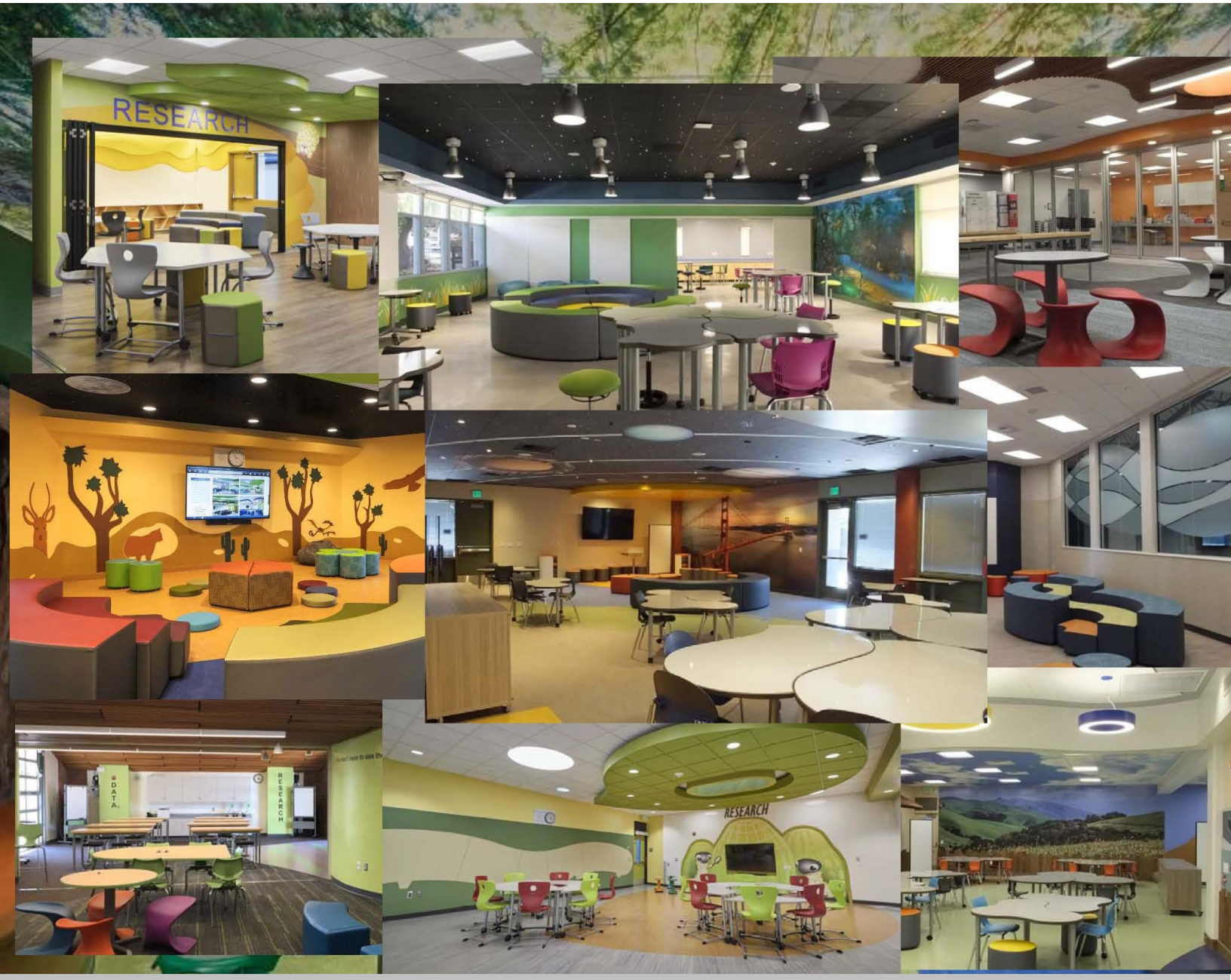


2020 FACILITIES NEEDS ASSESSMENT

UPDATED MAY 2024

BERRYESSA UNION SCHOOL DISTRICT

EXECUTIVE SUMMARY

Berryessa Union School District provides all students the skills to become Lifelong learners and successful 21st century global citizens.

The Berryessa Union School District, located on the East side of the City of San Jose, serves approximately 6,000 Kindergarten through 8th grade students at one of their ten elementary or three middle school sites.

The assessment process involved reviewing each of the District's school sites, as well as the District Office building, the Maintenance Operations and Transportation yard, and the Central Kitchen facility. The goal of the assessment process was to identify and evaluate the existing conditions of the various facilities along with the capacity and utilization rates of the schools, document these conditions, categorize and group them, and provide estimated costs for remedies as needed.

This facilities assessment will serve as a tool for the District to identify potential facilities projects for inclusion in the Measure U Bond. The purpose of this assessment was not to identify those bond measure projects, but to identify al potential projects for consideration. Typically, a facilities assessment like this will identify far more projects then a district's bond measure can support. Further work is necessary to establish priorities and to identify a list of project that fits within each project site's individual construction budget.

OUR FOCUS

Following this facilities assessment, the District will be identifying potential projects. It is anticipated that our assessed needs will exceed the funds available to us for bond measure projects. Therefore, we will be selecting project scope based on the following priorities. Based on these priorities, projects will be identified and described in detail, including budget and schedule information, in a coming implementation plan.

- Make essential school safety and security improvements
- Update science, arts, and math classrooms and labs for 21st-century learning
- Keep schools clean and well-maintained
- Replace aging fire alarms and communication systems
- Ensure playgrounds, walkways and fields meet current safety standards

DISTRICT GOALS

This facilities assessment is the first step in responsibly identifying projects for inclusion in the bond measure. The District will be working to address critical facilities needs and to meet our responsibilities to the community. The following are the District's goals when considering projects for inclusion in the bond.

- Ensure a safe learning environment
- Enhance proficiency in the 4 C's:
    - *communication*
    - *collaboration*
    - *critical thinking*
    - *creativity*
- Enhance technology
- Provide professional development for all staff
- Increase parent and community involvement and education

ACKNOWLEDGEMENTS

Board of Trustees	Board President	Jai Srinivasan
	Vice President	Thelma Boac
	Clerk	Hugo Jimenez
	Member	Khoa Nguyen
	Member	Jaira Jaug
District Office	Superintendent	Dr. Roxane Fuentes
	Assistant Superintendent of Business	Kevin T. Franklin
	Director of Bond Facilities and Modernization	Tony Kanastab
	Director MOT	Dan Norris
	Director Student Nutrition	Mari Fujikawa
Principals	Brooktree Elementary	Mya Duong
	Cherrywood Elementary	Tina Tong Choy
	Laneview Elementary	Maricela Krickovic
	Majestic Way Elementary	Virginia Pender
	Noble Elementary	Andrea Ortiz
	Northwood Elementary	Dr. Andrew Derrick
	Ruskin Elementary	Lakeisha Blackshire
	Summerdale Elementary	Samantha Rainer
	Toyon Elementary	Krista Castillou
	Vinci Park Elementary	Parisa Nunez
	Morrill Elementary	Jamal Plane
	Piedmont Elementary	Chris Mosley
	Sierramont Elementary	Carol Mar

Project Team

Flatley Design Management Planning	Architectural Consulting
Sugimura Finney Architects	Architectural Consulting
Deviri Castellanos Architects	Architectural Consulting
Peoples Associates Structural Engineers	Seismic Consultant
Alfatech Consulting Engineers	Mechanical Electrical and Plumbing
Pavement Engineers Inc.	Pavement
Gale Associates Inc.	Roofing

TABLE OF CONTENTS

BROOKTREE ELEMENTARY SCHOOL

2020 FACILITIES ASSESSMENT

UPDATED MAY 2024

Key Data

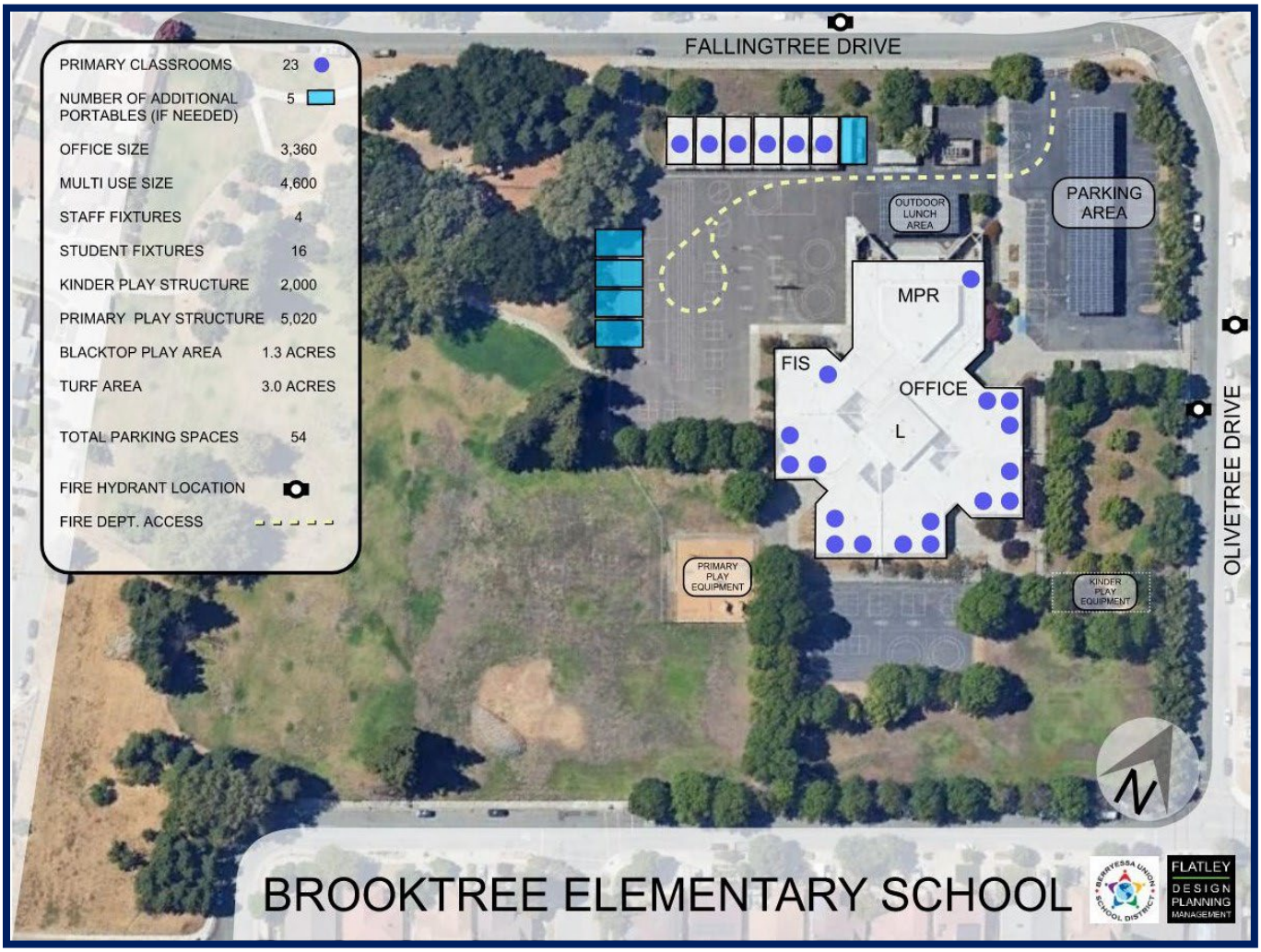
Site Size	10.0 Acres
Building Area:	38,189 SF
Portable Area	6,144 SF
Total Size	44,333 SF
Permanent Classrooms	16
Portable Classrooms:	6
Portable Restroom Building:	1

Construction History

1975	School constructed
1992	Portable restroom building, (4) Portable classroom installed.
1996	(2) Portable classroom buildings installed
2004	Modernization projects
2007	New playground equipment, misc. improvements, roofing projects
2015	Measure L - Exterior painting, security fencing, playground equipment upgrades, and IT infrastructure upgrade projects
2016	Measure L - Solar project
2018	Measure L - Flexible Instructional Space and modernization projects
2019	Interior and exterior LED lighting replacement
2021	Measure U - The main playground asphalt was reconstructed, portable ramps were replaced, an outdoor eating area was created, and irrigation controls and backflow were installed.
2022	Measure U – Library improvement, new library desk, library shelving, exterior door signage.
2023	Measure U – Restroom floor replacement and exhaust fan replacement projects.
2024	Measure U - Fire Alarm replacement

Existing Site Plan

Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	TOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior		$663,138	$263,942		$927,080	$14,326	$941,406
Roofing			$1,337,867	$205,134	$1,543,001		$1,543,001
Interiors		$1,235,924	$535,304	$1,714,830	$3,486,058	$91,769	$3,577,827
Restroom	$382,329		$364,780		$747,109	$81,952	$829,061
Kitchen		$506,684			$506,684		$506,684
Plumbing	$27,778	$106,314	$59,304	$94,163	$287,559		$287,559
HVAC	$3,475,934			$152,608	$3,628,542	$71,206	$3,699,748
Electrical	$314,111			$296,738	$610,849		$610,849
Fire Alarm						$760,065	$760,065
PA & Speakers	$356,628				$356,628		$356,628
Campus Security	$164,386		$670,873	$278,741	$1,114,000		$1,114,000
Technology/Data			$174,623	$445,108	$619,730		$619,730
Site Development		$5,711	$1,216,220	$662,352	$1,884,284	$66,276	$1,950,560
Landscaping & Fields	$150,891		$208,294	$158,967	$518,152	$21,422	$539,574
Infrastructure		$226,326			$226,326		$226,326
Pavement		$778,991	$77,304	$112,991	$969,286	$386,715	$1,356,001
Solar Replacement							
TOTAL	$4,872,057	$3,523,088	$4,908,511	$4,121,632	$17,425,289	$1,493,731	$18,919,020

Assessed Facilities Needs

Site Security and Safety

- Vehicle barriers are recommended at key areas.
- At key locations, install film on windows and door glazing to deter forced entry and obscure visibility.
- Paint or install large building, or pod numbers on buildings or exterior doors. **Complete**
- Consider installing new security systems and cameras. **Complete**
- Several areas of cracked concrete present tripping hazards and drainage issues. **Complete**

Site Accessibility

- Three pairs of the existing classroom exit doors do not meet access requirements. Revise concrete retaining walls to enlarge entry areas.
- Consider new wayfinding signage and displays site wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains.

Parking lot and Drop-Off / Pick-Up

- Maintain ADA accessible parking compliance as required by code.
- Existing curbs and striping need repainting.
- Add pickup and drop-off loop adjacent to existing parking lot.

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing. **Complete**
- The landscaping in the sloped planters adjacent to the building is causing moisture intrusion problems, as well as creating a security issue by assisting students in accessing the roof of the building. Simplify landscaping and reduce irrigation.
- Arborist should inspect large trees.Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Re-seed grass under trees and add redwood or other type of edging to create clear boundary for grass.
- Ensure that backflow preventers are installed and working properly. **Complete**
- Switch irrigation systems to grey water when it becomes available.

Play Surface / Fields / Play Structures

- Existing blacktop is aging, cracked. Refurbishment and replacement are needed. See attached pavement report. **Main play area - Complete**
- Pave dirt area near play equipment.
- Restore highly used areas of sports fields. Remove gophers and weeds. Reseed.
- Inspect playground equipment, refurbish as required. Replace safety surfacing. Add accessible ramps where needed.
- Existing benches should be refurbished with durable, low maintenance materials.
- Consider adding a perimeter running path.
- Repair, paint ball walls.
- Repair basketball poles, replace nets, replace backboards.
- Paint tetherball poles.
- Remove, refurbish, or replace baseball backstops, dugouts, benches, seating.

Outdoor General

- A trash enclosure is suggested. This would help improve security and prevent unauthorized dumping.

Outdoor Eating Area

- Current outdoor eating area is the grassy amphitheater area, which has little seating. Add paving, and spaced seating. **Complete**

Roofing and Building Protection

- The existing roof is a multi-ply built-up-roofing system. Installed in 2007, it has a 20- year warranty, and has an estimated remaining life of 7-16 years.

Exterior Paint

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Roof scuppers should be modified to have overflow holes.
- Replace dented steel exterior doors.
- Include allowance to replace ceiling tiles.

Administration

- Observations:
  - Entry has a brick floor that can allow dirt to be tracked in and become slippery when wet.
  - Some specialty spaces (RSP, Psych, Speech Therapy) are located away from the administration area and would be better served by being in the space general area as the main administration space.
  - Conference room too small to hold conferences with the door closed for privacy.
  - The principal's office is too small to permit a private conference with two parents and a child.
- Repair cabinets as needed. Consider replacement of counter tops.
- Paint interior space. Replace worn finishes.

Circulation Spaces

- Replace automatic fire door and hardware.

Classroom Pod Common Areas

- Observations:
  - Each of the "pods" has a common area adjacent to an exterior courtyard.
  - This space could be used to house more students that are spaced safely.
- Remove original cabinets with non-functioning appliances. Repair cabinets to remain.
- Consider new furniture to encourage use of this space.
- Consider new magnetic writable surfacing.
- Shared outdoor learning environments
  - Introduce fun colors
  - Stain existing wood
  - Add furnishings
  - Drought tolerant plants such as succulents,
  - Replace chain-link ceiling with something trellis-like.
  - Replace, repair outdoor sinks.

Classrooms

- Consider reconfiguring classrooms to allow each room to be fully enclosed and be equipped with an accessible exterior classroom door.
- Refurbish or remove worn wiremolds.

Library

- Existing clerestory windows need replacement or reglazing.
- Remove window blinds or remove them if room darkening is no longer needed.
- Upgrade existing floor outlet boxes.
- Repair or replace librarian desk. **Complete**

Multi-Purpose

- Existing clerestory windows need replacement or re-glazing.
- Remove window blinds if room darkening is no longer needed.
- Replace aging folding cafeteria tables.
- Remove old wiring, conduit, patch and paint.
- Replace accordion curtain wall.

Specialty Classrooms

- Remove old swing brackets in RSP.
- Remove unused phones, wiring, coax. Patch, paint where necessary.
- Refurbish or remove worn wiremolds.
- Small multi-purpose: refurbish cabinets, remove or replace wire molds. Repair or replace delaminating cabinets.

Portable Classrooms

- Whenever possible, add sink cabinets to any portables lacking sinks.
- Make exterior siding repairs.
- Install new outlets, switches (with sensors), cover plates.
- Add magnetic writable surfaces.
- Behind portables, consider gravel or paving to help prevent weed build-up and to deter pests.

Food Services

- Observations:
  - The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Remove unused equipment.
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Provide touch-up painting, wall finish repairs as needed.
- Kitchen door does not fit into jamb. Repair.
- In kitchen storage area, consider upgrading cabinets, storage.
- Consider conversion of kitchen to dedicated ‘speed-line’ style serving space.

Staff Work Areas

- Replace flooring near drinking fountain.
- Repair cabinets, repair or replace countertops with solid surface.
- Replace or clean HVAC ceiling registers, vents.
- Provide touch-up painting, wall finish repairs as needed.

Staff Lounge

- Provide touch-up painting, wall finish repairs as needed.
- Repair cabinets. Replace countertops with solid surface.
- Replace or clean HVAC ceiling registers, vents.
- Consider new magnetic markerboards to make this space more flexible.
- Consider moveable furniture to encourage flexible use.

Student Restrooms

- Student restrooms located in pods B, C, D, and E require ADA upgrades.
- Plumbing fixture count
  - Boys (6) toilets, (4) urinals, (4) sinks
  - Girls (10) toilets, (4) sinks
  - Unisex (2) toilets, (2) sinks
- Replace exhaust fans and controls in restrooms. **Complete**
- Re-grout, steam clean existing tile floors or replace floors with epoxy. **Complete**
- Confirm signage meets code requirements.

Staff Restrooms

- Plumbing fixture count:
  - Men (1) toilet, (1) urinal, (1) sink
  - Women (2) toilet, (1) sink
- Replace exhaust fans, provide controls, timer. **Complete**
- Consider upgrading finishes, fixtures in bathrooms that have not been upgraded.
- Upgrade staff restrooms that do not comply with current accessibility standards.
- Replace existing tile floors with epoxy.

Storage and Custodial

- Patch and paint walls.
- Install new flooring where needed.
- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms.

Building Structural Walls and Roofs

- Further structural investigations/inspections of the-out-of-plane wall ties are recommended, followed by structural improvements if called for.
- See attached structural report for additional information.

Mechanical and Plumbing Systems

- Remove all existing air handling units and replace with new air handling units.
- Replace all existing exhaust fans.
- Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.
- Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.
- Replace all insulated hot and chilled water piping within the building.
- Add water and gas shut-off valves to all areas that require maintenance or isolation.
- HVAC Room: Clean floors, paint walls, upgrade lighting and controls.
- Replace exterior mechanical yard doors.
- Replace plumbing fixtures and accessories with touch-free alternatives.
- See attached mechanical report for additional information.

Electrical Systems

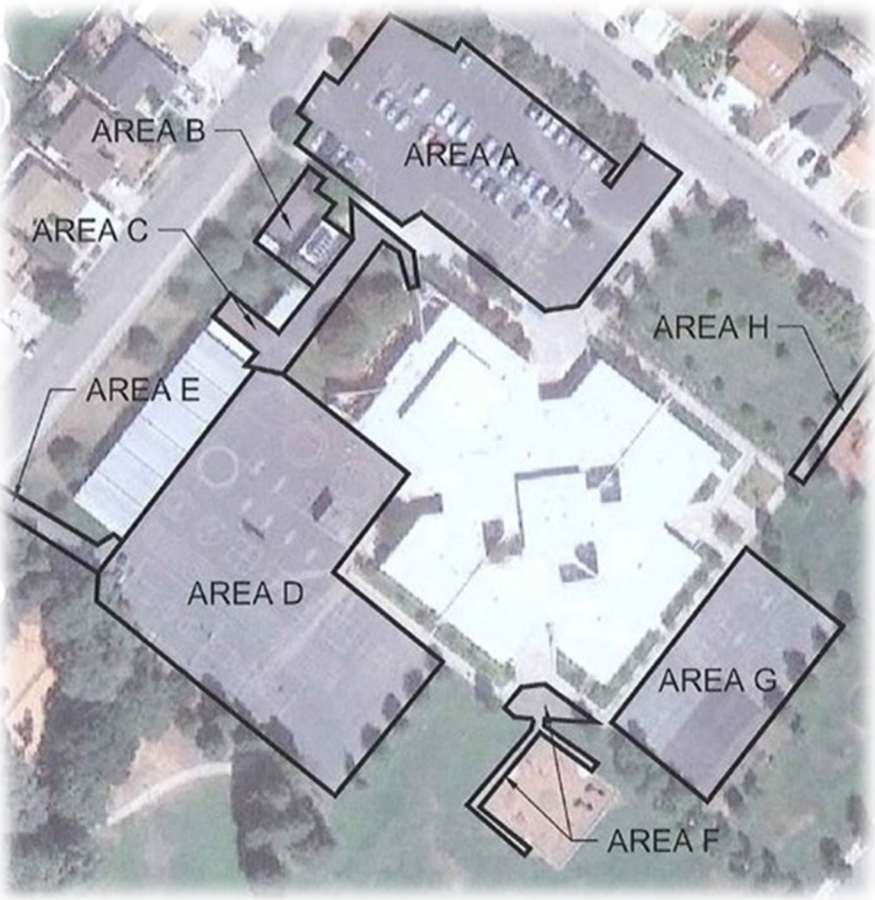
- Power: If more than 77amps are needed for future upgrades, replace the existing PG&E transformer.
- Inspect the existing PG&E transformer. Service as required if not replaced. Paint.
- See attached electrical report for additional information.
- Install new classroom lighting in all portables to remain.

Low Voltage Systems

- Install new, fully addressable, automatic fire alarm systems with new notification devices. **Complete**
- The existing Bogen Multicom 2000 Public Address and Master Clock system is functioning well. Review for replacement with networked system.
- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Consider updating or revising room numbering before upgrading any low voltage systems.
- Install new security systems and cameras. **Complete**

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Brooktree Elementary School	A	Reconstruct	29,870	60
Brooktree Elementary School	B	Reconstruct	2,504	54
Brooktree Elementary School	C	Reconstruct	4,029	59
Brooktree Elementary School	D	Reconstruct	44,740	46
Brooktree Elementary School	E	Crack Fill and Seal Coat	1,764	95
Brooktree Elementary School	F	Crack Fill and Seal Coat	1,940	95
Brooktree Elementary School	G	Reconstruct	14,850	54
Brooktree Elementary School	H	Reconstruct	984	41



Paving Area A

Paving Area D

Paving Area G

Paving Area H

SEISMIC ASSESSMENT REPORT

The building at Brooktree Elementary is one of three identical single-story buildings with a wood framed and concrete shear walls built in 1974. The other two schools are Majestic Elementary School and Summerdale Elementary School, evaluated in separate sections of this report. The building consists of multiple attached classrooms with centralized multipurpose rooms. The building shape is irregular with the roof containing several discontinuities due to differing plate heights and openings in the roof diaphragm.

The lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical concrete shear walls. Seismic loads are resisted in both directions by way of the concrete shear walls located on the interior and exterior of the structure. Our evaluation of the lateral force resisting system revealed that the concrete shear walls appear to be adequately designed, however it is not clear if the as-built condition of the out of plane wall ties are adequate to resist modern day code level forces. We recommend that further evaluation and investigation be conducted to determine the as-built condition as well as the capacity of the ties supporting the concrete walls out of plane.

MECHANICAL SYSTEMS ASSESSMENT

1. **Existing Conditions**
   a. New chiller, boiler, chemical treatment and pumps installed in the Equipment Yard in 2008.
   b. New temperature controls installed in 2008.
   c. Existing air handling units, ductwork and hot and chilled water piping are from original project.

2. **Recommendations**
   a. Remove all existing air handling units and replace with new air handling units.
   b. Replace all existing exhaust fans.
   c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.
   d. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.
   e. Replace all insulated hot and chilled water piping within the building.

3. **General**
   a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
   b. Refer to **Appendix A** for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
    a. Comply requirements of California Mechanical Code (CMC) latest edition.
- Possible Ventilation Code Issues
    a. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
    b. Corridors must have minimum two (2) air changes per hour for ventilation.
    c. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
    d. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
    a. Fire/smoke dampers in the system must be interlocked with fire alarm system.
    b. Corridors, lobbies, and building entrances to have dedicated supply air.
    c. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
    d. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.
- Possible Title 24 Issues
    a. Heating furnaces to have minimum 80% efficiency.
    b. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.
    c. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
    d. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.
    e. Heating, ventilating, and air conditioning systems to have control capability with night setback.
    f. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL SYSTEMS ASSESSMENT

Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboards with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 228 amp. There is a spare capacity of 77 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the multi-purpose building storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

CHERRYWOOD ELEMENTARY SCHOOL

2020 FACILITIES ASSESSMENT

UPDATED MAY 2024

Key Data

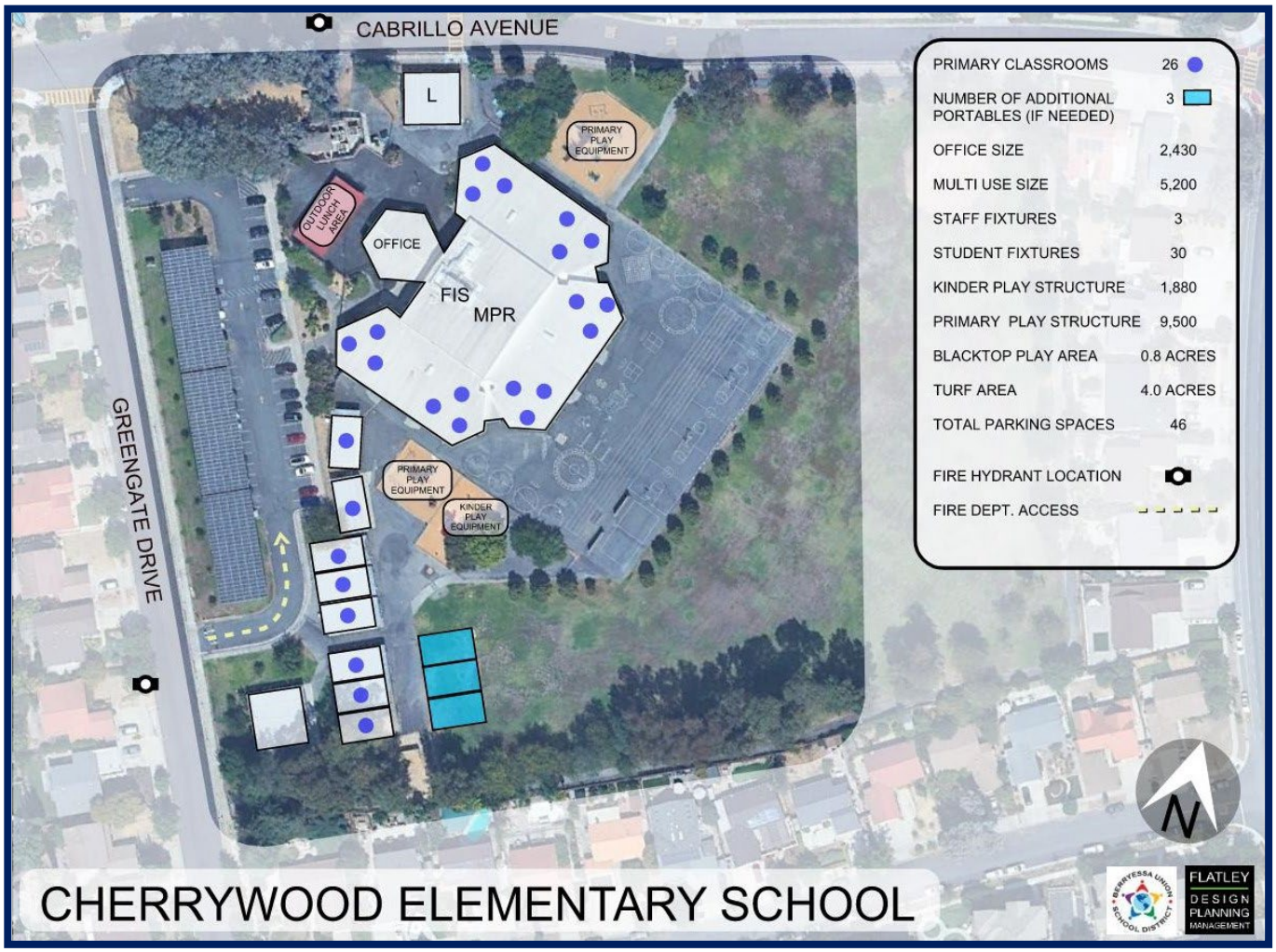
Site Size	11.0 Acres
Building Area:	35,718 SF
Portable Area:	8,640 SF
Total Size:	44,358 SF
Permanent Classrooms:	18
Portable Classrooms:	8
Portable Library:	1

Construction History

1974	School Constructed
1996	(1) Portable Classroom Installed
1998	(1) Portable Daycare installed
2004	Modernization Projects, (3) Portables
2006	(3) Portables, Library Portable, Main Electrical Service
2010	HVAC Improvements and Library
2015	Measure L - Exterior painting, playground equipment upgrades, and IT infrastructure upgrade projects
2016	Measure L - Solar Project
2017	Measure L - Paving project
2018	Measure L - Modernization Project
2019	Measure L - Flexible Instructional Space project and interior and exterior LED lighting replacement (not including classrooms)
2021	Measure U—An outdoor eating area, security fencing, a Kindergarten playground structure, irrigation controls, and backflow were installed.
2022	Measure U - Library improvements.

Existing Site Plan

Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	SUBTOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior		$663,050	$186,099		$849,149	$47,344	$896,493
Roofing		$14,841	$1,511,449		$1,526,290		$1,526,290
Interiors		$129,078	$316,472	$1,972,639	$2,418,190	$199,393	$2,617,583
Restroom	$426,440	$35,453	$1,112,131		$1,574,023		$1,574,023
Kitchen	$597,000				$597,000		$597,000
Plumbing	$266,969	$260,726			$527,695		$527,695
HVAC	$4,155,656				$4,155,656		$4,155,656
Electrical		$342,685			$342,685		$342,685
Fire Alarm	$852,009				$852,009		$852,009
PA & Speakers	$320,715				$320,715		$320,715
Campus Security	$177,715		$591,555		$769,270		$769,270
Technology/Data			$174,623	$445,108	$619,730		$619,730
Site Development		$135,246	$231,779	$1,171,693	$1,538,718	$612,052	$2,150,770
Landscaping & Fields	$244,652		$168,862	$207,422	$620,936	$2,764	$623,700
Infrastructure		$226,453			$226,453		$226,453
Pavement		$1,643,468	$18,812	$220,659	$1,882,940		$1,882,940
Solar Replacement							
TOTAL	$7,041,156	$3,451,000	$4,311,783	$4,017,522	$18,821,461	$861,553	$19,683,014

Assessed Facilities Needs

Site Security and Safety

- Vehicle barriers are recommended in key areas.
- Replace kindergarten fencing with a 6-foot tall fence.
- Make the location of the front office more obvious to visitors.
- Add exterior lighting to poorly lit areas.
- At key locations, install film on windows and door glazing to deter forced entry, and obscure visibility
- Paint or install large building or pod numbers on buildings or exterior doors.
- Consider installing new security systems and cameras.
- Several areas of cracked concrete present tripping hazards and drainage issues.

Site Accessibility

- Consider new wayfinding signage and displays site wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains equipped with bottle filling stations.
- Upgrade door thresholds that do not meet code.

Parking lot and Drop-Off / Pick-Up

- Maintain ADA-accessible parking compliance as required by code.
- Existing curbs and striping need repainting.

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing. **Complete**
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Switch irrigation systems to grey water when it becomes available.

Play Surface / Fields / Play Structures

- Some blacktop is aging and cracked. Refurbishment and replacement are needed. See the attached pavement report. **Lunch area - Complete**
- Restore highly used areas of sports fields. Remove gophers and weeds. Reseed.
- Inspect playground equipment and refurbish as required. Replace safety surfacing. Add accessible ramps where needed.
- Existing benches should be refurbished with durable, low-maintenance materials.
- More shade at kinder play is recommended.
- Consider adding a perimeter running path.
- Repair, paint ball walls.
- Repair basketball poles, replace nets, and replace backboards.
- Paint tetherball poles.
- Remove, refurbish, or replace baseball backstops, dugouts, benches, and seating.

Outdoor General

- A trash enclosure is suggested. This would help improve security and prevent unauthorized dumping.
- Suggestion: Install new room, door signage, site wide.

Outdoor Eating Area

- Suggestion: Install outdoor shade structure. **Complete**

Roofing and Building Protection

- The existing roof is a multi-ply built-up-roofing system. Installed in 2010, it has a 20 year warranty, and has an estimated remaining life of 10-15 years.
-

Exterior Paint

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Include a site-wide window replacement allowance to replace mismatched window- panes, scratch acrylic, etc.
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Replace dented steel exterior doors.
- Include allowance to replace ceiling tiles.
- Repair cabinets in classrooms, common and work areas, office, library and multi-use
- Install escutcheons on sprinkler heads where needed.

Administration

- Explore opportunities to maximize the administration space to suit staff needs.
- Front desk: Add plexiglass paneling. Consider metal corner trim.
- Repair cabinets in office area.

Classrooms

- Refurbish or remove worn wiremolds.
- Repair damaged cabinets and replace of counter tops with durable solid surfaces.
- Clean or replace HVAC registers. Repair loose, hanging registers (lab room 18)
- Install escutcheons on sprinkler heads.
- Shared common areas: Consider reconfiguring to encourage use and improve supervision.

Library

- Modify the librarian desk for accessibility. Make cabinet repairs **Complete**.
- See portables for additional scope

Multi-Purpose

- Confirm the drinking fountain meets ADA. Install a water bottle filling station.
- Student kitchen area
    - Remodel cabinets, appliances.
    - Consider removal of cabinets, appliances if this area is underutilized.

Specialty Classrooms

- If the computer lab is underutilized, consider conversion to classroom.
- Remove old wiring, conduit, unused devices.
- Repair cabinets in classrooms and common areas.
- Refurbish or remove worn wiremolds.
- Repair delaminating cabinets where found. Consider replacement of counter tops with durable solid surfaces.

Portable Classrooms

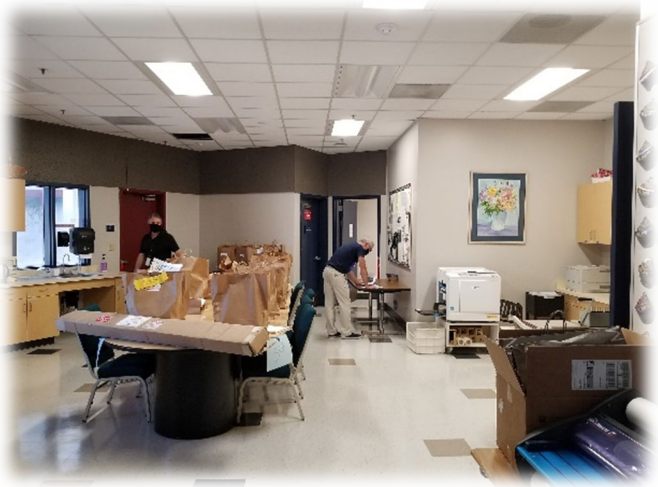
- Portable ramp landings no longer meet ADA.
- Repair damaged exterior siding.
- Install new outlets, switches (with sensors), cover plates.
- Add magnetic writable surfaces.
- Minor ceiling repairs are needed.
- P20: Replace windows or glazing.
- Install new clock/speaker units.
- Whenever possible, add sink cabinets to any portables lacking sinks.

Food Services

- Observation: The existing kitchen layout and equipment do not meet current Department of Health requirements .
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Touch-up painting needed.
- Consider upgrading cabinets, storage in the kitchen storage area.
- Remove unused equipment.
- Repair, patch, paint ceiling, replace HVAC grilles.
- Consider conversion of kitchen to dedicated ‘speed-line’ style serving space.
- The kitchen and serving area are small and should be enlarged.
-

Staff Work Areas

- Repair cabinets, repair or replace countertops with solid surface.
- Replace or clean HVAC ceiling registers, vents.



Staff Lounge

- Consider new magnetic markerboards to make this space more flexible.
- Consider moveable furniture to encourage flexible use.
- Repair cabinets, repair or replace countertops with solid surface.
- Replace worn finishes, paint.

Student Restrooms

- Plumbing fixture count:
  - Boys (6) toilets, (5) urinals, (5) sinks
  - Girls (9) toilets, (5) sinks
  - Unisex (2) toilets, (2) sinks
- Explore options to improve privacy and handicapped accessibility at student restrooms.
- Upgrade signage meets code requirements.
- Patch walls where needed. Paint.
- Install escutcheons on sprinkler heads where needed.
- Replace exhaust fans and controls in restrooms.
- Re-grout, steam clean existing tile floors or replace floors with epoxy.
- Student restrooms in the multi-use and those serving the playgrounds need accessibility upgrades.

Storage and Custodial

- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms.
- Patch and paint walls, Install new flooring.
- Replace hot water heater.
- Confirm new lighting and controls have been installed.

Building Structural Walls and Roofs

- Obtain structural drawings for review by engineer. Further analysis for structural integrity is recommended.
- See attached structural report for additional information.

Mechanical and Plumbing Systems

- Remove all existing air handling units and replace with new air handling units.
- Replace all insulated supply and return ductwork, diffuser and grilles within the building. Replace all exhaust ductwork within the building.
- Replace all exhaust ductwork within the building
- Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.
- Replace all insulated hot and chilled water piping within the building.

- Add water and gas shut-off valves to all areas that require maintenance or isolation.
- Mechanical room:
    - Install new exhaust fans and controls in custodial rooms.
    - Patch and paint walls.
    - Install new flooring where needed.
    - Confirm new lighting and controls have been installed.
    - See attached mechanical report for additional information.
- Replace plumbing fixtures and accessories with touch-free alternatives.

Electrical Systems

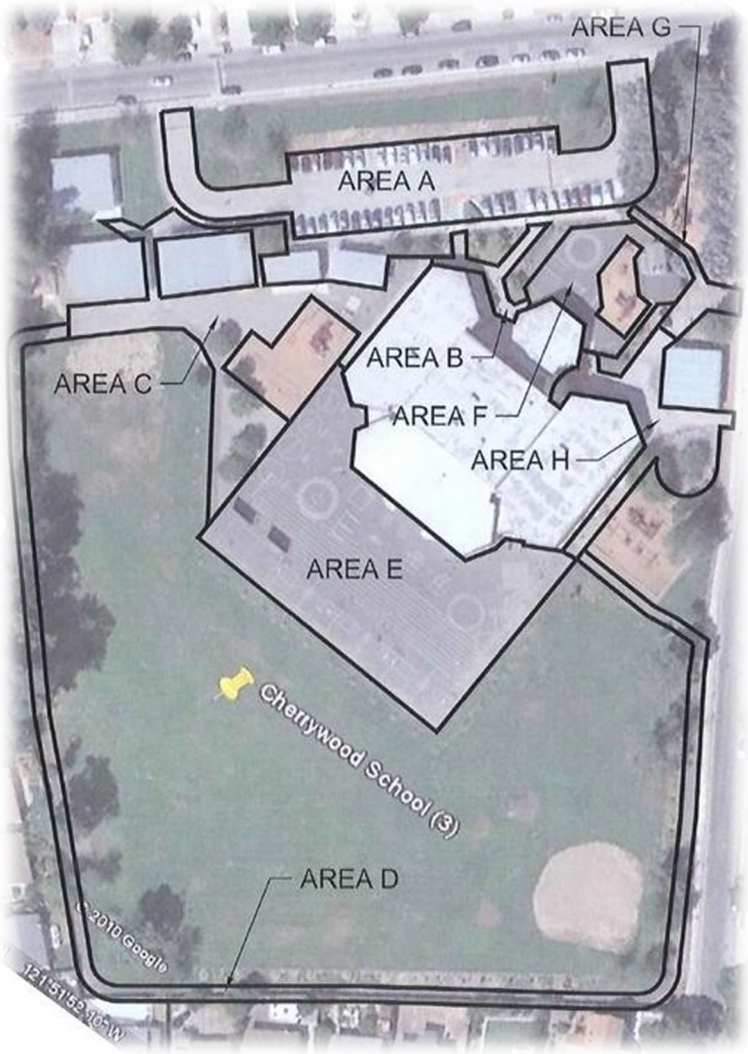
- Power: If more than 77amps are needed for future upgrades, replace the existing PG&E transformer.
- Inspect the existing PG&E transformer. Service as required if not replaced. Paint.
- See attached electrical report for additional information.
- Install new classroom lighting in all portables to remain.

Low Voltage Systems

- Install new, fully addressable, automatic FA systems with new notification devices.
- The existing Bogen Multicom 2000 Public Address and Master Clock system located in the Multi-Purpose Room storage room is in g functioning condition. Review for replacement with networked system.
- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Consider updating or revising room numbering before upgrading any low-voltage systems.
- Install new security systems. **Complete**

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Cherrywood Elementary School	A	Reconstruct	22,596	39
Cherrywood Elementary School	B	Reconstruct	1,908	56
Cherrywood School	C	Reconstruct	24,210	46
Cherrywood School	D	Reconstruct	13,050	51
Cherrywood School	E	Reconstruct	36,026	52
Cherrywood School	F	Reconstruct	4,950	38
Cherrywood School	G	Crack Fill and Seal Coat	1,490	69
Cherrywood School	H	Crack Fill and Seal Coat	8,994	69



Paving Area A

Paving Area C

Paving Area D

Paving Area E

SEISMIC ASSESSMENT REPORT

Building Description:

The Cherrywood Elementary School Building is a tall single-story structure with a mezzanine level. The drawings provided at the time of this review were incomplete. Only a partial set of Architectural plans were available. Very little information could be concluded from the plans. The building roof appears to be comprised of an open web truss system spanning between steel beams and concrete columns. A lateral system for the structure could not be determined. Since structural drawings were not made available for the building design, we recommend that these drawings be located and reviewed or the existing buildings be visually observed, documented and reviewed.

MECHANICAL SYSTEMS ASSESSMENT

1. **Existing Conditions**
   a. New chillers, boilers, and pumps (with VFDs) were installed in the Equipment Yard in 2010.
   b. New exhaust fans were installed in 2010.
   c. New temperature controls were installed in 2010.
   d. Existing indoor air handling units in the main and administration buildings are original.
   e. Existing ductwork and air distribution in the building are original.

2. **Recommendations**
   a. Remove all existing air handling units and replace with new air handling units. Install the replacement units that match the removed units to minimize the modifications to the duct connections and the unit supports.
   b. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.
   c. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.
   d. Replace all insulated hot and chilled water within the building.

3. **General**
   a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
   b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
    a. Comply requirements of California Mechanical Code (CMC) latest edition
- Possible Ventilation Code Issues
    a. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
    b. Corridors must have minimum two (2) air changes per hour for ventilation.
    c. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
    d. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
    a. Fire/smoke dampers in the system must be interlocked with fire alarm system.
    b. Corridors, lobbies, and building entrances to have dedicated supply air.
    c. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
    d. All air handling equipment supplying air flow in excess of 2,000 cubic feet per
- Possible Title 24 Issues
    a. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

    b. Exterior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 8.0.
    c. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
    d. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.
    e. Heating, ventilating, and air conditioning systems to have control capability with night setback.
    f. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL AND LOW VOLTAGE SYSTEMS ASSESSMENT

Power Systems:

A 1600A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located at the mechanical chiller yard provides power to the campus. The switchboard was installed around 2005 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 228 amp. There is a spare capacity of 84 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded

Fire Alarm System:

The existing fire alarm system was of manual system on a Gamewell 610 panel in the administration office storage room installed around 2003. The panel is in good and functioning condition. The initiation and notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.
b. Provide smoke detectors below ceiling and heat detector above accessible ceiling for a complete coverage automatic system with supervision and monitoring capability.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system in the main office storage room is functioning. However, the system is nearing its end of life and should be replaced soon.

LANEVIEW ELEMENTARY SCHOOL

2020 FACILITIES ASSESSMENT

UPDATED MAY 2024

Key Data

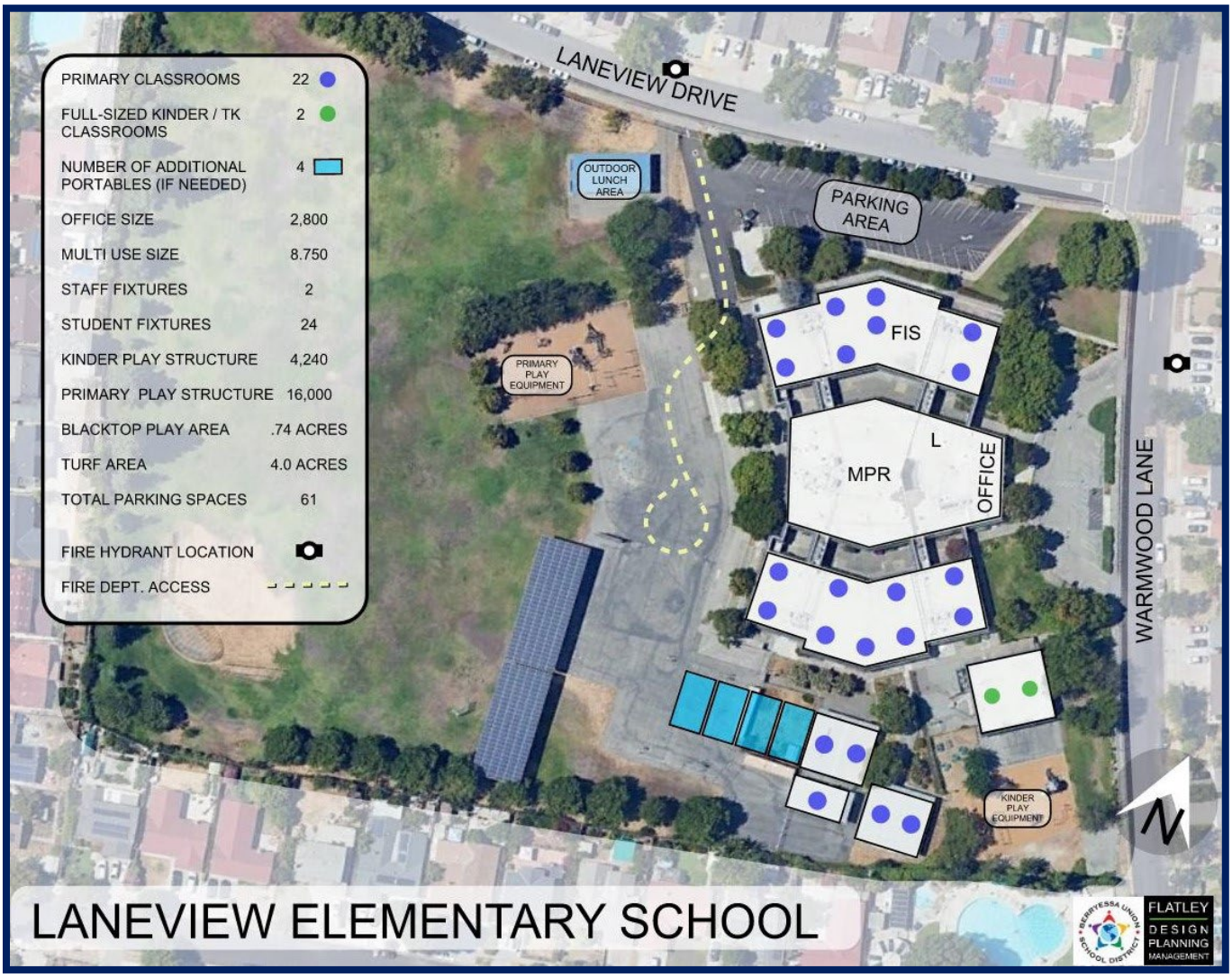
Site Size	10.9 Acres
Building Area:	36,028 SF
Portable Buildings	4,200 SF
Total Size	40,228 SF
Permanent Classrooms:	19
Portable Buildings:	5

Construction History

1968	School constructed
1995-98	(4) Portable classroom installed
1999	Canopy Repairs
2002	Modernization projects
2006	(1) Portable classroom installed
2008	Fire damage repairs
2009	HVAC and fire alarm upgrades. Roofing replacements
2015	Measure L - Playground equipment upgrades, and IT infrastructure upgrade projects
2016	Measure L - Solar project
2017	Measure L - Modernization project
2018	Measure L - Flexible Instructional Space project
2021	Measure U – Outdoor eating area, irrigation controls, and backflow were installed.
2023	Measure U - Library Improvement, library desk and library storage shelving

Existing Site Plan

Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	TOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior		$219,822	$178,845		$398,667	$25,417	$424,084
Roofing		$14,841	$1,349,175		$1,364,015		$1,364,015
Interiors		$171,036	$1,660,251		$1,831,287	$55,920	$1,887,207
Restroom			$547,541	$541,487	$1,089,028	$183,076	$1,272,104
Kitchen	$581,200				$581,200		$581,200
Plumbing	$27,778	$212,964			$240,742		$240,742
HVAC	$209,291		$1,778,323		$1,987,614		$1,987,614
Electrical		$342,685			$342,685		$342,685
Fire Alarm		$1,025,912			$1,025,912		$1,025,912
PA & Speakers	$313,514				$313,514		$313,514
Campus Security	$130,303		$584,882		$715,185		$715,185
Technology/Data			$174,623	$445,108	$619,730		$619,730
Site Development		$175,318	$767,736	$730,017	$1,673,071	$916,558	$2,589,629
Landscaping & Fields	$244,460		$168,729	$207,259	$620,449	$20,502	$640,951
Infrastructure		$205,369			$205,369		$205,369
Pavement	$614,004		$172,553	$125,309	$911,867		$911,867
Solar Replacement							
TOTAL	$2,120,550	$2,367,946	$7,382,659	$2,049,181	$13,920,336	$1,201,473	$15,121,809

Assessed Facilities Needs

Site Security and Safety

- Vehicle barriers are recommended at key areas.
- At key locations, install film on windows and door glazing to deter forced entry, and obscure visibility.
- Paint or install large building, or pod numbers on buildings or exterior doors.
- Consider installing new security systems and cameras. **Complete**
- Several areas of cracked concrete present tripping hazards. **Complete**

Site Accessibility

- Consider new wayfinding signage and displays site-wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains.
- Exterior ramps and outdoor seating have accessibility issues from an equal accommodation standpoint.
- The cracked concrete seating at the rear of the school does not appear to be accessible to the disabled. Consider repairs, replacement, and modifications to meet code **Complete**

Parking lot and Drop-Off / Pick-Up

- Existing striping needs repainting.
- Maintain ADA-accessible parking compliance as required by code.

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing. **Complete**
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Ensure that backflow preventers are installed and working properly. **Complete**
- Switch irrigation systems to grey water when it becomes available.

Play Surface / Fields / Play Structures

- Existing blacktop and is aging, cracked. Refurbishment and replacement are needed. See attached pavement report.
    - Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.
- The exterior concrete walks have extensive cracking that can present tripping hazards and allow unsightly weeds to grow.
    - Replace crack concrete walks, door landings.
- Restore highly used areas of sports fields. Remove gophers and weeds. Reseed.
- Inspect playground equipment, refurbish as required. Replace safety surfacing. Add accessible ramps where needed. **Primary Complete**
    - Accessibility to the playground is limited due to an elevation change.
    - The existing swing takes up a large amount of space and gets little use. Consider removal.
- Existing benches should be refurbished with durable, low maintenance materials.
- Consider adding a perimeter running path.
- Repair, paint ball walls.
- Repair basketball poles, replace nets, replace backboards.
- Paint tetherball poles.
- Remove, refurbish or replace baseball backstops, dugouts, benches, seating.

Outdoor General

- A trash enclosure is suggested. This would help improve security and prevent unauthorized dumping.
- Improve visibility to the location of the front office.
- Many of the metal guardrails are in poor condition and need replacement.
- Many wooden planter boxes need repair.

Outdoor Eating Area

- There are a few tables with benches in the grass area, but most of the students sit on the stepped concrete wall between the upper level of campus, and the lower field area.
    - Provide shade if possible.
    - Improve accessibility to this area if possible. **Added lunch shelter Complete**

Roofing and Building Protection

- The existing roof is a multi-ply built-up-roofing system with shingled mansards. Installed in 2009, the built-up portion has a 20-year warranty, and the shingled portion has a 40-year warranty. The roof system has an estimated remaining life of 15 years.

Exterior Paint

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- There is currently no covered walkway to any of the detached structures including the kinder building.
- Existing door thresholds are too high for current accessibility standards.
- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Include a site-wide window replacement allowance to replace mismatched window- panes, scratch acrylic, etc.
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Repair or replace damaged cabinets in classrooms, office, work areas, and library.
- Infill large louvers in exterior walls.

Administration

- Observations:
  - Administration area and staff support spaces are small.
  - This site has no staff production room.
- Front desk: Make repairs, add plexiglass. Modify to maximize healthy, safety, security.
- Repair cabinets in the front office and surrounding spaces.
- Upgrade the staff nurse's bathroom to meet accessibility code.
- Paint interior space. Replace worn finishes.

Classrooms

- Refurbish or remove worn wiremolds.
- Repair delaminating cabinets where found. Consider replacement of counter tops with durable solid surfaces.
- Many classrooms have full-height exterior louvers that should be replaced with solid, insulated paneling or some other low-maintenance material.
- Some classroom sinks were not accessible and did not look to be in use. Consider removal or replacement.

Library

- There is insufficient storage for curriculum and library books. **Complete**
- Improve accessibility at librarian desk **Complete**.
- Consider replacing or removing wiremolds.
- Make repairs to the librarian's desk as needed. **Complete**

Multi-Purpose

- Replace the remaining folding cafeteria tables that are in poor condition. **Complete**
- Remove old wiring, conduit, patch, and paint.

Specialty Classrooms

- At the Media Center / Computer Lab space, improve power and data distribution. If the space is underutilized, consider conversion to a classroom space.
- Remove unused phones, wiring, coax. Patch, paint where necessary.
- Refurbish or remove worn wiremolds.
- Repair delaminating cabinets where found. Consider replacement of counter tops with durable solid surfaces.

Portable Classrooms

- Whenever possible, add sink cabinets to any portables lacking sinks.
- Install new outlets, switches (with sensors), cover plates.
- Add magnetic writable surfaces.

Food Services

- Observations:
  - The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Remove unused kitchen equipment.
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Touch-up painting needed.
- In kitchen storage area, consider upgrading cabinets, storage.
- Upgrade kitchen bathroom to meet accessibility code.
- Consider conversion of kitchen to dedicated ‘speed-line’ style serving space.

Staff Work Areas

- Replace worn finishes, paint.
- Repair cabinets, repair or replace countertops with solid surface.

Staff Lounge

- Replace worn finishes.
- Repair cabinets, repair or replace countertops with solid surface.
- Consider new magnetic markerboards to make this space more flexible.
- Consider moveable furniture to encourage flexible use.

Student Restrooms

- Upgrade kinder restrooms to meet accessibility code.
- Plumbing fixture count
  - Boys (8) toilets, (10) urinals, (6) sinks
  - Girls (8) toilets, (6) sinks
- Replace exhaust fans and controls in restrooms.
- Re-grout, steam clean existing tile floors or replace floors with epoxy.
- Confirm signage meets code requirements.

Staff Restrooms

- Plumbing fixture count
  - Men (1) toilet, (1) urinal, (1) sink
  - Women (2) toilet, (1) sink
- Replace exhaust fans, provide controls, timer.
- Consider upgrading finishes, fixtures bathrooms that have not been upgraded.
- Upgrade staff restrooms that do not comply with current accessibility standards.
- Replace existing tile floors with epoxy.

Storage and Custodial

- Patch and paint walls.
- Install new flooring where needed.
- Confirm that LED lighting and controls were installed in these spaces (storage and custodial)
- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms.

Building Structural Walls and Roofs

- Buildings A, B & C:
  - Further analysis is recommended to determine if additional tie-downs are needed for shear walls to meet current code.
  - Further review of load transfer connections from low to high roof diaphragms is recommended.
- Building D
  - Further analysis is recommended to determine if additional tie-downs are needed for shear walls to meet current code.

Mechanical and Plumbing Systems

- Replace existing supply and return ductwork within the buildings.
- Add water and gas shut-off valves to all areas that require maintenance or isolation.
- See attached mechanical report for additional information.
- Replace plumbing fixtures and accessories with touch-free alternatives.

Electrical Systems

- A switchboard and a utility pad mounted transformer located next to the kindergarten provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E records, the current peak usage on the system is of 431 amps is well under the system's capacity.
- Replace lighting at portable classrooms to remain.
- See attached electrical report for additional information.

Low Voltage Systems

- Upgrade the system including notification devices to meet current code requirements.
- The existing Bogen Multicom 2000 Public Address and Master Clock system located in the Main Office storage room is in good and functioning condition. Review for replacement with networked system.
- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Consider updating or revising room numbering before upgrading any low voltage systems.
- Install new security systems and cameras.

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Laneview School	A	Reconstruct	8,000	38
Laneview School	B	Reconstruct	15,308	23
Laneview School	C	Seal Coat	2,898	95
Laneview School	D	Remove & Replace	1,550	67
Laneview School	E	Reconstruct	35,740	52
Laneview School	F	Digout, Crack Fill & Seal Coat	7,763	59
Laneview School	G	Remove & Replace	2,173	48
Laneview School	H	Remove & Replace	1,684	61

Paving Area A

Paving Area B

Paving Area G

Paving Area E

SEISMIC ASSESSMENT REPORT

Laneview Elementary School is comprised of four buildings. The main building containing the multipurpose room and offices is designated as Building B. The other three buildings are classrooms with Buildings A and C essentially being mirrors of each other. The roofs for Buildings A, B and C are tied together by covered walkways. Architectural and structural plans were available at the time of this review. From those plans the buildings, all built together at the same time, were built around 1967. Each building is referred to in this report as they are referenced on the Architectural plans. See the key plan for building labels.

Buildings A & C

These buildings are single story wood structures with a roof joist system supported on interior bearing walls and glulams spanning between exterior walls. The roof consists of an upper and lower portion. The two buildings are mirrored each side of the main building.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are

resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous non-orthogonal shear walls that can handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tiedowns which although the loads at the time of design may not have required the tiedowns, the code mandated loads have increased significantly since then. Therefore, we would recommend a further analysis be completed to determine if tiedowns need to be added. In general, the installation of tiedowns at the ends of shear walls is recommended to ensure the desired performance of the lateral system during a significant seismic event. Additionally, we recommend further review of the connections between the low and high roofs to ensure adequate load transfer.

Bldg. B

This building is a single-story wood structure with a roof joist system supported on interior bearing walls and glulams spanning between bearing walls. The roof consists of an upper and lower portion. The upper roof also cantilevers out to cover a portion of walkway adjacent to the building on each side.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of

numerous non-orthogonal shear walls that can handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. In general, the installation of tie downs at the ends of shear walls improves the overall performance of the building during a major seismic event. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building. Additionally, we recommend further review of the connections between the low and high roofs to ensure adequate load transfer.

Bldg. D

This building is a single-story wood structure with a single level roof joist system supported on bearing walls. This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. Our review of the building is that the building is comprised of shear walls in each direction that can handle the lateral load of the structure if the shear walls are in good condition. During the review it was noted that not all walls included tie downs at each end. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

MECHANICAL SYSTEMS ASSESSMENT

1. **Existing Conditions**
   a. New rooftop condensing units & indoor furnaces with D/X coils installed in 2009.
   b. New exhaust fans installed in 2009.
   c. New temperature controls installed in 2009.
   d. Existing ductwork in ceiling space is original.

2. **Recommendations**
   a. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

3. **General**
   a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
   b. Refer to **Appendix A** for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
    a. Comply requirements of California Mechanical Code (CMC) latest edition.
- Possible Ventilation Code Issues
    a. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
    b. Corridors must have minimum two (2) air changes per hour for ventilation.
    c. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
    d. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
    a. Fire/smoke dampers in the system must be interlocked with fire alarm system.
    b. Corridors, lobbies, and building entrances to have dedicated supply air.
    c. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
    d. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.
- Possible Title 24 Issues
    a. Heating furnaces to have minimum 80% efficiency.
    b. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.
    c. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
    d. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.
    e. Heating, ventilating, and air conditioning systems to have control capability with night setback.
    f. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL SYSTEMS ASSESSMENT

Power Systems:

A 2000A, 120/208V, 3 phase, 4 wire switchboards with a 300KVA utility pad mounted transformer located next to the kindergarten classroom building provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 431 amp. There is a spare capacity of 295 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in the administration office installed in 2008. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the multi-purpose building storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

MAJESTIC WAY ELEMENTARY SCHOOL

2020 FACILITIES ASSESSMENT

UPDATED MAY 202

Key Data

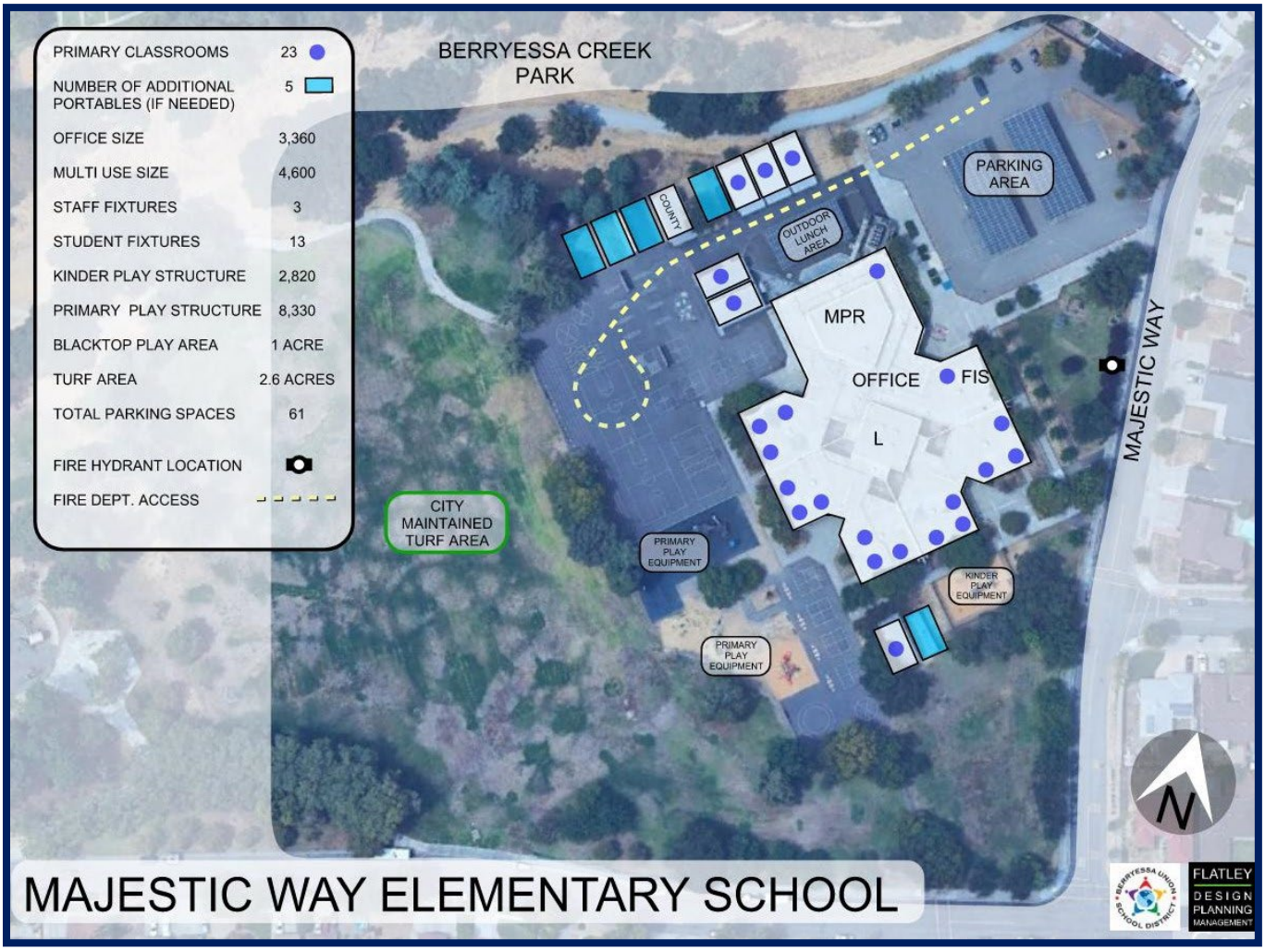
Site Size	10.0 Acres
Building Area:	38,189 SF
Portable Area	5,040 SF
Total Area	43,229 SF
Permanent Classrooms:	17
Portable Classroom	6

Construction History

1975	School constructed
1992	(2) Portable classroom buildings installed
2004	Modernization projects
2008	HVAC upgrade, roofing, (3) portable classrooms
2015	Measure L - Exterior painting, security fencing, playground equipment upgrades, and IT infrastructure upgrade projects
2016	Measure L - Solar project
2017	Measure L - Modernization and paving project.
2018	Measure L - Flexible Instructional Space and modernization projects.
2019	Interior and exterior LED lighting replacement.
2021	Measure U - An outdoor eating area was created, and irrigation controls and backflow were installed.
2022	Measure U – Library improvement, new library desk, library shelving, and exterior door signage.
2023	Measure U – Restroom floor replacement and exhaust fan replacement projects.
2024	Measure U - Fire Alarm replacement and primary playground structure replacement.

Existing Site Plan

Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	SUBTOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior		$654,360	$263,942		$918,301	$34,471	$952,772
Roofing	$11,786		$1,321,104	$205,134	$1,538,024		$1,538,024
Interiors	$23,732	$1,205,635	$535,304	$1,714,830	$3,479,501	$91,787	$3,571,288
Restroom	$376,999		$364,780		$741,779	$67,689	$809,468
Kitchen		$506,684			$506,684		$506,684
Plumbing	$27,778	$106,314	$59,304	$94,163	$287,559		$287,559
HVAC	$3,649,904			$152,608	$3,802,512	$71,458	$3,873,970
Electrical	$314,111			$296,738	$610,849		$610,849
Fire Alarm						$977,088	$977,088
PA & Speakers	$348,743				$348,743		$348,743
Campus Security	$156,813		$670,873	$278,741	$1,106,427		$1,106,427
Technology/Data			$174,623	$445,108	$619,730		$619,730
Site Development		$5,711	$246,605	$415,719	$668,035	$268,467	$936,502
Landscaping & Fields	$71,320		$98,452	$60,467	$230,239	$128,119	$358,358
Infrastructure		$220,690			$220,690		$220,690
Pavement		$373,312	$288,647	$85,054	$747,013		$747,013
Solar Replacement							
TOTAL	$4,981,186	$3,072,706	$4,023,634	$3,748,561	$15,826,088	$1,639,079	$17,465,167

Assessed Facilities Needs

Site Security + Safety

- Vehicle barriers are recommended at key areas.
- At key locations, install film on windows and door glazing to deter forced entry and obscure visibility.
- Paint or install large building, pod numbers on buildings or exterior doors. **Complete**
- Consider installing new security systems and cameras. **Complete**
- Several areas of cracked concrete present tripping hazards. **Complete**

Site Accessibility

- Three pairs of existing classroom exit doors do not meet access requirements. Revise concrete retaining walls to enlarge entry areas.
- Consider new wayfinding signage and displays site wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains.

Parking lot and Drop-Off / Pick-Up

- Existing curbs and striping need repainting.
- Parking lot is small. Consider adding compact spaces to increase parking count.
- Maintain existing accessible parking code compliance.
- Explore opportunities to improve flow of traffic through parking lot during peak hours.

Parking lot and Drop-Off / Pick-Up

- Existing curbs and striping need repainting.
- Parking lot is small. Consider adding compact spaces to increase parking count.
- Maintain existing accessible parking code compliance.
- Explore opportunities to improve flow of traffic through parking lot during peak hours.

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing. **Complete**
- The landscaping in the sloped planters adjacent to the building is causing moisture intrusion problems, as well as creating a security issue by assisting students in accessing the roof of the building. Simplify landscaping and reduce irrigation.
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Re-seed grass under trees and add redwood or other type of edging to create clear boundary for grass.
- Ensure that backflow preventers are installed and working properly. **Complete**
- Switch irrigation systems to grey water when it becomes available.

Play Surface / Fields / Play Structures

- Some blacktop and is aging, cracked. Refurbishment and replacement are needed. See attached pavement report.
- Inspect playground equipment, refurbish as required. Replace safety surfacing. Add accessible ramps. **Primary Complete**
- Existing benches should be refurbished with durable, low maintenance materials.
- Consider adding a perimeter running path.
- Repair, paint ball walls.
- Repair basketball poles, replace nets, replace backboards.
- Paint tetherball poles.
- Remove,refurbish or replace baseball backstops, dugouts, benches, seating.
- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.

Outdoor General

- A trash enclosure is suggested. This would help improve security and prevent unauthorized dumping.
- Suggestion: Install new room, door signage, site wide.
- Suggestion: Remove storage container near kinder portable.

Outdoor Eating Area

- Current outdoor eating area is the grassy amphitheater area, which has little seating. Add paving, and spaced seating. **Complete**

Roofing and Building Protection

- The existing roof is a multi-ply built-up-roofing system. Installed in 2008, it has a 20- year warranty, and an estimated remaining life of 8-17 years.

Exterior Paint

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Roof scuppers should be modified to have overflow holes.
- Replace dented steel exterior doors.
- Include allowance to replace ceiling tiles.
- Include allowance to replace laminate counters with durable solid surfacing.
- Repair or replace damaged cabinets in common areas, offices, work areas, and library.

Administration

- Observations:
    - The principal's office is too small to permit a private conference with two parents and a child.
    - Conference room too small to hold conferences with the door closed for privacy.
    - Some specialty spaces (RSP, Psych, Speech Therapy) are located away from the administration area and would be better served by being closer.
    - Entry has a brick floor that can allow dirt to be tracked in and become slippery when wet.
- Explore any opportunities to improve visibility at the entry area.
- Front desk: Add plexiglass paneling. Modify to maximize healthy, safety, security.
- Repair cabinets as needed. Consider replacement of counter tops.
- Paint interior space. Replace worn finishes.

Circulation Spaces

- Replace the automatic fire doors and hardware.

Classroom Pod Common Areas

- Observations:
  - Each of the six “pods” has a common area adjacent to an exterior courtyard.
  - This space could be used to house more students that are spaced safely.
- Remove original cabinets with non-functioning appliances. Repair cabinets to remain.
- Consider new furniture to encourage use of this space.
- Consider new magnetic writable surfacing.
- Shared outdoor learning environments
  - Introduce fun colors
  - Stain existing wood
  - Add furnishings
  - Drought tolerant plants such as succulents,
  - Replace chain-link ceiling with something trellis-like.
  - Replace, repair outdoor sinks.

Classrooms

- Refurbish or remove worn wiremolds.
- Consider reconfiguring classrooms to allow each room to be fully enclosed and be equipped with an accessible exterior classroom door.

Library

- Existing clerestory windows need replacement or reglazing.
- Upgrade existing floor outlet boxes.
- Replace window blinds or remove if room darkening is no longer needed.
- Ceiling tile repairs are needed.
- Repair or replace librarian desk. **Complete**
- Consider replacing, repairing or removing wiremolds.

Multi-Purpose

- Existing clerestory windows need replacement or re-glazing.
- Remove window blinds if room darkening is no longer needed.
- Replace any folding cafeteria tables that are in poor condition. **Complete**
- Remove old wiring, conduit, patch and paint.
- Replace accordion curtain wall.

Specialty Classrooms

- Remove old swing brackets in RSP.
- Remove unused phones, wiring, coax. Patch, paint where necessary.
- Refurbish or remove worn wiremolds.
- Repair delaminating cabinets where found. Consider replacement of counter tops with durable solid surfaces.
- Small flex-space: Refurbish cabinets, remove or replace wire molds. Repair or replace delaminating cabinets.

Portable Classrooms

- Whenever possible, add sink cabinets to any portables lacking sinks.
- Install new outlets, switches (with sensors), cover plates.
- Add magnetic writable surfaces.
- Consider adding exterior backpack-hooks to all classrooms.
- Behind portables, consider gravel or paving to help prevent weed build-up and to deter pests.
- Add slats to chain-link fencing between portables.
- Consider removal or relocation of portables P1 and P2, if they are underutilized.
- Repair ramps and glazing at P1 and P2.
- Patch and repair interior finishes at P2.

Food Services

- Observations:
  - The existing kitchen layout and equipment do not meet current Department of Health requirements.
  - Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan. Remove unused equipment.
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Touch-up painting needed.
- Kitchen door does not fit into jamb. Repair.
- In kitchen storage area, consider upgrading cabinets, storage.
- Consider conversion of kitchen to dedicated ‘speed-line’ style serving space.

Staff Work Areas

- Observations:
  - An area of carpet under a drinking fountain needs to be addressed.
- Consider replacement of counter tops with durable, solid surfacing.
- Repair or cabinets.
- Replace or clean HVAC ceiling registers, vents.

Staff Lounge

- Replace countertops with solid surfacing.
- Repair cabinets.
- Replace or clean HVAC ceiling registers, vents.
- Consider new magnetic markerboards to make this space more flexible.
- Consider moveable furniture to encourage flexible use.

Student Restrooms

- Upgrade student restrooms in pods B, C, D, and E to meet accessibility code.
- Plumbing Fixture Count
  - Boys (8) toilets, (4) urinals, (5) sinks
  - Girls (11) toilets, (4) sinks
- Replace exhaust fans and controls in restrooms. **Complete**
- Re-grout or steam clean existing tile floors or replace floors with epoxy. **Complete**

Staff Restrooms

- Plumbing fixture count:
  - Men (1) toilet, (1) urinal, (1) sink
  - Women (2) toilet, (1) sink
- Replace exhaust fans, provide controls, timer. **Complete**

- Consider upgrading finishes, fixtures bathrooms that have not been upgraded.
- Upgrade staff restrooms that do not comply with current accessibility standards.
- Replace existing tile floors with epoxy.

Storage and Custodial

- Patch and paint walls.
- Install new flooring where needed.
- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms.

Building Structural Walls and Roofs

- Further structural investigations/inspections of the-out-of-plane wall ties are recommended, followed by structural improvements if called for.
- See attached structural report for additional information.

Mechanical Systems and Plumbing

- Remove all existing air handling units and replace with new air handling units.
- Replace all existing exhaust fans.
- Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.
- Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.
- Replace all insulated hot and chilled water piping within the building.
- Add water and gas shut-off valves to all areas that require maintenance or isolation.
- HVAC Room: Clean floors, paint walls, upgrade lighting and controls.
- Replace plumbing fixtures and accessories with touch-free alternatives.
- See attached mechanical report for additional information.
- Replace exterior mechanical yard doors.

Electrical Systems

- Power: If more than 77amps are needed for future upgrades, replace the existing PG&E transformer.
- Inspect the existing PG&E transformer. Service as required *if not replaced*. Paint.
- See attached electrical report for additional information.
- Install new classroom lighting in all portables to remain.

Low Voltage Systems

- Install new, fully addressable, automatic FA systems with new notification devices.
- The existing Bogen Multicom 2000 Public Address and Master Clock system located in the Multi-Purpose Room storage room is in good and functioning condition. Review for replacement with networked system.
- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Consider updating or revising room numbering before upgrading any low voltage systems.
- Install new security systems and cameras.

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Majestic Way School	A	Reconstruct	36,556	32
Majestic Way School	B	Reconstruct	5,305	49
Majestic Way School	C	Reconstruct	800	62
Majestic Way School	D	Reconstruct	41,335	58
Majestic Way School	E	Remove & Replace	11,333	46
Majestic Way School	F	Remove & Replace	995	47
Majestic Way School	G	Crack Fill and Seal Coat	599	76

Paving Area A

Paving Area D

Paving Area B

Paving Area E

SEISMIC ASSESSMENT REPORT

The building is one of three identical single-story building with a wood framed roof with concrete walls built in 1974. Please refer to the evaluation written for Brooktree Elementary for specific recommendations for this building type.

MECHANICAL SYSTEMS ASSESSMENT

1. **Existing Conditions**
   a. New chillers, boilers and pumps installed in 2008.
   b. New exhaust fans installed in 2010.
   c. New temperature controls installed in 2008.
   d. Existing above ceiling ductwork and air distribution is original.
   e. Existing indoor air handling units are original.

2. **Recommendations**
   a. Remove all existing indoor air handling units and replace with new air handling units. Install the replacement units most matching the removed units to minimize the modifications to the duct connections and the unit supports.
   b. Remove all existing exhaust fans and replace with new exhaust fans to match the performance of the existing fans.
   c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.
   d. Replace all insulated hot and chilled water within the building.

3. **General**
   a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
   b. Refer to **Appendix A** for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
    a. Comply requirements of California Mechanical Code (CMC) latest edition.
- Possible Ventilation Code Issues
    a. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
    b. Corridors must have minimum two (2) air changes per hour for ventilation.
    c. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
    d. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
    a. Fire/smoke dampers in the system must be interlocked with fire alarm system.
    b. Corridors, lobbies, and building entrances to have dedicated supply air.
    c. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
    d. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.
- Possible Title 24 Issues
    a. Heating furnaces to have minimum 80% efficiency.
    b. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.
    c. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
    d. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.
    e. Heating, ventilating, and air conditioning systems to have control capability with night setback.
    f. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL SYSTEMS ASSESSMENT

Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 227 amp. There is a spare capacity of 78 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

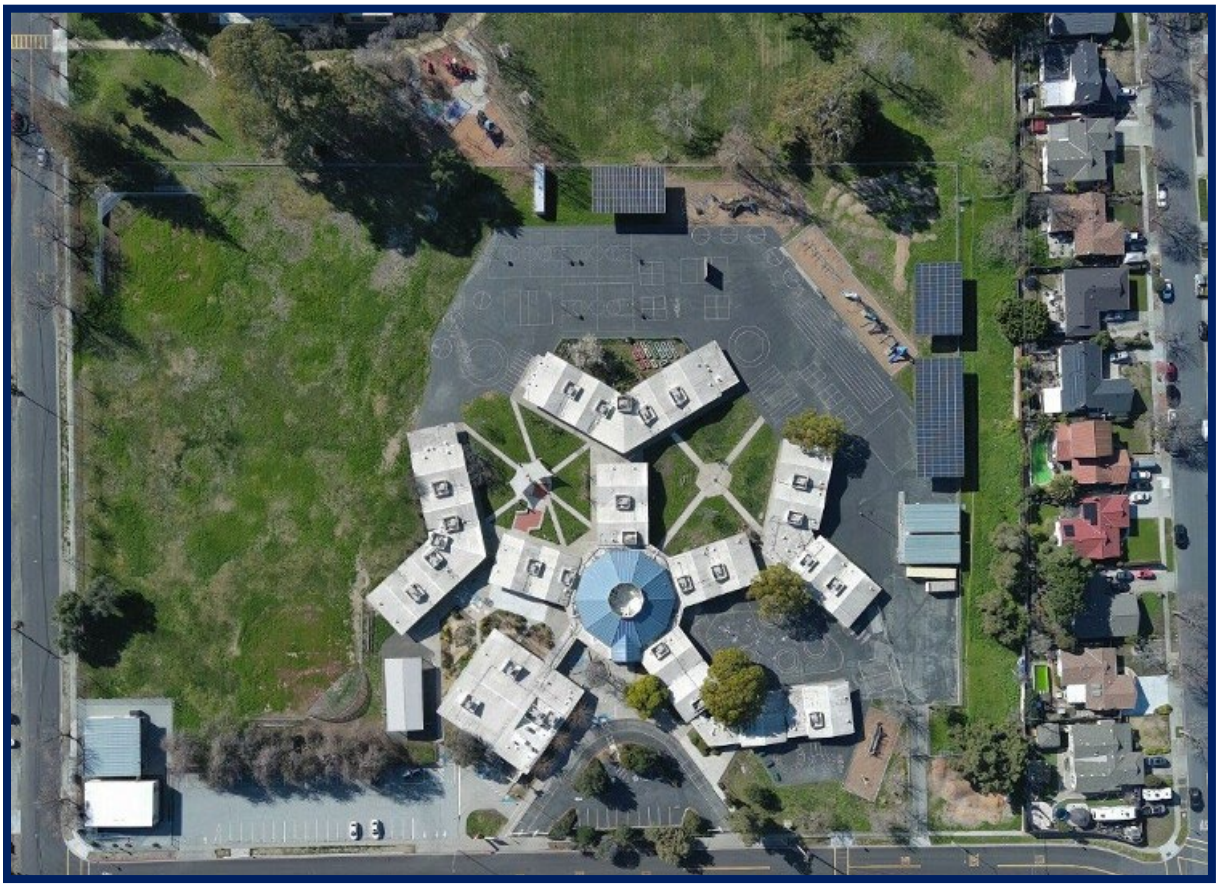
Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the multi-purpose building storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

NOBLE ELEMENTARY SCHOOL

2020 FACILITIES ASSESSMENT

UPDATED MAY 2024



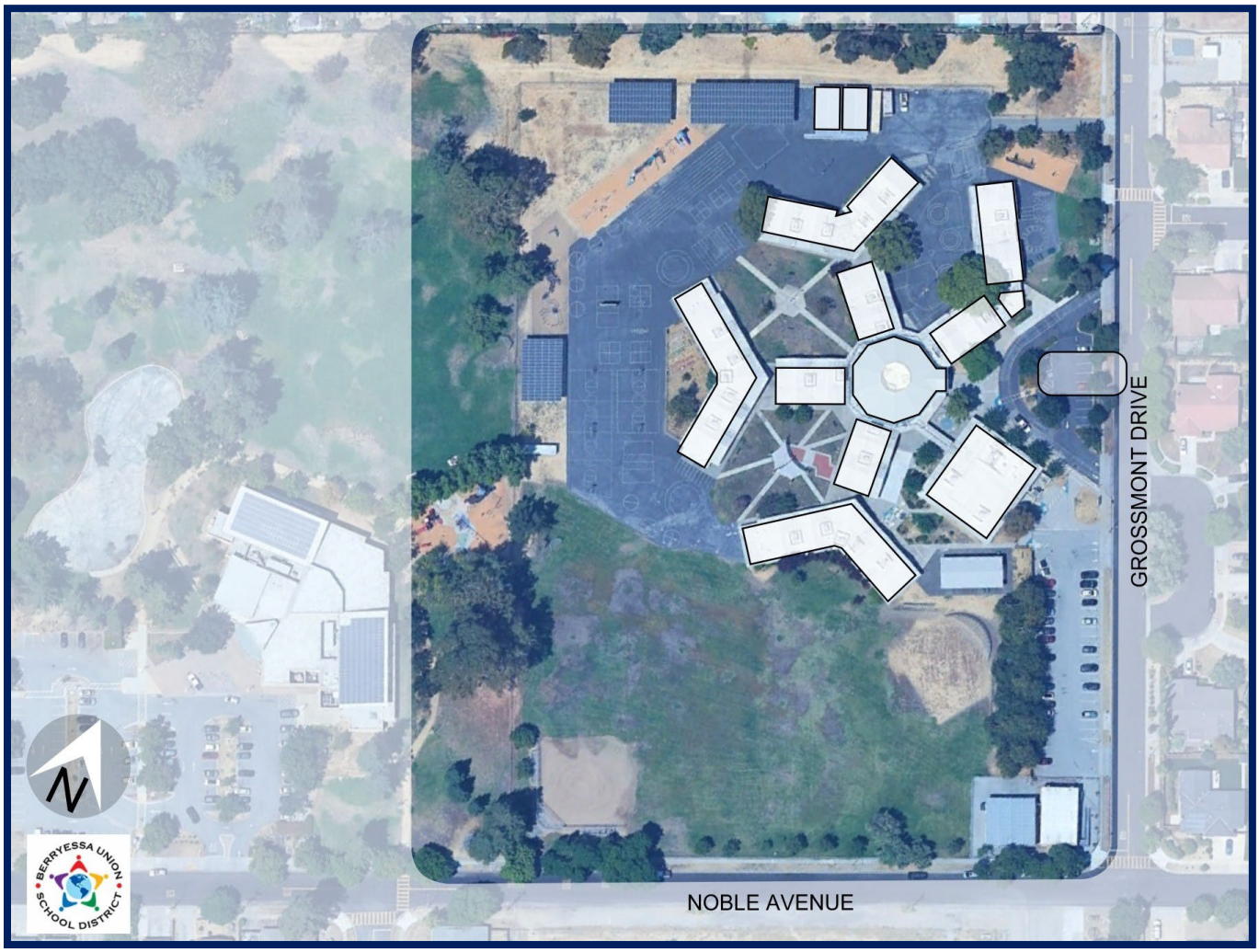
Key Data

Site Size	11.4 Acres
Building Area:	37,354 SF
Portable Area	1,680 SF
Total Area	39,034
Permanent Classrooms:	22
Portable Buildings:	2

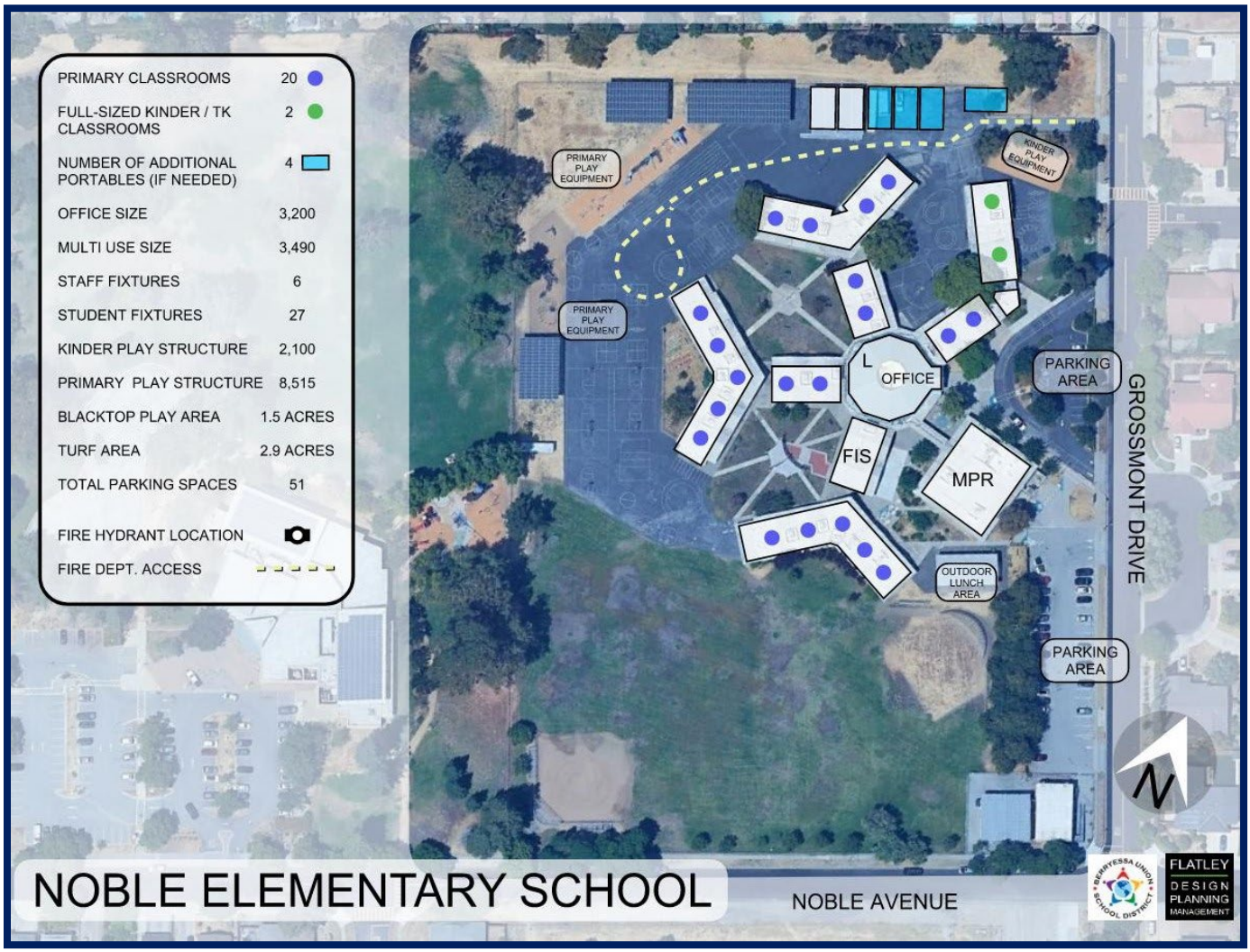
Construction History

1962	School Constructed
1994	Construction of administration buildings + walkways
1997	(2) Portable classroom buildings installed
2002	Modernization projects
2006	(1) portable daycare facility installed
2008	Flex space and misc. Improvements
2012	HVAC package units installed and fire alarm upgrade
2015	Measure L - Playground equipment upgrades and IT infrastructure upgrade projects
2016	Measure L - Flexible Instructional Space, modernization, paving, and solar projects
2019	Interior and exterior LED lighting replacement.
2021	Measure U - An outdoor eating area was created, and irrigation controls and backflow were installed.
2022	Measure U – Library improvement, new library desk and library shelving, and exterior door signage.
2023	Measure U – Restroom floor replacement, exhaust fan replacement projects, and exterior door signage.
2024	Measure U - Fire Alarm replacement and primary playground structure replacement.

Existing Site Plan



Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	TOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior		$229,146	$203,491		$432,638	$28,853	$461,491
Roofing	$84,503		$1,202,536		$1,287,039	$172,126	$1,459,165
Interiors	$13,627	$244,677	$670,799	$1,594,924	$2,524,027	$69,041	$2,593,068
Restroom		$837,177			$837,177	$199,812	$1,036,989
Kitchen		$561,764			$561,764		$561,764
Plumbing		$212,387	$51,890		$264,278		$264,278
HVAC	$1,288,242				$1,288,242	$95,000	$1,383,242
Electrical		$342,685			$342,685		$342,685
Fire Alarm						$751,795	$751,795
PA & Speakers	$334,202				$334,202		$334,202
Campus Security	$154,877		$568,327		$723,204		$723,204
Technology/Data			$174,623	$445,108	$619,730		$619,730
Site Development		$28,557	$500,623	$757,380	$1,286,559	$268,551	$1,555,110
Landscaping & Fields	$290,406		$200,442	$246,213	$737,061	$22,678	$759,739
Infrastructure		$199,273			$199,273		$199,273
Pavement		$1,621,915	$81,100	$225,447	$1,928,462		$1,928,462
Solar Replacement							
TOTAL	$2,165,857	$4,277,583	$3,653,831	$3,269,072	$13,366,342	$1,607,856	$14,974,198

Assessed Facilities Needs

Site Security and Safety

- Perimeter fencing. Ensure that entire campus is enclosed. During school hours, all visitors should have to pass through front office. **Complete**
- Suggestion: Add vehicle barriers near front entrance.
- At key locations, install film on windows and door glazing to deter forced entry and obscure visibility.
- Paint or install large building, or pod numbers on buildings or exterior doors.
- Consider installing new security systems and cameras.
- Several areas of cracked concrete present tripping hazards and drainage issues. **Complete**
- Explore opportunities to improve visual supervision from office area and around the campus in general.

Site Accessibility

- Consider new wayfinding signage and displays site wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains.
- Some existing door thresholds do not meet access codes. Replace or provide new level landing.

Parking lot and Drop-Off / Pick-Up

- Existing curbs and striping need repainting.
- Maintain ADA accessible parking compliance as required by code.

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing.
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Ensure that backflow preventers are installed and working properly. **Complete**
-
- Switch irrigation systems to grey water when it becomes available. **Complete**
-




Play Surface / Fields / Play Structures

- Some blacktop and is aging, cracked. Refurbishment and replacement are needed. See attached pavement report.
- Inspect playground equipment, refurbish as required. Replace safety surfacing. Add accessible ramps where needed. **Complete**
- Existing benches should be refurbished with durable, low maintenance materials.
- Consider adding a perimeter running path.

- Repair, paint ball walls.
- Repair basketball poles, replace nets, replace backboards.
- Paint tetherball poles.
- Remove,refurbish or replace baseball backstops, dugouts, benches, seating.
- Restore highly used areas of sports fields. Remove gophers and weeds. Reseed.
- Remove or replace aging swing set.

Outdoor General

- A trash enclosure is suggested. This would help improve security and prevent unauthorized dumping.
- Suggestion: Install new room, door signage, site wide. **Complete**
- Covered walks: Explore possibilities to address settling, low covered walks that interfere with doors.
- Explore possibilities to increase use of grassy areas between classrooms. Consider replacing grass with artificial turf.

Outdoor Eating Area

- The outdoor eating area shaded by trees. Consider providing gravel or paving in this area with new lunch tables.
- Consider adding shade structure that protects from rain.

Roofing

- The existing roof is a multi-ply built-up-roofing system. Installed in 2008, it has a 20- year warranty, and an estimated remaining life of 8-16 years.

Exterior Paint

- Existing paint is in fair condition. Consider repainting in a few year's time.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Include a site-wide window replacement allowance to replace mismatched window- panes, scratch acrylic, etc.
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Replace dented steel exterior doors.
- Include allowance to replace ceiling tiles.

Administration

- Front desk: Make repairs,. Modify to maximize healthy, safety, security. Modify desk if necessary, to meet accessibility code.
- Review cost-effective options for improving the overall configuration of the administration space.
- Install new clock-speaker unit.
- Upgrade nurse's restroom to meet access code.
- Repair ceilings in speech and ESL spaces.

Classrooms

- Refurbish or remove worn wiremolds.
- Patch or replace damaged, worn tackable panels.
- Repair delaminating cabinets where found. Consider replacement of counter tops with durable solid surfaces.

Library

- Observation: The library space is small. Explore possibilities to relocate or maximize use.
- Increase book storage and book stack capacity.
- Replace worn interior finishes, paint. **Complete**
-
- Door to library needs kick plate.
- Repair or replace librarian desk. **Complete**

Multi-Purpose

- Replace worn interior finishes, paint.
- Replace and remaining folding cafeteria tables that are in poor condition.
- Remove old wiring, conduit, patch.
- Remove unused speakers, CRT TV's, etc.
- Windows in this space are in poor condition. Repair or replace.
- Repair damaged wall base.
- Provide chair rails in chair storage area.

Specialty Classrooms

- Remove old wiring, conduit, where needed.
- Remove unused phones, wiring, coax. Patch, paint where necessary.
- Refurbish or remove worn wiremolds.
- Repair delaminating cabinets where found. Consider replacement of counter tops with durable solid surfaces.
-

Portable Classrooms

- Whenever possible, add sink cabinets to any portables lacking sinks.
- Behind portables, consider gravel or paving to help prevent weed build-up and to deter pests.
- Install new outlets, switches (with sensors), cover plates.

Food Services

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Remove unused equipment.
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Touch-up painting needed.
- Storage area: Upgrade shelving, cabinets.
- Consider conversion of kitchen to dedicated 'speed-line' style serving space.

Staff Work Areas

- Repair cabinets, repair or replace countertops with solid surface.

Staff Lounge

- Repair cabinets, repair or replace countertops with solid surface.
- Provide new markerboards to make this space more flexible.
- Replace existing, aging appliances.
- Remove abandoned wiring in IDF.

Student Restrooms

- Plumbing Fixture Count
  - Boys (11) toilets, (13) urinals, (8) sinks
  - Girls (21) toilets, (8) sinks
- Replace exhaust fans and controls in restrooms. **Complete**
- Existing drinking fountains are not accessible. **Complete**
- Re-grout, steam clean existing tile floors or replace floors with epoxy. **Complete**
- Confirm signage meets code requirements.
- Upgrade restrooms in Wing D to meet access code.

Staff Restrooms

- Plumbing fixture count:
  - Men (1) toilet, (2) urinals, (2) sinks
  - Women (2) toilets, (2) sinks
- Replace exhaust fans, provide controls, timer. **Complete**
- Consider upgrading finishes, fixtures bathrooms that have not been upgraded.
- Upgrade staff restrooms that do not comply with current accessibility standards.
- Replace existing tile floors with epoxy.

Storage and Custodial

- Patch and paint walls.
- Install new flooring where needed.
- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms. **Complete**

Building Structural Walls and Roofs

- Further structural investigations/inspections of all buildings are recommended.
- Damage may occur where covered walks are connected to buildings.
- Potential structural issues were visually observed in Buildings D and E and “Stage 3”. Further investigation is needed followed by structural improvements if called for.
- See seismic assessment report for additional information.

Mechanical and Plumbing Systems

- Replace all insulated supply and return ductwork, diffusers and grilles within the building.
- Replace all exhaust ductwork within the building.
- Add water and gas shut-off valves to all areas that require maintenance or isolation.
- HVAC Room: Clean floors, paint walls, upgrade lighting and controls.
- Replace plumbing fixtures and accessories with touch-free alternatives.
- See attached mechanical report for additional information.

Electrical Systems

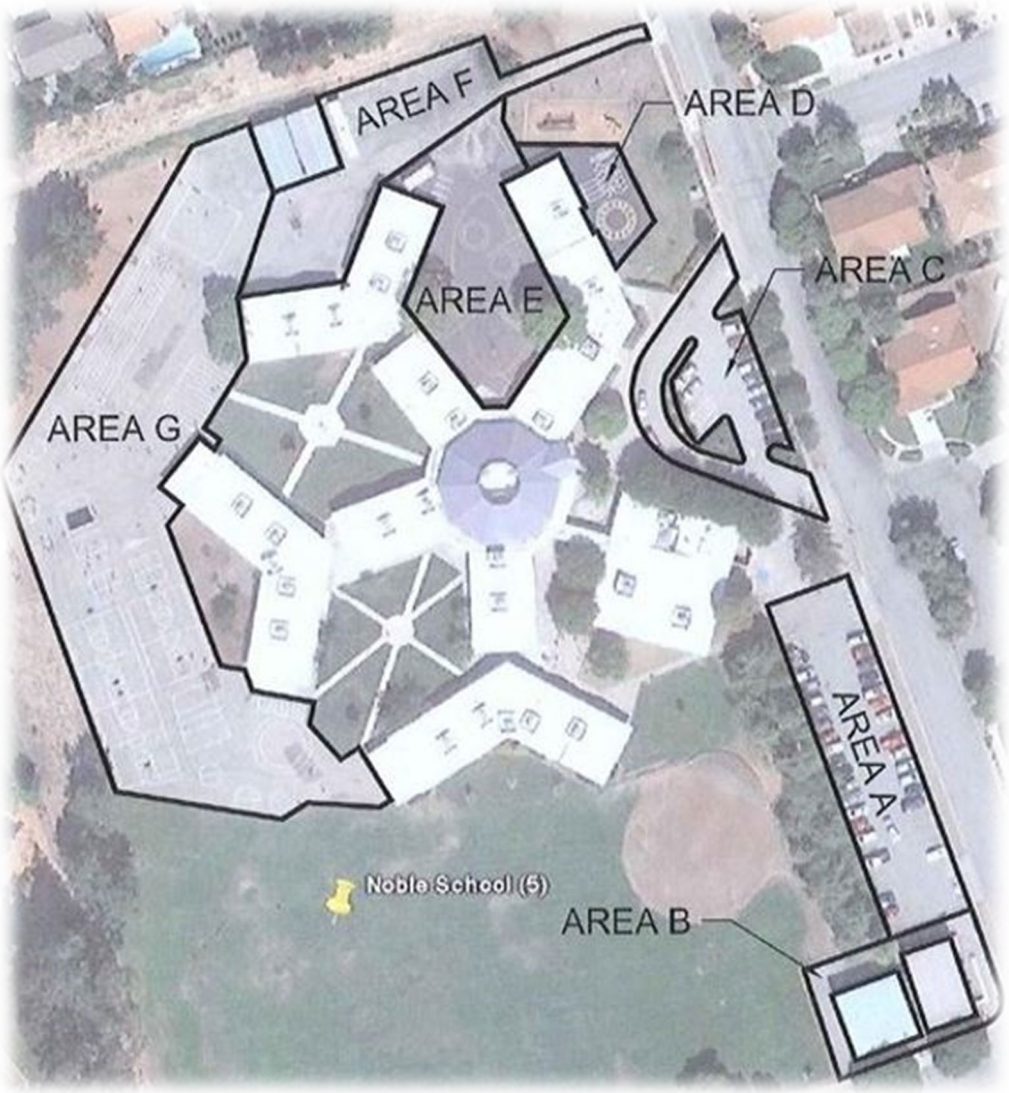
- Power: Current peak usage exceeds the electrical capacity of the PG&E transformer. Consider upgrading the transformer especially If additional power is needed.
- Inspect the existing PG&E transformer. Service as required if not replaced. Paint.
- See attached electrical report for additional information.
- Install new classroom lighting in all portables to remain.

Low Voltage Systems

- Confirm that the initiation and notification devices meet the current code requirement and are not in need of upgrades. **Complete**
-
- The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units can be considered for reuse if budget does not allow replacement.
- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Consider updating or revising room numbering before upgrading any low voltage systems.
- Install new security systems and cameras. **Complete**

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Noble School	A	Reconstruct	15,600	50
Noble School	B	Reconstruct	7,572	48
Noble School	C	Reconstruct	10,220	43
Noble School	D	Reconstruct	3,615	53
Noble School	E	Reconstruct	10,590	67
Noble School	F	Reconstruct	13,989	63
Noble School	G	Reconstruct	47,286	41



Paving Area A

Paving Area C

Paving Area F

Paving Area G

SEISMIC ASSESSMENT REPORT

Noble Elementary School consists of multiple buildings oriented in a "hub" configuration. Structural drawings were not made available for the original construction; however, it is assumed to be early 1960s. Structural drawings were available for the design of Unit D, Unit E, Stage 3 and the Administration Building.

Since structural drawings were not made available for the original campus design it is recommended that these drawings be located and reviewed or the existing buildings be visually observed, documented and reviewed.

It was also noted that there are several covered walkways connected to adjacent buildings. These covered walkways should be reviewed for susceptibility to damage due to differential movement between adjacent structures in an earthquake.

Units D and E

Units D and E were of nearly identical design, each consisting of two separate buildings, and were built in 1963. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the buildings.

All four building structures were designed with long windows just below the roof line. These windows create a discontinuity between the roof diaphragms and shear walls in many

locations. 3x6 mullions were provided as a transfer mechanism but should be reviewed in greater detail.

One of the buildings in Unit D includes a low roof surrounded by wood shear walls. According to the details there may not be adequate strapping between the upper and lower shear walls.

Additionally, there does not appear to be a direct transfer mechanism between the upper and lower roof for diaphragm shear loads.

Many of the roof diaphragms have diaphragm aspect ratios (i.e. length to width ratio) very near 2.0. Straight sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design. Additionally, these diaphragms appear to be unblocked.

We recommend that further investigation be performed to verify adequate diaphragm capacity at diaphragms with higher aspect ratios, verify if adequate load transfer can be obtained between the diaphragm and shear walls and to determine if adequate load transfer can be obtained between the high and low roofs.

Stage 3

The Stage 3 building was built in 1968 and is of similar construction to Units D and E, however this building did not have the full-length clerestory window condition. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the buildings.

The roof diaphragm aspect ratio (i.e. length to width ratio) is very near 2.0. Straight sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design. Additionally, these diaphragms appear to be unblocked.

We recommend that further investigation be performed to verify adequate diaphragm capacity at diaphragms with higher aspect ratios, verify if adequate load transfer can be obtained between the diaphragm and shear walls and to determine if adequate load transfer can be obtained between the high and low roofs.

Administration Building

The Administration Building was built in 1992 and consists of a wood panelized roof diaphragm with plywood sheathed shear walls. The building was constructed to relatively recent code standards with no notable, structural deficiencies.

MECHANICAL SYSTEMS ASSESSMENT

1. **Existing Conditions**
   a. New packaged gas heat / electric cool rooftop units and exhaust fans installed in 2008.
   b. New temperature controls installed in 2008.
   c. New ductwork on the roof was provided in 2008.
   d. Existing above ceiling ductwork and air distribution is original.

2. **Recommendations**
   a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.
   b. Replace all exhaust ductwork within the building.

3. **General**
   a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
   b. Refer to **Appendix A** for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
    a. Comply requirements of California Mechanical Code (CMC) latest edition.
- Possible Ventilation Code Issues
    a. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
    b. Corridors must have minimum two (2) air changes per hour for ventilation.
    c. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
    d. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
    a. Fire/smoke dampers in the system must be interlocked with fire alarm system.
    b. Corridors, lobbies, and building entrances to have dedicated supply air.
    c. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
    d. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.
- Possible Title 24 Issues
    a. Heating furnaces to have minimum 80% efficiency.
    b. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.
    c. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
    d. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.
    e. Heating, ventilating, and air conditioning systems to have control capability with night setback.
    f. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL SYSTEMS ASSESSMENT

Power Systems:

A 2000A, 120/208V, 3 phase, 4 wire switchboard with a 150KVA utility pad mounted transformer located next to the kindergarten classroom building provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 461 amp which exceeds the PG&E transformer capacity. If additional power is needed, the PG&E transformer shall need to be upgraded.

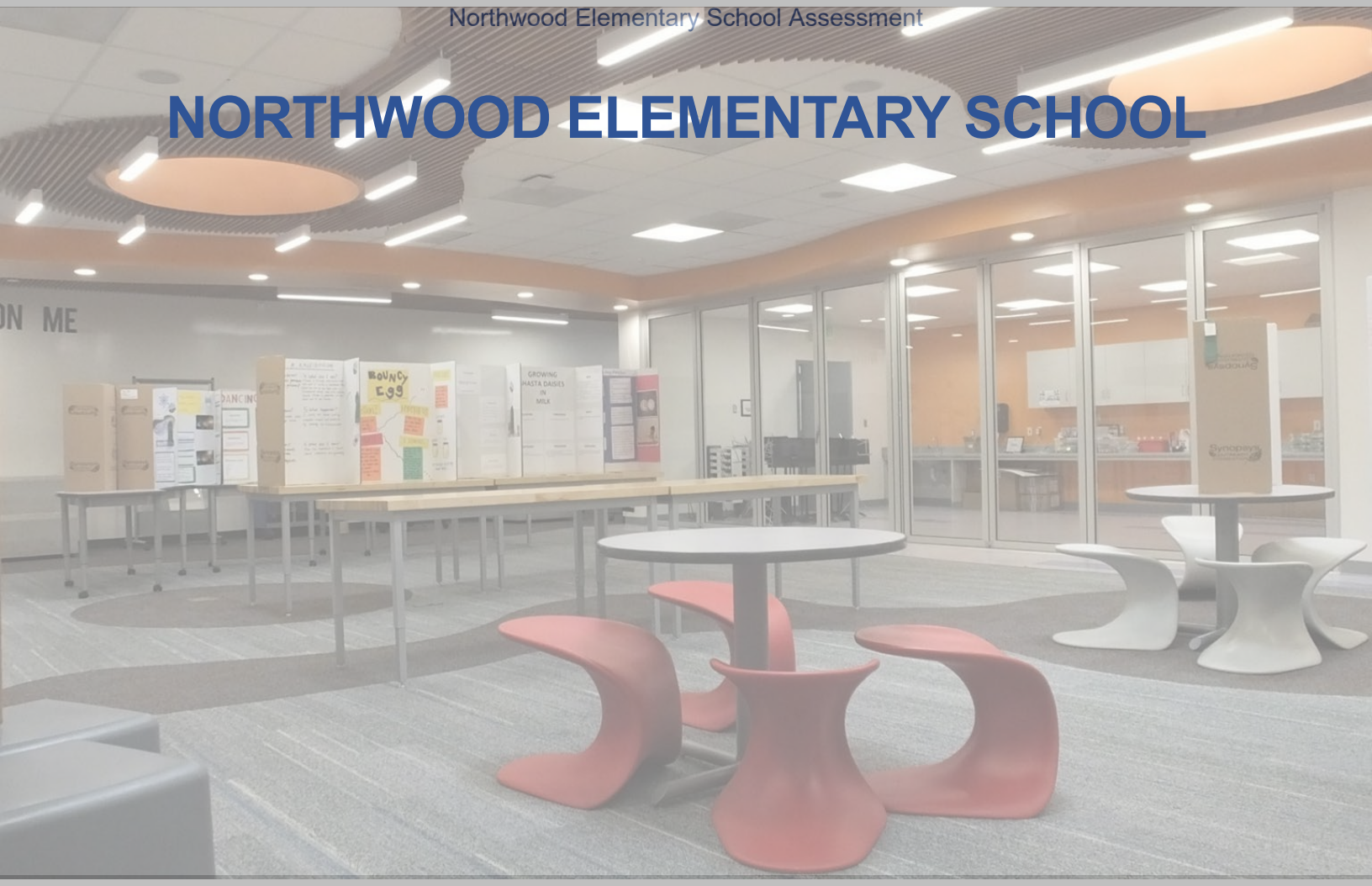
Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in building A installed in 2011. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the main office is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

NORTHWOOD ELEMENTARY SCHOOL



2020 FACILITIES ASSESSMENT

UPDATED MAY 2024

Key Data

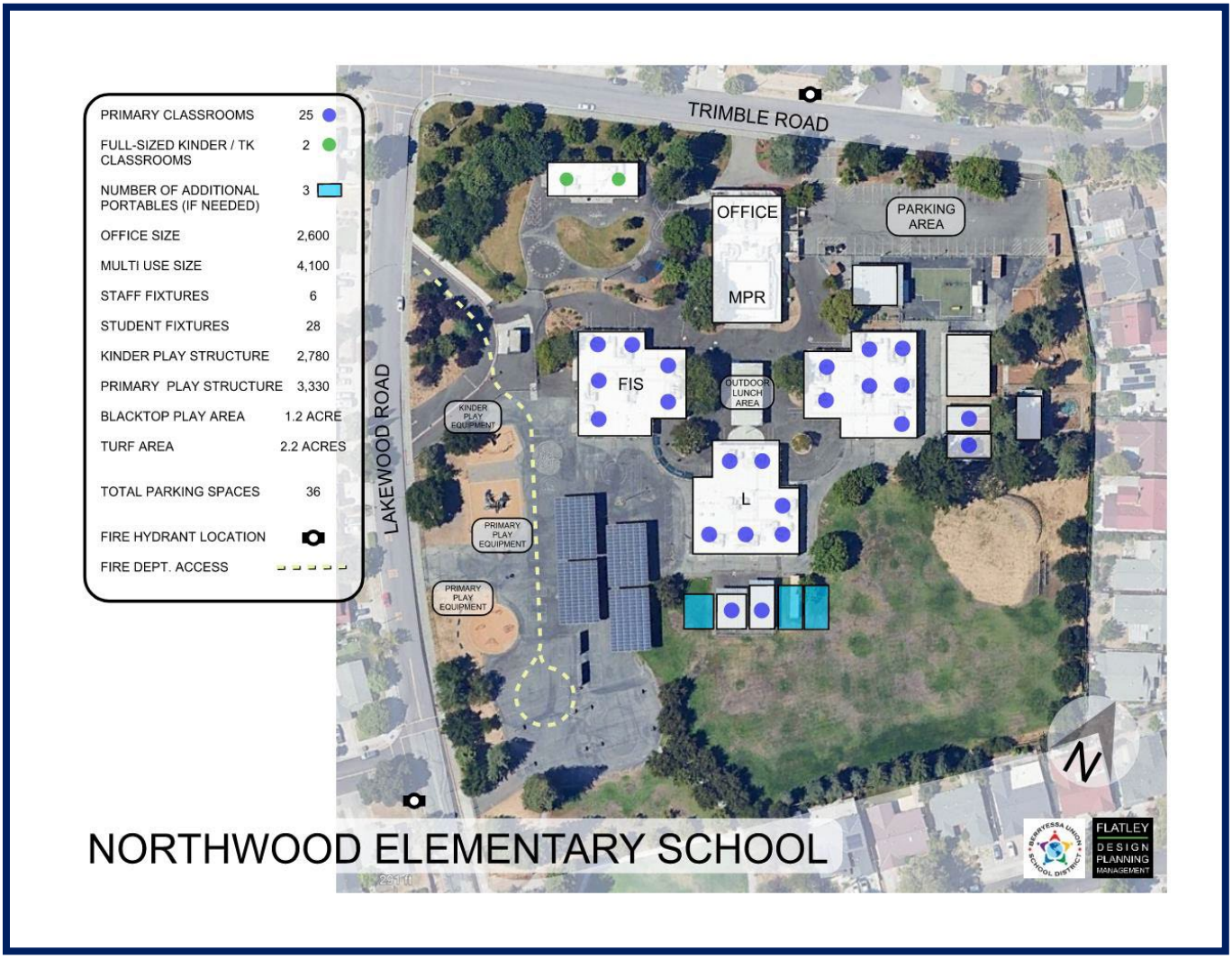
Site Size	9.2 Acres
Building Area:	44,132 SF
Portable Area	3,360 SF
Total Area	44,7492 SF
Permanent Classrooms:	21
Portable Buildings:	4

Construction History

1965	School constructed
1968	(1) Portable classroom building installed
1989	(1) Portable classroom building installed
1996	(1) Portable day care building installed
2002	Modernization projects, lunch structure installed
2007	Play Structure installed, (1) portable installed
2008	(1) Portable classroom building installed
2010	HVAC upgrade, roofing, fire alarms
2015	Measure L - Security fencing, playground equipment upgrades, paving, and IT infrastructure upgrade projects
2016	Measure L - Flexible instructional space, modernization, and solar projects
2018	Measure L - (2) Portable classroom building installed
2019	Interior and exterior LED lighting replacement.
2021	Measure U - Reconstruct asphalt pavement in the quad area; irrigation controls and backflow were installed.
2022	Measure U – Library improvements
2023	Measure U - Reroofing of permanent building, restroom floor replacement, and exhaust fan replacement projects
2024	Measure U – Exterior door signage.

Existing Site Plan

Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	TOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior		$521,323	$209,075		$730,398	$34,158	$764,556
Roofing						$1,235,690	$1,235,690
Interiors	$25,264	$171,457	$464,316	$1,324,512	$1,985,549	$91,701	$2,077,250
Restroom		$983,004			$983,004	$139,075	$1,122,079
Kitchen		$670,048			$670,048		$670,048
Plumbing	$27,778	$88,870			$116,648		$116,648
HVAC	$179,970		$1,778,323		$1,958,293	$69,520	$2,027,813
Electrical		$342,685			$342,685		$342,685
Fire Alarm	$832,414				$832,414		$832,414
PA & Speakers	$324,827				$324,827		$324,827
Campus Security	$134,998		$730,425		$865,423		$865,423
Technology/Data			$174,623	$445,108	$619,730		$619,730
Site Development		$5,711	$992,844	$913,261	$1,911,816	$24,258	$1,936,074
Landscaping & Fields	$233,394		$161,092	$197,877	$592,363	$6,896	$599,259
Infrastructure		$242,453			$242,453		$242,453
Pavement		$925,304	$1,423,910	$297,841	$2,647,054	$514,538	$3,161,592
Solar Replacement							
TOTAL	$1,758,645	$3,950,855	$5,934,607	$3,178,598	$14,822,705	$2,115,836	$16,938,541

Assessed Facilities Needs

Site Security and Safety

- At key locations, install film on windows and door glazing to deter forced entry and obscure visibility.
- Paint or install large building or pod numbers on buildings or exterior doors. **Complete**
- Consider installing new security systems and cameras.
- If new low voltage systems are being considered, review current room numbering. Consider updating or revising.
- Vehicle barriers are recommended at key areas.
- Several areas of cracked concrete present tripping hazards and drainage issues. **Complete**

Site Accessibility

- Consider new wayfinding signage and displays site wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains.
- Some existing doors have non-accessible thresholds. Replace thresholds or provide accessible level landing.

Parking lot and Drop-Off / Pick-Up

- Maintain ADA accessible parking compliance as required by code.
- Confirm that existing accessible parking meets current ADA requirements.
- Existing curbs and striping need repainting.

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing.
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Ensure that backflow preventers are installed and working properly.

Play Surface / Fields / Play Structures

- Refurbishment or replacement of some blacktop areas is needed. **Quad Complete**
  See attached pavement report.
- Restore highly used areas of sports fields. Remove gophers and weeds.
- Inspect playground equipment, refurbish as required. Replace safety surfacing. Add accessible ramps where needed. **Complete**

- Determine if existing benches should be refurbished with durable, low maintenance materials.
- Consider adding a perimeter running path.
- Repair, paint ball walls, tetherball poles.
- Repair basketball poles, replace nets, replace backboards.
- Remove, refurbish or replace baseball backstops, dugouts, benches, seating.

Outdoor Eating Area

- This site has covered eating for students already that is in good and functional condition.

Outdoor General

- A trash enclosure is suggested.
- Repair pathway to Gridley Street.

Roofing and Building Protection

- The existing roof is a multi-ply built-up-roofing system. Installed in 2010, it has a 20- year warranty, and an estimated remaining life of 10-15 years.
-

Exterior Paint

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Include a site-wide window replacement allowance to replace mismatched window- panes, scratch acrylic, etc.
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Replace dented steel exterior doors.
- Include allowance to replace ceiling tiles.

Administration Area

- Observations:
    - The administration area is congested.
    - The existing wall and casework finishes are worn.
- Front desk: Add plexiglass paneling. Make repairs where needed.
- Upgrade nurse's restroom to meet access code.
- Provide patching and touch-up painting as needed.

Circulation Spaces

- Circulation occurs primarily outdoors. Add covered walkways.

Classrooms

- Refurbish or remove worn wiremolds.
- Consolidate Kindergarten classrooms:
    - Consider the addition of (2) kinder or TK portables to the North West corner of the site.
        - Redesign site landscaping, play equipment, security fencing as required to accommodate additional kinder classrooms in this area.
- Repair cabinets as needed.

Library

- The existing library finishes are showing signs of wear.
- Remove or refurbish sink and cabinet.
- Replace the existing non-accessible librarian desk. **Complete**

Multi-Purpose Room

- Existing sliding doors need replacement.

Specialty Classrooms

- Explore opportunities to relocate music to a classroom space such as an old computer lab.

Portable Classrooms

- One portable was installed more than forty years ago and well well past its intended service life. Consider remove of this portable.
- Whenever possible, add sink cabinets to any portables lacking sinks.
- Behind portables, consider gravel or paving to help prevent weed build-up and to deter pests.
- Add slats to chain-link fencing between portables.

Kitchen / Food Service

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Remove unused kitchen equipment.
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Provide touch-up painting, wall finish repairs as needed.
- In kitchen storage area, consider upgrading cabinets, storage.
- Consider conversion of kitchen to dedicated ‘speed-line’ style serving space.

Staff Work Areas

- The staff work area appears to be in good condition.

Staff Lounge

- Repair cabinets, repair or replace countertops with solid surface.
- Consider new magnetic markerboards to make this space more flexible.
- Consider moveable furniture to encourage flexible use.
- Provide touch-up painting, wall finish repairs as needed.

Student Restrooms

- Plumbing fixture count:
  - Boys (6) toilet, (10) urinal, (6) sink
  - Girls (11) toilets, (6) sinks
- Replace exhaust fans and controls in restrooms. **Complete**
- Re-grout, steam clean existing tile floors or replace floors with epoxy. **Complete**
- Confirm signage meets code requirements.

Staff Restrooms

- Plumbing fixture count:
  - Men (1) toilet, (2) urinal, (2) sink
  - Women (3) toilet, (2) sink
- Explore options to improve handicapped accessibility at staff restrooms.
- Replace exhaust fans and controls in restrooms. **Complete**
- Upgrade restrooms in Buildings 400 and 500 to meet access code.
- Replace existing tile floors with epoxy.

Storage and Custodial Spaces

- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls.
- Patch and paint walls.
- Install new flooring where needed.

Structural System

- See attached structural report for additional information.

Mechanical and Plumbing Systems

- Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.
- Add water and gas shut-off valves to all areas that require maintenance or isolation.
- See attached mechanical report for additional information.
- Replace plumbing fixtures and accessories with touch-free alternatives.

Electrical Systems

- If more than 257 amps are needed for future additions, the existing PG&E transformer should be upgraded.
- Inspect the existing PG&E transformer. Service as required if not replaced. Paint.
- See attached electrical report for additional information.
- Install new classroom lighting in all portables to remain.

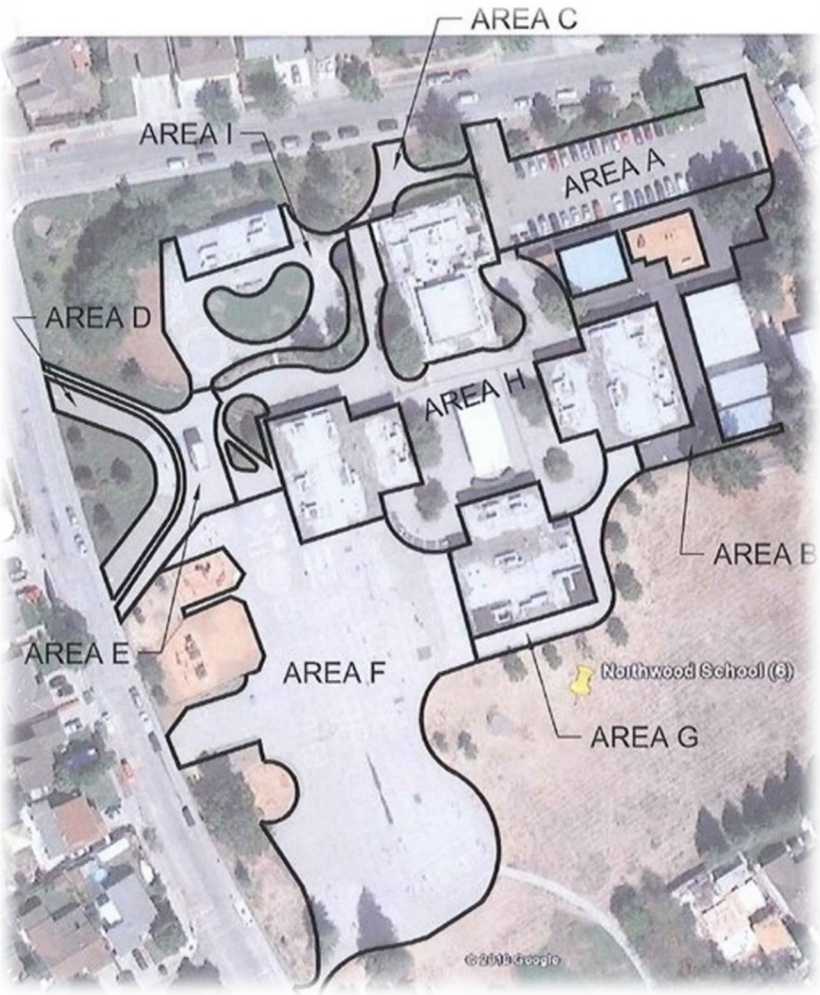
Low Voltage Systems

- Confirm that the existing fire alarm system meets current code and is not in need of replacement.
- The existing Bogen Multicom 2000 Public Address and Master Clock system located in the main office conference room is in good and functioning condition.

- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Consider updating or revising room numbering before upgrading any low voltage systems.
- Install new security systems and cameras. **Complete**

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Northwood School	A	Seal Coat	18,179	95
Northwood School	B	Reconstruct	15,131	61
Northwood School	C	Crack Fill & Seal Coat	2,530	93
Northwood School	D	Reconstruct	3,696	18
Northwood School	E	Reconstruct	6,320	60
Northwood School	F	Reconstruct	64,426	53
Northwood School	G	Reconstruct	5,292	57
Northwood School	H	Reconstruct	30,534	35
Northwood School	I	Reconstruct	10,831	23



Paving Area B

Paving Area E

Paving Area F

Paving Area H

SEISMIC ASSESSMENT REPORT

Building Descriptions:

Northwood Elementary School is comprised of six buildings. Architectural drawings were not available at the time of review for this campus. Based on the structural drawings that were available, all the buildings are estimated to be constructed at the same time roughly around the mid 1960s. The breakdown of each building corresponds to the structural plan designations and will be referenced in that way. See the key plan for building labels.

Unit 100

This unit is a single-story wood framed building with a plywood roof supported on steel and glue lam beams spanning between concrete columns and exterior walls. The building footprint is regular in shape, but the roof diaphragm is discontinuous due to differing plate heights.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between cantilevered concrete columns. Seismic loads are resisted in both orthogonal directions by way of the concrete columns located on the interior of the building structure. This lateral system is not a type that is typically used for this type of structure. We recommend a more thorough investigation of this system to determine the adequacy of the design. Additionally, the structure appears to have a discontinuity at the high roof diaphragm that does not appear to be tied back into the lower roof in a manner consistent with current code standards.

Unit 200

This unit is a single-story wood framed building with a plywood roof supported on glue lam beams spanning between exterior walls.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shearwalls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

Units 300, 400 & 500

These units are single story wood building with a panelized roof system supported on steel beams and glulams spanning between exterior walls.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shearwalls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

Unit 600

This unit is a small single-story wood building with a wood joist roof system supported on a sawn lumber beam spanning between exterior walls.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted on three sides by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shearwalls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

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MECHANICAL SYSTEMS ASSESSMENT

1. Existing Conditions

a. New rooftop air conditioning units (gas heat / electric cool).
b. New ductwork on roof.
c. New exhaust fans.
d. New temperature controls.
e. Existing above ceiling ductwork and air distribution is original.

2. Recommendations

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

3. General

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
  - Comply requirements of California Mechanical Code (CMC) latest edition
- Possible Ventilation Code Issues
  - Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
  - Corridors must have minimum two (2) air changes per hour for ventilation.
  - Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
  - Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
  - Fire/smoke dampers in the system must be interlocked with fire alarm system.
  - Corridors, lobbies, and building entrances to have dedicated supply air.
  - Chemistry classrooms with occupancy separation shall have fire/smoke damper.
  - All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.
- Possible Title 24 Issues
  - Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

ELECTRICAL SYSTEMS ASSESSMENT

Power Systems:

A 2000A, 120/208V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located next to the kindergarten classroom building provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 461 amp. There is a spare capacity of 257 amp available at the service for future need. If additional power is needed, the PG&E transformer shall need to be upgraded.

Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in main office MDF room installed in 2009. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the main office conference room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse. The main unit is suggested to be relocated to the MDF room to clear usage in the conference room.

RUSKIN ELEMENTARY SCHOOL

2020 FACILITIES ASSESSMENT
UPDATED MAY 2024

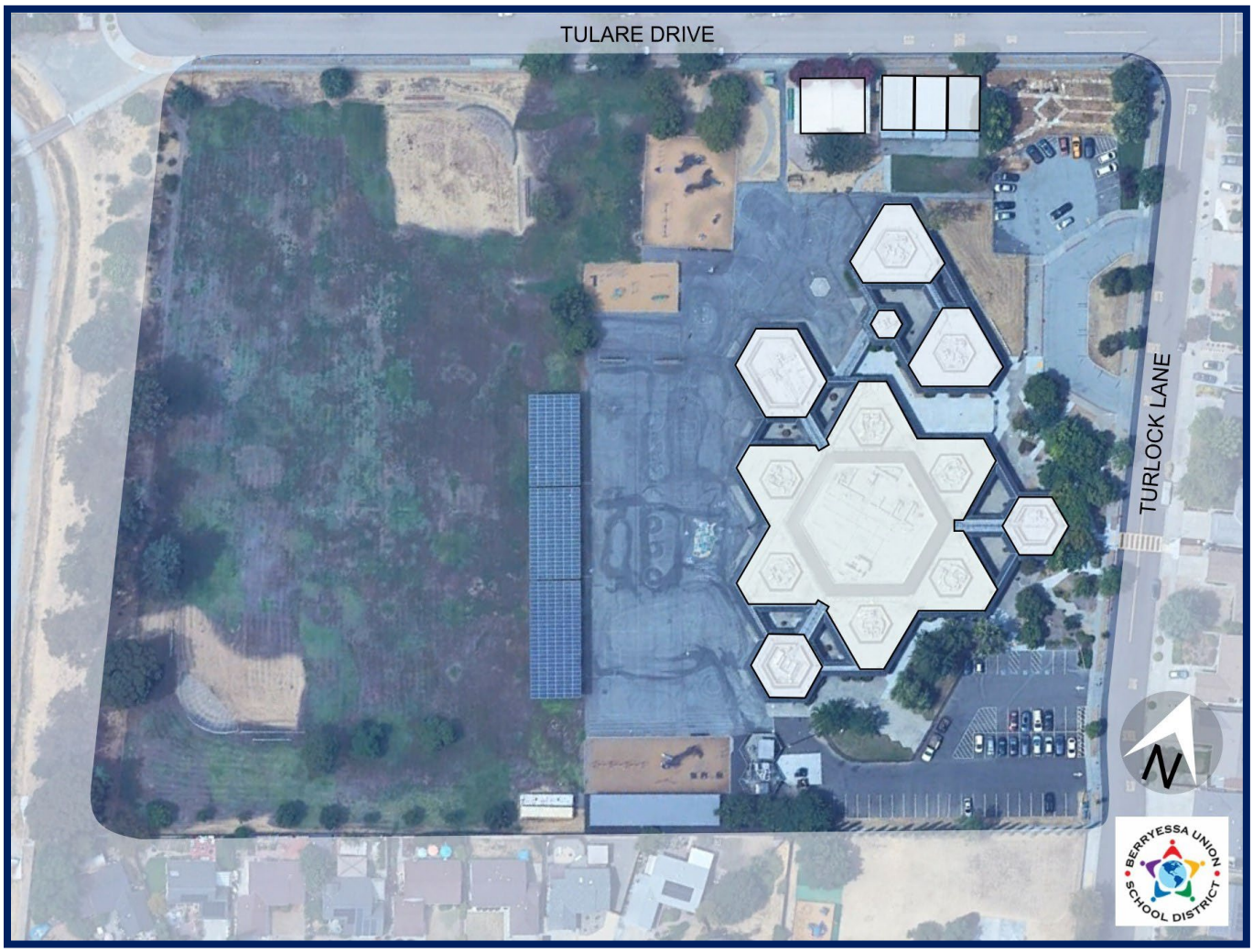
Key Data

Site Size	10.6 Acres
Building Area:	41,924 SF
Portable Area	4,200 SF
Total Area	46,124 SF
Permanent Classrooms:	24
Science Portable	2
Portable Buildings:	3

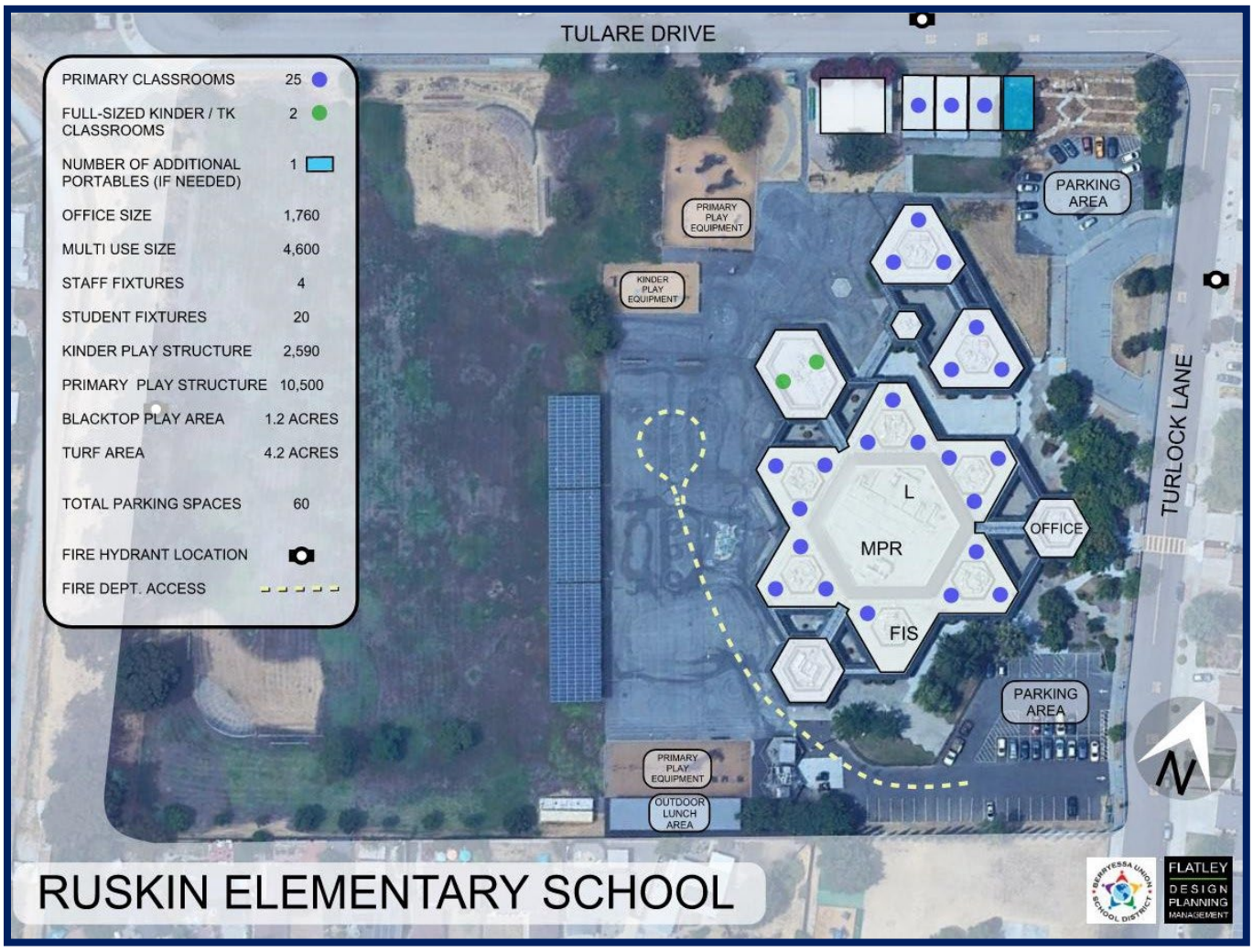
Construction History

1969	School constructed
1997	New science/computer labs
2002	Modernization projects
2003	(1) portable classroom installed
2005	Multi-purpose HVAC and roofing project
2010	Fire alarm upgrades
2012	(1) portable classroom installed
2016	Measure L - Solar project
2017	Measure L - Modernization project
2018	Measure L - Flexible instructional space project
2021	Measure U - An outdoor eating area was created, and irrigation controls and backflow were installed
2023	Measure U – Exterior gate replacement

Existing Site Plan



Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	TOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior		$351,197			$351,197	$194,038	$545,235
Roofing		$1,919,133			$1,919,133		$1,919,133
Interiors	$156,861	$274,491	$210,636	$1,619,494	$2,261,482	$92,927	$2,354,409
Restroom			$694,720		$694,720		$694,720
Kitchen			$842,703		$842,703		$842,703
Plumbing	$27,778	$71,051	$77,837		$176,665		$176,665
HVAC	$201,995		$1,916,366		$2,118,361		$2,118,361
Electrical		$342,685			$342,685		$342,685
Fire Alarm	$970,308				$970,308		$970,308
PA & Speakers	$340,221				$340,221		$340,221
Campus Security	$165,149		$694,842		$859,991		$859,991
Technology/Data			$174,623	$445,108	$619,730		$619,730
Site Development		$5,711	$613,307	$729,911	$1,348,929	$493,802	$1,842,731
Landscaping & Fields	$271,804		$187,603	$230,442	$689,849	$143,434	$833,283
Infrastructure		$235,469			$235,469		$235,469
Pavement	$745,400		$380,947	$173,187	$1,299,534		$1,299,534
Solar Replacement							
TOTAL	$2,879,516	$3,199,737	$5,793,582	$3,198,142	$15,070,977	$924,201	$15,995,178

Assessed Facilities Needs

Site Security and Safety

- Vehicle barriers are recommended at key areas.
- Make location of front office more obvious to visitors.
- At key locations, install film on windows and door glazing to deter forced entry and obscure visibility.
- Paint or install large building, or pod numbers on buildings or exterior doors.
- Consider installing new security systems and cameras.
- Consider adding a stop sign at the Tulare Drive at the Tulare / Turlock intersection.

Site Accessibility

- Consider new wayfinding signage and displays site wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains.
- Modify exterior door thresholds do not meet code, or provide accessible level landing.

Parking lot and Drop-Off / Pick-Up

- Maintain ADA accessible parking compliance as required by code.

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing. **Complete**
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Ensure that backflow preventers are installed and working properly.
- Switch irrigation systems to grey water when it becomes available.**Complete**

Play Surface / Fields / Play Structures

- The existing asphaltic concrete play surfaces appears to be in moderately good condition, some repair work is needed.
- Restore highly used areas of sports fields. Remove gophers and weeds. Reseed.
- Inspect playground equipment, refurbish as required. Replace safety surfacing. Add accessible ramps where needed.
- Existing benches should be refurbished with durable, low maintenance materials.
- Consider adding a perimeter running path.
- Repair, paint ball walls.
- Repair basketball poles, replace nets, replace backboards.
- Paint tetherball poles.
- Remove, refurbish, or replace baseball backstops, dugouts, benches, seating.

Outdoor Eating Area

- The existing outdoor lunch area is sloped (not accessible) and is in a remote location with poor supervision.
- Consider the addition of an ideally located covered lunch structure to protect from rain.

Outdoor General

- A trash enclosure is suggested. This would help improve security and prevent unauthorized dumping.
- Suggestion: Install new room, door signage, site wide. **Complete**

Roofing

- The existing roof is a multi-ply built-up-roofing system with shingled mansards. Installed in 2005, it has a 20-year warranty, and an estimated remaining life of 5-10 years.

Exterior Paint

- The existing exterior paint is generally in good condition.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Include a site-wide window replacement allowance to replace mismatched window- panes, scratch acrylic, etc.
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Roof scuppers should be modified to have overflow holes.
- Replace dented steel exterior doors.
- Include allowance to replace ceiling tiles.

Administration

- Explore opportunities to maximize the small admin space to suit staff needs.
- Upgrade nurse's restroom to comply with access code.**Complete**
- Front desk: Make repairs to laminated counter tops. Modify to maximize healthy, safety, security.
- Consider remodeling the office such that the entry faces toward the street.

Classrooms

- Refurbish or remove worn wiremolds.
- Repair cabinets as needed. Consider replacement of counter tops.

Library

- Repair or replace the librarian's desk. Modify the desk for accessibility.

Multi-Purpose

- Replace aging folding cafeteria **Complete**.
- Remove old wiring, conduit, patch and paint.

Specialty Classrooms

- Consider relocation of the music program located in the multi-purpose room, to another location.
- Remove unused phones, wiring, coax. Patch, paint where necessary.
- Refurbish or remove worn wiremolds.
- Repair cabinets as needed. Consider replacement of countertops.

Portable Classrooms

- Whenever possible, add sink cabinets to any portables lacking sinks.
- Make exterior siding repairs.
- Install new outlets, switches (with sensors), cover plates.
- Add magnetic writable surfaces.
- Behind portables, consider gravel or paving to help prevent weed build-up and to deter pests.

Kitchen / Food Services

- Observations:
  - The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Remove unused equipment.
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Provide touch-up painting, wall finish repairs as needed.
- Kitchen door does not fit into jamb. Repair.
- In kitchen storage area, consider upgrading cabinets, storage.
- Consider conversion of kitchen to dedicated ‘speed-line’ style serving space.

Staff Work Areas

- The staff work area (located near the admin.) appears to be in good condition.
- Repair cabinets, repair or replace countertops with solid surface.

Staff Lounge

- Provide touch-up painting, wall finish repairs as needed.
- The existing furniture is in poor condition. Consider moveable furniture to encourage flexible use.
- Consider new magnetic markerboards to make this space more flexible.
- Consider converting one wall of storage to space for refrigerators, microwaves, etc.
- Repair cabinets. Replace countertops with solid surface.

Student Restrooms

- Plumbing fixture count:
  - Boys (7) toilets, (4) urinals, (6) sinks
  - Girls (13) toilets, (6) sinks
- Replace exhaust fans and controls in restrooms.
- Re-grout, steam clean existing tile floors or replace floors with epoxy.
- Confirm signage meets code requirements.
- Patch walls where needed.

Staff Restrooms

- Plumbing fixture count:
  - Men (2) toilet, (1) urinal, (2) sink
  - Women (2) toilet, (2) sink
- Replace exhaust fans and controls in restrooms.
- Consider upgrading finishes, fixtures bathrooms that have not been upgraded.
- Replace existing tile floors with epoxy.

Storage and Custodial

- Patch and paint walls.
- Install new flooring where needed.
- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms.

Building Structural Walls and Roofs

- The mezzanine structure does not appear to have an adequate length of shear wall.
- The perimeter shear walls at the auditorium lack vertical continuity at the low roof level.
- Further review is recommended.
- Obtain structural drawings for ancillary buildings at North end of campus for review.
- See seismic report for additional information.

Mechanical and Plumbing Systems

- Replace all insulated supply and return ductwork, diffusers and grilles within the building.
- Replace all exhaust ductwork within the building.
- Add water and gas shut-off valves to all areas that require maintenance or isolation.
- See mechanical report for additional information.
- Replace plumbing fixtures and accessories with touch-free alternatives.

Electrical Systems

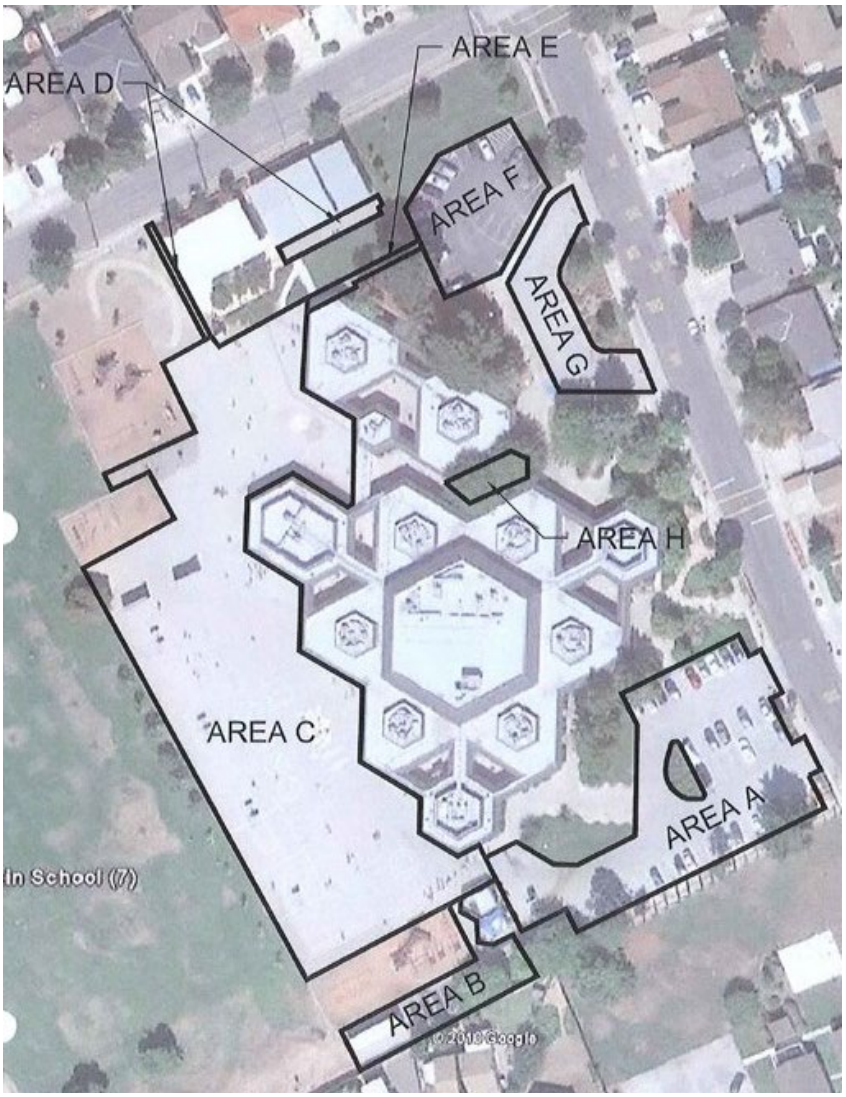
- If more than 87 amps are needed for future upgrades, replace the PG&E transformer.
- Inspect the existing PG&E transformer. Service as required if not replaced. Paint.
- See attached electrical report for additional information.
- Install new classroom lighting in all portables to remain.

Low Voltage Systems

- The existing fire alarm system is of automatic system on a Gamewell 602 panel in main office hallway installed in 2009. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirements.
- The existing Bogen Multicom 2000 Public Address and Master Clock system located in the Building D mezzanine is in good and functioning condition.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Consider updating or revising room numbering before upgrading any low voltage systems.
- Install new security systems and cameras. **Complete**

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Ruskin School	A	Reconstruct	20,691	42
Ruskin School	B	Reconstruct	5,369	62
Ruskin School	C	Reconstruct	63,168	41
Ruskin School	D	Reconstruct	1,765	49
Ruskin School	E	Reconstruct	558	41
Ruskin School	F	Reconstruct	7,663	45
Ruskin School	G	Reconstruct	5,550	59



Paving Area A

Paving Area C

Paving Area F

Paving Area G

SEISMIC ASSESSMENT REPORT

Building Descriptions:

This building was constructed in 1968 and consists of multiple hexagonal shaped elements connected via covered, exterior corridors. The main building's layout has multiple classrooms that surround an auditorium and lunchroom. Additionally, the auditorium has a mezzanine level that serves as a teacher lounge.

The lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in multiple directions by way of the wood shear walls located at the exterior and interior of each hexagonal building. In our evaluation of the buildings overall lateral system we noted a potential deficiency

in the lateral force resisting system of the mezzanine structure, in that one side of the mezzanine did not appear to have adequate length of shear wall to resist the anticipated seismic forces.

Additionally, we noted that the perimeter shear walls at the auditorium lacked the vertical continuity at the low roof level.

We recommend that further investigation be performed to confirm that the as-built mezzanine has a viable lateral force resisting system. Additionally, we recommend reviewing the as-built condition of the apparent vertical discontinuity at perimeter walls of the auditorium and adding vertical straps as necessary to resolve any discontinuity that may exist.

NOTE: The two auxiliary buildings on the north end of campus were not reviewed, as structural drawings were not available at the time of our review.

MECHANICAL SYSTEMS ASSESSMENT

1. **Existing Conditions**
   a. New packaged gas heat / electric cool rooftop units, and exhaust fans installed in 2006.
   b. New temperature controls installed in 2006.
   c. New ductwork on the roof was provided in 2006.
   d. Existing ductwork and air distribution in building is original.

2. **Recommendations**
   a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.
   b. Replace all exhaust ductwork within the building.

3. **General**
   a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
   b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
  - Comply requirements of California Mechanical Code (CMC) latest edition.
- Possible Ventilation Code Issues
  - Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
  - Corridors must have minimum two (2) air changes per hour for ventilation.
  - Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
  - Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
  - Fire/smoke dampers in the system must be interlocked with fire alarm system.
  - Corridors, lobbies, and building entrances to have dedicated supply air.
  - Chemistry classrooms with occupancy separation shall have fire/smoke damper.
  - All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.
- Possible Title 24 Issues
  - Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
  - Heating, ventilating, and air conditioning systems to have control capability with night setback.
  - Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL SYSTEMS ASSESSMENT

Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located next to the portable classroom buildings provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 219 amp. There is a spare capacity of 87 amp available at the service for future need. If additional power is needed, the PG&E transformer shall need to be upgraded.

Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in main office hallway installed in 2009. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the building D mezzanine is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

SUMMERDALE ELEMENTARY SCHOOL

2020 FACILITIES ASSESSMENT

UPDATED MAY 2024

Key Data

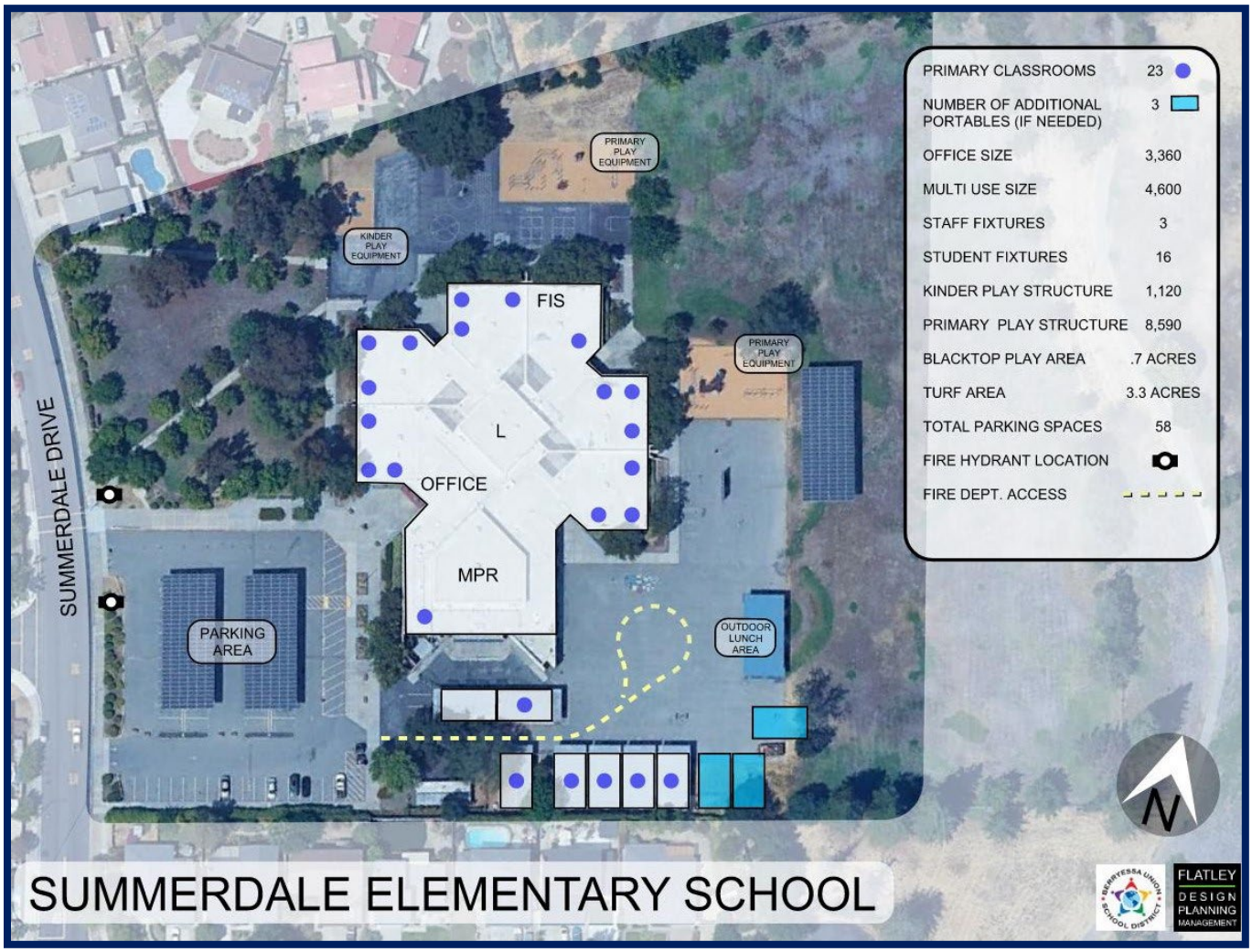
Site Size	10.0 Acres
Building Area:	38,189 SF
Portable Area	5,880 SF
Total Size	44,069 SF
Permanent Classrooms:	17
Portable Buildings:	6

Construction History

1975	School constructed
1992	(2) Portable classroom buildings installed
2004	Modernization projects
2008	HVAC upgrade, roofing, (3) portable classrooms
2015	Measure L- Paving, playground equipment upgrades, and IT infrastructure upgrade projects
2016	Measure L- Flexible Instructional Space, modernization, and solar projects
2021	Measure U - An outdoor eating area was created, and irrigation controls and backflow were installed.
2022	Measure U – Library improvement, new library desk, and exterior door signage.
2023	Measure U – Restroom floor replacement and exhaust fan replacement projects.
2024	Measure U - Fire Alarm replacement

Existing Site Plan

Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	TOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior		$637,490	$263,942		$901,431	$52,673	$954,104
Roofing			$1,337,867	$205,134	$1,543,001		$1,543,001
Interiors		$1,235,924	$535,304	$1,714,830	$3,486,058		$3,486,058
Restroom	$382,329		$364,780		$747,109	$127,277	$874,386
Kitchen		$506,684			$506,684		$506,684
Plumbing	$27,778	$106,314	$59,304	$94,163	$287,559		$287,559
HVAC	$3,529,071			$152,608	$3,681,679	$72,653	$3,754,332
Electrical	$314,111			$296,738	$610,849		$610,849
Fire Alarm						$845,585	$845,585
PA & Speakers	$356,628				$356,628		$356,628
Campus Security	$135,694		$670,873	$445,108	$1,251,675		$1,251,675
Technology/Data			$174,623	$132,473	$307,095		$307,095
Site Development		$5,711	$272,303	$737,049	$1,015,063	$20,957	$1,036,020
Landscaping & Fields	$171,996		$118,714	$145,822	$436,532	$21,451	$457,983
Infrastructure		$224,978			$224,978	$131,695	$356,673
Pavement			$454,850	$55,872	$510,722		$510,722
Solar Replacement							
TOTAL	$4,917,607	$2,717,101	$4,252,560	$3,979,796	$15,867,065	$1,272,291	$17,139,356

Assessed Facilities Needs

Site Security and Safety

- Vehicle barriers are recommended at key areas.
- Add exterior lighting to poorly lit areas.
- At key locations, install film on windows and door glazing to deter forced entry, and obscure visibility.
- Paint or install large building, or pod numbers on buildings or exterior doors. **Complete**
- Consider installing new security systems and cameras. **Complete**
- Several areas of cracked concrete present tripping hazards. **Complete**

Site Accessibility

- Three pairs of the existing classroom exit doors do not meet access requirements. Revise concrete retaining walls to enlarge entry areas.
- Consider new wayfinding signage and displays site wide.
    - Complete retrofit of non-accessible drinking fountains with ADA fountains.

Parking lot and Drop-Off / Pick-Up

- Existing curbs and striping need repainting.
- Maintain ADA accessible parking compliance as required by code.

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing.
- The landscaping in the sloped planters adjacent to the building is causing moisture intrusion problems, as well as creating a security issue by assisting students in accessing the roof of the building. Simplify landscaping and reduce irrigation.
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Reseed under trees, add redwood edging around trees.
- Ensure that backflow preventers are installed and working properly. **Complete**
- Switch irrigation systems to grey water when it becomes available. **Complete**

Play Surface / Fields / Play Structures

- Some blacktop and is aging, cracked. Refurbishment and replacement are needed. See attached pavement report.
- Inspect playground equipment, refurbish as required. Replace safety surfacing (fibar). Add accessible ramps where needed.
- Existing benches should be refurbished with durable, low maintenance materials.
- Consider adding a perimeter running path.
- Repair, paint ball walls.
- Repair basketball poles, replace nets, replace backboards.
- Paint tetherball poles.
- Remove, refurbish or replace baseball backstops, dugouts, benches, seating.
- Restore highly used areas of sports fields. Remove gophers and weeds. Reseed.
- Add AC paving at dirt play areas.

Outdoor General

- A trash enclosure is suggested. This would help improve security and prevent unauthorized dumping.
- Suggestion: Install new room and door signage site-wide.

Outdoor Eating Area

- Consider the addition of a covered eating area. **Complete**

Roofing and Building Protection

- The existing roof is a multi-ply built-up-roofing system. Installed in 2008, it has a 20- year warranty, and an estimated remaining life of 8-10 years.

Exterior Paint

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Include a site-wide window replacement allowance to replace mismatched window- panes, scratch acrylic, etc.
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Roof scuppers should be modified to have overflow holes.
- Replace dented steel exterior doors.
- Include allowance to replace ceiling tiles.

Administration

- Observations:
    - Some specialty spaces (RSP, Psych, Speech Therapy) are located away from the administration area and would be better served by being in the space general area as the main administration space.
- Explore any opportunities to improve visibility at the entry area.

- Repair cabinets as needed. Consider replacement of counter tops.
- Paint interior space. Replace worn finishes.



Circulation Spaces

- Replace automatic fire door and hardware.

Classroom Pod Common Areas

- Observations:
  - Each of the “pods” has a common area adjacent to an exterior courtyard.
  - This space could be used to house more students that are spaced safely.
- Remove original cabinets with non-functioning appliances. Repair cabinets to remain.
- Consider new furniture to encourage use of this space.
- Consider new magnetic writable surfacing.
- Shared outdoor learning environments
  - Introduce fun colors
  - Stain existing wood
  - Add furnishings
  - Drought tolerant plants such as succulents,
  - Replace chain-link ceiling with something trellis-like.
  - Replace, repair outdoor sinks.

Classrooms

- Refurbish or remove worn wiremolds.
- Replace non-accessible exterior door thresholds with new or provide level landing.
- Consider reconfiguring classrooms to allow each room to be fully enclosed and be equipped with an accessible exterior classroom door.

Library

- Existing clerestory windows need replacement or reglazing.
- Remove window blinds or remove them if room darkening is no longer needed.
- Upgrade existing floor outlet boxes.
- Repair or replace librarian desk. **Complete**

Multi-Purpose

- Existing clerestory windows need replacement or re-glazing.
- Remove window blinds if room darkening is no longer needed.
- Replace aging folding cafeteria tables. **Complete**
- Remove old wiring, conduit, patch and paint.
- Replace accordion curtain wall.

Specialty Classrooms

- Remove old swing brackets in RSP.
- Remove unused phones, wiring, coax. Patch, paint where necessary.
- Refurbish or remove worn wiremolds.
- Small multi-purpose: refurbish cabinets, remove or replace wire molds. Repair or replace delaminating cabinets.

Portable Classrooms

- Whenever possible, add sink cabinets to any portables lacking sinks.
- Consider adding exterior backpack-hooks to all classrooms.
- Install new outlets, switches (with sensors), cover plates.
- Add magnetic writable surfaces.
- Behind portables, consider gravel or paving to help prevent weed build-up and to deter pests.

Food Services

- Observations:
    - The existing kitchen layout and equipment do not meet current Department of Health requirements.
    - Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan. Remove unused equipment.
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Touch-up painting needed.
- In kitchen storage area, consider upgrading cabinets, storage.
- Consider conversion of kitchen to dedicated ‘speed-line’ style serving space.

Staff Work Areas

- An area of carpet under a drinking fountain needs to be addressed.
- Repair cabinets. Replace countertops with solid surface.
- Replace or clean HVAC ceiling registers, vents.
- Repair cabinets. Replace countertops with solid surface.

Staff Lounge

- The existing staff room finishes are worn and dated.
- Repair cabinets. Replace countertops with solid surface.
- Replace or clean HVAC ceiling registers, vents.
- Provide new markerboards to make this space more flexible.
- Consider moveable furniture to encourage flexible use.

Student Restrooms

- Upgrade student restrooms in pods B, C, D, and E to meet accessibility code.
- Plumbing Fixture Count
    - Boys (7) toilets, (2) urinals, (3) sinks
    - Girls (7) toilets, (3) sinks
    - Unisex (2) toilets, (2) sinks
- Replace exhaust fans and controls in restrooms.
- Re-grout or steam clean existing tile floors or replace floors with epoxy.
- Confirm signage meets code requirements.

Staff Restrooms

- Plumbing fixture count:
    - Men (1) toilet, (1) urinal, (1) sink
    - Women (2) toilet, (1) sink
- Replace existing tile floors with epoxy. Upgrade staff restrooms that do not comply with current accessibility standards. **Complete**
- Consider upgrading finishes, fixtures in bathrooms that have not been upgraded.
- Replace exhaust fans, provide controls, timer **Complete**.

Storage and Custodial

- Overall general storage capacity is good, with many built in cabinets available around the school for supplies and instructional material.
- Paint these spaces.
- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms.

Building Structural Walls and Roofs

- Further structural investigations/inspections of the-out-of-plane wall ties are recommended, followed by structural improvements if called for.
- See attached structural report for additional information.

Mechanical and Plumbing Systems

- Remove all existing air handling units and replace with new air handling units.
- Replace all existing exhaust fans. **Complete**
- Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.
- Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.
- Replace all insulated hot and chilled water piping within the building.
- Add water and gas shut-off valves to all areas that require maintenance or isolation.
- HVAC Room: Clean floors, paint walls, upgrade lighting and controls.
- Replace exterior mechanical yard doors.
- Replace plumbing fixtures and accessories with touch-free alternatives.
- See attached mechanical report for additional information.

Electrical Systems

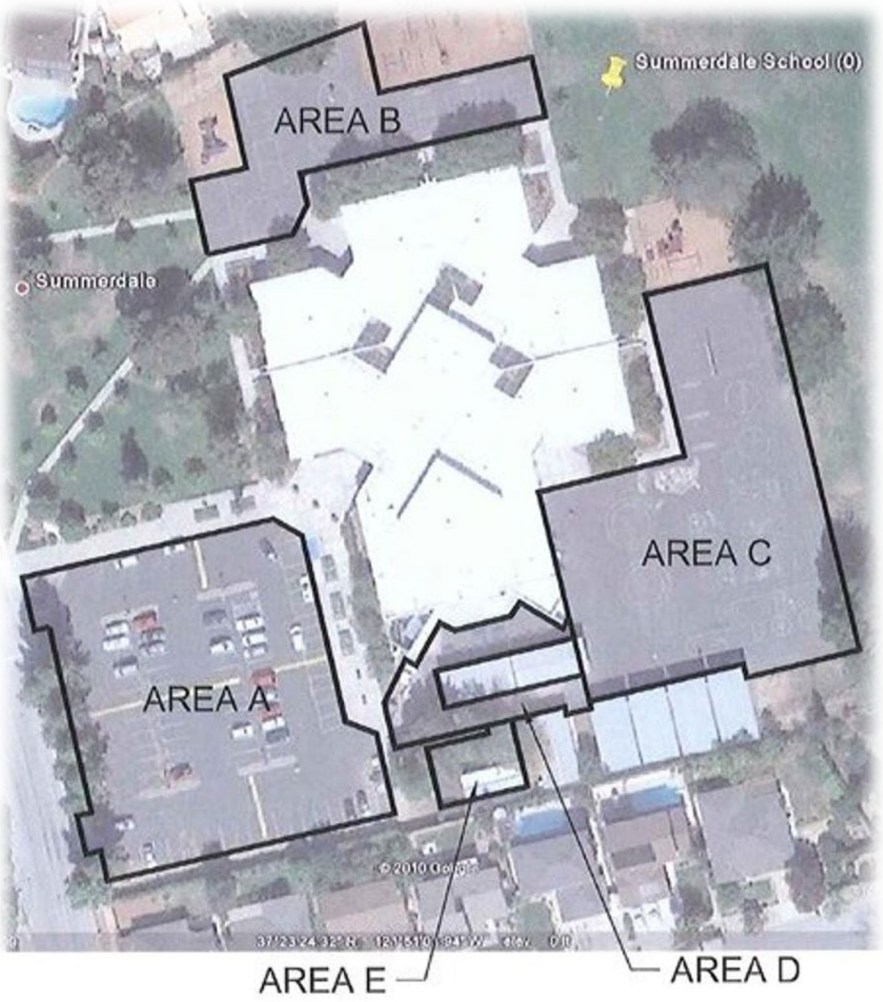
- If more than 35 amps of power are needed for future improvements, replace the existing PG&E transformer.
- Inspect existing transformer and service if required. Paint.
- Confirm lighting retrofit is completed.
- Replace lighting at portable classrooms to remain.

Low Voltage Systems

- The existing fire alarm system is a manual/automatic system on a Gamewell 610 panel in the Administration building installed in 2004. The panel is in good and functioning condition, but per the electrical report, the notification devices do not meet current code. Recommendation: Install new, fully addressable, automatic FA systems with new notification devices.
- The existing Bogen Multicom 2000 Public Address and Master Clock system located in the Multi-Purpose Room storage room is in good and functioning condition. Review for replacement with networked system.
- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- If new low voltage systems are being considered, review current room numbering and signage. Consider updating or revising.

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Summerdale School	A	Seal Coat	34,696	85
Summerdale School	B	Reconstruct	14,544	56
Summerdale School	C	Crack Fill and Seal Coat	33,725	85
Summerdale School	D	Reconstruct	5,808	57
Summerdale School	E	Reconstruct	2,435	62



Paving Area A

Paving Area A

Paving Area B

Paving Area C

SEISMIC ASSESSMENT REPORT

The building is one of three identical single-story building with a wood framed roof with concrete walls built in 1974. Please refer to the evaluation written for Brooktree Elementary for specific recommendations for this building type.

MECHANICAL SYSTEMS ASSESSMENT

1. **Existing Conditions**
   a. New chillers, boilers and pumps installed in 2009.
   b. New temperature controls installed in 2009.
   c. Existing above ceiling ductwork and air distribution is original.
   d. Existing indoor air handling units are original.

2. **Recommendations**
   a. Remove all existing indoor air handling units and replace with new air handling units. Install the replacement units most matching the removed units to minimize the modifications to the duct connections and the unit supports.
   b. Remove all existing exhaust fans and replace with new exhaust fans to match the performance of the existing fans.
   c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.
   d. Replace all insulated hot and chilled water within the building.

3. **General**
   a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
   b. Refer to **Appendix A** for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
  - Comply requirements of California Mechanical Code (CMC) latest edition.
- Possible Ventilation Code Issues
  - Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
  - Corridors must have minimum two (2) air changes per hour for ventilation.
  - Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
  - Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
  - Fire/smoke dampers in the system must be interlocked with fire alarm system.
  - Corridors, lobbies, and building entrances to have dedicated supply air.
  - Chemistry classrooms with occupancy separation shall have fire/smoke damper.
  - All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.
- Possible Title 24 Issues
  - Heating furnaces to have minimum 80% efficiency.
  - Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.
  - Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
  - Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.
  - Heating, ventilating, and air conditioning systems to have control capability with night setback.
  - Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL SYSTEMS ASSESSMENT

Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 261 amp. There is a spare capacity of 35 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the multi-purpose building storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

TOYON ELEMENTARY SCHOOL

2020 FACILITIES ASSESSMENT

UPDATED MAY 2024

Key Data

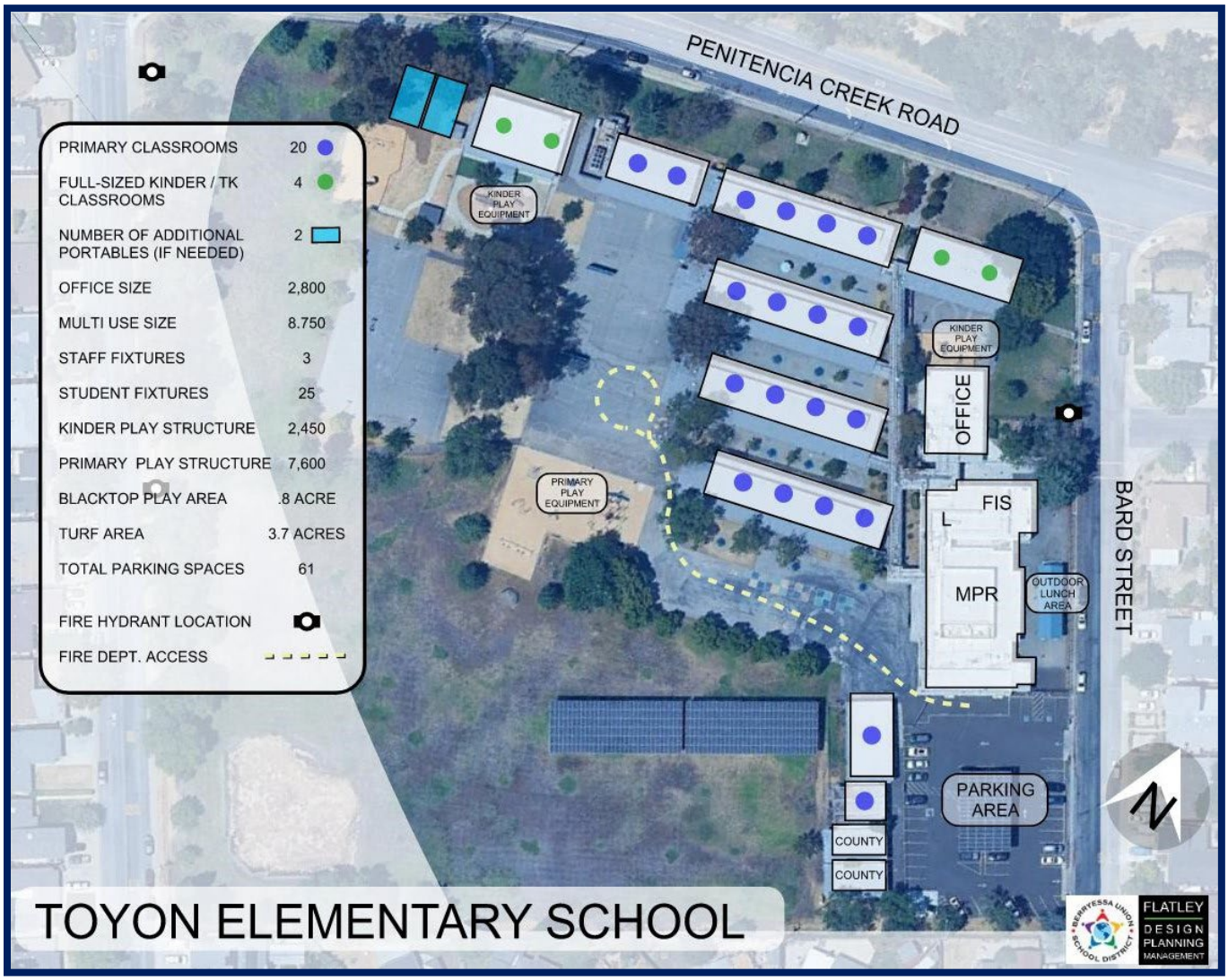
Site Size	10.3 Acres
Building Area:	40,927 SF
Portable Area	4,800 SF
Total Size	45,727 SF
Permanent Classrooms:	20
Portable Buildings:	4

Construction History

1955	School Constructed
Unknown	(2) portable classroom buildings installed
1996	(1) portable classroom building installed
2002	Modernization projects
2006	(1) portable classroom building installed
2008	Replacement of existing boiler and chiller
2008	Roofing removal and replacement
2009	Replacement of campus fire alarm system
2015	Measure L - Paving, playground equipment upgrades, and IT infrastructure upgrade projects
2016	Measure L - Solar project
2018	Measure L - Modernization project
2019	Measure L - Flexible Instructional Space project
2021	Measure U - The main parking lot asphalt was reconstructed, and irrigation controls and backflow were installed.
2023	Measure U – Replacement of primary playground structure.
2024	Measure U – SDC restroom renovation.

Existing Site Plan

Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	TOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior		$287,033	$2,187,975		$2,475,009	$29,549	$2,504,558
Roofing			$345,107	$814,641	$1,159,748		$1,159,748
Interiors		$158,187	$550,464	$1,475,250	$2,183,901		$2,183,901
Restroom			$223,964		$223,964	$410,000	$633,964
Kitchen		$968,970			$968,970		$968,970
Plumbing	$27,778	$140,844	$25,945		$194,567		$194,567
HVAC	$2,492,094				$2,492,094		$2,492,094
Electrical		$342,685			$342,685		$342,685
Fire Alarm	$891,736				$891,736		$891,736
PA & Speakers	$328,259				$328,259		$328,259
Campus Security	$145,021		$444,777		$589,798		$589,798
Technology/Data			$174,623	$445,108	$619,730		$619,730
Site Development		$288,412	$452,190	$406,956	$1,147,558	$311,048	$1,458,606
Landscaping & Fields	$206,260		$142,363	$174,872	$523,496	$4,578	$528,074
Infrastructure		$254,352			$254,352		$254,352
Pavement	$256,500		$372,715	$68,674	$697,889	$352,545	$1,050,434
Solar Replacement							
TOTAL	$4,347,648	$2,440,483	$4,920,125	$3,385,500	$15,093,756	$1,107,720	$16,201,476

Assessed Facilities Needs

Site Security and Safety

- Vehicle barriers are recommended at key areas.
- Complete installation of perimeter security fencing and gates. Direct visitors through front office during school hours. **Complete**
- Add exterior lighting to poorly lit areas.
- Install film on windows and door glazing to deter forced entry, obscure visibility.
- Paint or install large building, pod numbers are visible on the exterior. Consider adding large numbers to roof tops for identification from the air.
- Consider installing new security systems and cameras. **Complete**
- If new low voltage systems are being considered, review current room numbering. Consider updating or revising.
- Several areas of cracked concrete present tripping hazards and drainage issues.

Site Accessibility

- Consider new wayfinding signage and displays site wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains. **Complete**

- Consider new wayfinding signage and displays site wide.
- Many classroom door thresholds are too high to meet access code requirements. Replace threshold or provide new level landing.

Parking lot and Drop-Off / Pick-Up

- Existing accessible parking does not meet current requirements. **Complete**
- Maintain ADA accessible parking compliance as required by code **Complete**
- Existing curbs and striping need repainting. **Complete**

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing **Complete**.
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Ensure that backflow preventers are installed and working properly. **Complete**
- Switch irrigation systems to grey water when it becomes available.

Play Surface / Fields / Play Structures

- Existing blacktop and is aging, cracked. Refurbishment and replacement are needed. See attached pavement report.
- Restore highly used areas of sports fields. Remove gophers and weeds. Reseed.
- Inspect playground equipment, refurbish as required. Replace safety surfacing. Add accessible ramps where needed.
- Existing benches should be refurbished with durable, low maintenance materials.
- Consider adding a perimeter running path.
- Repair, paint ball walls.
- Repair basketball poles, replace nets, replace backboards.
- Paint tetherball poles.
- Remove, refurbish, or replace baseball backstops, dugouts, benches, seating.

Outdoor eating area

- Provide a shade structure between the street and the multi-purpose building.
- Improve drainage in the area to decrease flooding after heavy rains.

Roofing and Building Protection

- The existing roof is a multi-ply built-up-roofing system and shingles. Installed in 2008, the built-up roofing has a 20-year warranty, and the shingles have a 40-year warranty. The roof system has an estimated remaining life 3-11 years for the built-up roofing and 20+ years for the shingles.

Exterior Paint

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Include a site-wide window replacement allowance to replace mismatched window- panes, scratch acrylic, etc.
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Roof scuppers should be modified to have overflow holes.
- Replace dented steel exterior doors.
- Include allowance to replace ceiling tiles.

Administration Area

- Observations:
    - The principal's office is too small to permit a private conference.
    - Conference room too small to hold conferences with the door closed for privacy.
- Front desk: Make repairs, add plexiglass paneling. Modify to maximize healthy, safety,

security, and to meet access code.
- Paint interior space. Replace worn finishes.
- Explore options to improver visibility of office from front of school.

Classrooms

- Refurbish or remove worn wiremolds.
- Repair cabinets as needed. Consider replacement of counter tops.

Library

- The library was remodeled as part of Measure L.

Multi-Purpose Room

- Replace remaining folding cafeteria tables that are in poor condition **Complete**
- Remove old wiring, conduit, patch and paint.
- Replace window blinds or remove if room darkening is no longer needed.

Specialty Classrooms

- Consider eliminating the computer lab if this program is underutilized or being phased out. **Complete**

Portable Classrooms

- Whenever possible, add sink cabinets to any portables lacking sinks.
- Install new outlets, switches (with sensors), cover plates.
- Add magnetic writable surfaces.
- Behind portables, consider gravel or paving to help prevent weed build-up and to deter pests.
- One pair of portables is well beyond their intended service life. Consider removal.

Kitchen / Food Service

- Note, prior to the central kitchen on the Piedmont Middle school site, this kitchen served as the District's central kitchen.
- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Remove unused equipment.
- In kitchen storage area, consider upgrading cabinets, storage.
- Provide clear acrylic at serving area, point of sale.
- Consider conversion of kitchen to dedicated 'speed-line' style serving space.
- Consider removal of storage area behind kitchen.

Staff Work Area

- No work identified.

Staff Lounge

- Consider new magnetic markerboards to make this space more flexible.
- Consider moveable furniture to encourage flexible use.

Student Restrooms

- Observations:
  - Restrooms are generally in good condition.
  - Kindergarten classrooms do not have restrooms adjacent to them.
- Plumbing Fixture Count
  - Boys (9) toilets, (11) urinals, (7) sinks
  - Girls (16) toilets, (7) sinks
  - **Added 4 fixtures for SDC classrooms**
- Replace exhaust fans and controls in restrooms.
- Re-grout, steam clean existing tile floors or replace floors with epoxy.
- Confirm signage meets code requirements.
- Upgrade restrooms near multi-use to meet access code if possible.

Staff Restrooms

- Plumbing Fixture Count
  - Men (2) toilets, (1) urinals, (2) sinks
  - Women (3) toilets, (3) sinks
- Replace exhaust fans, provide controls, timer.

- Consider upgrading finishes, fixtures bathrooms that have not been upgraded.
- Upgrade staff restrooms that do not comply with current accessibility standards.
- Replace existing tile floors with epoxy.

Storage and Custodial Spaces

- Patch and paint walls.
- Install new flooring where needed.
- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms.

Structural System

- Further structural investigations/inspections are recommended, followed by structural improvements if called for.
- Covered walks appear to need structural upgrades.
- See attached structural report for additional information.

Mechanical and Plumbing Systems

- Remove all existing exposed, vertical baseboard fan coil units.
- Install new vertical gas fired furnaces with split DX cooling.
- Replace all insulated supply and return ductwork, diffusers and grilles.
- Replace all insulated underground hot and chilled water piping below grade, in the buildings and on covered walks.
- Consider replacement of central HVAC with individual ground mounted HVAC units for each occupied space.
- Add water and gas shut-off valves to all areas that require maintenance or isolation.
- Consider HVAC rooftop screening if new air handling units are located on the roof.
- Replace all existing exhaust fans and provide controls.
- HVAC Room: Clean floors, paint walls, upgrade lighting and controls.
- Replace plumbing fixtures and accessories with touch-free alternatives.
- See attached mechanical report for additional information.

Electrical Systems

- Power: If more than 514 amps are needed for future upgrades, replace the existing PG&E transformer.
- Inspect the existing PG&E transformer. Service as required if not replaced. Paint.
- See attached electrical report for additional information.
- Install new classroom lighting in all portables to remain.

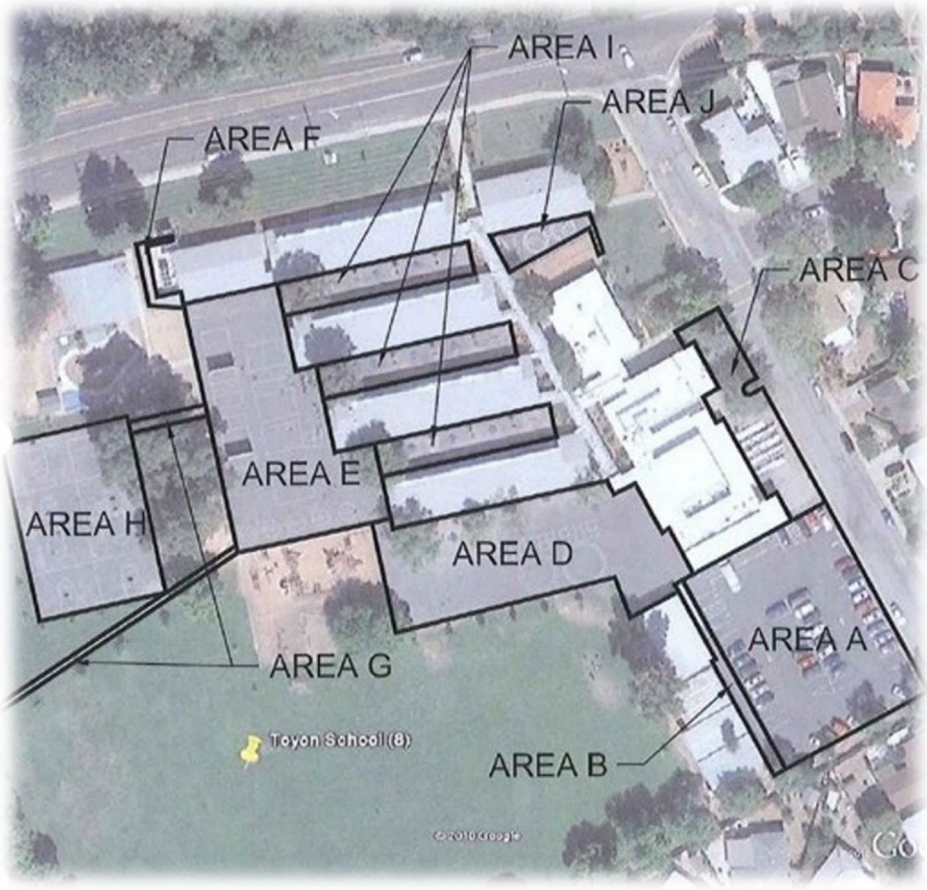
Low Voltage Systems

- The existing fire alarm system uses a Gamewell 602 panel in the Administration building installed around 2009. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirements.
- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the Building E storage room is in good and functioning condition.

- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Consider updating or revising room numbering before upgrading any low voltage systems.
- Install new security systems and cameras **Complete (cameras)**.

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Toyon School	A	Reconstruct	21,336	41
Toyon School	B	Reconstruct	1,909	47
Toyon School	C	Crack Fill and Seal Coat	4,644	72
Toyon School	D	Reconstruct	17,479	55
Toyon School	E	Crack Fill and Seal Coat	19,556	85
Toyon School	F	Reconstruct	1,087	59
Toyon School	G	Crack Fill and Seal Coat	2,145	85
Toyon School	H	Crack Fill and Seal Coat	14,140	85
Toyon School	I	Digout, Crack Fill & Seal Coat	9,089	85
Toyon School	J	Crack Fill and Seal Coat	1,970	85



Paving Area A

Paving Area B

Paving Area D

Paving Area F

SEISMIC ASSESSMENT REPORT

Building Descriptions:

Toyon Elementary School is comprised of nine buildings. The buildings were originally constructed and renovated in several different phases over the years. The buildings are labeled according to the Architectural plans that were the basis of this review. Not all buildings had Architectural and/or Structural plans to serve as the basis of this review as noted in the sections below.

Buildings A, B, C, D, E, J, H, G

The drawings that were available for these buildings for our review, was limited to a select few Architectural plan sheets. No structural plans were available for any of the buildings listed above. Therefore, we recommend that construction drawings be located and/or a site observation be conducted so that a seismic evaluation can be performed on the subject buildings.

Bldg. F

The plans for this building indicate that this building was built around 1956. The building is a single-story structure containing several classrooms. The framing consists of wood roof joists spanning between bearing walls. The building also features a clerestory window which runs nearly the entire length of the structure.

The lateral force resisting system for the building consists of a sloped roof with diagonal sheathing acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. It appears that the vertical load path to the shear walls below is insufficient due to the large clerestory window that spans nearly the entire length of the structure. Additionally, it appears that the transvers shear walls do not have tie-downs restraining them from uplift. We recommend a more in-depth review of the buildings lateral force resisting system be conducted to determine what, if any retrofit measure would be necessary to increase the buildings anticipated performance to a “Life Safety” level.

The structural plans also indicated covered walkways at the corridors of buildings C, D and E. The gravity as well as lateral support for the walkways are standard 3” diameter steel pipe columns. Our preliminary evaluation of these columns is that they would not perform at a level consistent with “Life Safety” when subjected a major seismic event.

Buildings C, D and E appear to be similar construction and therefore the recommendations would most likely be consist with those made for Building F.

Bldg. H

The original plans for the design of Bldg. H were not available at the time of this review. Architectural and Structural plans for the 1979 library addition were available but did not provide adequate information to review the building as a whole. We recommend that an effort be put forth to locate the original approved set of construction documents so that a full seismic evaluation can be completed for this structure. In the absence of reviewing the original drawings, we would recommend that a site observation be conducted to verify as-built conditions with the expectations that some destructive demolition be required to expose key elements of the lateral force resisting system. Upon the evaluation of either of the above methods, retrofit measures can be made, as necessary, to upgrade the existing structure to an acceptable level of performance.

MECHANICAL SYSTEMS ASSESSMENT

1. Existing Conditions

a. New chiller, pumps (w/ VFD's), boiler and exterior piping installed in 2008 for Buildings G & H.
b. New exhaust fans installed in 2008 for Buildings G & H. All other buildings have original exhaust fans.
c. New temperature controls installed in 2008.
d. New air handling units and ductwork on the roof was provided for Buildings G & H in 2008. All other buildings have original vertical baseboard fan coil units.
e. All hot and chilled water is original.

2. Recommendations

a. Remove all existing exposed, vertical baseboard fan coil units and replace with new vertical gas fired furnaces with split DX cooling with controlled outside air intake, EC motors and new ductwork with diffusers and grilles.
b. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.
c. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.
d. Replace all insulated hot and chilled water pipe installed within the building.
e. Replace all insulated hot and chilled water pipes installed on the covered walkway canopy.

3. General

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
    a. Comply requirements of California Mechanical Code (CMC) latest edition

- Possible Ventilation Code Issues
    a. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
    b. Corridors must have minimum two (2) air changes per hour for ventilation.
    c. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
    d. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
    a. Fire/smoke dampers in the system must be interlocked with fire alarm system.
    b. Corridors, lobbies, and building entrances to have dedicated supply air.
    c. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
    d. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

- Possible Title 24 Issues
    a. Heating furnaces to have minimum 80% efficiency.
    b. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.
    c. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.
    d. Heating, ventilating, and air conditioning systems to have control capability with night setback.
    e. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL SYSTEMS ASSESSMENT

Power Systems:

A 1200A, 120/208V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located next building C electrical room provides power to the campus. The switchboard was installed around 1996 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 256 amp. There is a spare capacity of 514 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in the administration office installed in 2008. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the building E storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

VINCI PARK ELEMENTARY SCHOOL

2020 FACILITIES ASSESSMENT
UPDATE MAY 2024

Key Data

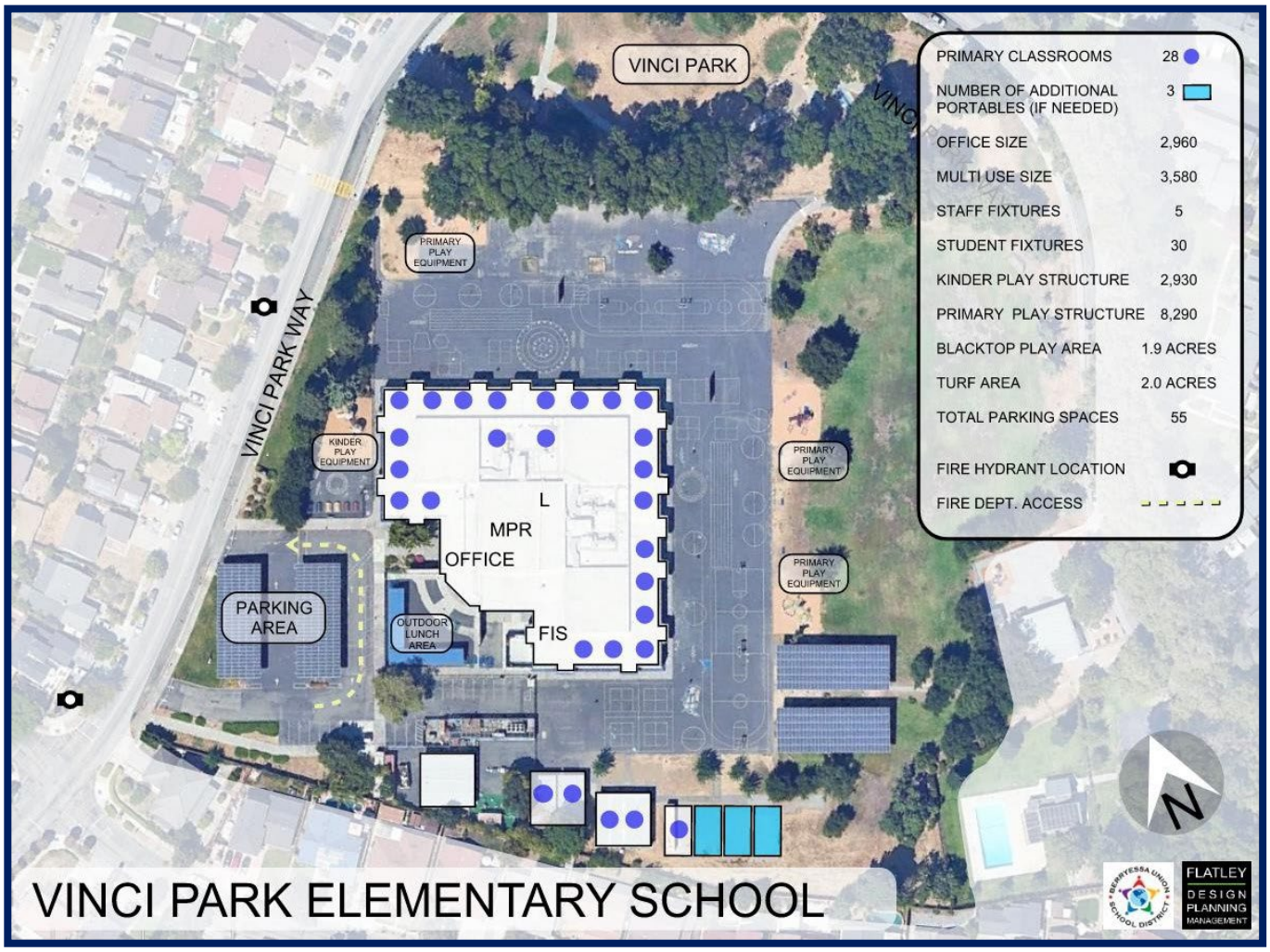
Site Size	9.8 Acres
Building Area:	49,670 SF
Portable Area:	4,800 SF
Total Size:	54,470 SF
Permanent Classrooms:	23
Portable Buildings:	5

Construction History

1973	School constructed
1996	(2) Portable classroom buildings Installed
2002	(1) Portable music room installed
2004	Modernization projects, (3) Portables
2006	Roofing, (1) portable classroom, boiler and chiller
2007	(2) Portable classroom buildings installed
2015	Measure L - Playground equipment upgrades and security fence projects
2016	Measure L - Modernization and solar projects
2017	Measure L - Paving project
2018	Measure L - Flexible instructional space, modernization projects
2021	Measure U - An outdoor eating area was created, and irrigation controls and backflow were installed.
2022	Measure U – Library improvement, new library desk and library shelving.
2023	Measure U – Restroom floor replacement and exhaust fan replacement project, and partial LED lighting upgrades
2024	Measure U - Playground structure replacement.

Existing Site Plan

Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	TOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior	$958,720	$148,919	$255,694		$1,363,333	$26,592	$1,389,925
Roofing		$147,418	$2,203,763	$1,956,611	$4,307,792		$4,307,792
Interiors	$344,222	$14,456	$865,937		$1,224,616	$74,294	$1,298,910
Restroom		$443,769	$389,211		$832,981	$202,637	$1,035,618
Kitchen		$513,278			$513,278		$513,278
Plumbing	$27,778	$205,726			$233,504		$233,504
HVAC	$261,913		$1,897,397		$2,159,310	$79,425	$2,238,735
Electrical		$342,685			$342,685		$342,685
Fire Alarm		$1,842,319			$1,842,319		$1,842,319
PA & Speakers	$587,038				$587,038		$587,038
Campus Security	$241,701		$621,701		$863,402		$863,402
Technology/Data			$174,623	$445,108	$619,730		$619,730
Site Development		$57,121	$24,710	$654,990	$736,821	$154,950	$891,771
Landscaping & Fields	$166,658		$115,030	$141,297	$422,984	$18,277	$441,261
Infrastructure		$236,884			$236,884		$236,884
Pavement		$1,422,799		$189,031	$1,611,830		$1,611,830
Solar Replacement							
TOTAL	$2,588,030	$5,375,376	$6,548,065	$3,387,036	$17,898,507	$556,175	$18,454,682

Assessed Facilities Needs

Site Security and Safety

- Vehicle barriers are recommended at key areas.
- Complete installation of perimeter security fencing, gates. Direct visitors through front office during school hours.
- Add exterior lighting to poorly lit areas.
- Install film on windows and door glazing to deter forced entry, obscure visibility.
- Paint or install large building, pod numbers are visible on the exterior. Consider adding large numbers to roof tops for identification from the air. **Complete**
- Consider installing new security systems and cameras. **Complete**
- If new low voltage systems are being considered, review current room numbering. Consider updating or revising.
- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.

Site Accessibility

- Consider new wayfinding signage and displays site wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains.
- Some existing door thresholds are too high for current accessibility standards. Replace thresholds or provide level landing.

Parking lot and Drop-Off / Pick-Up

- Maintain ADA accessible parking compliance as required by code.

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing **Complete**.
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Re-seed grass under trees and add redwood or other type of edging to create clear boundary for grass.
- Ensure that backflow preventers are installed and working properly **Complete**.
- Switch irrigation systems to grey water when it becomes available. **Complete**

Play Surface / Fields / Play Structures

- The existing blacktop is aging, cracked. Refurbishment and replacement are needed. See attached pavement report.
- Restore highly used areas of sports fields. Remove gophers and weeds. Reseed.
- Inspect playground equipment, refurbish as required. Replace safety surfacing. Add accessible ramps where needed.
- Existing benches should be refurbished with durable, low maintenance materials.
- Consider adding a perimeter running path.
- Repair, paint ball walls.
- Repair basketball poles, replace nets, replace backboards.
- Paint tetherball poles.
- Remove, refurbish, or replace baseball backstops, dugouts, benches, seating.

Outdoor eating area

- Add a shade structure to both the primary **Complete** and kinder outdoor eating areas.

Outdoor General

- A trash enclosure is suggested. This would help improve security and prevent unauthorized dumping.
- Consider reintroducing covered walks (formerly large overhangs) to connect campus buildings.

Roofing

- The existing roof is a multi-ply built-up-roofing system. Installed in 2006, it has a 20- year warranty, and an estimated remaining life of 2-6 years.

Exterior Paint

- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include and allowance for touchup painting, patching.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Replace dented steel exterior doors.
- Include allowance to replace ceiling tiles.

Administration Area

- Observations:
  - Entry into the office space is difficult, due to a single point of entry users are not able to access the length of the counter.
  - Access control to the building core is not currently possible.
  - Conference room too small to hold conferences with the door closed for privacy.
  - Existing counters are too high for comfortable use. Counter is not compliant with current accessibility requirements.
- Paint interior space. Replace worn finishes.

Classroom Pod Common Areas

- Observations:
  - If the classroom doors are all locked in an emergency, there is no available exit from the common space.
  - The common spaces appear to be underutilized as instructional spaces and used instead for storage.
  - Supervision from classrooms is difficult.
- Consider infilling the sunken floor to improve accessibility and encourage use.
- Consider lower perimeter cabinets to improve supervision.
- Consider providing FIS style furniture in this space.
- Consider improving visibility from classrooms into this space to aid in supervision.

Classrooms

- Refurbish or remove worn wiremolds.
- Repair cabinets as needed. Consider replacement of counter tops.

Multi-Purpose Room

- Improve visibility by re-exposing window-wall glass that surrounds this space.
- Replace and aging, folding cafeteria tables. **Complete**
- Remove old wiring, conduit, patch, and paint.

Library

- Repair or replace librarian's desk. **Complete**

Specialty Classrooms

- Consider converting underutilized computer lab spaces into classrooms.
- Consider Relocating music classroom from multi-use to new or unused classroom space.

Portable Classrooms

- Whenever possible, add sink cabinets to any portables lacking sinks.
- Install new outlets, switches (with sensors), cover plates.
- Add magnetic writable surfaces.
- Behind portables, consider gravel or paving to help prevent weed build-up and to deter pests.

Kitchen / Food Service

- Remove unused kitchen equipment.
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Provide touch-up painting, wall finish repairs as needed.
- Kitchen door does not fit into jamb. Repair.
- In kitchen storage area, consider upgrading cabinets, storage.
- Consider conversion of kitchen to dedicated 'speed-line' style serving space.

Staff Work Areas

- Repair cabinets. Replace countertops with solid surface, replace cabinet doors.
- Provide touch-up painting, wall finish repairs as needed.
- Provide touch-up painting, wall finish repairs as needed.

Staff Lounge

- Repair cabinets. Replace countertops with solid surface, replace cabinet doors.
- Provide touch-up painting, wall finish repairs as needed.
- Consider new magnetic markerboards to make this space more flexible.
- Consider moveable furniture to encourage flexible use.

Student Restrooms

- Upgrade restrooms that serve the playground to meet access code.
- Plumbing fixture count
  - Boys (9) toilets, (11) urinals, (7) sinks
  - Girls (16) toilets, (7) sinks
- Replace exhaust fans and controls in restrooms. **Complete**
- Re-grout, steam clean existing tile floors or replace floors with epoxy. **Complete**
- Confirm signage meets code requirements.

Staff Restrooms

- Plumbing fixture count
  - Men (2) toilets, (1) urinals, (2) sinks
  - Women (3) toilets, (3) sinks
- Replace exhaust fans, provide controls, timer **Complete**.
- Upgrading finishes and fixtures as needed.
- Upgrade staff restrooms that do not comply with current accessibility standards.
- Replace existing tile floors with epoxy.

Storage and Custodial Spaces

- Patch and paint walls.
- Install new flooring where needed.
- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms.

Structural System

- Further structural review of steel moment frame is recommended.
- Structural retrofit scope of moment frame is pending additional review.
- See seismic assessment report for additional information.

Mechanical and Plumbing Systems

- Replace all insulated supply and return ductwork, diffusers and grilles within the building.
- Replace all exhaust ductwork within the building.
- Replace all insulated hot and chilled water piping within the building.
- Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.
- Replace plumbing fixtures and accessories with touch-free alternatives.
- Add water and gas shut-off valves to all areas that require maintenance or isolation.

- See mechanical report for additional information.

Electrical Systems

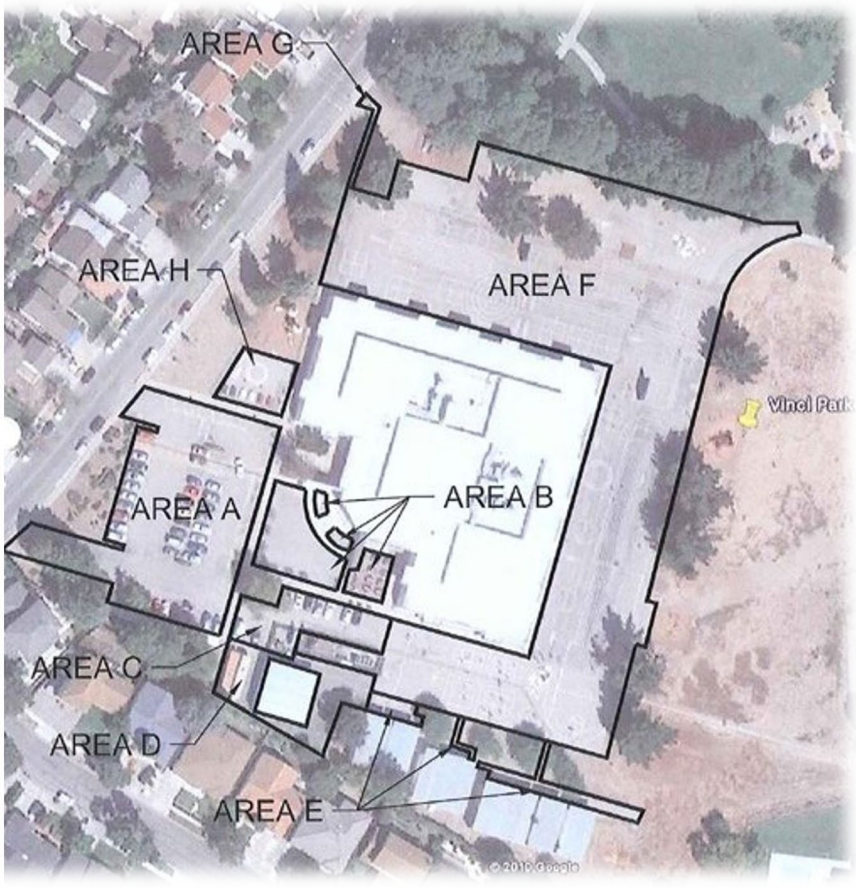
- The existing PG&E transformer has reached maximum capacity. If any additional power loads are needed for future additions, replace the transformer.
- Inspect the existing PG&E transformer. Service as required *if not replaced*. Paint.
- See attached electrical report for additional information.
- Install new classroom lighting in all portables to remain.

Low Voltage Systems

- The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the Administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirements.
    - Recommendation: Install new, fully addressable, automatic FA systems with new notification devices.
- The existing Bogen Multicom 2000 Public Address and Master Clock system located in the Administration storage room is in good and functioning condition.
- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Consider updating or revising room numbering before upgrading any low voltage systems.
- Install new security systems and cameras. **Complete**

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Vinci Park School	A	Reconstruct	25,252	40
Vinci Park School	B	Reconstruct	6,604	63
Vinci Park School	C	Reconstruct	5,112	49
Vinci Park School	D	Crack Fill & Seal Coat	4,135	74
Vinci Park School	E	Crack Fill & Seal Coat	3,964	74
Vinci Park School	F	Reconstruct	83,630	47
Vinci Park School	G	Crack Fill & Seal Coat	632	79
Vinci Park School	H	Crack Fill & Seal Coat	2,744	75



Paving Area A

Paving Area B

Paving Area C

Paving Area F

SEISMIC ASSESSMENT REPORT

Building Description:

Vinci Park Elementary School is a single-story steel framed structure constructed in 1973. The structure is relatively regular and square in plan except for the a few reentrant corners at one corner of the building. The roof is essentially flat but does have 4 raised areas to accommodate high architectural ceilings at these locations. The building's roof consists of conventional metal decking welded to the steel structure and is untopped except for two locations were concrete fill was added for the support of mechanical units. The structure was designed utilizing structural steel moment frames for its primary lateral force resisting system. Buildings of this vintage did not typically incorporate the ductile detailing that is required today for these types of structures. This detailing is required so that these building types will have superior performance when subjected to significant seismic events allowing the steel members and connections to yield gradually rather than abruptly. Our initial review of the drawings indicate that significant effort was utilized in the design of the building, however to fully evaluate the

members and connections as to their expected performance level when subjected to a major seismic event is beyond the scope of this report. We therefore recommend that a more thorough evaluation be completed to fully assess the expected performance level of the structure when subjected to a major seismic event. Upon completion of the more in-depth assessment, retrofit options can be made, as necessary, to obtain a “Life Safety” building performance level.

MECHANICAL SYSTEMS ASSESSMENT

1. **Existing Conditions**

   a. New rooftop multizone air handling unit (hot and chilled water), three new gas heat/ electric cool packaged rooftop units, and exhaust fans installed in 2006.
   b. New chiller and boiler added, reusing existing pumps, added in 2006.
   c. New temperature controls installed in 2006.
   d. New ductwork on the roof was provided in 2006.
   e. Existing ductwork and air distribution in building is original.
   f. Existing hot and chilled water below grade and within building is original.

2. **Recommendations**
   a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.
   b. Replace all exhaust ductwork within the building.
   c. Replace all insulated hot and chilled water piping within the building.
   d. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.

3. **General**
   a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
   b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
  a. Comply requirements of California Mechanical Code (CMC) latest edition
- Possible Ventilation Code Issues
  a. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
  b. Corridors must have minimum two (2) air changes per hour for ventilation.
  c. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
  d. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
  a. Fire/smoke dampers in the system must be interlocked with fire alarm system.
  b. Corridors, lobbies, and building entrances to have dedicated supply air.
  c. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
  d. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

- Possible Title 24 Issues
    a. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
    b. Heating, ventilating, and air conditioning systems to have control capability with night setback.
    c. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL AND LOW VOLTAGE SYSTEMS ASSESSMENT

Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 355 amp. There is no spare capacity at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

Fire Alarm System:

The existing fire alarm system was of manual system on a Gamewell 610 panel in the administration office storage room installed around 2003. The panel is in good and functioning condition. The initiation and notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the main office storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

MORRILL MIDDLE SCHOOL

FACILITIES ASSESSMENT

Key Data

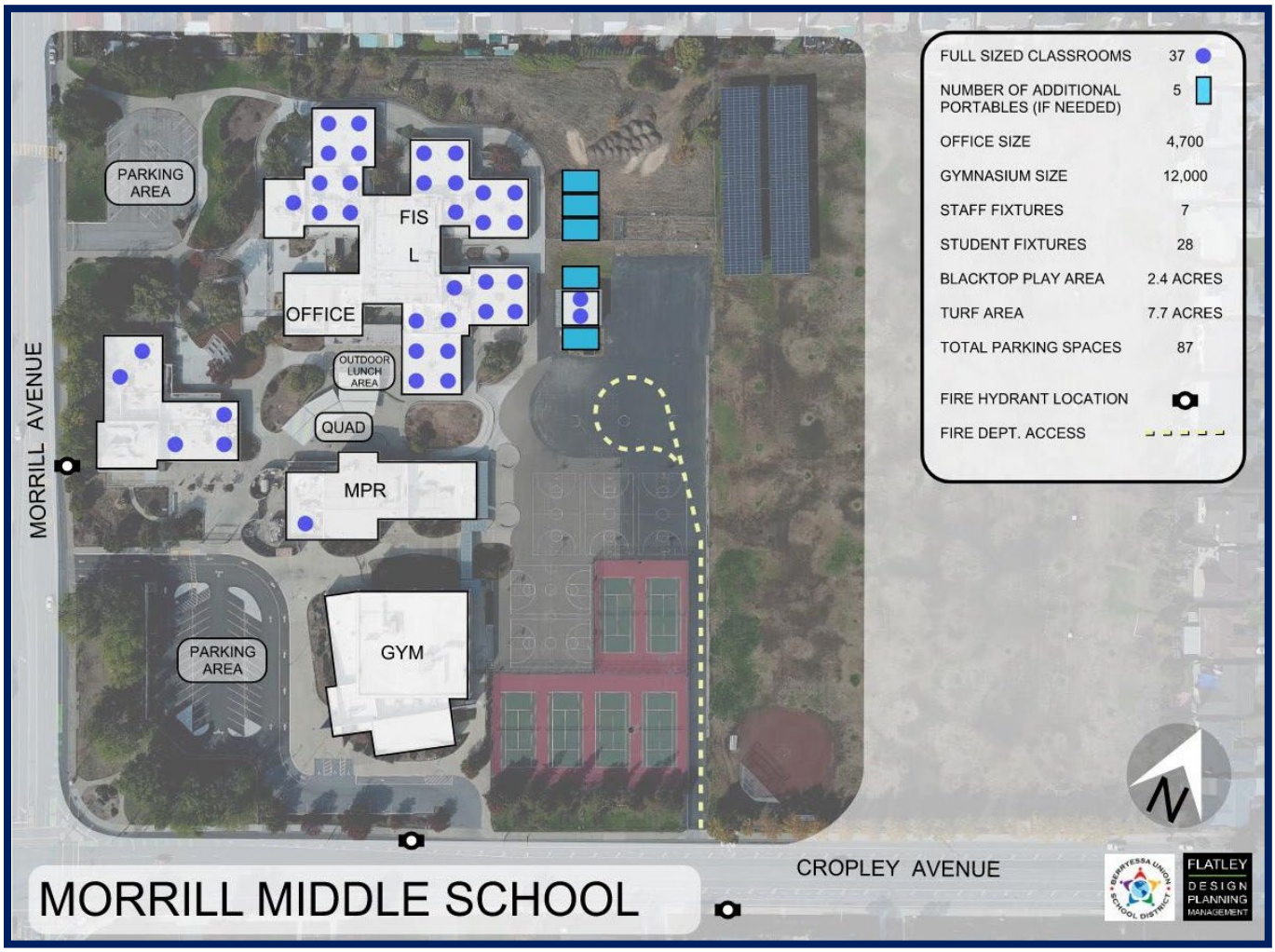
Site Size	22.5 Acres
Building Area:	66,950 SF
Portable Area	1,680 SF
Total Area	68,630 SF
Permanent Classrooms:	35
Portable Classrooms:	2

Construction History

1972	School Constructed
2002	(2) Portable classroom buildings installed
2004	Modernization projects
2005	Construction of Berryessa Youth Center
2006	Installation of marquee signage, HVAC replacements,
2015	Measure L - Exterior painting, and IT infrastructure upgrade projects
2018	Measure L - Flexible instructional space, and modernization project
2021	Measure U - An outdoor eating area was created, and irrigation controls and backflow were installed
2022	Measure U – Library improvement, including a new library desk and library shelving.
2023	Measure U - Restroom floor replacement, exhaust fan replacement projects, and exterior door replacement.
2024	Measure U – Fire alarm replacement, security alarm replacement, and exterior door numbers

Existing Site Plan

Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	TOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior			$340,463		$340,463	$457,659	$798,122
Roofing			$51,778	$2,909,972	$2,961,750		$2,961,750
Interiors		$1,230,587	$1,977,725	$2,633,342	$5,841,654	$124,621	$5,966,275
Restroom						$178,888	$178,888
Kitchen		$829,583			$829,583		$829,583
Plumbing	$27,778	$153,695			$181,473		$181,473
HVAC	$1,993,456				$1,993,456	$100,408	$2,093,864
Electrical		$414,792			$414,792		$414,792
Fire Alarm						$845,320	$845,320
PA & Speakers						$488,145	$488,145
Campus Security			$1,027,932		$1,027,932	$217,889	$1,245,821
Technology/Data			$232,830	$423,912	$656,742		$656,742
Site Development		$799,345		$737,049	$1,536,394	$389,941	$1,926,335
Landscaping & Fields	$351,431	$653,386	$242,562	$297,952	$1,545,331	$5,525	$1,550,856
Infrastructure		$263,777			$263,777		$263,777
Pavement		$552,789	$169,588	$282,822	$1,005,200		$1,005,200
Solar Replacement							
TOTAL	$2,372,665	$4,897,954	$4,042,878	$7,285,049	$18,598,546	$2,808,396	$21,406,942

Assessed Facilities Needs

Site Security and Safety

- Add exterior lighting to poorly lit areas.
- At key locations, install film on windows and door glazing to deter forced entry and obscure visibility.
- Paint or install large building, or pod numbers on buildings or exterior doors.**Complete**
- Consider installing new security systems and cameras. **Complete**
- Several areas of cracked concrete present tripping hazards and drainage issues. This issue is most apparent near buildings A, C, and D. **Complete**
- Explore opportunities to improve visual supervision from office area and around the campus in general.

Site Accessibility

- Consider new wayfinding signage and displays site wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains.
- Sloped paths and curved ramps present accessibility challenges. Review site design to ensure that all areas used by students and staff area accessible. **Complete**
- Some existing door thresholds do not meet access codes. Replace threshold or provide new level landing. **Complete**

Parking lot and Drop-Off / Pick-Up

- Existing curbs and striping need repainting.
- Maintain ADA accessible parking compliance as required by code.

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing **Complete**.
- Switch irrigation systems to grey water when it becomes available.
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Reseed under trees, add redwood edging around trees.

Play Surface / Fields

- Some blacktop is aging, cracked. Refurbishment and replacement are needed. See attached pavement report.
- Existing benches should be refurbished with durable, low maintenance materials.
- Consider adding a perimeter running path.
- Repair basketball poles, replace nets, replace backboards. **Complete**
- Remove, refurbish, or replace baseball backstops, dugouts, benches, seating.
- Restore highly used areas of sports fields. Remove gophers and weeds. Reseed.

Outdoor General

- Replace old exterior light poles.
- Suggestion: Install new room, door signage, site wide. **Complete**
- Explore opportunities to connect existing buildings with covered walkways.

Outdoor Eating Area

- The outdoor eating area is the amphitheater in the quad. **Complete**

- Refurbish concrete steps and ramps.
- Improve accessibility to this area.
- Add shade structure.

Roofing

- The existing roof is a multi-ply built-up-roofing system. Installed in 2006, it has a 20- year warranty, and an estimated remaining life of 6-10 years.

Exterior Paint

- Existing paint is in fair condition.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Include a site-wide window replacement allowance to replace mismatched window- panes, scratch acrylic, etc.
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Replace dented steel exterior doors. **Complete**
- Include allowance to replace ceiling tiles.
- Include allowance to replace laminate counters with durable solid surfacing.
- Repair or replace damaged cabinets in library and specialty classrooms.
- Replace plumbing fixtures and accessories with touch-free alternatives.

Administration

- Front desk: Make repairs, Modify to maximize healthy, safety, security. Modify desk if necessary, to meet accessibility code.
- Paint interior space. Replace worn finishes.

Circulation Spaces

- Refurbish or replace automatic fire door in corridor.
- Existing outdoor atria spaces are underutilized.

Classrooms

- Observation:
  - Classrooms are generally in good condition, although many of the finishes are faded and/or dirty.
  - Building D classrooms show considerable wear, including cracking in the floor.
- Remove unused phones, wiring, coax. Patch, paint where necessary.
- Refurbish or remove worn wiremolds.
- Repair delaminating cabinets where found. Consider replacement of counter tops with durable solid surfaces.

Library

- Replace worn interior finishes, paint.
- Consider installing new FIS style furniture to increase the flexibility of the space.
- Consider matching paint colors of the adjacent FIS.
- Repair or replace librarian desk **Complete**.

Multi-Purpose

- Replace worn interior finishes, paint.
- Replace and remaining folding cafeteria tables that are in poor condition **Complete**.
- Remove old wiring, conduit, patch and paint room.
- Replace stage lighting.
- Replace clock/speaker unit.

Specialty Classrooms

- Observation: The 'L' shape of the science classrooms is not ideal for instruction.
  - Explore opportunities for improvements.
- Repair or replace cabinets in art, music, and science.

Portable Classrooms

- Whenever possible, add sink cabinets to any portables lacking sinks.
- Install new outlets, switches (with sensors), cover plates.

Gymnasium

- Paint the exterior wall accent colors (fading).

Food Services

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Remove unused equipment.
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Touch-up painting needed.
- Storage area: Upgrade shelving, cabinets.
- Consider conversion of kitchen to dedicated 'speed-line' style serving space.

Staff Work Areas

- Replace worn finishes, paint.
- Repair cabinets, repair or replace countertops with solid surface.

Staff Lounge

- Replace worn finishes, paint.
- Repair cabinets, repair or replace countertops with solid surface.
- Provide new markerboards to make this space more flexible.
- Replace existing, aging appliances.
- Explore opportunities to improve accessibility to this space.

Student Restrooms

- Upgrade student restrooms in Building D to meet access code (as much as possible).
- Plumbing Fixture Count
    - Boys (6) toilets, (13) urinals, (8) sinks
    - Girls (14) toilets, (8) sinks
- Replace exhaust fans and controls in restrooms. **Complete**
- Re-grout, steam clean existing tile floors or replace floors with epoxy. **Complete**
- Confirm signage meets code requirements. **Complete**

Staff Restrooms

- Plumbing fixture count:
    - Men (4) toilet, (3) urinal, (4) sink
    - Women (5) toilet, (4) sink
- Confirm that lighting and controls have been updated.
- Replace existing tile floors with epoxy **Complete**.

Storage and Custodial

- Overall general storage capacity is good.
- Paint these spaces.
- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms. **Complete**

Building Structural Walls and Roofs

- Academic Center, Barn, and Union:
  - Existing wall ties used to brace walls out of plane are insufficient to meet code.
  - Further investigation is needed of wall reinforcing systems.
  - Determine if anchorage of covered walks to existing buildings is adequate.
- The Youth Center Building located at Morrill Middle School has no noticeable structural deficiencies.
- See seismic assessment report for additional information.

Mechanical Systems

- Replace all insulated supply and return ductwork, diffusers and grilles within the building.
- Replace all exhaust ductwork within the building.
- HVAC Room: Clean floors, paint walls, upgrade lighting and controls.

Electrical Systems

- A 2000A, 277/480V, 3-phase, 4-wire switchboard with a 750KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was installed around 2003 and is in good condition. According to PG&E record, the current peak usage on the system is of 378 amps.
- Inspect the existing PG&E transformer. Service as required if not replaced. Paint.
- See attached electrical report for additional information.
- Install new classroom lighting in all portables to remain.

Low Voltage Systems

- The notification devices were not adequate to meet the current code requirements.
    - Install new, fully addressable, automatic FA systems with new notification devices. **Complete**
- The existing Bogen Multicom 2000 Public Address and Master Clock system located in the Multi-Purpose Room storage room is in good and functioning condition. Review for replacement with networked system.
- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Consider updating or revising room numbering before upgrading any low voltage systems.
- Install new security systems and cameras. **Complete**

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Morrill Middle School	A	Reconstruct	14,832	28
Morrill Middle School	B	Reconstruct	30,172	26
Morrill Middle School	C	Crack Fill & Seal Coat	10,709	82
Morrill Middle School	D	Acrylic Seal Coat	35,636	95
Morrill Middle School	E	Crack Fill & Seal Coat	27,118	90
Morrill Middle School	F	Crack Fill & Seal Coat	12,000	82
Morrill Middle School	G	Crack Fill & Seal Coat	34,118	81

Paving Area A

Paving Area B

Paving Area D

Paving Area E

SEISMIC ASSESSMENT REPORT

Morrill Middle School consists of four buildings: the Academic Center, Barn, Union and Youth Center (Gym). The Academic Center, Barn and Union were all constructed at the same time in 1971. The Youth Center (Gym) was a later addition constructed more recently in 2003.

Academic Center, Barn and Union

The Academic Center, Barn and Union were all designed at the same time, by the same engineer and are of similar construction. The three buildings were constructed in 1971. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between CMU shear walls. Shear walls are generally located around the perimeter of each building section or room. The CMU shear walls are anchored to the foundation at 16" O.C. for in plane shear transfer and to the roof diaphragm at 4'□0" O.C. for out of plane

loading. Although wall ties are provided to brace the walls out of plane, these ties as detailed are likely insufficient to resist modern day code level forces. Therefore, we recommend that further evaluation be conducted to determine if any retrofit measure would be required to upgrade the structure so that its anticipated performance is at a "Life Safety" level. Continuous crossties do not appear to be present in the roof framing at any of the three buildings. Additionally, discrete chord members were not found in the CMU walls at the roof level. It is recommended that further investigation be performed to determine if the wall reinforcing contains adequate horizontal reinforcing adjacent to the roof to develop chord forces and to determine if diaphragm shear levels are acceptable given the lack of continuous crossties. It was also noted that there may be several covered walkways connected to adjacent building sections. These covered walkways should be reviewed for susceptibility to damage due to differential movement between adjacent structures in an earthquake.

Youth Center (Gym)

The Youth Center Building located at Morrill Middle School is a gymnasium structure with several auxiliary rooms for storage, activities and restrooms. The roof consists of an upper and lower portion that is comprised of steel framing spanning to exterior steel or CMU framing. The lateral system consists of a dual system of steel braces frames and CMU shear walls. The building was constructed to recent code standards with no noticeable structural deficiencies.

MECHANICAL SYSTEMS ASSESSMENT

1. **Existing Conditions**
   a. New packaged rooftop gas heat / electric cool units and exhaust fans installed in 2006.
   b. New temperature controls installed in 2006.
   c. New ductwork on the roof was provided in 2006.
   d. Existing above ceiling ductwork and air distribution is original.

2. **Recommendations**
   a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.
   b. Replace all exhaust ductwork within the building.

3. **General**
   a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
   b. Refer to **Appendix A** for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
    a. Comply requirements of California Mechanical Code (CMC) latest edition.
- Possible Ventilation Code Issues
    a. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
    b. Corridors must have minimum two (2) air changes per hour for ventilation.
    c. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
    d. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
    a. Fire/smoke dampers in the system must be interlocked with fire alarm system.
    b. Corridors, lobbies, and building entrances to have dedicated supply air.
    c. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
    d. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.
- Possible Title 24 Issues
    a. Heating furnaces to have minimum 80% efficiency.
    b. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.
    c. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
    d. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.
    e. Heating, ventilating, and air conditioning systems to have control capability with night setback.
    f. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL SYSTEMS ASSESSMENT

Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 750KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was installed around 2003 and is in good condition. According to PG&E record, the current peak usage on the system is of 378 amp. There is a spare capacity of 431 amp available at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

PIEDMONT MIDDLE SCHOOL

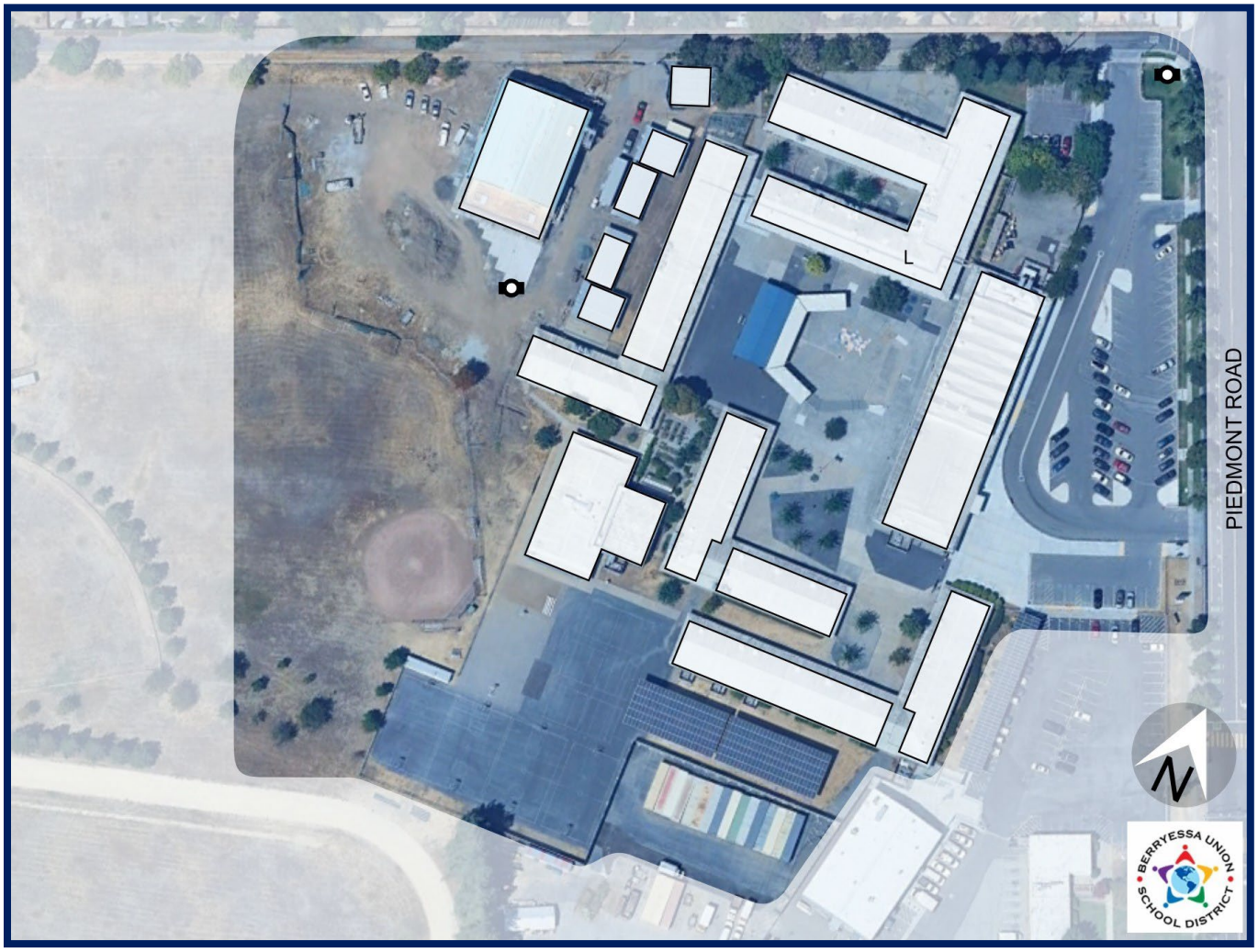
2020 FACILITIES ASSESSMENT

UPDATED MAY 2024

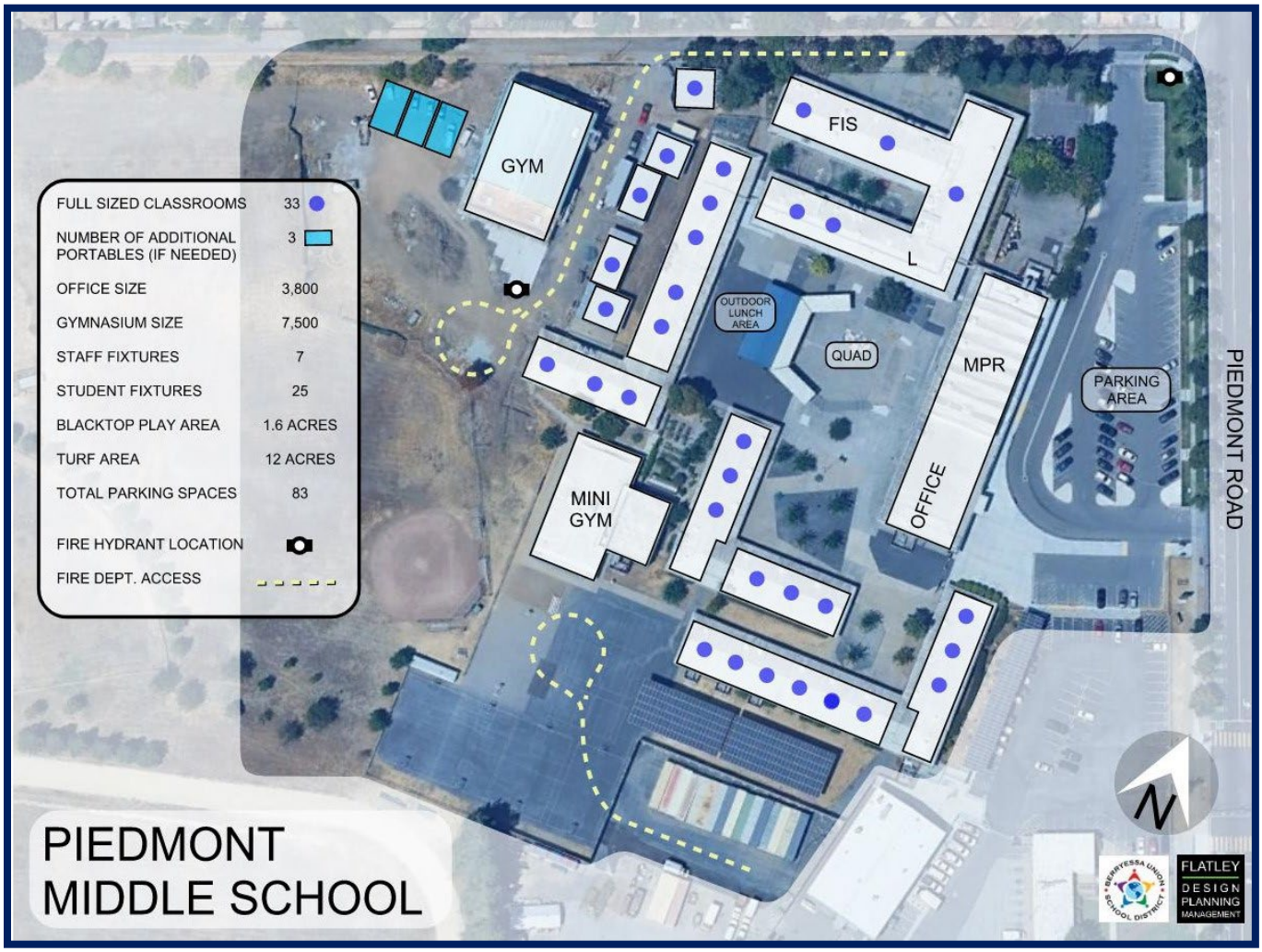
Key Data

Site Size	20 Acres
Building Area:	68,423 SF
Portable Area	4,800 SF
Total Area	73,233 SF
Permanent Classrooms:	28
Portable Buildings:	5

Existing Site Plan



Proposed Site Plan



Construction History

1959	School constructed
1973	Construction of mini gym, additional classrooms
1992	(2) Portable classroom buildings installed
2002	Modernization projects
2004	(2) Portable classroom buildings installed
2005	(1) Portable classroom building installed
2013	HVAC Improvements, roofing
2016	Measure L - Solar project
2017	Measure L - Modernization project
2018	Measure L - Flexible Instructional Space project
2019	Measure L - Staff parking lot project
2021	Measure U - An outdoor eating area was created, and irrigation controls and backflow were installed
2022	Measure U – Library improvement, new library desk and library shelving
2023	Measure U – Restroom floor replacement, exhaust fan replacement projects, and exterior door signage.
2024	Measure U- New gymnasium, fire alarm replacement, and security alarm replacement

Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	TOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior		$284,474	$349,280		$633,754	$2,033,034	$2,666,788
Roofing			$2,278,904		$2,278,904		$2,278,904
Interiors		$1,441,080	$411,901	$1,741,845	$3,594,826	$90,120	$3,684,946
Restroom			$413,273		$413,273	$218,345	$631,618
Kitchen		$906,160			$906,160		$906,160
Plumbing		$163,004			$163,004		$163,004
HVAC	$798,036		$1,380,426		$2,178,462	$91,116	$2,269,578
Electrical		$414,792			$414,792		$414,792
Fire Alarm						$1,129,496	$1,129,496
PA & Speakers						$471,903	$471,903
Campus Security			$869,787		$869,787	$212,785	$1,082,572
Technology/Data			$232,830	$423,912	$656,742		$656,742
Site Development		$37,010		$737,049	$774,059		$774,059
Landscaping & Fields	$389,678		$268,961	$330,378	$989,017	$13,504	$1,002,521
Infrastructure		$349,600			$349,600		$349,600
Pavement		$720,982	$831,224	$197,892	$1,750,097		$1,750,097
New Gymnasium						$9,750,547	$9,750,547
Solar Replacement							
TOTAL	$1,187,714	$4,317,101	$7,036,586	$3,431,076	$15,972,477	$14,010,850	$29,983,327

Assessed Facilities Needs

Site Security and Safety

- At key locations, install film on windows and door glazing to deter forced entry and obscure visibility.
- Paint or install large building, or pod numbers on buildings or exterior doors. **Complete**
- Consider installing new security systems and cameras. **Complete**.
- Vehicle barriers are recommended at key areas. **Complete**
- Several areas of cracked concrete present tripping hazards and drainage issues. **Complete**
- Explore opportunities to improve visual supervision from office area and around the campus in general.

Site Accessibility

- Consider new wayfinding signage and displays site wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains. **Complete**
- Some existing door thresholds do not meet access codes. Replace or provide new level landing.
- The central quad has accessibility issues and is used by students for outdoor dining.

Parking lot and Drop-Off / Pick-Up

- Maintain ADA accessible parking compliance as required by code. **Complete**

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing.
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Re-seed grass under trees and add redwood or other type of edging to create clear boundary for grass.
- Ensure that backflow preventers are installed and working properly. **Complete**
- Switch irrigation systems to grey water when it becomes available. **Complete**

Play Surface / Fields / Play Structures

- Some blacktop and is aging, cracked. Refurbishment and replacement are needed. See attached pavement report.
- Existing benches should be refurbished with durable, low maintenance materials.
- Repair basketball poles, replace nets, replace backboards.
- Remove, refurbish or replace baseball backstops, dugouts, benches, seating.
- Restore sports fields. Remove gophers and weeds. Reseed.
- Restore track.

Outdoor General

- A trash enclosure is suggested. This would help improve security and prevent unauthorized dumping.
- Suggestion: Install new room, door signage, site wide. **Complete**
- Explore opportunities to connect existing buildings with covered walkways.
- Recommendation: Explore options to improve aesthetics of the front of the school. Use color and modern finishes in a cost-effective manner to improve curb appeal.

Outdoor Eating Area

- The outdoor eating area is the amphitheater in the quad. The condition of the concrete steps is poor, and the area is unshaded. **Complete** Access to lower areas does not meet code. **Complete**.

Roofing

- The existing roof is a multi-ply built-up-roofing system. Installed in 2012, it has a 20- year warranty, and an estimated remaining life of 12-20 years.

Exterior Paint

- Existing paint is in fair condition.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace
- Include a site-wide window replacement allowance to replace mismatched window- panes, scratch acrylic, etc.
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Replace dented steel exterior doors.
- Include allowance to replace ceiling tiles.
- Include allowance to replace laminate counters with durable solid surfacing.

Administration

- Review options for make entry more prominent.
- Repair cabinets in front office areas as needed. Consider replacement of counter tops.

Classrooms

- Refurbish or remove worn wiremolds.
- Repair cabinets as needed. Consider replacement of counter tops.

Library

- Replace worn interior finishes, paint.
- Explore options to maximize effective use of the small library space. **Complete**

Multi-Purpose - Gym

- Upgrade stage lighting.
- Install new window coverings.
- Gym space is too small to accommodate spectators during basketball games. **New gymnasium. Complete.**

Specialty Classrooms

- Remove unused phones, wiring, coax. Patch, paint where necessary.
- Refurbish or remove worn wiremolds.
- Repair cabinets in front office areas as needed. Consider replacement of counter tops.
- Repair or replace cabinets in art and music.

Portable Classrooms

- Classrooms 26-31 are in an older modular building that has exceeded its intended life span. Consider removal of this building. **Complete**
- Behind portables, consider gravel or paving to help prevent weed build-up and to deter pests.
- Install new outlets, switches (with sensors), cover plates.
- Add magnetic writable surfaces.

Food Services

- Observation: The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Remove unused equipment.
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Provide touch-up painting, wall finish repairs as needed.
- Storage area: Upgrade shelving, cabinets.

Staff Work Areas

- Replace worn finishes, paint.
- Repair cabinets, repair or replace countertops with solid surface.
- Replace flooring near drinking fountain.
- Consider replacement of counter tops with durable, solid surfacing.

Staff Lounge

- Replace worn finishes, paint.
- Repair cabinets, repair or replace countertops with solid surface.
- Consider new magnetic markerboards to make this space more flexible.
- Consider moveable furniture to encourage flexible use.
- Replace existing, aging appliances.

Student Restrooms

- Plumbing Fixture Count
    - Boys (6) toilets, (6) urinals, (7) sinks
    - Girls (9) toilets, (8) sinks
- Replace exhaust fans and controls in restrooms. **Complete**
- Existing drinking fountains are not accessible.
- Re-grout, steam clean existing tile floors or replace floors with epoxy. **Complete**
- Confirm signage meets code requirements. **Complete**

Staff Restrooms

- Plumbing fixture count:
  - Men (1) toilet, (2) urinal, (3) sink
  - Women (3) toilet, (3) sink
- Replace exhaust fans and controls in restrooms. **Complete**
- Replace existing tile floors with epoxy.

Storage and Custodial

- Patch and paint walls.
- Install new flooring where needed.
- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms. **Complete**

Building Structural Walls and Roofs

- Further structural investigations/inspections of all buildings are recommended.
- Structural/seismic improvements are recommended for the shower room additions and the shop building.
- See seismic assessment report for additional information.

Mechanical and Plumbing Systems

- Replace all insulated supply and return ductwork, diffusers, and grilles within the building.
- Replace all exhaust ductwork within the building.
- Add water and gas shut-off valves to all areas that require maintenance or isolation.
- See attached mechanical report for additional information.
- Replace plumbing fixtures and accessories with touch-free alternatives.

Electrical Systems

- If additional power loads are needed, it is recommended to upgrade the existing PG&E transformer.
- Inspect the existing PG&E transformer. Service as required. Paint.
- Inspect the existing switchgear. Service as required.
- See attached electrical report for additional information.
- Consider re-routing power and low-voltage pathways to underground conduit.
- Install new classroom lighting in all portables to remain.

Low Voltage Systems

- Install new, fully addressable, automatic FA systems with new notification devices. Remove older FACP control panel. **Complete**
- The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units are can be considered for reuse if budget does not allow replacement.
- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Install new security systems and cameras. **Complete**

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Piedmont Middle School	A	Seal Coat	38,560	95
Piedmont Middle School	B	Crack Fill and Seal Coat	6,690	86
Piedmont Middle School	C	Remove & Replace	5,334	52
Piedmont Middle School	D	Remove & Replace	6,432	52
Piedmont Middle School	E	Remove & Replace	3,583	46
Piedmont Middle School	F	Remove & Replace	8,481	59
Piedmont Middle School	G	Reconstruct	50,196	43
Piedmont Middle School	H	Reconstruct	6,750	37
Piedmont Middle School	I	Reconstruct	4,900	45

Paving Area E

Paving Area F

Paving Area G

Paving Area H

SEISMIC ASSESSMENT REPORT

Piedmont Middle School consists of multiple buildings for which the original construction dates are unknown. Structural drawings were not available for the original campus construction. Based on the structural drawings that were available, we have the following understanding: 1) several building additions (shaded orange above) were constructed in 1973 to include a new classroom, new shop and expanded shower/locker room, and 2) the campus was "modernized" in 1995. The "modernization" appears to only include infill of several walls and creation of new wall openings and does not appear to include any seismic retrofit/rehabilitation items.

Since structural drawings were not made available for the original campus design it is recommended that these drawings be located and reviewed or the existing buildings be visually observed, documented and reviewed.

Classroom, Shop and Shower/Locker room Additions

The classroom, shop and shower/locker room additions were constructed in 1973, presumably designed to the 1973 California Building Code. The additions are generally all of similar design. The lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the additions. All the addition structures were designed to be seismically separated from the existing structures except for the shower room wings. The shower room wings were attached to the existing shower room building and rely on the existing structure for lateral support on one side each.

During our review it was noticed that the shower room additions have higher diaphragm aspect ratios (i.e. length to width ratio exceeding 2.0). Straight sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design.

It was also noted that there are several shear walls at the shop addition that appear to have a height to width aspect ratio that is greater than is currently allowed by code. Narrow shear walls are generally subject to much higher stresses and severe deformations that will reduce the capacity of the wall.

We recommend that further investigation be performed to verify adequate diaphragm capacity at diaphragms with higher aspect ratios and to determine if the narrow shear walls are adequate to resist the sites lateral forces.

MECHANICAL SYSTEMS ASSESSMENT

1. **Existing Conditions**
   a. New rooftop gas heat / electric cool air conditioning units, and exhaust fans installed in 2011.
   b. New electric cool split systems with gas fired furnaces added in 2011.
   c. New temperature controls installed in 2011.
   d. New ductwork on the roof was provided in 2011.
   e. Existing ductwork and air distribution in building is original.

2. **Recommendations**
   a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.
   b. Replace all exhaust ductwork within the building.

3. **General**
   a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
   b. Refer to **Appendix A** for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
    a. Comply requirements of California Mechanical Code (CMC) latest edition.
- Possible Ventilation Code Issues
    a. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
    b. Corridors must have minimum two (2) air changes per hour for ventilation.
    c. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
    d. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
    a. Fire/smoke dampers in the system must be interlocked with fire alarm system.
    b. Corridors, lobbies, and building entrances to have dedicated supply air.
    c. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
    d. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.
- Possible Title 24 Issues
    a. Heating furnaces to have minimum 80% efficiency.
    b. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.
    c. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
    d. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.
    e. Heating, ventilating, and air conditioning systems to have control capability with night setback.
    f. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL SYSTEMS ASSESSMENT

Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 500KVA utility pad mounted transformer located next to building J in the electrical service yard provides power to the campus. The switchboard was of original building in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 286 amp. There is a spare capacity of 245 amp available at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

A second service of 600a, 120/240V, 3 wire switchboard with overhead service provide a 50 KVA PG&E pole mounted transformer provides power for the portable building at the north of the campus. The switchboard was of original building in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 171 amp. There is no spare capacity at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

Fire Alarm System:

The existing fire alarm system was of a manual/automatic system on a Gamewell 610 panel in the administration office interfaced with an old Federal Signal 8000 panel. The panel had numerous trouble signals due to old device and cabling. The notification devices and initiating devices were not adequate to meet the current code requirement.

Recommendations:

a. Replace existing panel with new Gamewell 602 panel for an addressable supervised automatic system.
b. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.
c. Provide new initiating devices for a complete automatic system per CEC and CFC requirement.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

SIERRAMONT MIDDLE SCHOOL

2020 FACILITIES ASSESSMENT

UPDATED MAY 2024

Key Data

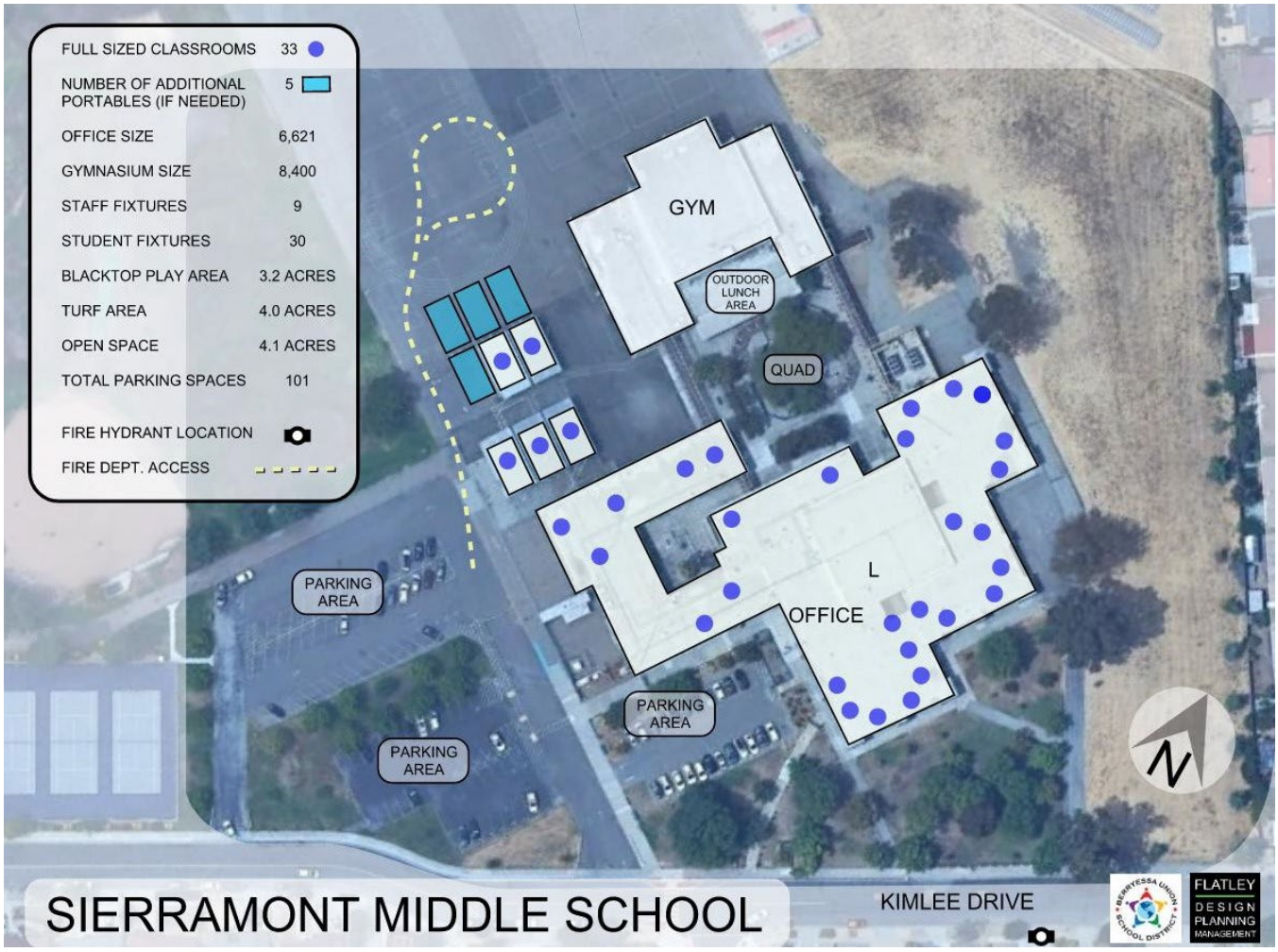
Site Size	21 Acres
Building Area:	68,399 SF
Portable Area	4,800 SF
Total Size	73,199 SF
Permanent Classrooms:	28
Portable Buildings:	5

Construction History

1978	School constructed
1991	(1) Portable classroom buildings installed
1999	(2) Portable classroom buildings installed
2004	Modernization projects
2006	Roofing, electronic marquee
2012	(4) Portable classroom buildings installed
2013	(4) Portable classrooms installed
2015	Measure L - Paving, playground equipment upgrades, and IT infrastructure projects
2016	Measure L - Flexible Instructional Space, Central plant chiller replacement, modernization, paving and solar projects
2021	Measure U – Renovation of tennis courts, irrigation controls, and backflow were installed.
2022	Measure U – Library improvement, new library desk and library shelving.
2023	Measure U – Restroom floor replacement and exhaust fan replacement projects.
2024	Measure U –Exterior door signage.

Existing Site Plan

Proposed Site Plan



Assessed Facilities Needs Costs

BUILDING SYSTEM	IMMEDIATE	3 YEARS	5 YEARS	10 YEARS	TOTAL	COMPLETED OR CURRENT PROJECTS	TOTAL
Building Exterior		$284,474	$322,321		$606,795	$40,934	$647,729
Roofing			$2,295,095		$2,295,095		$2,295,095
Interiors		$1,978,456	$1,266,530	$1,062,714	$4,307,700	$92,541	$4,400,241
Restroom		$436,809			$436,809	$319,458	$756,267
Kitchen		$955,465			$955,465		$955,465
Plumbing	$27,778	$221,203			$248,981		$248,981
HVAC	$317,327	$4,108,325			$4,425,652	$73,926	$4,499,578
Electrical		$414,792			$414,792		$414,792
Fire Alarm	$1,509,900				$1,509,900		$1,509,900
PA & Speakers	$425,025				$425,025		$425,025
Campus Security	$206,769		$1,027,932		$1,234,701		$1,234,701
Technology/Data			$232,830	$423,912	$656,742		$656,742
Site Development		$407,002		$737,049	$1,144,051	$90,617	$1,234,668
Landscaping & Fields	$276,383	$653,386	$190,763	$234,324	$1,354,856	$5,525	$1,360,381
Infrastructure		$277,970			$277,970		$277,970
Pavement		$447,416	$483,925		$931,341	$382,379	$1,313,720
Solar Replacement							
TOTAL	$2,763,182	$10,185,297	$5,819,396	$2,457,999	$21,225,874	$1,005,380	$22,231,254

Assessed Facilities Needs

Site Security and Safety

- Vehicle barriers are recommended at key areas.
- At key locations, install film on windows and door glazing to deter forced entry and obscure visibility.
- Paint or install large building, or pod numbers on buildings or exterior doors. **Complete**
- Consider installing new security systems and cameras. **Complete**
- Several areas of cracked concrete present tripping hazards and drainage issues. **Complete**

Site Accessibility

- Consider new wayfinding signage and displays site wide.
- Complete retrofit of non-accessible drinking fountains with ADA fountains **Complete**
- Many existing door thresholds do not meet access codes. Replace or provide new level landing. **Complete**
- Improve accessibility at the central quad area.
- Improve accessibility at the science classroom courtyard area.

Parking lot and Drop-Off / Pick-Up

- Existing curbs and striping need repainting.
- Maintain ADA accessible parking compliance as required by code.

Landscaping

- Redesign landscaping to ease maintenance and improve visibility.
- Add networked irrigation system with remote operation and moisture sensing. **Complete**
- Arborist should inspect large trees, especially eucalyptus trees in playgrounds. Trim trees of entire campus. Clear away low-lying branches to improve supervision.
- Reseed under trees, add redwood edging around trees.

Play Surface / Fields / Play Structures

- Some blacktop and is aging, cracked. Refurbishment and replacement are needed. See attached pavement report.
- Existing benches should be refurbished with durable, low maintenance materials.
- Consider adding a perimeter running path.

- Repair basketball poles, replace nets, replace backboards.
- Remove, refurbish or replace baseball backstops, dugouts, benches, seating.
- Restore sports fields. Remove gophers and weeds. Reseed.
- Switch irrigation systems to grey water when it becomes available.

Outdoor General

- A trash enclosure is suggested. This would help improve security and prevent unauthorized dumping.
- Suggestion: Install new room, door signage, site wide. **Complete**
- Explore opportunities to connect existing buildings with covered walkways.

Outdoor Eating Area

- Observation:
  - The outdoor eating area is the amphitheater in the quad. The wood pergola needs preventative maintenance. The condition of the concrete steps is fair. The amphitheater appears to not meet accessibility code.
- Improve accessibility in this area.
- Increase shade for outdoor dining.
- Improve condition of steps and amphitheater seating.

Roofing

- The existing roof is a multi-ply built-up-roofing system. Installed in 2006, it has a 20- year warranty, and an estimated remaining life of 6-12 years.

Exterior Paint

- Existing paint is in fair condition.
- Paint campus exterior prior to the conclusion of the bond measure.

All Buildings

- Ensure that all door hardware meets district standards, safety, security, and accessibility codes. Install new rubber feet on kick-down hold-opens or replace.
- Include a site-wide window replacement allowance to replace mismatched window- panes, scratch acrylic, etc.
- Remove unused coax cable, network wire, t-stat wire, etc.
- Add stainless-steel corner guards and chair rails to high traffic areas to ease maintenance.
- Include allowance to install new outlets, cover plates, switches in most areas.
- Stain or paint interior wooden doors.
- Replace dented steel exterior doors.
- Include allowance to replace ceiling tiles.
- Include allowance to replace laminate counters with durable solid surfacing.
- Repair or replace damaged cabinets in classrooms, office, and work areas.

Administration

- Review options for make entry more prominent.
- Front desk: Make repairs, add plexiglass paneling. Modify to maximize healthy, safety, security. Modify desk if necessary, to meet accessibility code.

Classrooms

- Observations:
  - Classrooms are generally in fair condition, although many of the finishes are faded and/or dirty.
  - Many classrooms are open to adjacent classrooms for exiting reasons.
  - Shared workspaces appear underutilized.
- Consider conversion of underutilized shared work/storage areas to open flexible use spaces.
- Refurbish or remove worn wiremolds.
- Repair cabinets replace countertops.

Library

- Consider minor change to flex space design to encourage use and improve supervision **Complete**.

Multi-Purpose + Gymnasium

- Replace worn interior finishes, patch, paint.
- Replace and remaining folding cafeteria tables that are in poor condition.
- Remove old wiring, conduit, patch and paint room.
- Patch, paint ceiling around new light fixtures.

Specialty Classrooms

- Remove old wiring, conduit, patch and paint rooms.
- Remove unused phones, wiring, coax. Patch, paint where necessary.

- Refurbish or remove worn wiremolds.
- Repair delaminating cabinets where found. Consider replacement of counter tops with durable solid surfaces.
- Improve acoustics at choir classroom.

Portable Classrooms

- Whenever possible, add sink cabinets to any portables lacking sinks.
- Make exterior siding repairs.
- Install new outlets, switches (with sensors), cover plates.
- Add magnetic writable surfaces.

Food Services

- Observations:
  - The existing kitchen layout and equipment do not meet current Department of Health requirements.
  - Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.
  - The kitchen restroom is not handicapped accessible and needs new plumbing fixtures, floor, and wall finishes.
- Remove unused equipment.
- Upgrade kitchen restroom and improve accessibility if possible.
- Provide clear acrylic at serving area, point of sale.
- Remove unused coax, low voltage wiring, conduit.
- Replace worn interior finishes, paint.
- Storage area: Upgrade shelving, cabinets.
- Consider conversion of kitchen to dedicated ‘speed-line’ style serving space.

Staff Work Areas

- Replace worn finishes, paint.
- The existing casework appears to be aging, although still serviceable, and an area of carpet under a drinking fountain needs to be addressed.
- Repair cabinets, repair or replace countertops with solid surface.

Staff Lounge

- Provide touch-up painting, wall finish repairs as needed.
- Repair cabinets, repair or replace countertops with solid surface.
- Consider new magnetic markerboards to make this space more flexible.
- Consider moveable furniture to encourage flexible use.
- Replace aging appliances.
- Add a stove if possible.

Student Restrooms

- Plumbing Fixture Count
  - Boys (6) toilets, (12) urinals, (12) sinks
  - Girls (12) toilets, (11) sinks
- Replace exhaust fans and controls in restrooms.
- Re-grout, steam clean existing tile floors or replace floors with epoxy. **Complete**
- Confirm signage meets code requirements.
- Confirm that all restrooms have been upgraded to meet accessibility code.

Staff Restrooms

- Plumbing fixture count:
  - Men (2) toilet, (1) urinal, (3) sink
  - Women (3) toilet, (3) sink
- Replace exhaust fans, provide controls, timer.
- Consider upgrading finishes, fixtures in bathrooms that have not been upgraded **Complete**.
- Upgrade staff restrooms that do not comply with current accessibility standards.
- Replace existing tile floors with epoxy.

Storage and Custodial

- Patch and paint walls.
- Install new flooring where needed.
- Evaluate usage and shelving in storage rooms to improve storage capacity, etc.
- Install new exhaust fans and controls in custodial rooms.

Building Structural Walls and Roofs

- Further structural investigations/inspections of all buildings are recommended.
- Analyze “K” brace frames of the gymnasium building for potential weaknesses.
- See seismic assessment report for additional information.

Mechanical and Plumbing Systems

- Remove existing chillers, cooling towers and pumps. Replace with new air cooled chiller and chilled water pumps.
- Remove all existing fan coil units and replace with new fan coil units. Modify and reconnect the existing ductwork to the new units. Install the replacement units most matching the removed units to minimize the modifications to the duct connections and the unit supports.
- Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.
- Replace all insulated hot and chilled water within the building.
- Add water and gas shut-off valves to all areas that require maintenance or isolation.
- Replace plumbing fixtures and accessories with touch-free alternatives.
- See attached mechanical report for additional information.

Electrical Systems

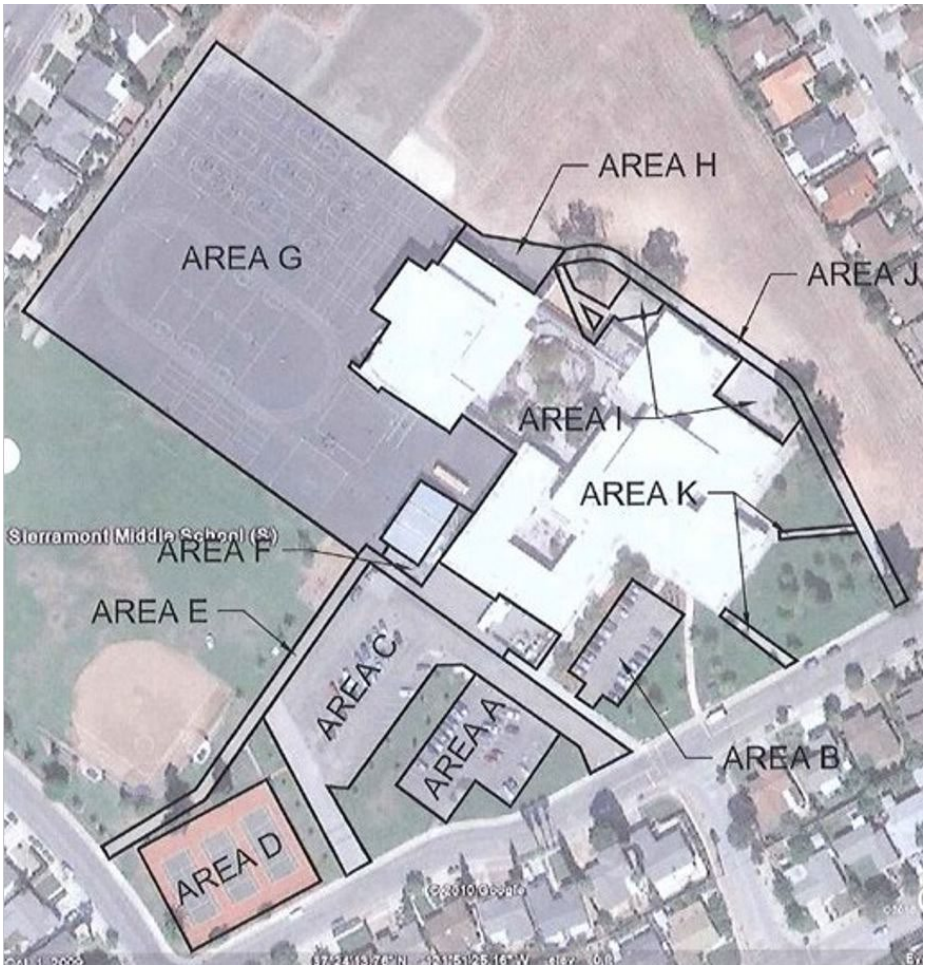
- If more than 431 amps of power loads are needed, it is recommended to upgrade the existing PG&E transformer.
- Inspect the existing PG&E transformer. Service as required. Paint.
- Inspect the existing switchgear. Service as required.
- See attached electrical report for additional information.
- Install new classroom lighting in all portables to remain.

Low Voltage Systems

- Install new, fully addressable, automatic FA systems with new notification devices. Remove older FACP control panel. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.
- The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units can be considered for reuse if budget does not allow replacement.
- Replace the existing energy management system with a simple to maintain but effective networked system.
- Confirm that all lighting is on timers, motion sensors, or networked.
- Consider updating or revising room numbering before upgrading any low voltage systems.
- Install new security systems and cameras. **Complete**

PAVING ASSESSMENT REPORT

School Name	Area	Work Description	SF Area	PCI Score
Sierramont Middle School	A	Reconstruct	13,860	64
Sierramont Middle School	B	Reconstruct	8,659	63
Sierramont Middle School	C	Crack Fill and Seal Coat	34,712	95
Sierramont Middle School	D	Reconstruct	18,369	32
Sierramont Middle School	E	Reconstruct	13,769	44
Sierramont Middle School	F	Reconstruct	2,394	53
Sierramont Middle School	G	Crack Fill and Seal Coat	145,564	95
Sierramont Middle School	H	Crack Fill and Seal Coat	3,333	95
Sierramont Middle School	I	Crack Fill and Seal Coat	5,792	95
Sierramont Middle School	J	Reconstruct	9,056	57
Sierramont Middle School	K	Crack Fill and Seal Coat	1,648	95



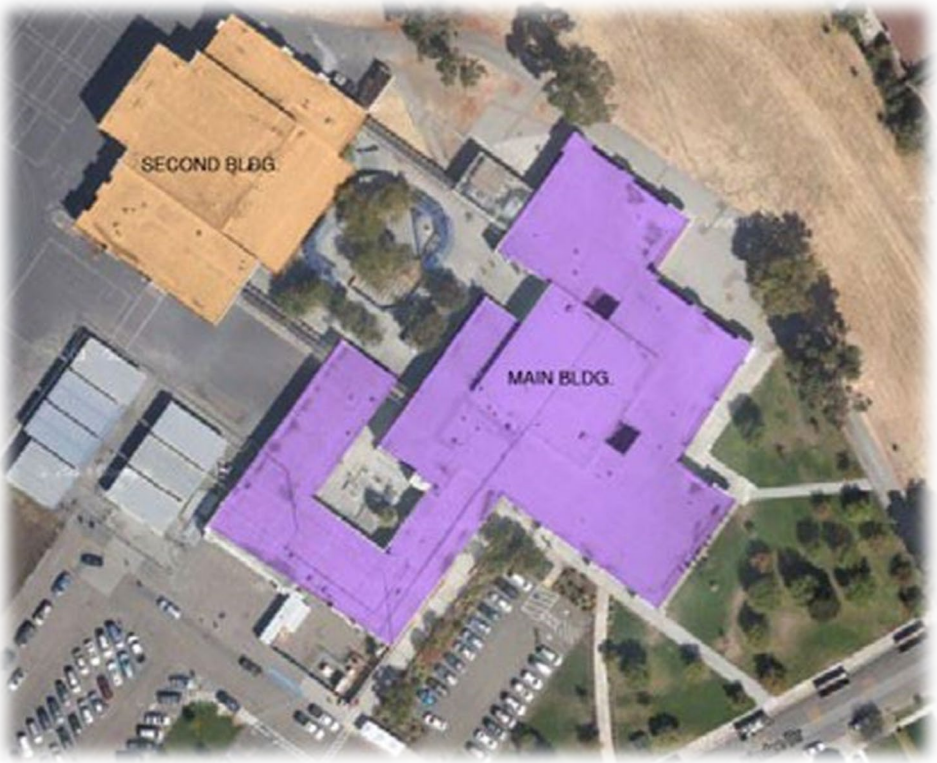
Paving Area A

Paving Area D

Paving Area E

Paving Area J

SEISMIC ASSESSMENT REPORT



Sierramont Middle School consists of two buildings, both built in 1978. The main building contains the educational portion of the school with classrooms and admin offices, while the second building contains the gymnasium.

Main Building

The main building's lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior and interior of building structure. During our review we noticed that a section of this building has a high roof section, surrounded by plywood shear walls. From our review of the available drawings, it is not evident if sufficient shear transfer is provided for between these two elements. Additionally, we noted that a portion of the shear walls that were considered to be part of the main lateral force resisting system had height to

width aspect ratios that were grater that what is allowed today. We recommend that further evaluation be completed to determine the effects of the potential deficiencies noted above.

Second Building

The second building is a single-story building and has a high roof section similar to the main building. The entire building consists of a plywood sheathed roof acting as a horizontal wood diaphragm. The lower roof contains vertical plywood shear walls to resist lateral forces while the high roof consists of both plywood shear walls and steel brace frames. Our review of the available structural drawings revealed that the plywood shear walls are discontinuous between the high and low roof similar to the main building. We also noted that the steel brace frames were constructed in a “K” configuration. These types of structures have not performed well in the past, when subject to major seismic events.

We recommend that further investigation be performed on both buildings to verify the capacity of the slender shear walls as well as if the apparent discontinuous shear walls require retrofit measures to resolve the discontinuity. Additionally, we recommend analyzing the brace frames in the second building to determine if the current configurations of the brace frames are adequate to resist the anticipated lateral forces.

MECHANICAL SYSTEMS ASSESSMENT

1. **Existing Conditions**
   a. Original chillers, cooling towers and pumps installed in the Equipment Yard.
   b. Original fan coil units, exhaust fans, temperature controls, piping and ductwork.
   c. New boilers (re-using the existing hot water pumps) added in 2013.
   d. Existing ductwork and air distribution is original.
   e. Existing hot and chilled water piping is original.

2. **Recommendations**
   a. Remove existing chillers, cooling towers and pumps. Replace with new air cooled chiller and chilled water pumps.
   b. Remove all existing fan coil units and replace with new fan coil units. Modify and reconnect the existing ductwork to the new units. Install the replacement units most matching the removed units to minimize the modifications to the duct connections and the unit supports.
   c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.
   d. Replace all insulated hot and chilled water within the building.
   e. Replace all insulated supply and return ductwork, diffusers and grilles within the building.
   f. Replace all exhaust ductwork within the building.

3. **General**
   a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.
   b. Refer to **Appendix A** for Title 24 requirements and general code issues that should be considered.

APPENDIX A

- General
  - Comply requirements of California Mechanical Code (CMC) latest edition.
- Possible Ventilation Code Issues
  - Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
  - Corridors must have minimum two (2) air changes per hour for ventilation.
  - Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
  - Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.
- Possible Fire Smoke Issues
  - Fire/smoke dampers in the system must be interlocked with fire alarm system.
  - Corridors, lobbies, and building entrances to have dedicated supply air.
  - Chemistry classrooms with occupancy separation shall have fire/smoke damper.
  - All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.
- Possible Title 24 Issues
  - Heating furnaces to have minimum 80% efficiency.
  - Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.
  - Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
  - Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.
  - Heating, ventilating, and air conditioning systems to have control capability with night setback.
  - Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

ELECTRICAL SYSTEMS ASSESSMENT

Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 750KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was installed around 2003 and is in good condition. According to PG&E record, the current peak usage on the system is of 378 amp. There is a spare capacity of 431 amp available at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.