

NO. OF STORIES: 1.0

Current Facility Replacement Cost is Approximately \$793,305 LAST RENOVATED:

24 Yrs.

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

2,601

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)

Southwestern College SURVEY DATE: 8/15

1660 Classroom-Modular 900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/BUILI	DING SYSTEM C	OST 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.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1660 Classroom-Modular

20 Electrical Improvement Light Fixtures

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

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

Repair

SYSTEM SUB-TOTAL Exterior Closure \$750 AV. SEVERITY SCORE = 40 COST PER BLDG GSF= \$0.29

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 1660 Classroom-Modular

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

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

Maintenance

40 Paint/Finish Non-Annual Recurring Maintenance Mounting Bracket Bolt Head Sealant

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 1660 Classroom-Modular

40 Paint/Finish Non-Annual Recurring Maintenance HVAC Equipment Enclosure

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

Maintenance

SYSTEM SUB-TOTAL Paint/Finish \$4,400 AV. SEVERITY SCORE = 42 COST PER BLDG GSF= \$1.69

60 Roof Annual PM Roof Drains

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 1660 Classroom-Modular

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

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

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

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

	ENANCE CATEG	CORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVER SCORE DEF. N	•	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Clas	ssroom-Modular	Roof								
	Roof Drains		3 EA								
102		ns and drain sumps are clogge ing drainage. Drains should b		\$300							
	Roof perimete	<u> </u>					. — — — —				
10	Roof perimete	<u> </u>		· — — —							
40	Roof perimete	er 	Roof 2,876 SF								

AINTENANCE CATEGORY: Improvement				SURVEY DA	ATE: 8/15				Pag
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 1660 C	Classroom-Modular	Electrical							
Light Fixtu	es	43 EA							
Light Fixtures 43 EA 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			

			TH. BEITGENOT REPAIRT R								
MAINT	ENANCE C	ATEGORY: Non-Annual Recurr	ing Maintenance		SURVEY DA	NTE: 8/15					Page 3
SEVER SCORE DEF. N	•	COMPONENT DEFICIENCY C. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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-Pl	y Roof Membrane	2,876 SF								
108	of leaves very diffice problems deficience cleaning Remove sumps. formulate cleaned life of the		e is very dirty. This makes it the roof and identify potential the membrane. No apparent of the membrane. Thorough mended. It clean downspouts and a cleaning solution The surface should be of maintain and prolong the		\$1,750						
46	1660	Classroom-Modular	- — — — — — — — — — — — — — — — — — — —	- — — — —		_ — — — —					
	Metal Pa	rapet Cap Joints	20 LF								
100	providing the parap	king in the joints of the metal para the potential for moisture to leak bet top. Remove failing caulk and caps on roof	into the joints and deteriorate		\$150						
40	1660	Classroom-Modular	Exterior Closure								
	Concrete	Fascia	1 LS								
105	approxim random of mortar in further de allowance two to the	om portion of the concrete building nately every 4'. The mortar/sealand deterioration that should be addressed on the joints should be addressed on the recommended for the building ree years.	it in these joints exhibits some ssed. Any loose/deteriorated n a recurring basis to prevent r moisture penetration. An		\$750						

VIAIN I	ENANCE CA	TEGORY: Non-Annual Recurrin	ng Maintenance		SURVEY DA	ATE: 8/15					Page 4
EVER CORE DEF. N	·	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	1660 (Classroom-Modular	Paint/Finish								
	Mounting E	Bracket Bolt Head Sealant	1 LS								
06	brackets e water to le be perform deteriorate activity.	nt on the bolt heads on the HVAC xhibits varying degrees of deterior ak under the roof membrane. Sea ned every two to three years to repaid. An allowance is being recomm	ration, potentially allowing alant maintenance should blace any sealant that has		\$350						
)	1660 (Classroom-Modular	— — — — — — — — — — — — — — — — — — —			- — — — —					
	HVAC Equ	ipment Enclosure Metal Cap	160 SF								
04	on the root appears to all exposed and 2 coat	on the sheet-metal cap on the HV is peeling across much of the subset is peeling across much of the subset is peeling across much of the subset is peeling across to remove deteriorating sof industrial enamel.	rface. The cap itself be re-finished. Wire brush			\$600					
)	1660 (Classroom-Modular	Paint/Finish								
	HVAC Equ	ipment Enclosure	1,120 SF								
03	The paint of is chalking appears to it. Scrape, deteriorating	on the wood on the HVAC equipment and peeling across much of the solution, and should sand all surfaces on both sides on paint, then apply a primer and alling of boards where nails are be	surface. The wood itself be re-finished to preserve f wood to remove 2 coats of exterior latex.			\$3,300					

Southwestern College

SURVEY DATE: 8/15

24 Yrs.

LAST RENOVATED:

1670 Classroom-Modular 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$7,235

Facility Condition Rating = 99 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 1 % Cost Per Square Foot is \$4.19

Average Severity Score = 42

Deficiencies Were Identified



PRIMARY USE: **Human Resources**

> 1,728 NO. OF STORIES: 1.0

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 SF:

Facility Suitability for Current Use is Good

Facility Construction Quality is Average

Relative Facility Priority Score = 28

(Maximum Score = 33 Minimum Score = 11)

Southwestern College SURVEY DATE: 8/15

1670 Classroom-Modular 900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/BUILL	DING SYSTEM C	OST 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.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1670 Classroom-Modular

20 Electrical Improvement Light Fixtures

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

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

Repair

SYSTEM SUB-TOTAL Exterior Closure \$750 AV. SEVERITY SCORE = 40 COST PER BLDG GSF= \$0.43

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 1670 Classroom-Modular

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

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 1670 Classroom-Modular

40 Paint/Finish Non-Annual Recurring Maintenance HVAC Equipment Enclosure Metal Cap

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 1670 Classroom-Modular

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

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

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

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

MAINTE	INTENANCE CATEGORY: Annual PM			SURVEY DATE: 8/15						
SEVER. SCORE DEF. NO.	DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 1	1670 Classroom-Modular	Roof								
)U I	Toro Gladoroum modular									
F	Roof Drains	2 EA	# 000							
102 - C		ed with significant amounts of	\$200							
02 - 01 -	Roof Drains The roof drains and drain sumps are cloggedebris, inhibiting drainage. Drains should bleast once per year.	ed with significant amounts of	\$200							
102 - (1) 104 - (1)	Roof Drains The roof drains and drain sumps are cloggedebris, inhibiting drainage. Drains should be least once per year. Roof perimeter	ed with significant amounts of be thoroughly cleaned out at	\$200 		- — — —	———			. — — — — —	

MAINTENANCE CATEGORY: Improvement				SURVEY DATE: 8/15						
EEVER. CORE DEF. NO. BLDG	COMPONENT DEFICIENCY . LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Fix	ures	33 EA								
existing f and shou recessed	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			

AAA IAIT	ENANCE OF	TEOODY No. 15			OUDVEY 5	TE: 0/45					Dami O
MAINT	ENANCE CAT		ring Maintenance		SURVEY DA	<i>IIE:</i> 8/15					Page 3
SEVER. SCORE DEF. NO		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	of leaf and difficult to a problems. deficiencie dirty and fu surface is Remove al sumps. Po formulated cleaned at life of the r	ascertain the condition of the roll talso can shorten the life of the swere identified from an analyull of debris. However, a thorourecommended. Il leaves/debris from the roof arower-wash the membrane using for single-ply roof membranes least every three to four years membrane.	s very dirty. This makes it very of and identify potential ne membrane. No apparent sis of areas that were not too agh cleaning of the membrane and clean downspouts and g a cleaning solution. The surface should be to maintain and prolong the		\$1,450						
46	1670 C	Classroom-Modular	Paint/Finish			- — — — —				- — — — — -	
	Metal Para	pet Cap Joints	54 LF								
100	providing t the parape	ng in the joints of the metal par he potential for moisture to leal et top. Remove failing caulk an aps on roof	into the joints and deteriorate		\$400						
40	1670 (Classroom-Modular	Exterior Closure								
	Concrete F	ascia	1 LS								
105	approxima random de mortar in the further dete allowance two to thre	eterioration that should be addre the joints should be addressed of erioration and the opportunity for is recommended for the building	nt in these joints exhibits some essed. Any loose/deteriorated on a recurring basis to prevent or moisture penetration. An		\$750						

•••	ENANCE CA	TEGORY: Non-Annual Recurring	g Maintenance		SURVEY DA	ATE: 8/15					Page 4
SEVER SCORE DEF. N	Ī	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	1670	Classroom-Modular	Paint/Finish								
	Mounting	Bracket Bolt Head Sealant	1 LS								
106	brackets of water to le be performed deteriorate activity.	ant on the bolt heads on the HVAC exhibits varying degrees of deteriorated under the roof membrane. Sea med every two to three years to repled. An allowance is being recommendate enclosures	ation, potentially allowing lant maintenance should ace any sealant that has		\$350						
0	1670	Classroom-Modular	Paint/Finish								
	HVAC Eq	uipment Enclosure	602 SF								
03	is chalking appears to it. Scrape deteriorat	on the wood on the HVAC equipments and peeling across much of the stop to be in good condition, and should be said all surfaces on both sides of bing paint, then apply a primer and 2 mailing of boards where nails are be equired.	urface. The wood itself be re-finished to preserve wood to remove coats of exterior latex.			\$1,750					
0	1670	Classroom-Modular	Paint/Finish								
	HVAC Eq	uipment Enclosure Metal Cap	86 SF								
04	on the roc appears t all expose and 2 coa	on the sheet-metal cap on the HVA of is peeling across much of the surfo o be in good condition, and should led surfaces to remove deteriorating tts of industrial enamel. closures on roof	face. The cap itself be re-finished. Wire brush			\$300					
	and 2 coa	its of industrial enamel.				- — — —					

%

Southwestern College

SURVEY DATE: 8/15

29 Yrs.

LAST RENOVATED:

1800 Horticulture 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$7,000

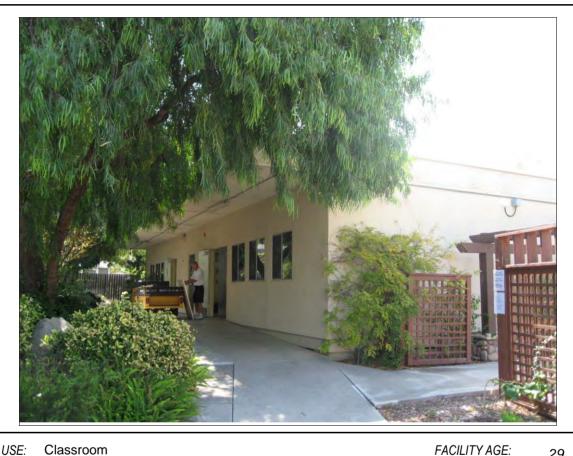
Facility Condition Rating = 99 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is

Cost Per Square Foot is \$3.13

Average Severity Score = 36

Deficiencies Were Identified



PRIMARY USE: Classroom

> NO. OF STORIES: 1.0

FACILITY SF: 2,240

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)

Southwestern College SURVEY DATE: 8/15

1800 Horticulture 900 Otay Lakes Rd.

	NTENANCE CATEGORY/BUILL				
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.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 1800 Horticulture

20 Electrical Improvement Light Fixtures

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

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 1800 Horticulture

SYSTEM SUB-TOTAL Paint/Finish \$1,550 AV. SEVERITY SCORE = 40 COST PER BLDG GSF= \$0.69

60 Roof Annual PM Roof Drains

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

Maintenance

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 1800 Horticulture

40 Roof Annual PM Roof Membrane

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

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

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

	NANCE CATEGORY: Annual	РМ		SURVEY DA	NTE: 8/15					Page 1
SEVER. SCORE DEF. NO.	COMPONENT DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 18	800 Horticulture	Roof								
R	Roof Drains	2 EA								
d le	debris, inhibiting drainage. Dr east once per year.	ps are clogged with significant amounts or ains should be thoroughly cleaned out at	of \$200							
F	Roof perimeter 									
	Roof perimeter				_ — — — —				- — — — — —	
40 18	`	Roof 2,800 SF								_ — —

AINTENANCE CATEG	GORY: Improvement			SURVEY DA	ATE: 8/15				Pag
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 1800 Hor	ticulture	Electrical							
Light Fixtures		38 EA							
existing fluore and should be	escent lighting is not as energe e replaced with LED lighting.	s have indicated they feel the rgy efficient as LED lighting . Retrofit existing fluorescent, at fixtures with energy efficient					\$2,200		

IAIN	TENANCE CA	ATEGORY: Non-Annual R	ecurring Maintenance		SURVEY DA	ATE: 8/15					Page :
EVEI COR DEF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	1800	Horticulture	Roof								
	Single-Ply	y Roof Membrane	2,800 SF								
	This make and ident membran recomme assessment assessment in the second sumps. From the second in th	es it somewhat difficult to a ify potential problems. It also e. Thorough cleaning of the nded. No apparent deficient of membrane areas that all leaves/debris from the repower-wash the membrane d for single-ply roof membrat least every three to four y membrane. e only bonded contractor wes.	ncies were identified from an are relatively clean.								
10	1800	Horticulture	Paint/Finish			_ — — — —				- — — — — —	
	Plywood I	Fascia	475 SF								
103	paint on r 2 coats ex		remely weathered, with peeling wood and apply 1 coat of primer and		\$1,550						
20	1800	Horticulture	Site								
	Tree		1 LS								
			oof and allowing excessive debris ut back from over the roof.		\$500						

MAIN	ITENANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page
SEVEI SCOR DEF. I	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	1800 Horticulture	Exterior Closure								
	Wood Exterior Trim Boards	48 LF								
04	Several of the trim boards (7) on the bottom of the vector boards and checked, and generally deteriorated boards and prime and paint the new wood. **Perimeter of building**			\$675 —————	- — — —				. — — — —	
ЭТ	AL: Replacement/Renewal AV.	SEVER. SCORE = 20	\$0	\$675	\$0	\$0	\$0	\$0	\$675	

Southwestern College

SURVEY DATE: 8/15

1810 Greenhouse

900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$1,925

Facility Condition Rating = 100 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 0 %

Cost Per Square Foot is \$0.86

Average Severity Score = 27

3 Deficiencies Were Identified



PRIMARY USE: Horticulture

FACILITY SF:

Horticulture

NO. OF STORIES: 1

1.0

Current Facility Replacement Cost is Approximately \$392,000

FACILITY AGE: 39 Yrs.

LAST RENOVATED:

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is **B**

2,240

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)

Southwestern College SURVEY DATE: 8/15

1810 Greenhouse 900 Otay Lakes Rd.

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	<u> </u>	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.

SITE: Southwestern College
FACILITY: 1810 Greenhouse

SURVEY DATE:: 8/15

Page 1

Light Fixtures

Mointenance staff and program managers have indicated they feel the existing fluorescent lighting is not as

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 1810 Greenhouse

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

	CATEGORY: Annual PM			SURVEY DA	NTE: 8/15				Page
SEVER. SCORE DEF. NO. BLD	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 1810	Greenhouse	Roof							
Roof an	d Gutters	1 LS							
in the g	a significant amount of debris on that latters. Debris should be cleaned off at least once per year. If ace and gutters		\$200						

MINITENANOL	ATEGORY: Improvement			SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO. BLD	COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 1810	Greenhouse	Electrical							
Light Fix	tures	21 EA							
existing and sho recesse	ance staff and program managers fluorescent lighting is not as energ uld be replaced with LED lighting. d can fixtures and suspended lights. tures throughout building	gy efficient as LED lighting Retrofit existing fluorescent,					\$1,200		

COMPONENT								
DEFICIENCY BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
10 Greenhouse	Paint/Finish							
xterior Metal Door	2 EA							
nd weathered paint on the interior surface. Po	wer brush/sand both		\$525					
x M d	O Greenhouse terior Metal Door o of the exterior HM doors have areas of rust d weathered paint on the interior surface. Pooles of doors and frames and prime and paint warmel.	O Greenhouse Paint/Finish terior Metal Door 2 EA to of the exterior HM doors have areas of rust on the exterior surface d weathered paint on the interior surface. Power brush/sand both les of doors and frames and prime and paint with 2 coats of alkyd amel.	BLDG. LOCATION SYSTEM QUANTITY QUANTITY O Greenhouse Paint/Finish terior Metal Door 2 EA of of the exterior HM doors have areas of rust on the exterior surface diveathered paint on the interior surface. Power brush/sand both less of doors and frames and prime and paint with 2 coats of alkyd amel.	BLDG. LOCATION SYSTEM QUANTITY Paint/Finish terior Metal Door 2 EA of of the exterior HM doors have areas of rust on the exterior surface diveathered paint on the interior surface. Power brush/sand both less of doors and frames and prime and paint with 2 coats of alkyd amel.	BLDG. LOCATION SYSTEM QUANTITY Paint/Finish terior Metal Door 2 EA of of the exterior HM doors have areas of rust on the exterior surface diveathered paint on the interior surface. Power brush/sand both less of doors and frames and prime and paint with 2 coats of alkyd amel.	BLDG. LOCATION SYSTEM QUANTITY QUA	BLDG. LOCATION SYSTEM QUANTITY 2015 QUANTITY QUANTITY 2016 QUANTITY Paint/Finish terior Metal Door 2 EA of of the exterior HM doors have areas of rust on the exterior surface dweathered paint on the interior surface. Power brush/sand both les of doors and frames and prime and paint with 2 coats of alkyd amel.	BLDG. LOCATION SYSTEM QUANTITY QUANTITY QUANTITY 2015 QUANTITY 2016 QUANTITY 2016 QUANTITY 2016 QUANTITY 2017 QUANTITY 2018 2019 2020 QUANTITY PR. 1 COST YR. 2 COST YR. 2 COST YR. 3 COST YR. 3 COST YR. 4 COST YR. 5 COST QUANTITY 2018 2019 2020 QUANTITY \$525 QUANTITY \$525 QUANTITY \$525 QUANTITY \$525 \$525 \$525 \$525 \$526 \$525

Southwestern College SURVEY DATE: 8/15

2000 Child Development Center 900 Otay Lakes Rd.

REPAIR COST ESTIMATE IS \$32,125

Facility Condition Rating = 99 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 1 %

Cost Per Square Foot is \$1.63

Average Severity Score = 47

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)

Southwestern College SURVEY DATE: 8/15

2000 Child Development Center 900 Otay Lakes Rd.

MAII	NTENANCE CATEGORY/BUILI	DING SYSTEM C	OST 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
	Floridad			•	<u> </u>
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

Southwestern College SURVEY DATE: 8/15

2000 Child Development Center

900 Otay Lakes Rd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 2000 Child Development Center

20 Electrical Improvement Light Fixtures

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

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

Repair

SYSTEM SUB-TOTAL Exterior Closure \$1,500 AV. SEVERITY SCORE = 40 COST PER BLDG GSF= \$0.08

S/TE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 2000 Child Development Center

50 Paint/Finish Non-Annual Recurring Maintenance Exterior Glazed Wood Doors

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 2000 Child Development Center

80 Roof Repair/Maintenance Steel Downspouts

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 2000 Child Development Center

40 Roof Annual PM Roof Membrane

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

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

MAINTENANCE CATE	GORY: Annual PM			SURVEY DA	ATE: 8/15					Page '
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 2000 Ch	ild Development Center	Roof								
Roof Membra	ane	18,460 SF								
O1 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								

AINTENANCE CATE	ORY: Improvement			SURVEY DA	ATE: 8/15				F	Page
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 2000 Chi	ld Development Center	Electrical								
Light Fixtures		272 EA								
existing fluore and should be recessed can	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			

1AIN7	TENANCE	CATEGORY: Non-Annual Recurring	Maintenance		SURVEY DA	ATE: 8/15				Page
EVER CORE EF. N	=	COMPONENT DEFICIENCY DG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0	2000	Child Development Center	Paint/Finish							
	Exterior	r Glazed Wood Doors	38 EA							
03	natural and war of a cle further coats o	terior wood doors located around the ce wood with no apparent protective finish ter staining is evident on the face of the ar sealer/urethane is recommended to degradation. The outside door faces sh f a clear sealer/urethane applied.	. Significant weathering doors. The application protect the surfaces from		\$4,050					
0	2000	Child Development Center	Roof							
	Single-I	Ply Roof Membrane	18,460 SF							
06	and the to asce also car areas o	gle-ply membrane on this building contains surface is dirty in several areas, which rtain the condition of the roof and idention shorten the life of the membrane. An of the membrane indicates that it is in gough cleaning of the membrane surface	can make it very difficult fy potential problems. It inspection of the clean od condition. However,			\$5,600				
	sumps. formula cleaned	e all leaves/debris from the roof and cle Power-wash the membrane using a cl ted for single-ply roof membranes. The d at least every three to four years to mane membrane.	eaning solution s surface should be							
	Note: Umembra		nce cleaning single-ply							
6	2000	Child Development Center	Paint/Finish	- — — — —		_ — — — —				- — — — — — — —
	Metal P	Parapet Cap Joints	116 LF							
00	providir the para	ulking in the joints of the metal parapeting the potential for moisture to leak into apet top. Remove failing caulk and recept caps on roof	the joints and deteriorate				\$825			

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

MAINTENA	NCE CATE	GORY: Non-Annual Recurrin	g Maintenance		SURVEY DA	ATE: 8/15				Page
EVER. CORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
	Non-Ann	ual Recurring Maintenance	AV. SEVER. SCORE = 49	\$ 0	\$4,050	\$5,600	\$825	\$ 0	\$0	\$10,475

MAIN	TENANCE CATEGORY: Repair/Maintenance			SURVEY DA	ATE: 8/15					Page
SEVER SCORI DEF. N	DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	2000 Child Development Center	Exterior Closure								
	HVAC Equipment Enclosure	25 SF								
02	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						
ЭТ/	AL: Repair/Maintenance AV.	SEVER. SCORE = 40	\$0	\$1,500	\$0	\$0	\$0	\$0	\$1,500	

SURVEY DATE: 8/15 Southwestern College

4000 **Otay Mesa Higher Ed Center** 8100 Gigantic St., SD

REPAIR COST ESTIMATE IS \$84,725

Facility Condition Rating = 100 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 0 %

Cost Per Square Foot is \$1.12

Average Severity Score = 44

Deficiencies Were Identified



Classroom/Lab PRIMARY USE:

FACILITY SF: 75,415 NO. OF STORIES: 2.0

Current Facility Replacement Cost is Approximately \$32,051,376 FACILITY AGE: 8 Yrs.

LAST RENOVATED:

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)

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 4000 Otay Mesa Higher Ed Center

20 Electrical Improvement

Light Fixtures - BLDG 4100

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

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

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

S/TE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 4000 Otay Mesa Higher Ed Center

20 Electrical Improvement Light Fixtures - BLDG 4500

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

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

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

SURVEY DATE .. 8/15 Page 3 SITE: Southwestern College FACILITY: 4000 **Otay Mesa Higher Ed Center** 46 Paint/Finish **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints - BLDG 4300 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak 102 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: REPAIR COST: 115 LF \$825 Deferrable Est. Remaining Life = 4 Yrs. Life Expectancy New = 15 Yrs. Estimate Date: 2015 Deficiency Data Source: **Condition Survey** Recommended Method of Repair: Contract Deficiency Cause is Weather Benefit Score = 38 Planning Priority: D-Escalating Repair Cost Reduction Maintenance 46 Paint/Finish **Non-Annual Recurring Maintenance** Metal Parapet Cap Joints - BLDG 4400 The caulking in the joints of the metal parapet caps is deteriorating, providing the potential for moisture to leak 102 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 Recommended Method of Repair: Contract Deficiency Cause is Weather Planning Priority: D-Escalating Repair Cost Reduction Benefit Score = 38 Maintenance SYSTEM SUB-TOTAL AV. SEVERITY SCORE = Paint/Finish COST PER BLDG GSF= \$0.03 \$2,275 46 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 Recommended Method of Repair: In-House Deficiency Cause is No Maintenance Benefit Score = 36 Planning Priority: C-Prevent Bldg. System Failure

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 4000 Otay Mesa Higher Ed Center

60 Roof Annual PM Roof Drains - BLDG 4300

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 Blda 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

Maintenance

60 Roof Annual PM Roof Drains - BLDG 4400

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

Maintenance

60 Roof Annual PM Roof Drains - BLDG 4200

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 4000 Otay Mesa Higher Ed Center

60 Roof Annual PM Roof Drains - BLDG 4100

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 Blda 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

Maintenance

50 Roof Non-Annual Recurring Maintenance Single-Ply Roof Membrane - BLDG 4500

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: 4000 Otay Mesa Higher Ed Center

50 Roof Non-Annual Recurring Maintenance Single-Ply Roof Membrane - BLDG 4200

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

Maintenance

50 Roof Non-Annual Recurring Maintenance Single-Ply Roof Membrane - BLDG 4300

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

Maintenance

SITE: Southwestern College SURVEY DATE:: 8/15 Page 7

FACILITY: 4000 Otay Mesa Higher Ed Center

50 Roof Non-Annual Recurring Maintenance Single-Ply Roof Membrane - BLDG 4400

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

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

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

FAC	CILITY CONDITION SURVEY - CRITICAL/5YR. DE	FICIENCY REPAIR PR	OGRAMMIN	IG DETAIL BY	Y MAINTENA	NCE/REPLA	ACEMENT C	ATEGORY		
MAIN	ITENANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVE SCOR DEF. I	RE DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 debris, inhibiting drainage. Drains should be thore 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 debris, inhibiting drainage. Drains should be thore 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 debris, inhibiting drainage. Drains should be thore least once per year. Roof perimeter of Bldg 4400	significant amounts of	\$975							
60	4000 Otay Mesa Higher Ed Center		- — — — —		_ — — — —	. — — — —			- — — — — –	
	Roof Drains - BLDG 4200	4 EA								
101	The roof drains and drain sumps are clogged with debris, inhibiting drainage. Drains should be thore least once per year. Roof perimeter of Bldg 4200	significant amounts of	\$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 debris, inhibiting drainage. Drains should be thore least once per year.		\$750							

Roof perimeter of Bldg 4100

MAINTENANCE CATE	GORY: Annual PM			SURVEY D	A <i>TE:</i> 8/15				F	Page 2
SEVER. SCORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
「OTAL: Annual P	·M	AV. SEVER. SCORE = 60	\$2,950	\$0	\$0	\$0	\$0	\$0	\$2,950	

FAC	CILITY CONDITION SURVEY - CRITICAL	/5YR. DEFICIENCY REPAIR PR	OGRAMMIN	IG DETAIL BY	Y MAINTENA	ANCE/REPLA	ACEMENT C	ATEGORY		
MAIN	TENANCE CATEGORY: Improvement			SURVEY DA	ATE: 8/15					Page 3
SEVEI SCOR DEF. I	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 manage existing fluorescent lighting is not as ene and should be replaced with LED lighting recessed can fixtures and suspended lig LED lights. Light fixtures throughout building 4500	ergy efficient as LED lighting g. Retrofit existing fluorescent,					\$2,050			
20	4000 Otay Mesa Higher Ed Center	Electrical								
	Light Fixtures - BLDG 4400	467 EA								
103	Maintenance staff and program manage existing fluorescent lighting is not as ene and should be replaced with LED lighting recessed can fixtures and suspended lig LED lights. Light fixtures throughout building 4400	ergy efficient as LED lighting g. Retrofit existing fluorescent,					\$26,700			
20	4000 Otay Mesa Higher Ed Center	Electrical								
	Light Fixtures - BLDG 4300	483 EA								
103	Maintenance staff and program manage existing fluorescent lighting is not as ene and should be replaced with LED lighting recessed can fixtures and suspended lig LED lights. Light fixtures throughout building 4300	ergy efficient as LED lighting g. Retrofit existing fluorescent,					\$12,100			
20	4000 Otay Mesa Higher Ed Center	Electrical	. — — —			. — — —				
	Light Fixtures - BLDG 4200	90 EA								
103	Maintenance staff and program manage existing fluorescent lighting is not as ene and should be replaced with LED lighting recessed can fixtures and suspended lig LED lights.	ergy efficient as LED lighting g. Retrofit existing fluorescent,					\$5,150			

Light fixtures throughout building 4200

, <u>-</u> , <u>-</u> ,	TEGORY: Improvement			Page					
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 4000	Otay Mesa Higher Ed Center	Electrical							
Light Fixtu	res - BLDG 4100	292 EA							
existing flu	ce staff and program managers have lorescent lighting is not as energy effi d be replaced with LED lighting. Retro can fixtures and suspended light fixture.	cient as LED lighting fluorescent,					\$16,700		

MAIN	TENANCE CAT	TEGORY: Non-Annual Recurring	g Maintenance		SURVEY DA	ATE: 8/15					Page 5
SEVER SCOR DEF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 C	Otay Mesa Higher Ed Center	Roof								
	Single-Ply	Roof Membrane - BLDG 4200	4,490 SF								
100	debris, and dirt accumus the condition shorten the surface is a Remove all sumps. Poformulated	-ply membrane on the building cord the membrane is relatively clean. ulate going forward it can make it is on of the roof and identify potential elife of the membrane. Thorough recommended in about 3 years. Il leaves/debris from the roof and cower-wash the membrane using a lifer single-ply roof membranes. The least every three to four years to membrane.	However, as debris and very difficult to ascertain I problems. It also can cleaning of the membrane elean downspouts and cleaning solution he surface should be				\$2,150				
	membrane	e only bonded contractor with expenses. f of Bldg 4200	rience cleaning single-ply	- — — — —	. — — — —	- — — — —	· — — — —			. — — — — -	
50		Otay Mesa Higher Ed Center	Roof								
100	The single- debris, and dirt accumi the condition	Roof Membrane - BLDG 4500 -ply membrane on the building cord the membrane is relatively clean. ulate going forward it can make it won of the roof and identify potential elife of the membrane. Thorough recommended in about 3 years.	However, as debris and very difficult to ascertain problems. It also can				\$1,650				
	sumps. Po	Il leaves/debris from the roof and cower-wash the membrane using a I for single-ply roof membranes. The least every three to four years to membrane.	cleaning solution he surface should be								
	membrane	e only bonded contractor with expenses. f of Bldg 4500	rience cleaning single-ply								

MAIN	ENANCE CAT	EGORY: Non-Annual Recurring M	aintenance		SURVEY DA	ATE: 8/15					Page 6
SEVER SCORE DEF. N	•	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 C	Otay Mesa Higher Ed Center	Roof								
	Single-Ply	Roof Membrane - BLDG 4300	7,950 SF								
100	debris, and dirt accumus the condition shorten the surface is researched. Remove all sumps. Postermulated cleaned at life of the new Note: Use	only bonded contractor with experien	owever, as debris and difficult to ascertain oblems. It also can aning of the membrane on downspouts and aning solution surface should be antain and prolong the				\$3,400				
	membrane Entire roof	s. of Bldg 4300									
50	4000 C	Otay Mesa Higher Ed Center	Roof								
	Single-Ply	Roof Membrane - BLDG 4400	14,800 SF								
100	debris, and dirt accumulation the condition shorten the	ply membrane on the building contain I the membrane is relatively clean. He ulate going forward it can make it very on of the roof and identify potential pro e life of the membrane. Thorough clear recommended in about 3 years.	owever, as debris and difficult to ascertain oblems. It also can				\$5,500				
	sumps. Po	I leaves/debris from the roof and clear ower-wash the membrane using a cleat for single-ply roof membranes. The st least every three to four years to main membrane.	aning solution surface should be								
	membrane	only bonded contractor with experien s. of Bldg 4400	ce cleaning single-ply								

MAINT	ENANCE CAT	EGORY: Non-Annual Recurring N	Maintenance		SURVEY DA	ATE: 8/15					Page 7
SEVER. SCORE DEF. NO	·	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 O	tay Mesa Higher Ed Center	Roof								
	Single-Ply F	Roof Membrane - BLDG 4100	9,960 SF								
100	debris, and dirt accumuthe conditions shorten the surface is reconstructed. Remove all sumps. Por formulated cleaned at I life of the minus Note: Use membranes	only bonded contractor with experier	lowever, as debris and y difficult to ascertain oblems. It also can raning of the membrane an downspouts and raning solution surface should be intain and prolong the				\$4,100				
46	4000 O	tay Mesa Higher Ed Center	Paint/Finish								
	Metal Parap	pet Cap Joints - BLDG 4400	105 LF								
102	providing the the parapet	g in the joints of the metal parapet c e potential for moisture to leak into t top. Remove failing caulk and re-ca os on roof of east wing and separate	he joints and deteriorate aulk all joints.					\$750 			
46	4000 O	tay Mesa Higher Ed Center	Paint/Finish								
	Metal Parap	pet Cap Joints - BLDG 4300	115 LF								
102	providing the the parapet	g in the joints of the metal parapet c ne potential for moisture to leak into t top. Remove failing caulk and re-ca os on roof of east and west wings of	he joints and deteriorate aulk all joints.					\$825			

MAINTENANCE CATEGORY	Non-Annual Recurring Ma	intenance		SURVEY DA	ATE: 8/15					Page
CORE D	OMPONENT DEFICIENCY OCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
6 4000 Otay M	esa Higher Ed Center	Paint/Finish								
Metal Parapet Ca	p Joints - BLDG 4100	100 LF								
providing the pote	e joints of the metal parapet capential for moisture to leak into the Remove failing caulk and re-cauroof of Bldg. 4100	e joints and deteriorate					\$700		. — — — — —	
OTAL: Non-Annual R	ecurring Maintenance A	V. SEVER. SCORE = 49	\$0	\$ 0	\$0	\$16,800	\$2,275	\$0	\$19,075	

Southwestern College SURVEY DATE: 8/15

5000 San Ysidro Higher Ed Center 460 W San Ysidro Blvd.

REPAIR COST ESTIMATE IS \$45,600

Facility Condition Rating = 99 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 1 %

Cost Per Square Foot is \$2.39

Average Severity Score = 47

Deficiencies Were Identified



PRIMARY USE: Classroom/Lab FACILITY AGE: 7 Yrs.

\$8,092,000

FACILITY SF: 19,040 NO. OF STORIES: 2.0 LAST RENOVATED:

0 Deficiencies Require Additional Study/Analysis

Current Facility Replacement Cost is Approximately

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)

Southwestern College SURVEY DATE: 8/15

5000 San Ysidro Higher Ed Center 460 W San Ysidro Blvd.

		W0.05	41/50405	DEFICIENCY	0007.050
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

Southwestern College SURVEY DATE: 8/15

5000 San Ysidro Higher Ed Center 460 W San Ysidro Blvd.

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 5000 San Ysidro Higher Education Center

20 Electrical Improvement Light Fixtures

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 5000 San Ysidro Higher Education Center

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

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

Maintenance

40 Paint/Finish Non-Annual Recurring Maintenance Metal Parapet Cap

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 5000 San Ysidro Higher Education Center

SYSTEM SUB-TOTAL Plumbing \$10,500 AV. SEVERITY SCORE = 68 COST PER BLDG GSF= \$0.55

60 Roof Annual PM Roof Drains

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

Maintenance

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

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

Maintenance

S/TE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 5000 San Ysidro Higher Education Center

40 Roof Repair/Maintenance Downspout

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

Repair

40 Roof Annual PM Roof Membrane

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

MAIN	TENANCE CATEGORY: Annual PM			SURVEY DA	ATE: 8/15					Page 1
SEVE SCOR DEF. I	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0	5000 San Ysidro Higher Education Center	Roof								
	Roof Drains	5 EA								
02	The roof drains and drain sumps are clogged with sign debris, inhibiting drainage. Drains should be thorough least once per year. Roof perimeter		\$500							
0	5000 San Ysidro Higher Education Center	Roof								
	Roof Membrane	6,700 SF								
101	There are small amounts of debris on the roof membra can create a scouring action across the surface and se drains. Debris should be cleaned off the roof at least of Roof surface	eriously clog roof	\$200							

AINTENANCE CATE	EGORY: Improvement		SURVEY DATE: 8/15						
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
0 5000 Sa	an Ysidro Higher Education Center	Electrical							
Light Fixture	es	272 EA							
existing fluo and should	e staff and program managers have indi- rescent lighting is not as energy efficient be replaced with LED lighting. Retrofit ex an fixtures and suspended light fixtures w	as LED lighting disting fluorescent,					\$15,600		

MAIN	TENANCE CA	ATEGORY: Non-Annual Recurring Mainte	enance		SURVEY DA	ATE: 8/15					Page 3
SEVER SCOR DEF. N	Ε	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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-Pl	y Roof Membrane	6,700 SF								
108	debris lea areas. H ascertain the meml recomme revealed Remove sumps. I formulate cleaned a life of the		n a few small it more difficult to shorten the life of surface is the roof membrane which spouts and solution the should be and prolong the			\$3,200					
46	5000	San Ysidro Higher Education Center	Paint/Finish	- — — — —		_ — — — —				- — — — — -	
	Metal Pai	rapet Cap Joints	117 LF								
100	providing the parap	king in the joints of the metal parapet caps is the potential for moisture to leak into the joint to bet top. Remove failing caulk and re-caulk all caps on roof	nts and deteriorate			\$850					
40	5000	San Ysidro Higher Education Center	Paint/Finish					. — — — -		- — — — — -	
	Metal Par	rapet Cap	639 SF								
103	as the pa appears t painted. brushed a	ory finish on the metal caps appears to be verint is peeling badly over the entire length of that the sheet metal may not have been prime. The existing finish should be thoroughly san and the metal primed with an appropriate prion of 2 coats of an industrial enamel.	the caps. It led prior to being ded/power		\$4,350						

<i>MAINTENA</i>	NCE CATE	GORY: Non-Annual Recurrin	g Maintenance		SURVEY DA	ATE: 8/15				Р
EVER. CORE EF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
	Non-Anni	ual Recurring Maintenance	AV. SEVER. SCORE = 45	\$0	\$4,350	\$4,050	\$ 0	\$ 0	\$0	\$8,400

<i>MAINTE</i>	NANCE CATEGORY:	Repair/Maintenance			SURVEY DA	ATE: 8/15				Page
EVER. CORE DEF. NO.	DE	MPONENT FICIENCY CATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
		ro Higher Education Center	Plumbing							
07	Some work has been of sewer gases into This deficiency prov	have been observed in the first floor en performed, however, the root can the first floor restrooms has not be vides an allowance to troubleshoot stem to determine the root cause of the floor restrooms.	ause of the release been determined. t the soil, drain,		\$10,500					
4 5	5000 San Ysid	ro Higher Education Center	HVAC							- — — — — — — -
06 (season. The buildi which should provic provides an allowar	_	or each classroom, deficiency m HVAC control		\$10,000					
0 5	5000 San Ysid	ro Higher Education Center	Roof			_ — — — —				- — — — — — — -
04 ⁻ 1	that allows rain wat below. The rusted	of one of the downspouts has a ba er to run outside of the downspour section should be cut-out and repl ang at roof canopy over 2nd floor en	t onto the concrete aced.	\$400						
OTAL	.: Repair/Mainten	ance AV. SE	EVER. SCORE = 57	\$400	\$20,500	\$ 0	\$ 0	\$0	\$0	\$20,900

Southwestern College

SURVEY DATE: 8/15

7000 **National City Higher Ed Center** 880 National City Blvd.

REPAIR COST ESTIMATE IS \$52,975

Facility Condition Rating = 100 (Excellent)

Repair Cost as a Percent of Facility Replacement Cost is 0 % Cost Per Square Foot is \$1.10 Average Severity Score = 24

Deficiencies Were Identified



PRIMARY USE: Classroom/Lab

FACILITY SF:

NO. OF STORIES: 2.0

Current Facility Replacement Cost is Approximately \$20,505,400 LAST RENOVATED:

11 Yrs.

0 Deficiencies Require Additional Study/Analysis

Recommended Maintenance Level is A

48,248

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)

Southwestern College SURVEY DATE: 8/15

7000 National City Higher Ed Center 880 National City Blvd.

man	ITENANCE CATEGORY/BUIL				
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.

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.

SITE: SURVEY DATE .. 8/15 Page 1 Southwestern College

FACILITY: 7000 **National City Higher Education Center**

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: REPAIR COST: 574 EA Est. Remaining Life = 3 Yrs. \$32,800 **Deferrable**

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

Recommended Method of Repair: Contract Deficiency Cause is Design

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2018 2038

SYSTEM SUB-TOTAL AV. SEVERITY SCORE = COST PER BLDG GSF= \$0.68 Electrical \$32.800 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.

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

Recommended Method of Repair: Contract Deficiency Cause is No Maintenance

Planning Priority: F-Occupant Comfort Enhancement Benefit Score = 8

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2016

SYSTEM SUB-TOTAL AV. SEVERITY SCORE = COST PER BLDG GSF= \$0.06 HVAC \$2,900 5

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: **Deferrable** Est. Remaining Life = 2 Yrs. \$5,600

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

Recommended Method of Repair: Contract Deficiency Cause is Abuse

Planning Priority: F-Occupant Comfort Enhancement Benefit Score = 8

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2017 2037

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 7000 National City Higher Education Center

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

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

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

Maintenance

20 Paint/Finish Non-Annual Recurring Maintenance Exterior HM Doors

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 7000 National City Higher Education Center

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

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

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

IAINTENANCE CATEG	ORY: Improvement			SURVEY DA	ATE: 8/15					Page 1
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
7000 Nati	onal City Higher Education Center	Electrical								
Light Fixtures		574 EA								
existing fluores and should be	staff and program managers have indic scent lighting is not as energy efficient e replaced with LED lighting. Retrofit ex fixtures and suspended light fixtures wi	as LED lighting isting fluorescent,				\$32,800				

		ION SURVEY - CRITICAL/5YR. DEFI		OGRAMMII			ANCE/REPLA	ACEMENT C.	ATEGORY		
SEVER. SCORE DEF. NO.	BLDG.	CORY: Non-Annual Recurring Maint COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	SURVEY DA	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	Page 2
50 70	000 Nati	ional City Higher Ed Center	Roof								
S	Single-Ply Ro	of Membrane	24,500 SF								
d a re re re F S fe C U	lebris and so accumulate, it oof and ident nembrane. Tecommended evealed no a Remove all leaumps. Powermulated for the mer	membrane on this building contains a me minor dirty areas on the membrane t can make it very difficult to ascertain tiffy potential problems. It also can shor horough cleaning of the membrane sud in about 2 years. An assessment of t pparent deficiencies. Laves/debris from the roof and clean doer-wash the membrane using a cleaning r single-ply roof membranes. The surfacest every three to four years to maintain mbrane.	As debris and dirt he condition of the ten the life of the rface is he roof membrane wnspouts and g solution and prolong the			\$8,500					
40 70	000 Nati	ional City Higher Education Center	Paint/Finish								
N	Metal Parapet	t Cap	11 LF								
e r tl	extensively du eplaced withi he joints clea	king on the several of the metal cap joing to weathering. The caulking in these in the next year. The existing caulk will uned and new calk installed.	e joints should be	\$250							
40 70	000 Nati	ional City Higher Education Center	Paint/Finish				<u> </u>				
N	Metal Parapet	t Cap	140 LF								
y e	laces due to vill likely be n	king on the metal caps is starting to deweathering. Though it is still in reason ecessary to replace the caulking in fouwill have to be cut-out, the joints clean	able condition, it r to five years. The					\$1,000			

Perimeter of roof

MAINTENANCE CATEG	ORY: Non-Annual Recurring	g Maintenance	SURVEY DATE: 8/15							Page 3
EEVER. CORE DEF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
0 7000 Nat	ional City Higher Education C	Center Paint/Finish								
Exterior HM D	oors (10 EA	1							
scratched, de	several exterior HM doors is ba tracting from the overall appear should be sanded, primed and		of	\$1,925						

MAINTE	TENANCE CATEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15					Page 4
SEVER. SCORE DEF. NO.	E DEFICIENCY	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5	
7	7000 National City Higher Education Center	er HVAC								
ı	HVAC Ceiling Diffusers	27 EA								
I	HVAC supply perforated ceiling diffuser(s) are stanew ceiling diffuser(s). Ceilings throughout building	ined and rusty. Install		\$2,900						
7	7000 National City Higher Education Center	r Interior Closure								
-	Toilet Partitions	6 EA								
1	There are several cubicles where the surface finisdamaged. Replace with new high pressure plastipartition(s). 1044, 1043, 1041				\$5,600					
OTAL	AL: Replacement/Renewal	V. SEVER. SCORE = 5	\$0	\$2,900	\$5,600	\$0	\$0	\$0	\$8,500	
ОТ А І	AL FOR ALL CATEGORIES AV. SEVER. SCO	PRE = 24	\$250	\$4,825	\$14,100	\$32,800	\$1,000	\$0	\$52,975	

Southwestern College SURVEY DATE: 8/15

9000 Crown Cove Aquatic Center 500 State Hwy 75, Coronado

REPAIR COST ESTIMATE IS \$107,975

Facility Condition Rating = 96 (Good)

Repair Cost as a Percent of Facility Replacement Cost is 4 %

Cost Per Square Foot is \$13.12

Average Severity Score = 44

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)

Southwestern College SURVEY DATE: 8/15

9000 Crown Cove Aquatic Center 500 State Hwy 75, Coronado

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: 9000 Crown Cove Aquatic Center

20 Electrical Improvement Light Fixtures

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 2

FACILITY: 9000 Crown Cove Aquatic Center

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: 9000 Crown Cove Aquatic Center

HVAC Replacement/Renewal Exhaust Fan

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: 9000 Crown Cove Aquatic Center

75 Roof Repair/Maintenance Cement Tiles

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

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

Maintenance

50 Roof Replacement/Renewal Metal Parapet Cap

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

Recommended 25 Yr. Sustainment Planning Replacement Years

Replace in 2015 2035

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: 9000 Crown Cove Aguatic Center

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

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

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

	GORY: 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
0 9000 Cro	own Cove Aquatic Center	Roof							
Roof Drains		3 EA							
	ns and drain sumps are clogg ting drainage. Drains should b er year.	ed with significant amounts of be thoroughly cleaned out at	\$325						

	ENANCE CATEGORY: Improvement			SURVEY DA	ATE: 8/15					Page 2
SEVER. SCORE DEF. NO.	COMPONENT DEFICIENCY D. BLDG. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 9	9000 Crown Cove Aquatic Center	Electrical								
l	Light Fixtures	74 EA								
6 1 1	Maintenance staff and program managers have ind existing fluorescent lighting is not as energy efficien and should be replaced with LED lighting. Retrofit e recessed can fixtures and suspended light fixtures a LED lights. Light fixtures throughout building. Main building, ga	t as LED lighting xisting fluorescent, with energy efficient rage, CPR office				. — — —	\$4,250 		. — — — — —	
	October 2000 Crown Cove Aquatic Center	Floor Cover								
ı	Floor Coverings	400 SY								
ı	Carpet is badly stained and dirty and is no longer or maintain. It should be replaced. The vinyl flooring in also deteriorating and should be replaced. Before in waterproof the concrete slab. Install new low-pile hi- grade carpet using waterproof adhesive. Note that					\$22,700				

	NCE CATEGORY:	Non-Annual Recurring	Maintenance		SURVEY DA	ATE: 8/15					Page
SEVER. SCORE DEF. NO.	DEFI	MPONENT FICIENCY FATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	0 Crown Co	ove Aquatic Center	Roof								
Sing	ngle-Ply Roof Mem	nbrane	SF								
acc	cumulation of dirt	mall areas of dirty membra and debris can make it ver and identify potential problem	ry difficult to ascertain the								
acc con the is re reve	cumulation of dirt ndition of the roof life of the membrecommended in t realed no apparent move all leaves/d	and debris can make it ver and identify potential probl rane. Thorough cleaning o two years. An assessment at deficiencies.	ry difficult to ascertain the lems. It also can shorten of the membrane surface of the roof membrane an downspouts and								
acc con the is re reve Ren sum forn clea	cumulation of dirtandition of the roof the membrate of the membrate different from the commended in tax and the commended in tax and the commended in tax and the commended from the commended from the commended from the commended for single control of the commended from the comme	and debris can make it ver and identify potential problem. Thorough cleaning of two years. An assessment and deficiencies. Debris from the roof and cless the membrane using a cless- ply roof membranes. The ery three to four years to ma	ry difficult to ascertain the lems. It also can shorten of the membrane surface of the roof membrane an downspouts and eaning solution a surface should be								
acc con the is re- reve Ren sum forn clea life	cumulation of dirtandition of the roof the membrace life of the membrace directly and the recommended in the realed no apparent amove all leaves/demps. Power-wash mulated for single than and at least every of the membrane	and debris can make it ver and identify potential problem. Thorough cleaning of two years. An assessment and deficiencies. The membrane using a cleaning the membrane using a cleaning the early roof membranes. The early three to four years to make the dedicate of the membrane with experience.	ry difficult to ascertain the lems. It also can shorten of the membrane surface of the roof membrane an downspouts and eaning solution a surface should be aintain and prolong the								

	TEGORY: Repair/Maintenance			SURVEY DA	NTE: 8/15					Page 4
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 9000	Crown Cove Aquatic Center	Roof								
Cement T	iles	10 EA								
·		the tiles should be ddition to replacing the nual allowance of \$500	\$500							

MAINTE	NANCE CAT	TEGORY: Replacement/Renewal			SURVEY DA	ATE: 8/15				Page
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
		Crown Cove Aquatic Center	Roof							
ľ	Metal Para	pet Cap	470 LF							
t a r k	through in almost tota replaceme been treate based indu	parapet cap in two locations on the s most spots due to the salt water envially deteriorated the sheet metal cap. In the are either a stainless steel cap or a ed with corrosion-resistant primer and astrial enamel. If of the main building and on the CPF	ronment, which has The alternatives for a metal cap that has d two coats of an epoxy-	\$25,000						
50 9	0000 (Crown Cove Aquatic Center	Exterior Closure							
ľ	Metal Flasi	hing	554 LF							
k F f F	buildings a Replaceme metal flash finished wi provided is	flashing at the base of the cement/stu to the site is rusting extensively due to ent alternatives include either stainles ing that has been primed with a rust- th 2 coats of an epoxy-based industri is for replacement. ing, warehouse/shop and CPR Office	the salt environment. ss steel flashing or a inhibiting primer and al enamel. Cost				\$15,700			
9	0000 (Crown Cove Aquatic Center	HVAC							
E	Exhaust Fa	an	1 EA							
k	be somewl	nounted circular exhaust fan was inop nat deteriorated. Replacement is rec ain building			\$3,000					
9	000 (Crown Cove Aquatic Center								- — — — — — — —
١	Water Hea	ter	1 EA							
s r	showing si	large electric water heater serving law gns of deterioration and should be pr nt. It is estimated to be a 100 gallon	ogrammed for			\$9,800				

Plumbing chase in shell storage area

	GORY: Replacement/Renewal			SURVEY DA	A <i>TE:</i> 8/15					Page 6
EVER. CORE EF. NO. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Cr	own Cove Aquatic Center	HVAC								
Exhaust Fan		1 EA								
are three cire wall that do a standpoint th provide vent	. These fans should both be replacular aluminum exhaust fans moulalso not appear to operational. Fraces should be replaced as well. It is also for the storage bay areas well times have wet equipment in them	nted horizontally in the om a cost-effectiveness These fans appear to hen the doors are closed,								
building app	ted cooling thermostat mounted of ears to energize and de-energize ed in the cost of this deficiency to the ese fans.	the fans. Funds have								
Roof of stora	age - — — — — — — — — — — —		- — — —							

South	western College		SURVEY DATE: 8/15
ST	Site		900 Otay Lakes Rd.
REPA	IR COST ESTIMATE IS \$1,384,050		Cost Per Square Foot is
Facili	ty Condition Rating = #Error		Average Severity Score = 40
Dana:	r Cost as a Percent of Facility Replacement Cost is	%	24 Deficiencies Were Identified

PRIMARY USE: Building Site/Parking/Athletic Fields FACILITY AGE:

50 Yrs.

LAST RENOVATED:

FACILITY SF: 0 NO. OF STORIES: 0.0

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.

		NO.OF	AVERAGE	DEFICIENCY	COST PER
MAINT. CATEGORY/SYSTEM		DEF.	SEV. SCORE	COST	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.

FACILITY CONDITION SUMMARY REPORT

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.

SITE: Southwestern College SURVEY DATE:: 8/15 Page 1

FACILITY: ST Site

68 Electrical Replacement/Renewal

Electrical Distribution Switchboard

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

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

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=

SITE: FACILIT	Southwesterr Y: ST	Colleg	e		SURVEY DATE::	8/15	Page 2
5	Other	R	eplacement/Rene	wal	Outside Benc	h	
113					the campus are dama These benches should	ged. The plastic coating is be replaced.	8
QUANTIT		EA	REPAIR COST:	\$11,900	Deferrable	Est. Remaining Life	= 1 Yrs.
Life Ex	xpectancy New	= 12 \	rs. Estimate Date:	2015	Deficiency Data Source:	Condition Survey	
Deficie	ency Cause is l	 Jnknowi	 า	Recomi	mended Method of Repai	r: Contract	
Benefi	t Score = 39	Plar	ning Priority: F-Oc	cupant Con	nfort Enhancement		
	place in 2016		t Planning Replaceme 2040	nt Years			
SYSTEN	M SUB-TOTAL C	ther	\$11,900) AV	. SEVERITY SCORE = 5	COST PER BLDG GSF=	
68 105	walkways are	d that the the distributed the distributed the distributed to the distributed	oxidized and not ac rust-inhibiting prim	ire protectior lequately pro	n and natural gas piping	kway Fire Protection and N g routed on the roofs of the nts. All exposed piping sho ed paint.	covered
QUANTIT		LS	REPAIR COST:	\$104,000	Deferrable	Est. Remaining Life	= 1 Yrs.
Life Ex	xpectancy New	= 8 \	rs. Estimate Date:	2015	Deficiency Data Source:	Condition Survey	
Benefi	ency Cause is I		on Ining Priority: C-Pr		mended Method of Repail System Failure	r: Contract	
Maint	enance						

SITE: Southwestern College SURVEY DATE:: 8/15 Page 3

FACILITY: ST Site

13 Paint/Finish Non-Annual Recurring Maintenance Wood Interior Doors/Frames

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 4

FACILITY: ST Site

13 Paint/Finish Non-Annual Recurring Maintenance Wood Window Frame

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

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=

SITE: Southwestern College SURVEY DATE:: 8/15 Page 5

FACILITY: ST Site

50 Paving Non-Annual Recurring Maintenance Asphalt Parking Lot O

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

Maintenance

50 Paving Non-Annual Recurring Maintenance Asphalt Parking Lot C

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 6

FACILITY: ST Site

50 Paving Non-Annual Recurring Maintenance Asphalt Parking Lot F

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

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 7

FACILITY: ST Site

50 Paving Non-Annual Recurring Maintenance Asphalt Parking Lot J

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.

I of 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

Maintenance

50 Paving Non-Annual Recurring Maintenance Asphalt Parking Lot H

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 8

FACILITY: ST Site

50 Paving Non-Annual Recurring Maintenance Asphalt Parking Lot I

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

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

SITE: Southwestern College SURVEY DATE:: 8/15 Page 9

FACILITY: ST Site

13 Paving Repair/Maintenance

Tennis Court Surface

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

Repair

13 Paving Repair/Maintenance

Tennis Court Surface

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

Repair

SITE: Southwestern College SURVEY DATE:: 8/15 Page 10

FACILITY: ST Site

13 Paving Repair/Maintenance

Tennis Court Surface

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

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=

SITE: Southwestern College SURVEY DATE:: 8/15 Page 11

FACILITY: ST Site

40 Roof Non-Annual Recurring Maintenance Covered Walkway Roof

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

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=

MAIN	ENAI	NCE CATEGO	RY: Non-Annual Recurring Mainte	nance		SURVEY DA	ATE: 8/15					Page 1
SEVER SCORI DEF. N	•	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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								
	Cov	ered Walkv	vay Fire Protection and Natural Gas Ro	oof 1 LS								
105	pipi and sho an e	ng routed of I not adequa uld be sand epoxy based	I that the surfaces of the fire protection the roofs of the covered walkways are stely protected from the elements. All cled, primed with a rust-inhibiting primer dipaint.	e heavily oxidized exposed piping		\$104,000 						
50	ST	Site		Paving								
	Asp	halt Parking	g Lot C	18,746 SY								
115	allig in d ade repa	gatoring. The eep and widequate. For rair. It is recolled top, bas alled, and the	ving in this lot exhibits significant areas to 1/2" top placed over the original aspect cracks. Minor repairs and sealing a much of the lot, and there is some base ommended that the entire lot be cold-pare repairs performed where necessary, ne lot restriped.	halt has resulted re no longer e that also needs laned to remove		\$151,800						
50	ST	Site		Paving								
	Asp	halt Parking	J Lot D	28,118 SY								
116	allig in d ade cold	gatoring. The eep and widequate. For red- d-planed to reessary, a neep	ving in this lot exhibits significant areas to 1/2" top placed over the original aspet de cracks. Minor repairs and sealing a much of the lot. It is recommended that remove the old top, base repairs perforew 1" lift installed, and the lot restriped	halt has resulted re no longer at the entire lot be rmed where		\$218,300						

FAC	ILIT	Y CONDI	TION SURVEY	- CRITICAL/5YR. DEFIC	IENCY REPAIR PR	ROGRAMMII	NG DETAIL B	Y MAINTENA	ANCE/REPL	ACEMENT C	ATEGORY		
MAIN	TENA	NCE CATE	GORY: Non-A	Annual Recurring Mainte	nance		SURVEY DA	ATE: 8/15					Page 2
SEVER SCOR DEF. N	E	BLDG.	COMPONENT DEFICIENCY LOCATION		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	Sit			Paving								
400	-	ohalt Park	-		11,500 SY		A= 0.000						
123	in g wic ent	generally de. All cra tire lot sho sistant em	good condition. cks should be s	t exhibits random cracking Cracks range in width from swept out and cleaned, the al-coated with 2 coats of a iped.	om 1/2" to 3/4" en sealed. The		\$58,000						
50	ST	Sit	e		Paving							- — — — — — -	
	Ası	phalt Park	ing Lot A		10,590 SY								
100	in (wic ent	generally de. All cra tire lot sho sistant em	good condition. cks should be s	t exhibits random cracking Cracks range in width from Swept out and cleaned, the al-coated with 2 coats of a iped.	om 1/4" to 3/4" en sealed. The			\$49,300					
50	ST	Sit	- — — — — — e	- — — — — — — -	Paving		- — — — — –					- — — — — —	
	Ası	phalt Park	ing Lot F		9,000 SY								
119	in r All sho	easonabl cracks should then oulsion an	e condition. Cra ould be swept o	t exhibits random cracking acks range in width from a cut and cleaned, then sea with 2 coats of a petroleur	1/4" to 3/4" wide. led. The entire lot			\$42,000					
50	ST	Sit	- — — — — — e	- — — — — — — -	 Paving				- — — —				
		ohalt Park			23,315 SY								
117	onl be	y minor ra seal-coat triped.	indom surface v	t is in reasonably good cowear. It is recommended of a petroleum resistant e	that the entire lot				\$94,800				

MAINT	ENANCE (CATEGORY: Non-Annu	al Recurring Maintenance		SURVEY DA	A <i>TE:</i> 8/15					Page 3
SEVER SCORE DEF. N		COMPONENT DEFICIENCY G. LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	only min	or random surface wear. coated with 2 coats of a p	n reasonably good condition, exhibiting It is recommended that the entire lot petroleum resistant emulsion and				\$27,400				
50	ST		Paving				- — — —			- — — — — — -	
	Asphalt	Parking Lot H	4,300 SY								
121	in gener wide. A entire lo	ally good condition. Crac Il cracks should be swept	ibits random cracking, but is otherwise cks range in width from 1/8" to 1/2" to out and cleaned, then sealed. The ated with 2 coats of a petroleum				\$23,900				
50	ST						. — — — —			- — — — — -	
	Asphalt	Parking Lot B	8,440 SY								
101	only min	or random surface wear. coated with 2 coats of a	n reasonably good condition, exhibiting It is recommended that the entire lot petroleum resistant emulsion and					\$34,300			
50	ST	Site					. — — — —			- — — — — —	
	Asphalt	Parking Lot I	1,075 SY								
122	in gener wide. A entire lo	ally good condition. Crad	ibits random cracking, but is otherwise cks range in width from 1/8" to 1/2" tout and cleaned, then sealed. The ated with 2 coats of a petroleum					\$6,000			

MAINT	TENANCE CATE	GORY: Non-Annual Recur	ring Maintenance		SURVEY DA	ATE: 8/15					Page 4
SEVER SCORE DEF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Sit		Paving								
120		paving in this lot exhibits rand						\$78,200			
	to 1/4". All c		racks range in width from 1/8" and cleaned, then sealed. The 2 coats of a petroleum								
0	ST Sit	e	Roof							- — — — — —	
	Covered Wa	Ikway Roof	1 LS								
14	areas, have this makes i	walkways, especially those fextensive amounts of leaves it difficult to ascertain the conditems such as electrical conditems.	dition of the membrane and		\$7,500						
	roof drain inlover the edg support bear premature do was observe followed a pe	es of the walkways and down ms and the underside of the c eterioration of the wood on the d during the first couple of da eriod of intense rain that had ect on the roofs, which was no	debris. This forces rain water the faces of the walkway decks. This in turn leads to ose surfaces. This situation ays of the survey in July, which allowed significant amounts of								
	basis using pathe same time cleaned of de recurring man every year.	powered leaf blowers, every the the roof drain screens and ebris. An amount should be lintenance requirement to add to settimated that about 120 enhance the maintenance of	I inlets should be thoroughly budgeted to cover this dress half of the walkways hours per year would								

MAINTE	NANCE CATE	GORY: Non-Annual Recu	rring Maintenance		SURVEY DA	NTE: 8/15					Page 5
SEVER. SCORE DEF. NO	. BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 5	ST Si	te	Paint/Finish								
	Wood Winde	ow Frame	30 EA								
	window fram an annual m annually. It refinish/repa Any peeling using an ext	aintenance expenditure for a is recommended that mainte ir approximately 30 frames pure finish should be scraped/sar erior wood filler/putty, and the differ be primed and re-finis	This should be addressed as a set quantity of frames nance funds be budgeted to er year. ded, damaged wood repaired a repaired areas sanded. The		\$5,700						
13 5	ST Sit	te	Paint/Finish			- — — —					
	Exterior Woo	od Panel	1,000 SF								
	panels on m annual main is recommer		ould be addressed as an t quantity of panels annually. It be budgeted to refinish/repair		\$8,200						
	using an ext	erior wood filler/putty, and the ld then be primed and re-finit	ded, damaged wood repaired e repaired areas sanded. The shed with two coats of finish.								

MAIN	TENANCE CATEGO	DRY: Non-Annual Recu	rring Maintenance		SURVEY DA	ATE: 8/15					Page 6
SEVER SCORE DEF. N		COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	finishes on a n largely the rest scratches/ding significantly ind an annual main annually. It is refinish/repair. Any peeling fin damaged wood repaired areas	umber of interior doors thrult of constant use/abuse. s and refinishing of worn dorease the life of the doors attenance expenditure for a	loor and frame surfaces will This should be addressed as a set quantity of doors nance funds be budgeted to erry year. Inded/wire brushed and exterior filler/putty and the		\$9,000						
13	ST Site									- — — — — -	
	Exterior Doors	/Frames	25 EA								
112	doors throughd weathering and refinishing of dof the doors. Expenditure for maintenance fidoors every year. Any peeling fin damaged area areas sanded. two coats of firms.	but the campus. This is lart donstant use. Repair of a constant use. Repair of a cor and frame surfaces withis should be addressed at a set quantity of doors an unds be budgeted to refinishar. ish should be scraped/sants repaired using an exterior The doors should then be aish.	minor scratches/dings and II significantly increase the life as an annual maintenance inually. It is recommended that sh/repair approximately 25		\$12,900						

MAINTENAN	NCE CATE	GORY: Non-Annual Recurrin	g Maintenance		SURVEY DA	ATE: 8/15				Page
EVER. CORE EF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
TAL: N	Non-Ann	ual Recurring Maintenance	AV. SEVER. SCORE = 42	\$ 0	\$575,400	\$91,300	\$146,100	\$118,500	\$0	\$931,300

MAIN	TENANCE	CATEGO	RY: Repair/Maintenand	e		SURVEY DA	ATE: 8/15					Page 8
SEVEF SCOR DEF. N	E	DG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 Su	urface	4 EA								
	surface underly problen deficier The correction of the correction	e. Many ring asphenatic and action and action and action a	d the two bleacher courts a esses the 4 courts in the wall direct be cleaned with a pall cracks should be clean ified cement with silica sand apply a base coat acrylic color. Finally, the court statimate does NOT include will require a more thorough	also be present in the ath tennis courts are the most are in the best condition. This worst shape. pressure washer. After the ed, filled and smoothed using ad to fill all cracks. The next cresurfacer, followed by two			\$53,400					
13	ST	Site	urfood	Paving								
108	The 14 surface underly problen	e. Many ring asph natic and	courts all have generalized of these cracks appear to halt/concrete. The four so	also be present in the uth tennis courts are the most are in the best condition. This					\$112,000			
	court ha a polym step wo	as dried ner modi ould be to	all cracks should be clean ified cement with silica san	pressure washer. After the ed, filled and smoothed using ad to fill all cracks. The next cresurfacer, followed by two hould be re-striped.								
	spots, a profess	as this w	rill require a more thorough	repair of "bird baths" or low a assessment by a court repair								

	NANCE CATEGO	PRY: Repair/Maintenanc	ce		SURVEY DA	ATE: 8/15				Page
SEVER. SCORE DEF. NO.	BLDG.	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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	T Site		Paving							
Т	ennis Court S	urface	2 EA							
u p d T	inderlying asp problematic an leficiency add The courts sho court has dried	d the two bleacher courts a resses the 2 courts in the b uld first be cleaned with a all cracks should be clean ified cement with silica sar	uth tennis courts are the most are in the best condition. This							
a s	tep would be	color. Finally, the court sh								

FAC	ILITY COND	DITION SURVEY - CRITICAL	/5YR. DEFICIENCY REPAIR PR	OGRAMMIN	NG DETAIL BY	Y MAINTENA	NCE/REPL	ACEMENT C	ATEGORY	
MAIN	TENANCE CAT	EGORY: Replacement/Ren	ewal		SURVEY DA	ATE: 8/15				Page 10
SEVER SCORI DEF. N	E	COMPONENT DEFICIENCY LOCATION	SYSTEM QUANTITY	CRITICAL COST 2015	YR. 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 S	Site	HVAC							
	Covered W	alkway Piping Insulation	1 LS							
103	from building insulation a excessive laced.	ater heating piping for buildingsing 102 across the roofs of the and protective jackets on this pheat loss. The insulation and povered walkways	covered walks. The piping biping are deteriorated, causing		\$114,400					
68	ST S	Site	Plumbing							
	Covered W	alkway Fire Protection and Na	atural Gas Piping 1 LS							
104	natural gas per industr deterioratir standard si	y standard and appear very in ng. These supports should be	the covered walkways are not		\$83,700					
68	ST S		Electrical							
	Electrical D	Distribution Switchboard	1 LS							
102	appears to Although th parts are e the end of with the rel circuits cor equipment	on switchboard that serves Bu be original and is thought to be equipment is still functional, xpensive and not readily availatis generally accepted service iability of the equipment as it penected to each breaker. It is be replaced.	, it is obsolete, replacement able, and the equipment is at life. There is also a concern provides protection of the				\$52,000			
5	ST S	 Site						. — — — -		
	Outside Be	ench	9 EA							
113	damaged.	d. These benches should be r	orn and the metal seat webbing		\$11,900					

				SURVEY DA	A/E: 8/15				Page
VER. COMPO ORE DEFICI F. NO. BLDG. LOCAT		SYSTEM QUANTITY	CRITICAL COST 2015	YR. 1 COST 2016	YR. 2 COST 2017	YR. 3 COST 2018	YR. 4 COST 2019	YR. 5 COST 2020	TOTAL COST YR. 0-5
DTAL: Replacement/Ren	ewal A	/. SEVER. SCORE = 52	\$0	\$210,000	\$0	\$52,000	\$0	\$0	\$262,000

SOUTHWESTERN COLLEGE

BUILDING-SPECIFIC DEFICIENCY PHOTOS



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 620 - Badly deteriorated rooftop hot water heater



Bldg 620 - Badly rusting rooftop HVAC duct seams



Bldg 610 - Weathered finish on exterior wood panels



Bldg 620 - Damage on roof parapet top



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



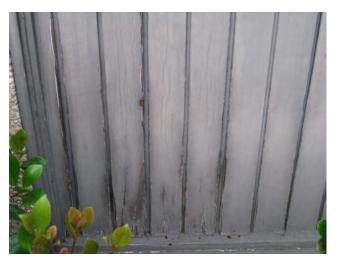
Typical concrete column spalling



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



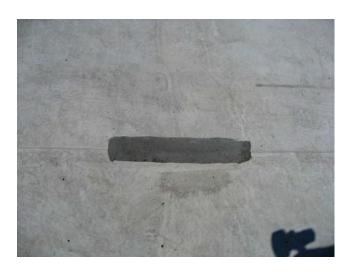
Typical clogged roof drains/sumps



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