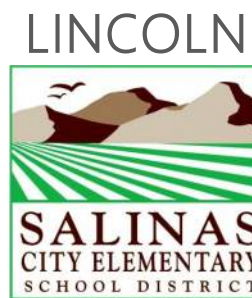


FACILITIES NEEDS ASSESSMENT



PREPARED BY BELLI ARCHITECTURAL GROUP

2022

1. CAMPUS INFORMATION: Lincoln.

Address: 705 California Street, Salinas, CA 93901
 Year Built: 1924
 Current Principal: Juan Chaidez
 Current Enrollment: 581 students

2. ON-SITE OBSERVATIONS

2.1 SITE

The school site contains significant areas in need of improvement, such as:

- No off-street bus loading zone present.
- No accessible ramp from main building into courtyard.
- Second Kindergarten playground located too far away from Kindergarten.
- Non-accessible ramps to enter some relocatable buildings.
- No accessible path of travel to kindergarten playgrounds.
- Rusted handrails.
- Dry rot and damage at exterior furnishings.



Image 2.1.2 Non-accessible relocatable building entrance. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.1.4 Kindergarten playground access. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.1.1 Non-accessible Courtyard entrance. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.1.3 Non-accessible second Kindergarten playground. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.1.5 Non-accessible ramp to kindergarten playground. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.1.5 Exterior furnishings. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.1.7 Aging concrete surfaces. Taken on 05/03/2022 by Belli Architectural Group.

- Missing gutters.

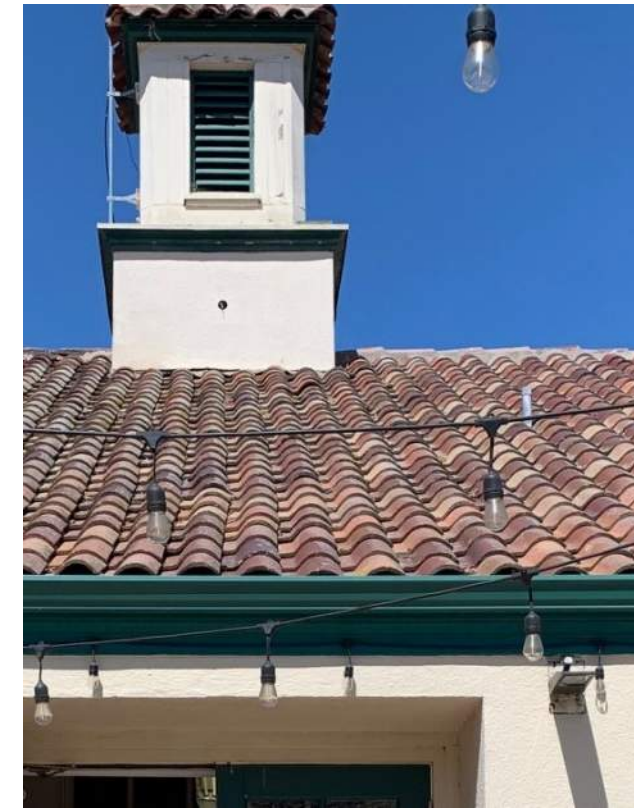


Image 2.2.1 Main building roof. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.1.6 Rusty handrail. Taken on 05/03/2022 by Belli Architectural Group.

2.2 EXTERIOR SHELL

The campus is composed of old buildings and portable classrooms, which require extensive work:

The existing permanent buildings present:

- Original roofing in need of cleaning and new underlayment.
- Old, original doors show dry rot damage.
- Exterior paint needed.
- Severe dry rot at library building.
- Failing gutters.

All portable classrooms were found to be in poor condition:

- Lack of access ramps in selected buildings.
- Exterior paint needed.
- Dry rot present.
- Heavy rust at doors, roofs and hardware.
- Rust at HVAC units.



Image 2.2.2 Original wood doors. Taken on 05/03/2022 by Belli Architectural Group.

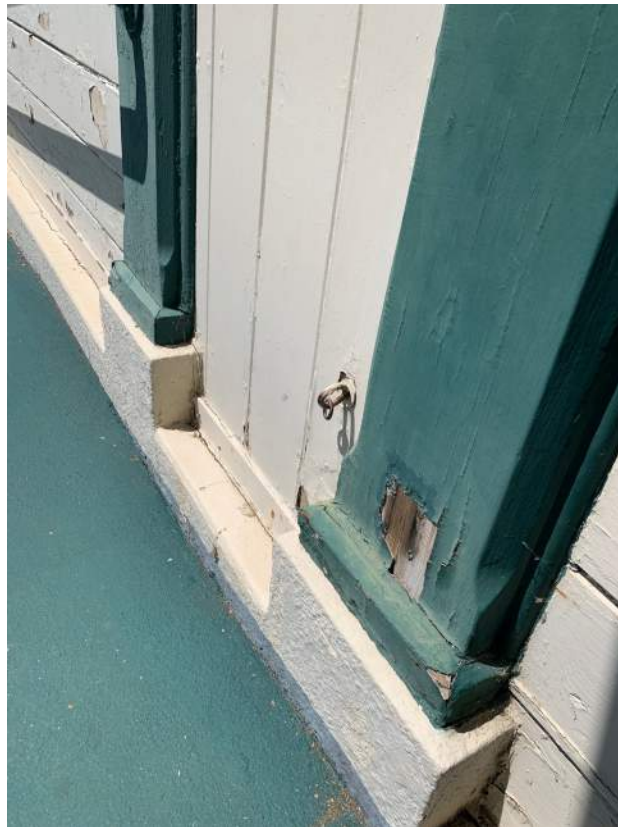


Image 2.2.3 Exterior paint. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.5 Library. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.7 Non-accessible ramp. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.4 Library. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.6 Dry rot conditions at Library overhang. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.8 Non-accessible stairs to relocatable building. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.9 Relocatable classroom. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.11 Weathered exterior conditions and dry rot at portables. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.10 Non-accessible door at relocatable classroom. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.12 Rusted HVAC units. Taken on 05/03/2022 by Belli Architectural Group.

2.3 INTERIORS

Existing interior finishes present significant issues, such as:

- Uneven flooring conditions in hallways.
- Peeling paint.
- Non-accessible ramps.
- No vision lights present in classroom doors.
- Select classrooms have old carpet.
- Aging skylights.
- Old, non-accessible restrooms.
- Aging sheet vinyl flooring in select areas.
- Broken ceiling panels in select areas.
- Non-accessible sinks at classroom casework.
- Damaged surfaces at existing casework.
- Old, original plumbing fixtures.
- Old, non-accessible drinking fountains.
- Aged, deteriorated equipment in Janitorial spaces. Storage capacity limited.



Image 2.3.1 Hallway. Taken on 05/03/2022 by Belli Architectural Group.

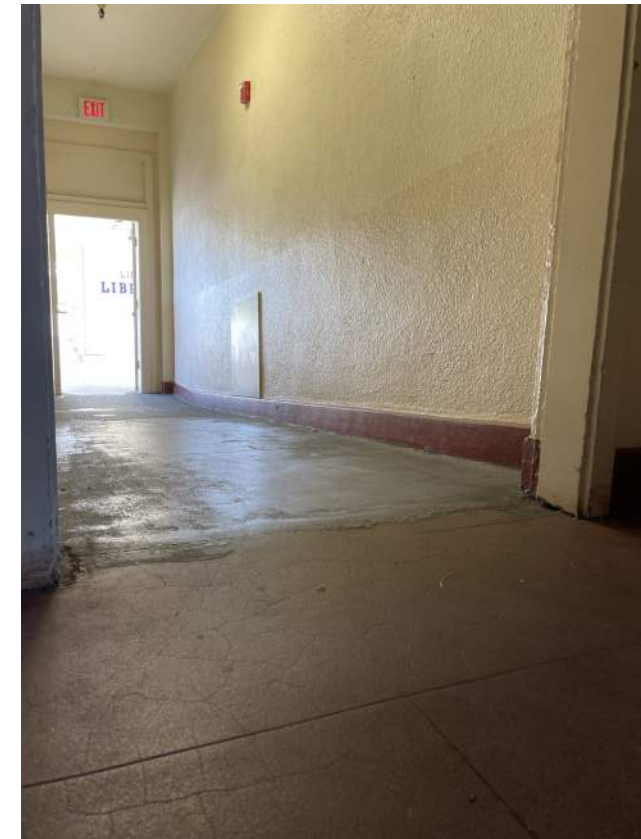


Image 2.3.3 Non-accessible interior ramp. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.2 Peeling interior paint. Taken on 05/03/2022 by Belli Architectural Group.

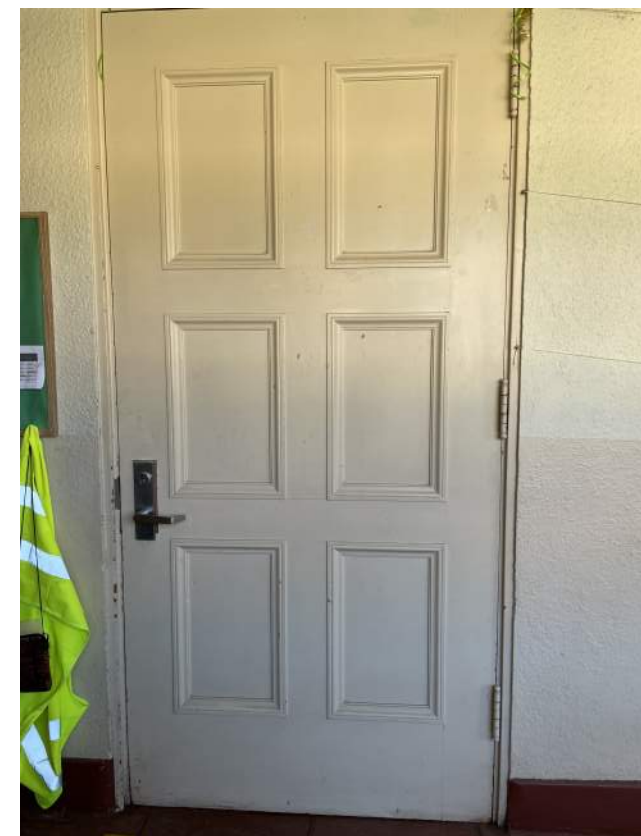


Image 2.3.4 Classroom door with no vision light. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.5 Classroom with carpet flooring. Taken on 05/03/2022 by Belli Architectural Group.

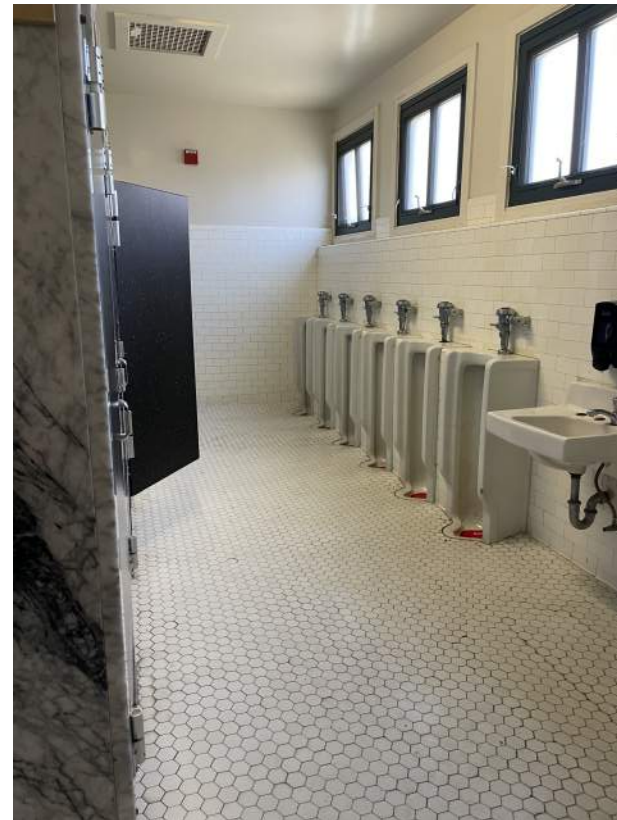


Image 2.3.7 Student restrooms. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.9 Relocatable classroom ceiling. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.6 Skylight. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.8 VCT flooring. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.10 Classroom casework. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.11 Drinking fountain. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.13 Kindergarten/Preschool restroom. Taken on 05/03/2022 by Belli Architectural Group.

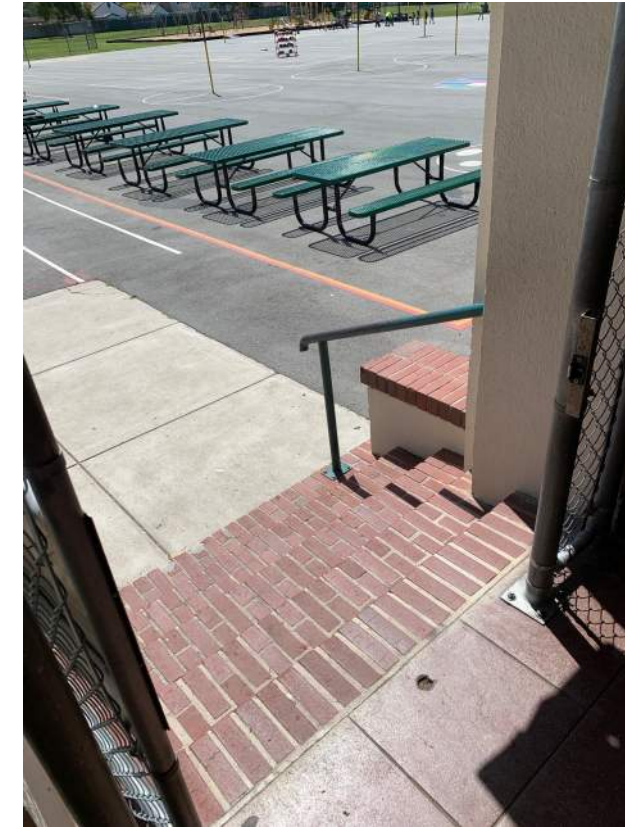


Image 2.4.1 Non-accessible playground entry. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.12 Janitorial room. Taken on 05/03/2022 by Belli Architectural Group.

2.4 ACCESSIBILITY

The campus presents significant accessibility issues due to:

- Non-accessible entrances.
- Non-accessible ramps.
- Non-accessible sinks at casework.
- Non-accessible drinking fountains.



Image 2.4.2 Drinking fountain missing cane detection rails. Taken on 05/03/2022 by Belli Architectural Group.

2.5 SERVICES

For MEP findings, please refer to subsequent reports provided by Aurum Consulting and Axiom Engineers.

2.6 STAKEHOLDER REMARKS

- Student and staff restrooms, both permanent and portable, in poor condition.
- Playgrounds need upgrades.
- Roofs in need of replacement.

3. MECHANICAL SITE VISIT REPORT

AXIOM ENGINEERSSM
 CONSULTING MECHANICAL ENGINEERS
 22 Lower Ragsdale Dr., Suite A Monterey, CA 93940
 Phone 831.649.8000 Fax 831.649.8038



School Name: **Lincoln ES**

Address: 705 California Street

Findings from a site visit conducted on May 3, 2022. It appears the last significant HVAC/Plumbing modernization was done in 2003. A minor remodel was done to the administration area and teacher’s lounge in 2020. The main school building is similar to El Gabilan, Kammann, Roosevelt and Sherwood and was constructed prior to 1940. All windows were replaced in 2018 or 2019. The building is uninsulated. The main building has a few abandoned in place cast iron radiators from when the building had a steam boiler system. It is desired to install a Pelican Wireless Control System to allow the district maintenance staff to control all HVAC equipment.



3.1 HVAC

Administration:

The heating system for the Administration area, the adjacent Teacher’s Lounge and Room 9 consist of a single (one) Armstrong horizontal gas-fired furnace located in the attic above. The furnace was installed during the 2003 modernization and appears to be fair condition and operating. This furnace is 20 years old and should be replaced.



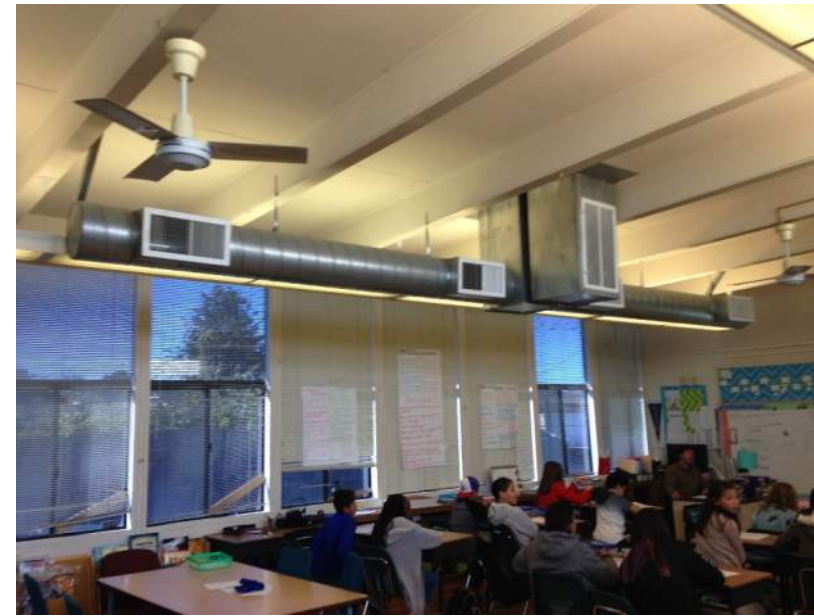
Classrooms 1 thru 7, Classrooms 10 thru 18:

The heating system for these classrooms consist of an Armstrong horizontal gas-fired furnace located on a platform in the Teachers Workroom at the back of the classroom. These furnaces were installed during the 2003 modernization and appear to be fair condition and operating. These furnaces are 20 years old and should be replaced.



Classroom 21:

The classroom is heated with an up-flow gas-fired furnace located inside a TEAM Mfg. metal enclosure. This furnace was installed in the 2003 modernization and appears to be in fair condition and operating. The furnace inside the enclosure is 20 years old and should be replaced. This classroom also had a ceiling mounted Mitsubishi split system air conditioning unit and a ceiling mounted paddle fan.



Classroom 20, 23 thru 37:

These are portable classroom consisting of the exterior wall mounted “Bard” type heat pump units. All portables utilize this type of equipment. Older (20 years) unit should be replaced.

Library:

This is a stand-alone building heated by a Lennox up-flow gas-fired furnace in a corner classroom unit. This unit appears to be in fair condition and operating. This furnace is 20 years old and should be replaced.



Multi-Purpose/Cafeteria Building:

The heating system for the Multi-Purpose room consist of two (2) suspended Sterling gas-fired unit heaters. These appear to be from the 2003 modernization and are in fair condition and operating. These heaters are 20 years old and should be replaced. An older gas-fired wall furnace heats the adjacent Staff Lounge.



Classroom 22:

This is a stand-alone classroom building heated with a rooftop mounted packaged heating/cooling unit that was installed recently and appears to be in good condition and operating.



3.2 PLUMBING

Multi-Purpose/Cafeteria Building:

A gas-fired tank type water heater serves the food service equipment.



A bottle filler located inside the Cafeteria.



3.3 FIRE SPRINKLERS

Only the main building has fire sprinklers located in the hallway and door openings into the hallway. The sprinkler system appears to be from the mid 1970's. Fire sprinkler heads or 45 years old and should be replaced.

This concludes my assessment.

AXIOM ENGINEERSSM CONSULTING MECHANICAL ENGINEERS
22 Lower Ragsdale Dr., Suite A • Monterey, CA 93940 • Phone 831.649.8000 • Fax 831.649.8038

4. ELECTRICAL SITE VISIT REPORT



ELECTRICAL ENGINEERING · LIGHTING DESIGN · SYSTEMS DESIGN

ELECTRICAL DUE DILIGENCE REPORT

For
Lincoln Elementary School
Salinas, CA

For
Belli Architectural Group
235 Monterey Street, Suite B
Salinas, California 93901
May 6, 2022

Prepared by: Najib Anwary, P.E.

Aurum Consulting Engineers Monterey Bay
404 W. Franklin Street, Suite 100
Monterey, California 93940
Telephone : (831) 646-3330
Fax: (831) 646-3336
ACEMB Project #: 21-393.00

4.1 INTRODUCTION

The following is based on a walk-through visual inspection of the school. No electrical equipment was opened for inspection, no load studies done and no testing was performed. The intent was to evaluate the electrical systems and identify any obvious problems that may be present.

4.2 FIELD FINDINGS

Electrical System:

There are (2) existing main “metered” electrical service switchboards and (1) service panel (MSB1, MSB2 and a service panel). MSB1 is an 800 amp, 120/208 volt, 3 phase, NEMA 3R, Square D, service located outdoors on the south west side of main building. MSB1 feeds the main building and library. MSB1 expected life; 15 to 20 yrs. MSB2 is an 800 amp, 120/240V, single-phase, NEMA 3R, Square D, service located outdoors east side of campus. MSB2 has a connection for the existing Solar PV system. The Solar PV is connected ahead of the main breaker at MSB2. MSB2 feeds all modular classrooms and restrooms. MSB2 expected life; 15 to 20 yrs. There is a 200A, 120/240V, single-phase, NEMA 1, metered service panel with overhead service feeding the Multi-Purpose building. The electrical services are used primarily for lighting and heating equipment, with minimal plug loads. It appears that the electrical distribution equipment has been replaced by newer equipment. There are a few of the electrical distribution system panels that are original to the main campus buildings when the school was built, are old and manufactured by a company that no longer exists. The reliability of the system’s breakers to function correctly when necessary cannot be relied upon. It is recommended to replace the oldest panels within the classroom wings of the main campus building. Where the District plans to add HVAC to main building, MSB1 has the load capacity for the additional loads. The maximum additional load to be added is unknown so it is recommended to have an Electrical Engineer to conduct a load study prior to connection of new loads to MSB1. See attached photos MSB1, MSB2 and service panel.

Interior Lighting is primarily fluorescent with T8 or T12 lamps at interior spaces in permanent buildings (with the exception of a very select few spaces recently remodeled...Admin area and a couple of Restrooms). Several light fixture lamps color temperature does not match and few lamps don’t work, see attached photo LTG1. The lighting throughout the school campus is old and although there was no mention of complete failure, some light fixtures seemed original to the spaces, so they are likely near their “end of life”, especially with regards to efficiency. The library building does not provide a good lighting distribution. Emergency lighting was not apparent at any classrooms, restrooms, or exterior landings. However, in multi-use spaces and hallways, bug-eye type stand-alone emergency light fixtures were installed. Occupant sensors and multilevel switching/dimming necessary for energy conservation is almost non-existent. Expected life; Unknown. It is recommended to retrofit or replace campus wide lighting system with new LED technology in the near future. This would be a good opportunity for reduction in energy use from more efficient lighting fixtures, improved classroom lighting, smart lighting controls, daylight harvesting and would also reduce maintenance costs. See attached photo LTG2.

Exterior Building Lights are LED and old fluorescent. No lighting poles were found at the parking lot. Between buildings, where walkways are present, there are wall mounted fluorescent light fixtures throughout the main building. Most, if not all building lights at the

around the modular classrooms are LED. Exterior lighting is controlled via astronomic time clock or photocell for auto shut-off. Where new lighting is to be installed, it will need to be controlled via an astronomic time clock or photocell. Motion sensor may also be required per T24. Expected life of existing exterior lighting; unknown.

Classrooms have typically one outlet per wall with modifications in some areas to accommodate current computer loads (where surface raceways were added). Expected life; Unknown. It is recommended to retrofit classrooms, in the near future, with additional circuits and outlets to accommodate a minimum district standard quantity of devices in general classroom/space for equipment connections including multi-media equipment. This will in turn require an upgrade to existing electrical panelboards (as most panels don’t have the space capacity to accommodate additional loads) which will need to be connected to the existing main electrical switchboard or nearby distribution panels. There are some classrooms where either the sink was added or the receptacle installation was original to the site and thus the receptacle(s) are not GFCI (Ground-Fault Circuit Interrupt) type. This is a safety hazard and should be replaced.

Most of the classrooms have wall mounted short-throw projectors with associated AV controls located near the teacher’s station. There are no ongoing problems. Additionally, few of the teacher’s stations are centralized in the classrooms, which lead the power cord to be extended from the outlet to the teacher’s station.

Telephone System:

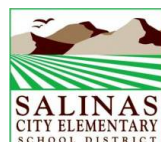
The existing telephone system appears to be in fair condition and functional. It is an analog system for the campus. There was no input provided for major problems except that the desire is to bring the entire site to District standard of a Voice Over IP (VoIP) system. Expected life of existing system; unknown.

PA Speaker System:

The existing PA System is an older Dukane model and is connected to speakers around the campus, some exterior speakers with separate amplifiers are located strategically to cover large open field areas. There are no ongoing issues with the system itself. However, per district staff, it was found that static is present on the PA system wiring. This can be subject to a fire hazard so it is recommended to ensure that the grounding system has a low impedance and where possible, wires bundled with other low voltage wires (from other systems) to be rated for such use and shielded as necessary. Expected life; 2 to 3 yrs., the system is older and requires regular maintenance, per district staff.

Clock System:

The existing PRIMEX Clock system is a wireless battery-operated system. It seems to be in good condition and functional. The school staff reported no ongoing problems with the existing system other than replacing the clock batteries every one or two years. It is recommended to install new and reliable batteries to reduce the maintenance cost. Expected life; approximately 5 yrs. Where PA Speaker system is upgraded, it is recommended to upgrade the clock system if desired to have both under one “umbrella”/manufacturer.



Data System:

There are IDF's (Intermediate Distribution Frame) throughout the school campus with wireless routers in most of the buildings/classroom spaces. Since most classrooms have only a couple computers at most (except for computer labs), the existing campus wide data system seems to be working fine. Expected life; unknown. It is recommended to retrofit classrooms, in the near future, with additional outlets to accommodate a district standard quantity of devices in general classroom/space for computers, printers and multi-media equipment. This will require District IT input on available bandwidth and patch panels at existing distribution frames to accommodate an increase in connections.

Fire Alarm System:

1.The existing Fire Alarm System is Notifier AFP-200 model (FACP) and it is discontinued. The FACP is located in the Administration building. The site does not have current code compliant coverage as required by California Fire Code (except for remodeled classrooms and new MPR building). The school site has pull stations and horns/horns-strobes for majority of the spaces which met code standards at the time of install, however, where spaces are remodeled and required to conform to current code requirements, the existing Notifier AFP-200 panel will not accommodate any future remodel work or Emergency Voice Evacuation System addition. Moreover, per District staff, it was brought to our attention that ground faults occur very often during rainy days. The ground faults are typically found inside in-grade pull boxes, where fire alarm spliced cabling exists. It is recommended to replace wires affected by ground fault with new wires and avoid splicing inside the in-grade pull box to eradicate the ground fault problem. The raceways associated with fire alarm/low voltage systems around the central/main interconnected building of the campus are cabled through in concealed locations and where add-ons or systems are extended, surface raceways (Panduit) are routed within the room/spaces. Where fire alarm/low voltage raceways extend between buildings, it seems to be mainly an underground connection with pull cans on exterior of buildings. Expected life of existing system; 1 to 3 years if no new major building renovations or additions occur.

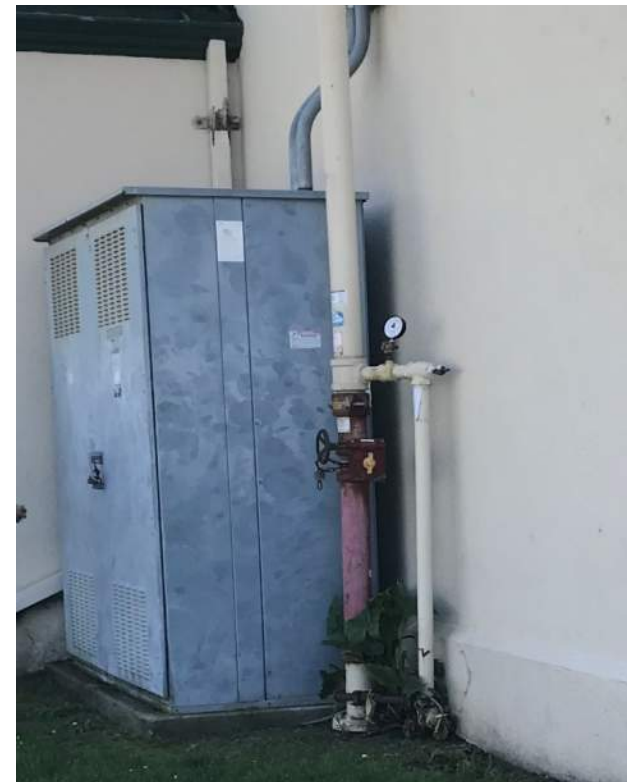
Security:

1.The existing campus security system is comprised of a stand-alone security panel (DSC) located in the Administration building. The system seems to be in good condition and the school staff reported no ongoing problems. The system is interconnected to remote building booster panels and the campus has wired motion detectors throughout the site connected to the security panel. Expected life; 4 to 5 yrs. There is also a CCTV Security Camera system which Power over Ethernet (POE) cameras located strategically by the district throughout the site. Each camera is connected to a local IDF/MDF via data cable. Expected life; unknown, seems to be in working condition with no reported problems.

4.3 SUMMARY

The school electrical infrastructure is in good condition except for a few panels that are very old and should be replaced with new to match the existing main service switchboard manufacturer type and ratings in the near future. The school interior lighting system and controls need to be upgraded in the near future where energy may be conserved with lower maintenance cost and higher lamp life LED technology with dimming capabilities. Only the modular classrooms building lights seem to have LED drivers.

An increase in the classroom receptacle quantity and associated electrical loads will require the downstream electrical distribution to upgrade from the main service switchboard to the classroom building in order to support future additional computer/technology loads as well as possible mechanical HVAC connections. The raceways associated with low voltage systems around the campus may need to be verified/inspected for re-use where additional fiber optic cables/network cabling for any low voltage system upgrades is deemed necessary in order to verify cost impact of new trench vs. existing underground conduit re-use. Where a new building may be proposed at this site, an electrical survey will need to be completed and it is likely that the new building will require an Electrical (PG&E) service upgrade to accommodate any new proposed building (should an equivalent number of buildings/rooms not be slated to be removed due to new building added). In addition, Site Telecom, Fire Alarm, and Low Voltage Systems will need upgrades to accommodate new connections with newer technology and EM Voice Evacuation Fire Alarm System.



MSB1.



MSB2.



SERVICE PANEL.



LTG1.



LTG2.

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