



DULL OLSON WEEKES
architects inc.

PARKROSE
SCHOOL DISTRICT

FACILITY REPORT

JUNE 2009

TABLE OF CONTENTS

Introduction	Page 1
Capacity Report	Page 5
Parkrose High School	Page 13
Parkrose Middle School	Page 31
Shaver Elementary School	Page 51
Sacramento Elementary School	Page 67
Russell Academy	Page 83
Prescott Elementary School	Page 99
Sumner Elementary School	Page 119
Thompson School	Page 141
Knott School	Page 159
District Administrative & Maintenance Facilities	Page 179

Floor Plans of Schools

INTRODUCTION

Purpose of the Review

The purpose of this assessment is to provide the District with a written report of the current conditions of Parkrose High School, Parkrose Middle School, Shaver Elementary School, Sacramento Elementary School, Russell Academy, Prescott Elementary School, Sumner Elementary School, Thompson School, and Knott School, as well as the District Administration Building and the adjacent Maintenance and Transportation Facilities. In addition to physical conditions, the assessment of each school building also includes a review of building use and capacity. The physical assessments are focused on architectural, mechanical, and electrical conditions related to: building condition and maintenance, basic fire and life safety (code) issues, and condition/capacity of electrical and mechanical systems. The building use and capacity studies focus on current and potential use of each school building in terms of classrooms, core facilities, and the space requirements of special programs.

Methodology

Dull Olson Weekes Architects, along with Mazzetti & Associates (mechanical and electrical consultant), conducted an overall assessment of the building. The assessment and systems review included walk through observations of existing conditions, based on available plans and discussion of prior maintenance issues with Scott Wood of Parkrose School District as well as custodial personnel at most of the facilities. Building use and capacity was discussed with the Principal at each school.

All references to “the code” or “code requirements” in this document refer to the Oregon Structural Specialty Code 2007.

Report Approach

The report follows the following format:

- Capacity Study for each school
- Facility Analysis for each facility including architectural, mechanical, electrical and plumbing assessments
- Each facility analysis includes a Cost matrix with Architect recommendations regarding suggested prioritization (“Critical”, “High”, and “Low”).

Exclusions

The following items were not part of the scope of work for this report:

- Asbestos and Hazardous Materials (Asbestos reports have previously been completed for the District by another consultant)

- Roofing (individual problems are noted in report, but it is recommended that a roof consultant be retained to do a thorough evaluation of all facilities)
- Structural (most facilities received seismic upgrades in 1996 bond program)
- Classroom Technology (this is an educational program issue and is beyond the scope of this type of report)

Cost Matrix

The cost analysis for each item is based on cost information from current similar projects (June 2009). Each item includes the actual estimated construction cost and the following mark ups:

- 10% Estimating Contingency.
- 15% General Contractor Overhead and Profit.
- 25% Project Soft Costs, including design fees, permits, special testing requirements, project management, furniture and equipment, and other project related costs. (Please note that soft costs can increase dramatically if high System Development Charges are required and if local jurisdiction determines needs for wetlands mitigation and off site improvements such as street and traffic related improvements.)

These mark ups result in a cost for each item that represents true project costs, not just actual construction costs. Please note that the mark ups do not include a factor for inflation. Current market conditions indicate that at least for the next six months construction escalation will be 0%.

Current school replacement project costs for comparison are as follows (June 2009 market conditions):

- Elementary School including sitework: $40,000 \text{ sf} \times \$175/\text{sf} \times 1.25 \text{ (soft costs)} = \$8,750,000$
- Middle School including sitework: $120,000\text{sf} \times \$205/\text{sf} \times 1.25 \text{ (soft costs)} = \$30,750,000$

These costs do not include site acquisition, possible offsite improvements, or demolition of existing structures. These items would have to be evaluated on a case by case basis.

Parkrose School District | Overall
Facilities Assessment | Budget Summaries

On this chart and charts throughout the report, improvements to each facility are placed into (3) categories. A description of the priorities are as follows:

Critical Priority: Immediate Need. Work should be complete within three years. Projects in this category are critical to the continued life and operation of the building or are recommended for the safety of building users.

High Priority: Three to Five Year Need. Work is considered high priority, but not critical. If funding is available, projects in this category are suggested for completion within three to five years.

Low Priority: Ten Year Need. Projects in this category have been identified as low priority needs, but are not critical to the operation of the facility.

Project Cost Summary - By Facility Site

School	Critical Priority	High Priority	Low Priority	Total
Parkrose High School	65,389	1,811,073	1,292,030	3,168,491
Parkrose Middle School	349,263	2,139,149	2,965,354	5,453,766
Shaver Elementary School	54,000	1,419,505	1,630,551	3,104,056
Sacramento Elementary School	-	1,534,516	2,180,171	3,714,687
Russell Academy	482,340	1,203,062	1,886,586	3,571,988
Prescott Elementary School	541,199	1,049,149	1,401,246	2,991,594
Sumner Elementary School	25,761	1,573,970	2,695,391	4,295,123
Thompson Elementary School	30,610	1,595,191	1,213,642	2,839,443
Knott Elementary School	-	2,459,240	1,499,402	3,958,642
District Administration / Maintainance	190,928	313,248	306,505	810,681
Totals	\$1,739,491	\$15,098,102	\$17,070,877	\$33,908,470

Project Cost Summary - By Project Category

Category	Critical Priority	High Priority	Low Priority	Total
Site Improvements	125,569	1,972,170	3,460,340	5,558,079
Building Exterior	909,985	2,360,128	940,055	4,210,168
Building Interior	570,759	2,531,179	4,557,077	7,659,015
Fire & Life Safety and ADA upgrades	67,928	3,474,125	127,250	3,669,302
Miscellaneous	45,000	757,500	984,255	1,786,755
Heating, Ventilation and Cooling	0	2,647,000	5,095,000	7,742,000
Plumbing	0	1,045,000	1,207,500	2,252,500
Electrical	20,250	311,000	699,400	1,030,650
Totals	\$1,739,491	\$15,098,102	\$17,070,877	\$33,908,470

Parkrose School District | Overall
Facilities and Capacity Assessment | Capacity

Current Use

Based on the current use of the buildings and enrollment figures, all schools in the district are near capacity, except the middle and high school which are significantly over capacity. The core facilities are adequate for current enrollment but at the elementary schools, the use of the same space for PE and Lunch has caused some impacts to most of the facilities.

	Capacity	Enrollment May 2009
Elementary Schools		
Prescott Elementary School	400	393
Russell Academy	425	422
Sacramento Elementary School	425	439
Shaver Elementary School	375	376
Elementary Capacity	1625	1630
Middle School		
Parkrose Middle School	748	802
Middle School Capacity	748	802
High School		
Parkrose High School	940	1013
High School Capacity	940	1013
TOTAL Capacity	3313	3445

The capacity for the district was based on the following:

- a. Class Sizes for all grades is 25 students per classroom
- b. Kindergarten is calculated as full day only

Potential Use

Based on the potential use of the buildings, all schools in the district are significantly under capacity, except the high school which is over capacity. The core facilities are adequate for current enrollment but at the elementary schools, the use of the same space for PE and Lunch has caused some impacts to most of the facilities.

	Capacity	Enrollment May 2009
Elementary Schools		
Prescott Elementary School	500	393
Russell Academy	500	422
Sacramento Elementary School	575	439
Shaver Elementary School	525	376
Elementary Capacity	2100	1630
Middle School		
Parkrose Middle School	918	802
Middle School Capacity	918	802
High School		
Parkrose High School	980	1013
High School Capacity	980	1013
TOTAL Capacity	3998	3445

The capacity for the district was based on the following:

- a. Class Sizes for all grades is 25 students per classroom
- b. Kindergarten is calculated as full day only

Prescott Elementary School

Capacity Based on Current Use

Current Use: Kindergarten thru 5th Grade

Classrooms	Quantity	Students	Capacity	Enrollment 2009	NOTE
Kindergarten	3	25	75	56	
1st thru 3rd	8	25	200	208	
4th thru 5th grade	5	25	125	129	
TOTAL	16		400	393	

Special Use	Quantity	Students	Capacity	Enrollment 2009	NOTE
Smart	0	0	0	0	Volunteer/basement
MECP	0.5	0	0	0	share with daycare
Daycare	0.5	0	0	0	share with MECP
After School Program	0	0	0	0	gym, cafeteria, stage
ELL	1	0	0	0	
Resource	1	0	0	0	
Computer Lab	0	0	0	0	In Library
Music	1	0	0	0	
TOTAL	4		0	0	

Capacity Based on Potential Use

Classrooms	Quantity	Students	Capacity	Enrollment 2009	NOTE
Classrooms	20	25	500	393	
TOTAL	20		500	393	

Core Facility Capacity

Core Facility	Square Feet	Code	Capacity		NOTE
Cafeteria	2184	15	146		Dining
Gym	2604	7	372		Seating
Library	2112	7	302		Seating

NOTE:

1. Class Size is 25 students per classroom
2. Kindergarten is calculated as full day only
3. Code: The area per person allowed in such occupancy type space per the Building Code.
4. All Elementary School Lunches begin at 11:30 and end at 12:45, except on Wednesday's which start at 11:15am.

Russell Academy

Capacity Based on Current Use

Current Use: Kindergarten thru 5th Grade

Classrooms	Quantity	Students	Capacity	Enrollment 2009	NOTE
Kindergarten	3	25	75	66	
1st thru 3rd	9	25	225	219	
4th thru 5th grade	5	25	125	137	
TOTAL	17		425	422	

Special Use	Quantity	Students	Capacity	Enrollment 2009	NOTE
MECP	0.5	0	0	0	share with daycare
Daycare	0.5	0	0	0	share with MECP
After School Program	0	0	0	0	gym, cafeteria, stage
ELL	0	0	0	0	small office
Resource	1	0	0	0	
Computer Lab	0	0	0	0	small room
Music	1	0	0	0	
TOTAL	3		0	0	

Capacity Based on Potential Use

Classrooms	Quantity	Students	Capacity	Enrollment 2009	NOTE
Classrooms	20	25	500	422	
TOTAL	20		500	422	

Core Facility Capacity

Core Facility	Square Feet	Code	Capacity		NOTE
Cafeteria/Gym	3840	15	256		Dining
Cafeteria/Gym	3840	7	549		Seating
Library	1020	7	146		Seating

NOTE:

1. Class Size is 25 students per classroom
2. Kindergarten is calculated as full day only
3. Code: The area per person allowed in such occupancy type space per the Building Code.
4. All Elementary School Lunches begin at 11:30 and end at 12:45, except on Wednesday's which start at 11:15am.

Sacramento Elementary School

Capacity Based on Current Use

Current Use: Kindergarten thru 5th Grade

Classrooms	Quantity	Students	Capacity	Enrollment 2009	NOTE
Kindergarten	3	25	75	71	
1st thru 3rd	8	25	200	222	
4th thru 5th grade	6	25	150	146	
TOTAL	17		425	439	

Special Use	Quantity	Students	Capacity	Enrollment 2009	NOTE
MECP	0.5	0	0	0	portable
Daycare	0.5	0	0	0	portable
After School Program	0.5	0	0	0	share w/ music
ELL/Title 1	2	0	0	0	portables
Resource	1	0	0	0	portable
Computer Lab	1	0	0	0	
Music	0.5	0	0	0	share w/ after school
TOTAL	6		0	0	

Capacity Based on Potential Use

Classrooms	Quantity	Students	Capacity	Enrollment 2009	NOTE
Classrooms	23	25	575	439	
TOTAL	23		575	439	

Core Facility Capacity

Core Facility	Square Feet	Code	Capacity		NOTE
Cafeteria/Gym	3000	15	200		Dining
Cafeteria/Gym	3000	7	429		Seating
Library	1520	7	217		Seating

NOTE:

1. Class Size is 25 students per classroom
2. Kindergarten is calculated as full day only
3. Code: The area per person allowed in such occupancy type space per the Building Code.
4. All Elementary School Lunches begin at 11:30 and end at 12:45, except on Wednesday's which start at 11:15am.

Parkrose School District | Shaver Elementary School**Facilities and Capacity Assessment | Capacity**

Shaver Elementary School

Capacity Based on Current Use

Current Use: Kindergarten thru 5th Grade

Classrooms	Quantity	Students	Capacity	Enrollment 2009	NOTE
Kindergarten	3	25	75	71	
1st thru 3rd	7	25	175	188	
4th thru 5th grade	5	25	125	117	
TOTAL	15		375	376	

Special Use	Quantity	Students	Capacity	Enrollment 2009	NOTE
Smart	0.3	0	0	0	share w/ music & after
MECP	0.5	0	0	0	share w daycare
Daycare	0.5	0	0	0	share w MECP
After School Program	0.3	0	0	0	share w/ music & SMART
ELL/Title 1	2	0	0	0	
Resource	1	0	0	0	
Computer Lab	0	0	0	0	in library
Music	0.3	0	0	0	share w/ smart &after school
Counseling	1	0	0	0	classroom
TOTAL	6		0	0	

Capacity Based on Potential Use

Classrooms	Quantity	Students	Capacity	Enrollment 2009	NOTE
Classrooms	21	25	525	376	
TOTAL	21		525	376	

Core Facility Capacity

Core Facility	Square Feet	Code	Capacity		NOTE
Cafeteria/Gym	3000	15	200		Dining
Cafeteria/Gym	3000	7	429		Seating
Library	1840	7	263		Seating

NOTE:

1. Class Size is 25 students per classroom
2. Kindergarten is calculated as full day only
3. Code: The area per person allowed in such occupancy type space per the Building Code.
4. All Elementary School Lunches begin at 11:30 and end at 12:45, except on Wednesday's which start at 11:15am.

Parkrose Middle School

Capacity Based on Current Use

Current Use: 6th - 8th Grade (7 period day; block schedule)

Classrooms	Quantity	Students	Prep Factor	Capacity	Enrollment 2009	NOTE
General Classrooms	17	25	0.85	361		
Science	9	25	0.85	191		
Electives	6	25	0.85	128		
PE	2	40	0.85	68		
TOTAL	34			748	802	

Special Use	Quantity	Students	Prep Factor	Capacity	Enrollment 2009	NOTE
Resource	1	0	0	0		
ELL	1	0	0	0		
ISS	1	0	0	0		
Lecture Hall	0	0	0	0		Non ADA
Textbook	1	0	0	0		
Team Room	2	0	0	0		
District Technology	2	0	0	0		
Computer Lab	0	0	0	0		testing/non ADA
TOTAL	8			0	0	

Capacity Based on Potential Use

Classrooms	Quantity	Students	Prep Factor	Capacity	Enrollment 2009	NOTE
Classrooms	40	25	0.85	850		
PE	2	40	0.85	68		
TOTAL	42			918	802	

Core Facility Capacity

Core Facility	Square Feet	Code		Capacity	NOTE
Cafeteria	5320	15		355	Dining
Gym	6300	7		900	Seating
Small Gym	2640	7		377	Seating
Upper Gym	2888	7		413	Seating
Library	2184	7		312	Seating

NOTE:

1. Class Size for 6th thru 8th Grade is 25 per classroom
2. 40 students per every PE space
3. Code: The area per person allowed in such occupancy type space per the Building Code.

Parkrose High School

Capacity Based on Current Use

Current Use: 9th - 12th Grade (4 period day; block schedule)

Classrooms	Quantity	Students	Prep Factor	Capacity	Enrollment 2009	NOTE
General Classrooms	23	25	0.8	460		
Science	6	25	0.8	120		
Electives	10	25	0.8	200		
PE	5	40	0.8	160		
TOTAL	44			940	1013	

Special Use	Quantity	Students	Prep Factor	Capacity	Enrollment 2009	NOTE
Resource	1	0	0	0		
ELL	1	0	0	0		
Computer Lab	0	0	0	0		library
TOTAL	2			0	0	

Capacity Based on Potential Use

Classrooms	Quantity	Students	Prep Factor	Capacity	Enrollment 2009	NOTE
Classrooms	41	25	0.8	820		
PE	5	40	0.8	160		
TOTAL	46			980	1013	

Core Facility Capacity

Core Facility	Square Feet	Code		Capacity	NOTE
Cafeteria	4000	15		267	Dining
Main Gym	17500	7		2500	Seating
Library	7850	7		1121	Seating

NOTE:

1. Class Size for 9th thru 12th Grade is 25 per classroom
2. 40 students per every PE space
3. Code: The area per person allowed in such occupancy type space per the Building Code.

Parkrose High School



Address: 12003 NE Shaver
Portland, Oregon 97220

Approx Area: 260,497 sq. ft. (main building and FAB)
Approx Acres: 40.82 acres

Buildings: FAB:.....1968
Main Building:.....1996

INTRODUCTION

Parkrose High School main building is a newer facility that is located in Northeast Portland and is approximately 260,000 square feet. Constructed in 1996 the facility includes the Commons, Cafeteria, Theatre, Library, Multi-Purpose Room, Kitchen, Classrooms, Administration Areas, Community Center, Gymnasium, Swim Center, Locker Rooms, Baseball and Football Grounds, Grandstands, Tennis Courts, etc.

After reviewing the existing conditions throughout the building, the building appears to meet general life safety and code requirements and appears not to present any major hazards to occupants for its current daily use. The building is well maintained, and does not indicate any need of a major renovation or concern in any energy issues. However there are few areas that needs some level of repair or refinish.

Some minor landscaping, grading, and striping issues need to be addressed on the exterior while minor issues on the interior pertained to door hardware, ceiling tiles, wainscot, stained carpets, acoustical wall panels, stage electrical wiring & flooring etc.

There have been issues with roof leaks in the curved metal roof which will be addressed in a roof replacement project this summer.

Maintenance issues and minor accessibility issues appear to be the main with the notable exception of the stadium, which is in poor shape. As described below, accessibility upgrades are not required by code to be addressed until renovations or additions are made to the building. Most of the maintenance issues can be addressed and prevented through routine inspections by the maintenance staff.

The detailed review below describes general observations of current conditions. Maintenance and accessibility issues that should be addressed are listed and itemized by priority. The lists include possible solutions and estimated costs for repair or improvement. Also included is a short list of design recommendations that could improve the appearance and use of the building.

Building Exterior & Site

All painted exterior components of the building are to be repainted including handrails, projections at windows, etc. Repair and paint the columns on the south side of the classrooms. The canopies structures, downspout base, exterior metal doors and frames, gates, and fences, etc. that appear to be rusted are to be cleaned and repainted. At the internal courtyard repair the crack on wall prior to painting. The canopies on south and southwest side also appear rusted in several places; repaint these areas as well. Clean the existing brick sill at windows of drip marks. Repair the EIFS / Stucco as required in all the damaged areas. Repair the areas of the sidewalk that appear to be cracked. Repair the wooden fence on the southern side in between the classroom wings that is damaged. Clean and maintain the landscaping in the area. Install missing wall scuppers and clean the wall of any drip marks. The ceiling at canopy at east entry of commons appears to be water damaged. Install proper flashing by the parapet walls. Maintain and replant a few miscellaneous areas of the landscape. Site drainage needs to be reviewed at the south side of the classroom wings. There is evidence of water stagnation at the curbs outside the classrooms. Inspect all area drains in the landscaped areas and clean out clogged ones like the one behind the gym in the north side. The grading on the side of the theater on the north side and on the south west corner is too steep for the lawn to be maintained hence remove the lawn and replant with native ground cover along the slope. On the northeast corner of the theatre building there is some erosion exposing the concrete foundation of the building. The grading needs to be addressed at the earliest. The football field and the track need maintenance. Upgrade the track to meet current standards. The grandstand requires more frequent maintenance, painting, and repairs pertaining to moisture. The CMU blocks appear to have some moisture problems and a thorough inspection should reveal roof or other leakages if any.

Building Interior

The interior of the building is fairly well maintained and does not require any urgent attention. However a few maintenance issues were observed. Ceiling tiles in a few areas appeared damaged with water leaks from the roof and/or sprinkler pipes. The ceiling, soffit and the wall above the stair, by the entry, is water damaged from leaks in the wall / roof assembly above. Stained ceiling tiles were also seen in a few other areas like the drama dressing room, corridors etc. The hollow metal doors and frames appear to be heavily used and are dirty and scratched and these need to be cleaned and repainted. All other wood finished doors could be cleaned and refinished. Install panic hardware for fire doors wherever missing.

Casework pulls to be repaired or replaced as required in a few places. Clean the occasional stains on the wainscot and also repair the areas of the wainscot that seem to be peeling off. This was observed in the main corridor connecting the two classroom wings.

The acoustical panels in the band and music rooms appear to have a bubbling effect on its surface. The floor in the band storage rooms appears cracked. Repair and install carpet in area. The carpet in the Band room is stained and needs to be professionally cleaned and new base installed in the areas where missing. New tack surfaces are needed in the Band and the Music room.

Replace the temporary electrical wiring with permanent wiring at the front of the stage in the theater. Repair the MDF stage floor wherever damaged and refinish to match. Since there are very frequent maintenance issues an alternative to consider would be to replace the entire stage floor with a new stage floor.

The gym appears to be in fairly well maintained shape. However, minor maintenance issues like reinstalling the loose clock hanging by wires near the dance classes of the gym building. In the girls locker room repair the leaking shower. The wall and floor tiles at all toilets and locker rooms need to be thoroughly cleaned.

In the kitchen heavy duty storage shelving is required in receiving area. Repaint all painted interior surfaces as needed.

ADA, Life & Safety and code issues

Install ADA automatic door operator at all major entries into the building. Provide a fence or a safety barrier as part of a landscape feature, at the top of the slope near the steps leading to the Swim Center to prevent any accidental falls.

Mechanical, Electrical & Plumbing Systems – Findings

General

Parkrose High School was originally built in 1996; the building is approximately 244,300 gross square feet and includes classrooms, multipurpose room, kitchen, assembly room, shops, labs, administration and counseling. A pool building was added in 1998 which added an additional 16,200 gross square feet. This is the newest building in the district.

See the attached spreadsheet for recommended budgets.

Fire Sprinkler System

The building is fully protected by wet and dry pipe sprinklers. No upgrade would be required.

HVAC Systems

Building Envelope: The building envelope is sufficient by current standards. Windows are double glazed and wall and roof insulation is likely at current efficient standards.

Heating: The primary heating source for the school is the original, cast iron sectional boilers. Hot water is used directly for coils in fan systems and reheats for zone control at terminal units. Heating equipment is operational; and, with good maintenance, can continue to operate in the future.

Cooling: The school is cooled by packaged self contained rooftop air conditioning units systems. These appear to be in good working condition and an additional 20 yrs could be expected with good maintenance.

Ventilation: Spaces are ventilated by the rooftop air handling units. Minimum outside air is provided through these units and full economizer outside air delivery is provided for free cooling when outside conditions permit. Kitchen ventilation and hood make-up air is present and operational with no reported problems.

Exhaust Systems: Toilets and janitors rooms and lab areas are exhausted by roof top exhaust fans. There were no reported problems with these systems.

Temperature Controls: Temperature controls are full DDC (Allerton). It was reported that there were some temperature control problem in some areas of the building. It is recommended that retro-commissioning be done in order to trouble shoot and resolve these issues. There were no other reported issues or concerns with this system.

Plumbing Systems

Roof Drainage: Roofs drain by interior drains via storm sewer piping, connected to the city storm drain line.

Sanitary Waste and Vent: Building plumbing systems drain via waste piping to a municipal sewer. A grease trap serves the kitchen. There are no current reported problems with the waste and vent systems.

Domestic Cold and Hot Water: Domestic cold water is served to a water heater in the boiler room. Water piping is mostly original copper. Domestic hot water is generated by gas hot water heaters in the boiler room. No problems were noted with hot and cold water systems.

Natural Gas: Natural gas serves a meter outside the south end of the boiler room. The boiler is served with 5 PSIG gas, and the pressure is likely reduced to serve the water heater and kitchen equipment. No problems are reported with the natural gas system.

Plumbing Fixtures: Most plumbing fixtures are original and in good operation. They meet ADA standards.

Electrical Power

Normal Power: Power is provided by Pacific Power from a power pole mounted transformers at the south via buried feeders to a meter on the south exterior wall of the boiler room and to switchgear in the boiler room. The service is a 3000 amp, 277/480 volt, 3 phases, and 4 wires.

Emergency Power: Emergency power is provided by a 50 kw diesel fired generator outside the main electrical room. Emergency power appears to serve emergency lighting and may also serve IT rooms. Emergency power should be sufficient for continued use of the school.

Stadium: The electrical for the Stadium is in poor condition. The lighting is still incandescent; the panels are in poor shape. The concessions panel is tucked under the stands and does not meet code. If a breaker trips, someone in the concessions stand would have to walk around the stadium, enter underneath the stands about midway and crawl to the panel to reset the breaker.

Lighting

Site Lighting: Site lighting is adequate. There was some exterior lighting near the front entrance which was still on during the day. The controls need to be adjusted.

The field lighting is minimally adequate and should be reviewed. Typical field lighting should be 30-50 footcandles for competitive play up to 5000 spectators. Depending on distance from sidelines 8 poles are recommended if located close to sidelines (15-45 feet); 6 if located between 45-75 feet from sidelines and 4 if located more than 75 feet. The current pole arrangement is 4 poles.

Interior Lighting: Interior lighting is a mixture of HID in the commons and rotunda, compact fluorescent down lights and 2'x4' with T-8 lamps and electronic ballasts. The lighting seemed to be adequate, however, there appeared to be damage to many of the parabolic fixtures in the corridors as students like to jump up and hit them. Although the lighting is efficient, additional efficiency could be achieved with occupancy sensors and daylighting. As discussed, emergency exit lighting and exit signs are likely included with the new fixtures as no battery pack were observed.

Fire Alarm

The building is served by an addressable Simplex 4020 fire alarm system. The system included ADA strobe lights throughout, pull stations and detectors in the corridors, media center, multipurpose room and utility spaces. Although this system is over 10 years old, this system should serve the needs of the school for the future. It was noted that several other schools which have the Simplex system is having sporadic "Trouble" alarms due to dust in the detectors

Low Voltage Systems

Overall the Simplex Public Address System and Master Clock System seems to be operating adequately. IT equipment is also sufficient for the school's needs.

Security

The school is served by an extensive security system that includes sensors in classrooms, door entry sensors, cameras covering exterior and interior locations, a camera monitor in the office, and 24 hour monitoring.

Improvement	Critical Priority	High Priority	Low Priority	Total
Site Improvements				
Repair cracked sidewalk			3,000	3,000
Repair damaged asphalt near FAB			187,500	187,500
New asphalt at parking on west side			191,250	191,250
Repair wooden fence	2,569			2,569
Miscellaneous landscape maintenance			15,000	15,000
Planting at slopes NW and SE corner			23,045	23,045
Site drainage @ south side of classrooms			4,050	4,050
Repair clogged area drain		11,250		11,250
Repair eroded areas and redo site grading for drainage @ NE corner		3,000		3,000
Upgrade athletic track			225,000	225,000
Restripe parking lot			7,875	7,875
Provide hedge to block step grading at Pool Entry	3,000			3,000
Grandstand				
Grandstand - demolition / misc maintenance		52,500		52,500
Grandstand - toilet upgrades		196,875		196,875
Grandstand - Concession upgrades		90,000		90,000
Grandstand - New coiling door		15,000		15,000
Grandstand - roof decking upgrades		84,375		84,375
Grandstand - Brick - repair & maintenance		75,542		75,542
Grandstand - Painting		75,602		75,602
Grandstand - Pressroom Interior upgrades		76,500		76,500
Grandstand - Birdnetting		15,000		15,000
Grandstand - Repair and maintenance of wooden seating		29,531		29,531
Grandstand - ADA upgrades (access ramp) handrails etc		18,000		18,000
Covered walkway for ADA access to pressbox		131,250		131,250
Elevator shaft, machine room in CMU		76,545		76,545
Roof joist & metal deck @ roof for CMU elevator shaft		4,860		4,860
Grandstand - Elevator access to Press room		112,500		112,500
Grandstands - replace existing doors and frames with new HM		6,480		6,480
<i>(Grandstand total)</i>				1,060,560
Building Exterior				
Replace exiting windows @ FAB with new energy efficient ones	22,320			22,320
Repaint exterior of building			78,000	78,000
Paint canopies, handrails etc.		13,500		13,500
Repair cracks misc cracks on wall		1,500		1,500
Repair EIFS		75,000		75,000
Clean all exterior brick walls, sill etc.			108,675	108,675
Graffiti coatings			24,000	24,000
Install new flashing and repair exterior soffit and wall scupper		15,000		15,000

Building Interior				
Repair leaks at ceiling and replace damaged ceiling tiles		413		413
Paint all hollow metal doors and frames			14,625	14,625
Refinish all interior doors and frames			83,025	83,025
Replace damaged casework hardware			4,500	4,500
Clean stains on wainscot			1,125	1,125
Repair damaged acoustical wall panels in Band and Music room			74,520	74,520
Clean stains from carpet in Band room			1,050	1,050
Install carpet in band storage room			990	990
New tack surface in Band rm, Music room, corridors etc.			4,800	4,800
Repair stage flooring		48,600		48,600
Refix clock on to wall		300		300
Clean all toilet and locker room floor and wall tiles		15,000		15,000
New slotted angle shelving in the kitchen receiving area		2,250		2,250
New blind in Classrm wing		1,500		1,500
New ceiling in the FAB		33,000		33,000
Repair/ repaint all interior walls as needed in the FAB			25,500	25,500
Replace flooring in the FAB			48,000	48,000
New storage in the FAB			54,000	54,000
New work tables in the FAB		16,200		16,200
Replace wired glass in relites with plain code compliant glass			112,500	112,500
Fire, Life safety & ADA				
Install panic hardware at fire doors	37,500			37,500
ADA door operator at all main entry doors		1,500		1,500
Miscellaneous				
Miscellaneous demolition and maintenance		37,500		37,500
Field Lighting - Replacement at football/track		375,000		375,000
Heating, Ventilation, and Cooling				
Provide 24/7 cooling for hub rooms		50,000		50,000
Retro - Commissioning		50,000		50,000
Total	65,389	1,811,073	1,292,030	3,168,491
New grandstand				
Demolition of existing				37500
1000 seat covered grandstands				412500
Foundation / Footings				37,500
Elevator, pressbox etc.				150,000
Concessions, toilets etc.				450,000
MEP				172,500
Total for Grandstand				\$1,260,000

Visual Inspection – Building Exterior

Part I – Building Exterior – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Structural Condition:		Structural Analysis not in this scope of work.
▪ Exterior Window Frames & Glass:	4	All windows in good shape and are code compliant. Needs cleaning.
▪ Doors & Frames:	4	All doors and frames are in good shape Hollow metal needs cleaning /painting while storefront needs cleaning
▪ Exterior Walls:	4	The exterior walls appear to be cracked at a couple of locations. The exterior brick veneer needs to be cleaned.
▪ Roof Condition:	2	There appears to be leakage in the curved roof, but will be addressed this summer.
▪ Site Sidewalks & Stairs:	4	The existing sidewalks and curbs appear to be in good shape except that it needs minor maintenance.
▪ Parking & Drive Surfaces:	4	Good parking and drive surface. Needs striping in some parking lots.
▪ Bus Loop and Circulation:	5	There does not seem to be any problems at the bus loop drop-off.
▪ Landscaping:	4	Landscaping is well maintained. A few minor issues needs to be addressed.
▪ Grading & Drainage:	4	Good overall site grading. A few minor issues need to be addressed.
▪ Irrigation System(s):	1	Irrigation system not visible.
▪ Site Lighting / Electrical:	4	Good site lighting. Daylight sensors need to be incorporated to site lighting.

▪ Site Signage / Flag Pole	4	The school signage and flag pole are in good condition. Repaint flag pole.
▪ Play grounds	4	The play grounds are in fair condition however the track needs upgraded to match current standards.
▪ Exterior Finishes:	2	The exterior of the building, fascia, etc. need cleaning and painting.
▪ Other:	1	Provide ADA door operator at all main entrances.

Part II –Unsafe / Undesirable Conditions

1. Provide safety barrier at the top of the slope near the steps leading to the Swim Center to prevent any accidental falls.

Part III – Comments

1. Provide ADA door operator at all main entrances.

Visual Inspection – Building Interior**Part I – Basic Components – Rated on a Scale of 1 (poor) to 5 (excellent)**

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Sprinkler System / Location(s):	1	See Consultant's comments.
▪ Floor/Finishes - Carpeting:	4	Carpeting in some of the administration needs cleaning. Repair stage floor.
▪ Floor Finishes – (VCT):	5	Most of the school has VCT (Vinyl Composite Tile) There is no visible damage to the tiles.
▪ Walls – Repair and Refinishes:	4	A few areas of walls need patching and painting. Wainscot in corridors need minor cleaning / repair.
▪ Ceilings (mostly glue-up tile):	4	Most ceiling is in good condition, however in a few areas they need to be replaced, patched and painted as required.
▪ Window Coverings:	4	The window blind system are in good condition and could to be cleaning as required.
▪ Doors & Hardware	4	Most interior doors, frames, and hardware are original and in good shape. They could to be refinished.
• Interior Relights & Glass:	4	Interior relights are of wired glass and these could be addressed if needed. Needs painting / cleaning

Part II – Fixtures and Equipment – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Casework & Cabinetry:	4	Most casework is original and in good condition. Refinish existing shutters as needed.
▪ Tackboards / Tacksurface:	4	The tacksurfaces are in good condition. A few additional needed in Music and band room
▪ Markerboards \ Projection Screens:	5	Projection screen and marker boards are in good condition.
▪ Plumbing Fixtures:	3	Plumbing fixture are in good condition. A few drinking water fountains do not work and needs servicing.
▪ Acoustics:	4	Acoustics in the school fair and there is no need for additional acoustical.
▪ PE Equipment:	4	PE equipment seems to be in fair condition.
▪ Kitchen:	4	The kitchen and its equipment are in fair condition. Heavy duty shelving needed at receiving area.
▪ Signage:	4	Interior signage is adequate.

Part III – Unsafe or Undesirable Conditions

1. None

Part IV – Comments

1. Wired glass at interior doors and relights is no longer code compliant in new construction.



Damaged sidewalk



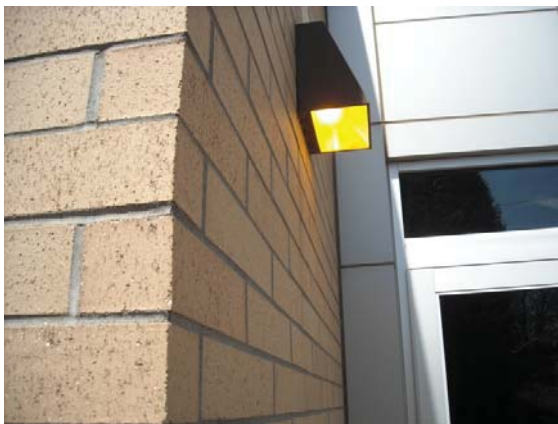
Misc landscaping work needed



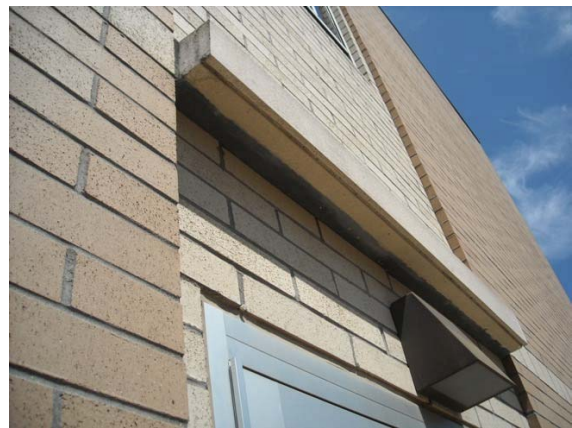
Storm water drainage issues



Damaged fence



**Site lighting needs day light sensors
or controls adjusted**



Paint under projections at window



Missing through wall scupper



Curved roof at class room wing



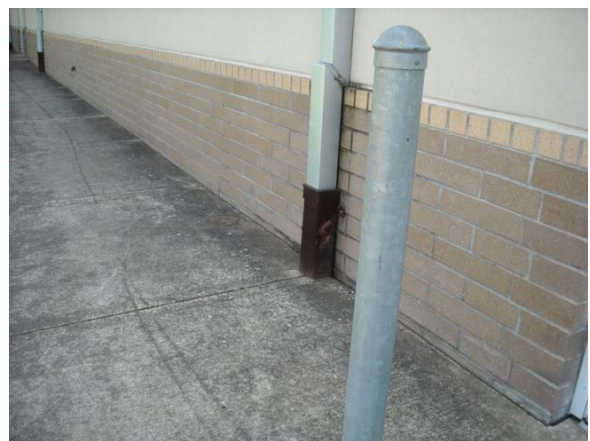
Clean window sills and brick wall



Repair ceiling at canopy by commons



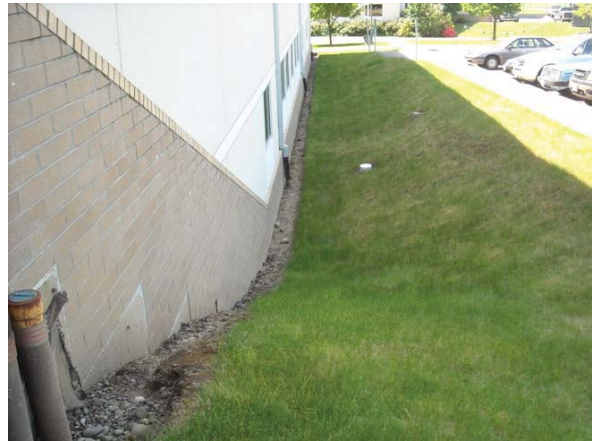
Damaged EIFS wall



Paint rusted metal downspout



Clogged area drain



Replant slope with ground cover



Exterior hollow metal door



Paint the balcony structure



Clean exterior brick walls



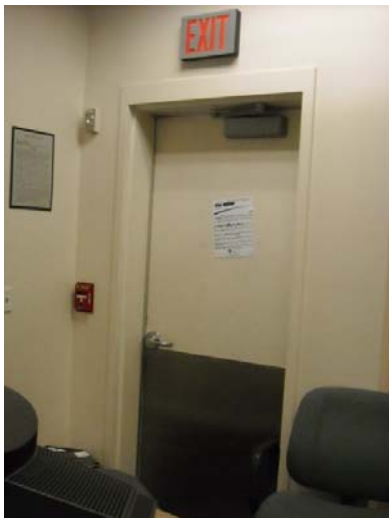
Repair cracked walls



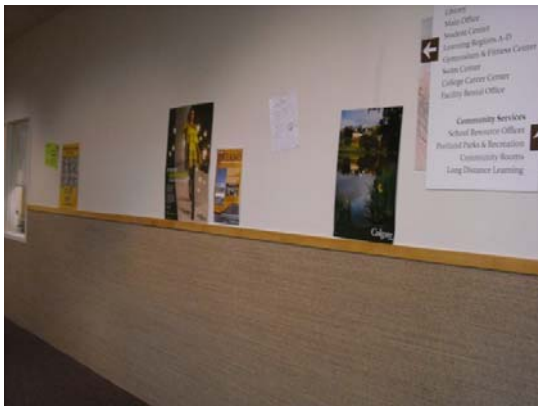
Water damaged soffit and ceiling



Paint all exterior canopies



Panic hardware required at exit doors



Corridor needs tack surface



Stained carpet



Acoustical panels damaged and more tack surface needed in band & music rm.



Temp wiring at stage



Stage floor being repaired



Leaks at ceiling



Privacy screens are stained and bend



Ponding in locker room floors



Toilet tiles to be cleaned



Broken blinds



Shelving needed for kitchen



Install permanent safety barrier

Parkrose School District | Parkrose Middle School
Facility Assessment

Parkrose Middle School



Address: 11800 NE Shaver St.
Portland, OR 97220

Approx Area: 113,603 sq. ft.

Approx Acres: 16.65 acres

Buildings: Original Building:..... 1961
Fire & Life Safety Upgrades:.....1996
Other Remodels / Upgrades..... Data Not Available

INTRODUCTION

Parkrose Middle School is an older facility that is located in Northeast Portland and is approximately 113,000 square feet. Constructed in 1961 with subsequent upgrades, the facility includes the Commons, Cafeteria & Stage, Library, Multi-Purpose Room, Kitchen Classrooms, Administration Areas, and Gymnasium with Locker Rooms, Playgrounds, Tennis Courts etc.

After reviewing the existing conditions throughout the building, the building generally appears to meet general life safety and code requirements and appears not to present any major hazards to occupants for its current daily use. The building, although well maintained, is in need of a renovation / remodel. Roof drainage, ceilings, etc. are in need of repairs. Exterior windows are mainly single pane and need to be replaced with energy efficient ones. There are indications of deterioration such as minor cracks on the exterior walls. There is also evidence of leakage in certain areas especially in the south corridor which appear to be near the gym. There did not seem to be other reports or major signs of roof leaks. A visual inspection at the exterior canopies revealed that the flashings were not correctly installed hence water was dripping on to the fascia. All interior relights and windows are of wire glass and these should be upgraded with code compliant glass. Some parts of the flooring is damaged and needs to be replaced. Wooden casework is old and could be refinished with new hardware. Replace the sinks with new and modify cabinets to comply with code.

This report addresses energy issues pertaining to the building envelope particularly the exterior window glazing. Considering the age of the building it does not meet current energy codes, resulting in poor energy performance for the building.

Maintenance issues and accessibility appear to be of concern. As described below, accessibility upgrades are not required by code to be addressed until renovations or additions are made to the building. Most of the maintenance issues can be addressed and prevented through routine inspections by the maintenance staff.

The detailed review below describes general observations of current conditions. Maintenance and accessibility issues that should be addressed are listed and itemized by priority. The lists include possible solutions and estimated costs for repair or improvement.

The building contains suspect asbestos materials. Review of asbestos is not part of this assessment or scope of work. Additionally, review of current technology systems or suggestions for upgrades is not part of this assessment or scope of work.

Building Exterior & Site

The building has had very little or no remodeling in recent times and therefore many items need to be replaced or are not in compliance with current code. The exterior entry doors and windows are original with the single pane glass. These need to be replaced with energy efficient ones. Some of the other exterior doors are also old and need to be replaced with new doors. The roof, canopies, gutters and downspouts need to be repaired for minor leakage. The exterior brick needs to be cleaned and sealed. Minor cracks were observed on the exterior concrete walls that need to be repaired. Landscaping at the main entries will need to be addressed as these are not maintained adequately and appear overgrown. There seem to be a few site drainage issues; however drainage at the tennis court needs to be addressed. The site seems to be well maintained and clean however parking and entry is to be reconfigured due to frequent backups on to the adjacent street at the entry. Proper site signage is required to divert traffic and to indicate parking and striping to be done periodically.

There is a bus drop off in front of the school and operation is of concern. There are several entrances into the building and parking areas around the facility that cause safety and security issues.

The landscape, sidewalks, curbs, exterior lighting, signage, etc. also have small issues that need to be addressed. Exterior lighting needs to incorporate daylight sensors for energy efficiency. All handrails and exterior building surfaces need to be painted or refinished. Miscellaneous repairs and maintenance needs to be done throughout the school.

The track around the playground is not finished to meet standards. Complete work on the track and the field to meet current standards. The baseball backstop needs to be replaced with new. Replace existing bleachers with bleachers that have more seating capacity.

Building Interior

The front office, Principal's office and conference rooms, staff rooms, etc. near the main entry needs to be remodeled with new reception desks, updated furniture, appliances, storage, lighting, etc. The building has many finishes and materials that are beyond their useful life. This includes chalk boards, floors, ceilings, interior doors and especially the carpets which are out dated. Install new recessed entry mats at the all entryways. Replace damaged flooring with new flooring. Ceiling requires repair and replacement in a few areas of damage. The doors of wood are old and could be refinished and new hardware installed wherever required. Wooden casework is old and needs to be refinished and new countertops installed, the hardware and pulls in the existing casework to be replaced with new. The storage shelving in the student store is not efficient for its use. New tack surfaces need to be installed in the corridors and classrooms. The toilet facilities have outdated plumbing fixtures and needs to be upgraded. All toilets, including the ones in the locker rooms need to be modernized. The kitchen is in fair condition and does not have any operational problems.

Acoustic wall panels in the gym appear to be discolored and needs cleaning and refinishing. The damaged panels are to be replaced and the leakage if any needs to be repaired. The existing wooden bleachers and wooden flooring need to be refinished with new striping. Wooden flooring and paneling in the stage also needs to be refinished. More secured storage is needed in the locker rooms equipment and sports gear storage.

In the computer lab the wire management system is not adequate.

The tables, casework, and other furniture in the art room require urgent attention where new casework and flooring is required. Install appropriate thresholds wherever applicable.

Lighting could be upgraded in certain areas and rooms that have comparatively lesser natural day lighting.

New signage needs to be installed and the building needs to be painted as required. Install missing escutcheons wherever needed. A few light fittings need to be changed as they are old and not working. Ensure that lighting has incorporated an occupancy sensors system for more energy efficiency.

The exposed electrical wiring conduits and fire sprinkler pipes all over the school does affect the aesthetic appeal of the school.

ADA, Life & Safety and code issues

There is no entrance in the school that has an automatic operator. Most ramps in the school do not appear to be ADA compliant in terms of the slope. The sinks in the casework are not ADA compliant. Casework to be modified to comply with ADA at all sinks. There are no ADA stalls in the staff toilet. Upgrade the staff toilet to comply with ADA. Replace non-compliant drinking water fountain with new.

In the multi-purpose room the door that leads into the fan room and the one that leads to the girl's locker room needs to be shifted from under the basket ball hoop and adequate wall padding to be installed to prevent any injury to players.

Fire extinguisher cabinets in gym damaged and the extinguisher is missing. Most of the interior glass is wired glass which does not comply with the current code. Even though its replacement is not required by code at this time, the issue could be considered at a later date.

The existing ramps along the corridor are not ADA compliant and hence a new wheelchair lift needs to be provided.

Mechanical, Electrical & Plumbing Systems – Findings

General

Parkrose Middle School was originally built in 1961; the building is approximately 113,600 gross square feet and includes classrooms, multipurpose room, kitchen, assembly room, administration and counseling.

The facility upgraded in 1996 for seismic issues and to improve information technology infrastructure. IT power and data improvements, including new electrical service, switchgear and panels; a new emergency generator; and updated ADA fire alarm.

See the attached spreadsheet for recommended budgets. All recommended budgets are in current dollars without contingency or soft costs, and do not include contracts for non MEP trades such as carpenters for cutting and patching.

Fire Sprinkler System

The building is fully protected by wet and dry pipe sprinklers. The system is served from NE Shaver to a vault with a fire department connection just inside the property fence to a fire riser in the boiler room.

HVAC Systems

Building Envelope: The building envelope is inefficient by current standards. Windows are single glazed and wall and roof insulation is likely below current efficient standards. Which in conjunction with temperature control problems (see temperature controls), likely results in high energy use and energy bills. The orientation of classrooms is ideal for a sustainable renovation including insulation, efficient glass with shading on the south, daylighting, and new HVAC.

Heating: The primary heating source for the school is the original, high fire box, fire tube, low pressure steam boilers. Steam is used directly for coils in fan systems, perimeter radiation heat, and converted to heating water in the boiler room and pumped to floor radiant heat in the locker rooms. It was reported that one boiler has recently developed a leak and will be repaired over the summer. Heating equipment is operational; and, with good maintenance, can continue to operate in the future. Several potential downstream issues are possible:

1. The extent of deferred maintenance is unknown. Many components, including the condensate pumps and heating water pumps, appear to need preventive maintenance.

2. While good maintenance can extend the life of the equipment, replacement may be a better option in the future. Failing equipment or major renovation could trigger an upgrade to a newer, more efficient system.
3. Floor panel heating systems are good for the radiant heat effect, but are difficult to control and are susceptible to failure over time. Floor panel take several hours to warm up and several hours to cool down. If controls don't anticipate this time lag, spaces can be cold in the morning and hot in the afternoon. Rooms were observed with open windows on a cold afternoon, indicating control problems exist. It was also reported that systems are operated over night in cold weather, adding to energy use. Many schools of this vintage and design have already replaced floor panel heating systems due to control problems or pipe failure.
4. The boiler appear to have been originally fired by oil as there is an oil tank vent outside the southeast corner of the boiler room. It was not known whether the oil tank had been removed or decommissioned. If not, this would be a liability.

A boiler plant replacement, if desired in the future, would run around \$ 240,000.

We recommend budgeting \$ 10,000 per locker room for replacing floor panel heating.

Cooling: The school has no cooling systems; however, spot cooling unit were observed. The school program is evolving toward more 12 month operation and should consider a cooling upgrade.

Ventilation: Most spaces are ventilated by fans distributing outside air via tunnels below corridors to rooms. It is not clear whether all of the air is exhausted, or if some is re-circulated. Systems of this design and vintage did both. Outside air is taken in via roof heads and heated with steam coils. There is one tunnel system per wing. The multipurpose room is heated and ventilated by a cabinet fan with a steam heating coil. Kitchen ventilation and hood make-up air were not observed. There were no problems identified with the ventilation systems.

Exhaust Systems: Toilets and janitors rooms are exhausted by gravity vents. It is recommended that new exhaust fans be installed for this ventilation.

Temperature Controls: Temperature controls have recently been upgraded to full DDC with electric belimo actuators. This system has not been fully installed or commissioned at the time of this report.

Plumbing Systems

Roof Drainage: Roofs drain by both gutters and downspouts and interior drains via storm sewer piping, reportedly to drywells on the site. Interior roof drains have experience leaks over the years; however, there are no current problems noted.

Sanitary Waste and Vent: Building plumbing systems originally drained via waste piping to a Septic tank and leaching wells. This waste has since been connected to the city sewer system. It is not known if the septic tank was properly decommissioned. It does not appear that a grease trap serves the kitchen. There are no current reported problems with the waste and vent systems.

Domestic Cold and Hot Water: Domestic cold water is served from NE Shaver to a water header in the boiler room. Water piping is mostly original galvanized steel. No significant rusting problems were noted in plumbing fixture. Domestic hot water is generated by a gas hot water heater in the boiler room. No problems were noted with hot and cold water systems. Significant renovation should use copper piping and include a reduced pressure backflow preventer.

Natural Gas: Natural gas serves a meter outside the south end of the boiler room. The boiler is served with 5 PSIG gas, and the pressure is likely reduced to serve the water heater and kitchen equipment. No problems are reported with the natural gas system.

Plumbing Fixtures: Most plumbing fixtures are original. During the 1996 upgrade, toilet rooms were modified to meet ADA requirements with some fixtures relocated or replaced. They are high in water consumption. There is no immediate need to upgrade fixtures.

Electrical Power

Normal Power: Power is provided by Pacific Power from a power pole at the northwest corner of the property and is routed via buried feeders to utility transformer in vault on the west side and then is extended to switchgear in the room adjacent to the boiler room. The service is 277/480 volt, 3 phases, and 4 wires. The service and switchgear were replaced in 1996 with a new Siemens 800 amp switchboard. New dedicated IT panels were installed as part of the IT upgrade in 1996. Panels in the corridors are of original vintage and are served by transformers in the tunnel. These panels should be replaced as most are completely full and it was noted that at times it is difficult to find available breaker space. The custodian mentioned that there were some breakers tripping in the food service area from added equipment. Even with upgraded power distribution to classrooms, limited pathways have resulted in wide use of extension cords. The power infrastructure with exception of the Hallway panels is sufficient to support the ongoing use of the school, but limited paths for raceways will continue to limit flexibility.

Emergency Power: Emergency power is provided by battery packs mounted in selected corridor fixtures.

Lighting

Site Lighting: The parking lot is not illuminated. Additional site lighting would be desirable.

Interior Lighting: Interior lighting throughout the school was upgraded to T-8 lamps and electronic ballasts in surface mounted fluorescent fixtures as part of an energy efficiency project. Additional efficiency could be achieved with occupancy sensors and daylighting sensors in the classrooms and offices. The existing HID lighting in the gymnasium has been replaced with fluorescent lighting.

Fire Alarm

The building is served by an addressable Simplex 4020 fire alarm system. The system included ADA strobe lights throughout, pull stations and detectors in the corridors, media center, multipurpose room and utility spaces. Although this system is over 10 years old, this system could serve the needs of the school in the future. It was noted that several other schools which have the Simplex system is having sporadic "Trouble" alarms due to dust in the detectors

Data and Telephone

As previously discussed, data and telephone systems were upgraded in 1996. The MDF room is located at the north classroom wing and the IDF room is located at the south classroom wing. Data and telephone cable routing is extensive, but suffers from the same lack of flexibility as IT power due to limited pathways. Cables are route exposed on "D" hooks in corridors and the surface mounted raceways in classrooms. The overall IT infrastructure should be sufficient for future use of the school.

Security

The school is served by an extensive Sonitrol security system that includes sensors in classrooms, door entry sensors, cameras covering exterior and interior locations, a camera monitor in the office, and 24 hour monitoring. It was noted that more cameras could be added.

Improvement	Critical Priority	High Priority	Low Priority	Total
Site Improvements				
Landscaping upgrades at entry			21,338	21,338
Site drainage upgrades			30,000	30,000
Drainage at tennis courts			172,800	172,800
Reconfigured entry & parking	112,500			112,500
Striping at parking			3,375	3,375
Repair sidewalks		1,875		1,875
Repair curbs		3,000		3,000
Site signage		8,250		8,250
Athletic track surfacing			675,000	675,000
New exterior bleachers			75,000	75,000
New chain link back stop			15,000	
Building Exterior				
New energy efficient exterior windows		511,500		511,500
Replace exterior main entry double doors and hardware with new aluminum storefront		39,900		39,900
Replace exterior main entry single doors and hardware with new aluminum storefront		18,000		18,000
Roof and canopy repairs	63,902			63,902
Cleaning exterior brick, sealing, graffiti coating		33,396		33,396
Repair damaged wall		11,250		11,250
Paint exterior of building		70,112		70,112
New Bollards		9,000		9,000
Building Interior				
Renovate reception, Principal's room, back office, staff rooms, health room, conference room etc		225,000		225,000
Repair flooring at damaged areas	70,036			70,036
Repair damaged ceiling	11,715			11,715
Repair damaged and replace discolored ceilings	64,433			64,433
Replace stained carpets	26,250			26,250
Refinish wood floor in the multi-purpose room, Gym, stage etc.including wood paneling in the stage		33,000		33,000
New entry mats		3,300		3,300
Refinish interior doors			28,688	28,688
Refinish all casework, install new hardware			19,664	19,664
New countertops and backsplash			296,625	296,625
Student store to get new appropriate shelving			54,000	54,000
New tack surfaces in corridors		14,400		14,400
Upgrade and modernize all toilets		316,313		316,313

Clean acoustical wall panels in the Gym and refinish		13,200		13,200
Refinish the wooden bleachers in the gym			5,040	5,040
Interior Painting		191,250		191,250
Secured storage for sports equipment			7,500	7,500
New computer tables at testing room with better wire management			28,125	28,125
New casework for Art room			167,400	167,400
Replace wired glass in relites with plain code compliant glass			75,000	75,000
Fire, Life safety & ADA				
ADA door operator at all main entry doors		15,000		15,000
ADA wheel chair lift at ramp		45,000		45,000
Upgrade staff toilet with new ADA toilet		17,850		17,850
Move doors from under basketball hoop		7,500		7,500
Install wall pads in Multi-purpose room		36,000		36,000
Fire extinguisher and cabinet	428			428
New ADA Plumbing Fixtures - Assume 60 Fixtures		180,000		180,000
New interior signage with Braille		59,642		59,642
ADA compliant reception desk		6,413		6,413
Miscellaneous				
Miscellaneous demolition and maintenance		37,500		37,500
Heating, Ventilation, and Cooling				
Deferred Maintenance - Allowance		85,000		85,000
Replace Boiler Plant			240,000	240,000
Add cooling - Classrooms			500,000	500,000
Add cooling - Admin only		35,000		35,000
Add Mechanical exhaust to restrooms		30,000		30,000
Add cooling - data rooms		30,000		30,000
Plumbing				
Repair drinking water fountains				
Backflow Preventor		7,500		7,500
Domestic Piping Replacement			400,000	400,000
Electrical				
Occupancy sensors - Classrooms & Admin			37,800	37,800
New site lighting - 8 poles			40,000	40,000
New Panels			73,000	73,000
Replace Fire Alarm Detectors		44,000		44,000
Total	349,263	2,139,149	2,965,354	5,438,766

Visual Inspection – Building Exterior

Part I – Building Exterior – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Structural Condition:		Structural Analysis not in this scope of work.
▪ Exterior Window Frames & Glass:	1	Original frames with single pane glazing. The window sealants seem to be damaged at some locations. All windows to be upgraded for code compliance.
▪ Interior Relights & Glass:	2	Interior relights are of wired glass and these need to be replaced with code compliant glass
▪ Doors & Frames:	2	All exterior entry doors and adjacent relights to be replaced with new energy efficient ones. Replace other exterior door with new.
▪ Exterior Walls:	4	The exterior walls appear to be cracked at a few locations. The exterior brick veneer needs to be cleaned and sealed.
▪ Roof Condition:	3	There appears to be leakage in the corridor by the Gym and needs to be repaired. The roof also needs some miscellaneous repair. Repair gutters and downspouts that appear leaking or damaged.
▪ Site Sidewalks & Stairs:	3	The existing sidewalks and curbs appear cracked in a few areas. These need to be repaired.
▪ Hard Surface Play Areas:	2	The tennis courts need to be repaired, adequately sloped and re-stripped.
▪ Parking & Drive Surfaces:	2	The entry and the parking need to be reconfigured to reduce any backup into the public street.
▪ Bus Loop and Circulation:	4	There does not seem to be any problems at the bus loop drop-off.

- | | | |
|-------------------------------|---|---|
| ▪ Landscaping: | 2 | There is some landscaping on site. Grass and other landscaping need some kind of maintenance and irrigation. Weed growth was observed mostly along the rear side in the courtyard and at the entry. A maintenance plan for the landscaping is required. |
| ▪ Grading & Drainage: | 2 | There are a few areas along the front driveway that need proper grading and drainage. Storm water from the sloping lawn on the rear side could be addressed. Grading near the kitchen entry is to be repaired to prevent water flowing down the steps. |
| ▪ Irrigation System(s): | 1 | Irrigation system not visible. |
| ▪ Site Lighting / Electrical: | 2 | There seems to be very little site lighting, new site lighting is required. |
| ▪ Site Signage / Flag Pole | 2 | The school signage needs to be repainted. Repaint the existing flag pole and improve the landscaping and drainage around the area. |
| ▪ Play grounds | 3 | The play grounds are in fair condition however the track needs to be finished to match current standards. The baseball back stops need to be replaced with new. |
| ▪ Exterior Finishes: | 2 | The exterior of the building, fascia, etc. need cleaning and painting. Exterior concrete walls needs repair in a few areas. |
| ▪ Other: | 1 | Provide ADA door operator at all main entrances. |

Part II –Unsafe / Undesirable Conditions

1. Vehicular access and parking to be reconfigured to prevent back up into streets during peak hours.

Part III – Comments

1. Better ADA access into the school to be considered at the earliest.

Visual Inspection – Building Interior

Part I – Basic Components – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Sprinkler System / Location(s):	1	See Consultant's comments.
▪ Floor/Finishes - Carpeting:	1	Carpeting in some of the administration is very old and could be replaced with new.
▪ Floor Finishes – (VCT & VAT):	2	Most of the school has VAT (Vinyl Asbestos Tile) that is old and has been patched in a few areas. There is also damage in some areas.
▪ Walls –Repair and Refinishes:	2	Several areas of walls are in need of repair and paint. Corridors need wainscot.
▪ Ceilings (mostly glue-up tile):	2	Ceiling in some areas need to be replaced, patched and painted as required.
▪ Window Coverings:	2	The vertical blind system are old and could to be replaced in some areas.
▪ Doors & Hardware	2	Most interior doors, frames, and hardware are old and need to be refinished. Replace wired glass at relights and doors with code compliant ones.

Part II – Fixtures and Equipment – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Casework & Cabinetry:	2	Most casework is original and thus old and outdated. Cabinet hardware and sinks need to be

		upgraded to meet ADA standards. Replace counter top with new. Provide new reception counter. Refinish existing shutters for storage under the stage in the multipurpose room.
▪ Tackboards / Tacksurface:	2	There are very few tackboards around the corridors. The ones that do exist are in poor condition. These should be replaced and more added.
▪ Markerboards \ Projection Screens:	2	Remove unused all chalk boards. The school has very few interactive white boards for the classrooms. There are also several unused projection screen brackets on the classroom walls that need to be discarded.
▪ Plumbing Fixtures:	2	There are a few ADA stalls in the building, however most of the toilets are old and non-ADA compliant. All drinking fountains and toilet plumbing fixtures needs to be replaced with new.
▪ Acoustics:	1	Due to the amount of hard surface, the school is noisy and needs some acoustical treatment.
▪ PE Equipment:	2	Adequate wall padding is needed in the multi-purpose room.
▪ Kitchen:	4	The kitchen and its equipment are in fair condition. A major remodel is not needed at this time.
▪ Signage:	2	Interior signage is not adequate and needs to be code compliant with Braille letters.

Part III – Unsafe or Undesirable Conditions

1. The main entry and many toilets are not ADA compliant to be made compliant.
2. The building has asbestos in several areas. Asbestos has been contained; however there seems to be damage to the contained asbestos in certain areas. The entire facility needs to be checked to make sure that the asbestos is still remains contained.

Part IV – Comments

1. The principal's office and the main reception, back office and storage for the school need remodeling.



No ADA door operator. Poor site drainage



Existing landscaping at entry



Leaking downspout



Damaged walls



Site drainage



Needs bollards



Tennis court - water stagnation



Unfinished track



Damaged baseball backstop



Damaged sidewalks and curb



Flashing not installed properly



Leaking downspout



Cracked walls



Single pane windows



Water drains down into kitchen area



Wooden door / signage / wired glass



Mop sink in kitchen?



Reception with poor electrical wiring



Toilets to be remodeled



Refinish casework / new counter top



Sinks and taps to be replaced



Art classroom casework



Student store



Damaged counter at student store



Bed in health room



Remove chalk boards



Damaged ceiling



Damaged VAT tiles



Replace bleachers

Parkrose School District | Shaver Elementary School
Facility Assessment

Shaver Elementary School



Address: 3701 NE 131st Place
Portland, Oregon 97230

Approx Area: 43,916 sq. ft.
Approx Acres: 8.73 acres

Buildings: Original Building (includes Annex):.....1963
Seismic Upgrades / Fire and Life Safety:.....1996

INTRODUCTION

Shaver Elementary School is an older facility located in a residential neighborhood and adjacent to farmland. The building is 43,916 square feet. The facility includes a Cafetorium, Kitchen, Library, Classrooms, Administration and Counseling Areas.

After reviewing the existing conditions throughout the building, the building generally appears to meet general life safety and code requirements. The building, although well maintained, is in need of cosmetic upgrades. The exterior is in good shape; however there are some grading issues in addition to inadequate parking facilities.

The building contains suspect asbestos materials. Review of asbestos is not part of this assessment or scope of work. Additionally, review of current technology systems or suggestions for upgrades is not part of this assessment or scope of work.

The detailed review below describes general observations of current conditions.

Building & Site

The exterior windows were replaced with double pane, low 'e' windows in 2008. It appears door hardware has been upgraded; however, there did not appear to be any ADA automatic operators at any main entry doors. Most exterior doors have metal grates in the concrete in front of the doors.

The parking lot is scheduled to be resealed and re-striped in the summer of 2009. There is one parking lot serving the school and contains 21 standard stalls and 2 accessible stalls; traffic is one-way. Overflow parking is handled near the covered play structure which contains 13 stalls. Buses (2-3 in addition to several special education buses) line up on the street. There is congestion at peak times (pick-up and drop-off). In addition, site lighting is handled with building-mounted fixtures.

The sidewalk, particularly in front of the accessible stalls, is cracked and in need have repaired. At the south side of the site, the lawn slopes toward the building, this has caused some damage to the building's exterior. On the west side, near the playground, the asphalt sloping toward the cleanout is in need of repair.

There are 2 playgrounds onsite and both appear to be in very good condition. The site is partially fenced; the land adjacent to the site is farmland but part of this will be converted into a park.

The exterior of the building is in good condition with the exception of areas mentioned above that having been damaged due to the grading. The fascia and coping have some areas of peeling paint and cracked corners. The wood components of the exterior, including the vented soffit board, have areas of peeled paint. There is one area that needs to be re-attached to the building on the west side. Exterior handrails need to be repainted.

Building Interior

The building has many finishes and materials that are beyond their useful life. The primary issue on the interior is the wall base. It is of various materials and sizes and it detaching from the interior walls. In some areas the base has been removed but not replaced. The interior walls themselves are in good condition, and need to be repainted with the exception of the brick wall in the cafetorium, that has cracks. Many of the ceiling tiles throughout the building (including the annex) have water damage and/or are popping off the substrate. In several of the classrooms, there appears to be an issue with the settling of the building, particularly at the ceiling. The kitchen's ceiling tile is peeling off the substrate.

Doors and frames throughout the building are wood and are in fair condition; many of them show signs of wear; all of them need to be refinished / repainted. It is suggested to install kickplates on the classroom doors to prevent damage. There are grates recessed in the floor at all egress doors that are currently covered over with walk-off mats. Sinks with bubblers are located in the classrooms and have been well maintained; however, they are older models and should be replaced. Laminate countertops are also in need of replacement. Interior blinds are new in age but there are issues with the blinds' operation as they often get stuck and are not easy to operate.

ADA and Life Safety

Toilet facilities were upgraded to provide accessible stalls. Lavatory piping needs to be wrapped; flooring is showing signs of age and there is damage to walls. There are some single stall toilets in the annex classrooms that are not compliant and are in need of finish upgrades. The door into the kitchen and the serving counter do not appear to meet accessibility

requirements. Additionally, the main desk in the front office does not meet accessibility requirements. ADA compliant room signage needs to be installed at every room.

Mechanical, Electrical & Plumbing Systems - Findings

General

The facility was added to in 1965 and was upgraded in 1996 for seismic issues and to improve information technology infrastructure. In addition, windows were upgraded to double pane in 2008.

See the attached spreadsheet for recommended budgets.

Fire Sprinkler System

The building is partially protected by wet and dry pipe sprinklers. Sprinklers protect exit corridors and openings to exit corridors, including doorways, with heads extending into rooms. Piping runs exposed in corridors, as there is no ceiling cavity to conceal the piping. The system is served from NE 131st Place to a vault with a fire department connection just inside the property fence to a fire riser in the boiler room. This "life safety exiting" system was a common retrofit in the 70's, but it does not meet current code. Any significant renovation will likely trigger full sprinkler coverage.

HVAC Systems

Heating: The primary heating source for the school is the original, high fire box, fire tube, hot water boiler (3500 mbh). Hot water is used directly for coils in fan unit. Heating equipment is operational; and, with good maintenance, can continue to operate in the future. Several potential downstream issues are possible:

1. The extent of deferred maintenance is unknown. Many components, including the heating water pumps, require regular maintenance and appear to be in good working order.
2. While good maintenance can extend the life of the equipment, replacement may be a better option in the future. Failing equipment or major renovation could trigger an upgrade to a newer, more efficient system.
3. The boiler appears to have been originally fired by oil as there is an oil tank vent outside the southeast corner of the boiler room. It was not known whether the oil tank had been removed or decommissioned. If not, this would be a liability.

Cooling: The school has no cooling systems. Data closets and computer rooms are in need of cooling at a minimum.

Ventilation: Spaces are ventilated by fans distributing outside air via tunnels below corridors to dual duct terminal units serving rooms from the tunnel. Return air is routed in below ground tunnels back to the AHU. Relief air is provided via air relief hoods at every classroom. There are two tunnel systems per wing. Kitchen hood exhaust is provided by exhaust fans on the roof. Make up air is provided by air handling system that serves the entire building. There were no

problems identified with the ventilation systems. The fan room and boiler room are located in the same space. Any major upgrade may trigger the need for separation of these spaces to bring it up to current code.

Exhaust Systems: Toilets and janitors rooms are exhausted roof top or gravity vents. It is recommended that mechanical exhaust systems be added to current code.

Temperature Controls: Temperature controls are mostly original pneumatic. The controls air compressor and after dryer are located in the boiler room. It appears that minimal electronic DDC controls were installed in the 1996 upgrade to schedule system operation. Controls should be upgraded for future operation of the building, whether renovated or not.

Plumbing Systems

Roof Drainage: Roofs drain by both gutters and downspouts and interior drains via storm sewer piping, reportedly to drywells on the site. Interior roof drains do not have overflow drains, and any significant renovation would likely trigger an upgrade to include overflow.

Sanitary Waste and Vent: Building plumbing systems originally drained via waste piping to a Septic tank and leaching wells. This waste has since been connected to the city sewer system. It is not known if the septic tank was properly decommissioned. It does not appear that a grease trap serves the kitchen. There are no current reported problems with the waste and vent systems.

Domestic Cold and Hot Water: Domestic cold water is served from NE 131st Place to a water heater in the boiler room. Water piping is mostly original galvanized steel. No significant rusting problems were noted in plumbing fixture. Domestic hot water is generated by a gas hot water heater in the boiler room. No problems were noted with hot and cold water systems. Significant renovation should use copper piping and include a reduced pressure backflow preventer.

Natural Gas: Natural gas serves a meter outside the south end of the boiler room. The boiler is served with 5 PSIG gas, and the pressure is likely reduced to serve the water heater and kitchen equipment. No problems are reported with the natural gas system.

Plumbing Fixtures: Most plumbing fixtures are original. They are high in water consumption. There is no immediate need to upgrade fixtures, but renovation would likely trigger full ADA upgrades.

Electrical Power

Normal Power: Power is provided by Portland General Electric from pole mounted transformers at the north via buried feeders to a meter on the north exterior wall of the boiler room and to switchgear in the boiler room. The service is 120/208 volt, 3 phases, and 4 wires. The panels and switchgear are of original vintage and manufactured by Square D. Company. Although the panels and switchgear are over 46 years old, the custodian indicated it has had very little trouble.

New dedicated IT panels were installed during the IT upgrade in 1996. The power infrastructure is sufficient to support the ongoing use of the school, but limited paths for raceways will continue to limit flexibility.

Emergency Power: Emergency power is provided by battery packs mounted in selected corridor fixtures.

Lighting

Site Lighting: The parking lot is not illuminated. Additional site lighting would be desirable.

Interior Lighting: Interior lighting throughout the corridors were replaced with fluorescent fixtures with T-8 lamps and electronic ballasts as part of an energy efficiency project upgrade.

Emergency exit lighting and exit signs with battery packs were observed.

Additional efficiency could be achieved with occupancy sensors and daylighting controls.

Fire Alarm

The building is served by an updated Notifier AFP -200 fire alarm system, including ADA strobe lights. This system should serve the needs of the school for the future. But as the system gets older, the detectors will start to get dirty causing sporadic "Trouble" alarms.

Data and Telephone

As previously discussed, data and telephone systems were upgraded in 1996. The MDF room is located at the main office and the IDF room is located at the south classroom wing. Data and telephone cable routing is extensive, but suffers from the same lack of flexibility as IT power due to limited pathways. Cables are routed exposed on "D" hooks in tunnels and corridors and then extended to surface mounted raceways in classrooms. The overall IT infrastructure should be sufficient for future use of the school.

Security

The school is served by an extensive Sonitrol security system that includes sensors in classrooms, door entry sensors, cameras covering exterior and interior locations, a camera monitor in the office, and 24 hour monitoring.

Improvement	Critical Priority	High Priority	Low Priority	Total
Site Improvements				
Improve grading on South side of building		174,375		174,375
Repair ramp adjacent to H/C stalls		7,200		7,200
Miscellaneous sidewalk improvements and repairs		45,000		45,000
Add fencing along Property line to fields (will become a park)			23,625	23,625
Building Exterior				
Repair and paint wood fascias			15,188	15,188
Repaint exterior of building			24,426	24,426
Paint handrails			2,700	2,700
Repaint exterior doors			7,800	7,800
Building Interior				
New Rubber base	36,750			36,750
Repair/ repaint all interior walls as needed			98,175	98,175
Replace damaged ceiling tile		181,154		181,154
Replace toilet room flooring (floor and cove)		8,733		8,733
Replace casework and sinks in all classrooms			135,000	135,000
Replace all administration casework			11,138	11,138
Add corner guards			7,500	7,500
Refinish/paint doors			27,000	27,000
Provide kick plates for all classroom doors		3,375		3,375
Acoustic Wall panels to Cafetorium			15,750	15,750
Fire, Life safety & ADA				
Fire Sprinklers		150,000		150,000
Provide compliant counter in administration and library		17,813		17,813
Modifications to kitchen		201,300		201,300
ADA Signage with Braille		23,056		23,056
Miscellaneous				
Oil Tank Decommissioning			67,500	67,500
Heating, Ventilation, and Cooling				
Deferred Maintenance Allowance		75,000		75,000
Replace Boiler Plant			180,000	180,000
Add Cooling in Classrooms			600,000	600,000
Add Cooling - Administration		45,000		45,000
Add Cooling - Data Rooms		15,000		15,000
Add Cooling - computer room		60,000		60,000
Replace Temperature Controls		225,000		225,000

Add Toilet Room Exhaust			15,000	15,000
Plumbing				
New ADA plumbing fixtures (assume 40)		180,000		180,000
Backflow Preventer		7,500		7,500
Replace Domestic Piping			262,500	262,500
Electrical				
New Site Lighting			33,000	33,000
New Panels and Switchgear			104,250	104,250
Occupancy Sensor in Classrooms and Administration	17,250			17,250
Total	54,000	1,419,505	1,630,551	3,104,056

Visual Inspection – Building Exterior

Part I – Building Exterior – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Window Frames & Glass:	5	Windows were replaced in 2008.
▪ Doors & Frames:	3	All doors appear to be original and should be refinished. Existing grates are located in front of most exterior doors. Exterior doors are not power actuated.
▪ Exterior Walls:	3-4	Exterior walls are in good shape with the exception of a few areas where the adjacent fields slope toward the building. Paint is needed on most exterior components.
▪ Site Sidewalks & Stairs:	2	The existing sidewalks are in poor condition.
▪ Hard Surface Play Areas:	3	The hard basketball play area on the north side of the site is cracked, it needs to be repaved and re-striped for safety concerns.
▪ Parking & Drive Surfaces:	2	The parking areas are being resealed and re-striped. Drop-off loop is one-way and adds to traffic congestion at drop-off and pick-up.
▪ Bus Loop and Circulation:	1	There is no bus loop. Congestion is an issue.
▪ Landscaping:	4	Landscaping is in good shape.
▪ Grading & Drainage:	2	There are several areas that need proper grading and drainage, particularly on the west side of the building.

▪ Irrigation System(s):	N/A	Irrigation system not visible.
▪ Site Lighting / Electrical:	3	There seems to be some site lighting, but mainly building mounted fixtures. There is no site lighting in the parking areas.
▪ Site Signage / Flag Pole	4	There does not appear to be any issues with flagpole; there is no site sign (only lettering on the building).
▪ Exterior Canopies	4	Wood decking is in good shape.
▪ Exterior Finishes:	3	The exterior of the building, fascia, doors etc. need cleaning and to be repainted. There are several areas around the perimeter that need to be repaired.
▪ Other:	3	Fencing needs to be installed at the north in preparation for park to be built adjacent to school site.

Part II –Unsafe / Undesirable Conditions

1. Sidewalks are in need of repair or replacement.

Part III – Comments

1. See Visual Inspection – Interior – for building comments.

Visual Inspection – Building Interior**Part I – Basic Components – Rated on a Scale of 1 (poor) to 5 (excellent)**

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Sprinkler System / Location(s):	--	See Consultant's comments.
▪ Floor Finishes – VCT / Vinyl:	2	The floor is suspect of VAT and needs to be replaced throughout the facility. Wall base needs to be removed and replaced on all walls.
▪ Walls – Repair and Refinishes:	3	Walls need to be repainted; repairs in various areas (mainly at corners or damage due to doors). There are cracks in the brick walls in the cafeteria that should be inspected further. Wall base needs to be removed and replaced on all walls.
▪ Ceilings (mostly ACT & glue-up tiles):	1	There is evidence of damaged tiles throughout the entire facility. Several classrooms have issues with the ceiling sagging. Structural analysis of the roof structure is recommended.
▪ Window Coverings:	3	Blinds are newer to the building but there are issues with the operation.
▪ Doors & Hardware	2	Most interior doors and frames are worn and are in need of paint as well as kickplates on the doors.

Part II – Fixtures and Equipment – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Casework & Cabinetry:	2	Most casework is original and showing signs of its age. Cabinets and sinks need to be replaced and comply with ADA standards.
▪ Tackboards / Tacksurface:	3	There are very few tackboards around the corridors. The existing ones are in fair condition.
▪ Markerboards \ Projection Screens:	3	Markerboards have replaced chalkboards in most if not all classrooms.
▪ Plumbing Fixtures:	2	ADA upgrades were made within the last 5 years; the annex has single stall toilet rooms that may not meet ADA requirements. Lavatories need to have plumbing pipes wrapped. Walls and floors need to be repaired and/or replaced.
▪ Acoustics:	2	There is a significant amount of hard surfaces throughout the school. The Cafetorium could benefit from acoustical wall and/or ceiling treatment.
▪ PE Equipment:	2	There is no wall padding, bleachers, or electronic score boards in the cafetorium.
▪ Kitchen:	2	The kitchen equipment is old, but in moderate condition. However the kitchen does not meet ADA standards. Doors and aisle into the kitchen service line are not ADA compliant and should be addressed immediately. The ceiling is in need of replacement.
▪ Signage:	2	Interior signage is not adequate and needs to be code compliant with Braille letters.

Part III – Unsafe or Undesirable Conditions

1. A more detailed roof and building structure analysis should be completed to determine cause of cracks in walls and issues with ceiling and ceiling tiles.

Part IV – Comments

1. Most of the flooring, ceilings, and other interior finishes are original. Due to the age of this facility along with issue of asbestos materials, these should be replaced.
2. Although hardware has been replaced on all doors with lever hardware, doors should be carefully examined to ensure code and accessibility requirements are met.
3. A structural analysis of this facility is recommended to confirm if cracking in walls and ceilings are related to structural issues.
4. A bus loop or expanded parking lot area may help with the congestion issues currently experienced by the school. Further study would be required before any costs could be determined.



Damaged curb at main entry



Exterior damage / grading



Cracked asphalt



Damaged exterior



Interior – base not adhering to wall



Kitchen ceiling tile



Classroom ceiling issues



Student toilet room



Annex- single stall toilet



Typical classroom casework

Sacramento Elementary School



Address: 11400 NE Sacramento St.
Portland, Oregon 97220

Approx Area: 41,107 sq. ft.
Approx Acres: 11.59 acres

Buildings: Original Building:.....1960
West Annex:.....1960
Portable:.....1980
Seismic Upgrades/Fire and Life Safety:.....1996

INTRODUCTION

Sacramento Elementary School is an older facility located in a residential neighborhood and adjacent to a park. The building is approximately 41,100 square feet. The facility includes a Cafetorium, Kitchen, Classrooms, and Administration Areas in addition to several classrooms housed in a portable building.

After reviewing the existing conditions throughout the building, the building generally appears to meet general life safety and code requirements. The building, although maintained, is in need of cosmetic upgrades. The biggest site issue appears to be inadequate parking facilities.

The detailed review below describes general observations of current conditions.

Building & Site

The exterior windows were replaced with double pane, low 'e' windows in 2008. It appears door hardware has been replaced / upgraded; however, there did not appear to be any ADA automatic operators at any main entry doors.

There is one parking lot serving the school and contains 15 standard stalls, 3 loading stalls and 2 accessible stall. The parking lot is undersized to accommodate parent and bus pick-up and

drop-off; overflow is handled on the residential street which impacts any other vehicular circulation during these peak times.

There are 2 playgrounds onsite and both appear to be in good condition. The site is completely fenced. Asphalt and sidewalks surrounding the facility are cracked.

The exterior is in fair condition; the building's exterior show signs of damaged/age. Corners are chipped off; there are several holes in the exterior face. The entire exterior needs to be repainted. The wood at the covered entry from the main office to the playground has some damage. The roof of the main building and the portable structure has roof leaks; exterior siding at the portable building is damaged and there are several areas of rot. The ramp leading to this building does not comply with ADA.

Building Interior

The building has many finishes and materials that are beyond their useful life. Both ceiling and floor tiles is suspect of containing asbestos. There are a fair amount of cracks in the flooring, particularly at door thresholds. Many interior doors have wire glass. The rubber base is in poor condition and should be replaced. From a functional/security standpoint, the main office does not have a clear view of the parking area. Additionally, there are several classrooms in an adjacent building whose entrances/exits cannot be supervised from the main office.

Doors and frames throughout the building that are wood are in fair condition; many of them show signs of wear, all of them need to be refinished/repainted. It is suggested to install kickplates on the classroom doors to prevent damage. Laminate countertops and cabinets are in good to fair shape; replacement is optional. In classrooms observed, there is a significant amount of surface mounted wiring; chalkboards appear to have been painted over. There is ceiling tile damage in the textbook storage room.

The general finishes of the portable building are in fair condition, but appear to be dated and/or at the end of their useful life, particularly the ceiling and carpeting.

ADA and Life Safety

Toilet facilities were upgraded to provide accessible stalls in some but not all toilet rooms; however, fixtures look dated. The door into the kitchen and the serving counter do not appear to meet accessibility requirements. The circulation desk in the library does not meet accessibility requirements. ADA compliant room signage needs to be installed at every room. There are several interior doors, particularly in the portable building, that are not ADA compliant. In the cafetorium, there is a significant amount of acoustical wall treatment; there are some panels behind the backstops and only the stage opening wall that are damaged. The kitchen equipment appears to be in fair condition but the serving line and access to it do not comply with ADA. The door to the kitchen is a Dutch door retrofitted with compliant hardware. The storage room adjacent to the kitchen has damaged ceiling and indicates a leak from the roof. There is a large crack in the cafetorium flooring that extends across the floor.

Mechanical, Electrical & Plumbing Systems - Findings

General

The facility was upgraded in 1996 for seismic issues and to improve information technology infrastructure. IT power and data improvements, lighting and updated ADA fire alarm.

See the attached spreadsheet for recommended budgets. All recommended budgets are in current dollars without contingency or soft costs, and do not include contracts for non MEP trades such as carpenters for cutting and patching.

Fire Sprinkler System

The building is partially protected by wet and dry pipe sprinklers. Sprinklers protect exit corridors and openings to exit corridors, including doorways, with heads extending into rooms. Piping runs exposed in corridors, as there is no ceiling cavity to conceal the piping. The system is served from NE Sacramento to a vault with a fire department connection just inside the property fence to a fire riser in the boiler room. This “life safety exiting” system was a common retrofit in the 70’s, but it does not meet current code. Any significant renovation will likely trigger full sprinkler coverage.

HVAC Systems

Building Envelope: The building envelope is inefficient by current standards. Wall and roof insulation is likely below current efficient standards. Which, in conjunction with temperature control problems (see temperature controls), likely results in high energy use and energy bills. The orientation of classrooms is ideal for a sustainable renovation including insulation, efficient glass with shading on the south, daylighting, and new HVAC.

Heating: The primary heating source for the school is the original, high fire box, fire tube, low pressure steam boiler. Steam is used directly for perimeter heat steam fin pipe, and converted to heating water in the boiler room and pumped to floor panel throughout the school. Heating equipment is operational; and, with good maintenance, can continue to operate in the future. Several potential downstream issues are possible:

1. The extent of deferred maintenance is unknown. Many components, including the condensate pumps and heating water pumps, appear to need preventive maintenance.
2. While good maintenance can extend the life of the equipment, replacement may be a better option in the future. Failing equipment or major renovation could trigger an upgrade to a newer, more efficient system.
3. Floor panel heating systems are good for the radiant heat effect, but are difficult to control and are susceptible to failure over time. Floor panel take several hours to warm up and several hours to cool down. If controls don’t anticipate this time lag, spaces can be cold in the morning and hot in the afternoon. Rooms were observed with open windows on a cold afternoon, indicating control problems exist. It was also reported that systems are operated over night in cold weather, adding to energy use. Many schools of

this vintage and design have already replaced floor panel heating systems due to control problems or pipe failure.

4. The boiler appear to have been originally fired by oil as there is an oil tank vent outside the north east corner of the boiler room. It was not known whether the oil tank had been removed or decommissioned. If not, this would be a liability.

Cooling: The school has no cooling systems. Data Closets and computer rooms are in need of cooling at a minimum.

Ventilation: Most spaces are ventilated by fans distributing outside air via tunnels below corridors to rooms. It is not clear whether all of the air is exhausted, or if some is recirculated. Systems of this design and vintage did both. Outside air is taken in via roof heads and heated with steam coils. There is one tunnel system per wing. The multipurpose room is heated and ventilated by a cabinet fan with a steam heating coil. Kitchen ventilation and hood make-up air were not observed. There were no problems identified with the ventilation systems.

Exhaust Systems: Toilets and janitors rooms are exhausted roof top or gravity vents. It is recommended that mechanical exhaust systems be added to current code

Temperature Controls: Temperature controls are mostly original pneumatic. The controls air compressor and after dryer are located in the boiler room. It appears that minimal electronic DDC controls were installed in the 1996 upgrade to schedule system operation. Thermostats are in disrepair throughout the school. This may be contributing to the temperature control problems previously discussed. Controls should be upgraded for future operation of the building, whether renovated or not.

Plumbing Systems

Roof Drainage: Roofs drain by both gutters and downspouts and interior drains via storm sewer piping, reportedly to drywells on the site. Interior roof drains do not have overflow drains, and any significant renovation would likely trigger an upgrade to include overflow.

Sanitary Waste and Vent: It does not appear that a grease trap serves the kitchen. There are no current reported problems with the waste and vent systems.

Domestic Cold and Hot Water: Domestic cold water is served from NE Sacramento to a water heater in the boiler room. Water piping is mostly original galvanized steel. No significant rusting problems were noted in plumbing fixture. Domestic hot water is generated by a gas hot water heater in the boiler room. No problems were noted with hot and cold water systems. Significant renovation should use copper piping and include a reduced pressure backflow preventer.

Natural Gas: Natural gas serves a meter outside the south end of the boiler room. The boiler is served with 5 PSIG gas, and the pressure is likely reduced to serve the water heater and kitchen equipment. No problems are reported with the natural gas system.

Plumbing Fixtures: Most plumbing fixtures are original. During the 1996 upgrade, toilet rooms were modified to meet ADA requirements with some fixtures relocated or replaced. They are high in water consumption. There is no immediate need to upgrade fixtures.

Electrical Power

Normal Power: Power is provided by Portland General Electric from pole mounted transformers at the north via buried feeders to a meter on the north exterior wall of the boiler room and to switchgear in the boiler room. The service is a 600 amp, 120/208 volt, 3 phases, and 4 wire services. The service and switchgear is original and is proving the end of its life. The switchboard and panelboard manufacturer is Frank Adams Electric which is no longer in business. In 1996, with the IT upgrade, a new dedicated IT panels were installed to provide power to computers in each classroom and the computer center. Branch circuits are both original concealed conduits and new surface mounted raceways. Even with upgraded power distribution to classrooms, limited pathways have resulted in wide use of extension cords. The power infrastructure is sufficient to support the ongoing use of the school, but limited paths for raceways will continue to limit flexibility.

Emergency Power: Emergency power is provided by battery packs located in strategic locations to provide emergency lighting.

Lighting

Interior Lighting: Interior lighting throughout the school was upgraded to T-8 lamps and electronic ballasts in surface mounted fluorescent fixtures as part of an energy efficiency project. Additional efficiency could be achieved with occupancy sensors and daylighting sensors in the classrooms and offices. The existing HID lighting in the gymnasium has been recently replaced with fluorescent lighting.

Fire Alarm

The building is served by an addressable Simplex 4020 fire alarm system. The system included ADA strobe lights throughout, pull stations and detectors in the corridors, media center, multipurpose room and utility spaces. Although over 10 years old this system should still serve the needs of the school in the future. It was noted that several other schools which have the Simplex system is having sporadic "Trouble" alarms due to dust in the detectors

Data and Telephone

As previously discussed, data and telephone systems were upgraded in 1996. The MDF room is located in the Admin Area. Data and telephone cable routing is extensive, but suffers from the same lack of flexibility as IT power due to limited pathways. Cables are routed exposed on "D" hooks in corridors and extended into surface mounted raceways in each classroom. The overall IT infrastructure should be sufficient for future use of the school.

Security

The school is served by an extensive Sonitrol security system that includes sensors in classrooms, door entry sensors, cameras covering exterior and interior locations, a camera monitor in the office, and 24 hour monitoring.

Improvement	Critical Priority	High Priority	Low Priority	Total
Site Improvements				
Portable building - replacement		210,000		210,000
Building Exterior				
Repair and paint wood fascias		4,275		4,275
Paint exterior			22,824	22,824
Repair roof as needed		86,331		86,331
Repair holes in exterior walls			7,500	7,500
Repair/replace canopy between buildings			172,800	172,800
Refinish exterior doors/upgrade hardware		16,575		16,575
Building Interior				
Replace flooring in accessible toilet rooms			4,512	4,512
New rubber base		38,766		38,766
Repair/ repaint all interior walls as needed			95,625	95,625
Repaint ceilings as needed			6,165	6,165
Replace damaged ceiling tile			50,870	50,870
Address cracking in floor of cafeteria			7,500	7,500
Modernize toilet rooms		94,763		94,763
Re-finish casework - administration			12,188	12,188
Replace casework - classrooms			70,875	70,875
Refinish classroom doors and replace wire glass			7,500	7,500
Provide kick plates for all classroom doors		1,875		1,875
Refinish doors			5,063	5,063
Fire, Life safety & ADA				
Kitchen Upgrades		129,600		129,600
ADA Compliant Signage		21,581		21,581
100% Fire Sprinklers		150,000		150,000
New ADA Compliant Circulation Desk for Library			6,750	6,750
Miscellaneous				
New Entry/Administration			600,000	600,000
Oil Tank Decommissioning			67,500	67,500
Heating, Ventilation, and Cooling				
Deferred Maintenance - Allowance		75,000		75,000
Replace Boiler Plant			180,000	180,000
Add Cooling - Classrooms			600,000	600,000
Add Cooling - Data Room		15,000		15,000
Add Cooling - Computer Classroom		60,000		60,000
Add Cooling - Administration		45,000		45,000
Replace Temperature Controls		150,000		150,000

Replacement of Floor Panel Heating (Classrooms)		162,000		162,000
Plumbing				
New ADA Plumbing Fixtures (assume 40)		180,000		180,000
Backflow Preventer		7,500		7,500
Piping Replacement			262,500	262,500
Electrical				
Replace Panels		72,000		72,000
Occupancy Sensor in Classrooms and Administration		14,250		14,250
Total		1,534,516	2,180,171	3,714,687

Visual Inspection – Building Exterior

Part I – Building Exterior – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Structural Condition:		Structural Analysis not in this scope of work.
▪ Window Frames & Glass:	4	Windows were recently replaced.
▪ Doors & Frames:	2-3	Doors appear to be old and should be refinished. Exterior doors are not power actuated. Doors should be examined to ensure
▪ Exterior Walls:	3-4	The areas that seem to be the most affected are the building corners. There are also several walls with holes in them. The brick walls/planters at the cafetorium are in good condition.
▪ Roof Condition:	3	No information was obtained regarding the condition of the roof; a more extensive study should be conducted.
▪ Site Sidewalks & Stairs:	3	The existing sidewalks are in fair to condition with areas of cracking at the main entry and adjacent to the hard surface area.
▪ Hard Surface Play Areas:	3	The hard surface play areas are in good condition.
▪ Parking & Drive Surfaces:	2	Drop-off loop is one-way and adds to traffic congestion at drop-off and pick-up. Traffic overflow spills into adjacent, narrow residential street.
▪ Bus Loop and Circulation:	1	There is no bus loop. Congestion is an issue.
▪ Landscaping:	3	Landscaping is in fair condition. There is a space between the lawn and the building of dirt. It is unknown if this a result of grading issues or lack of landscaping.
▪ Grading & Drainage:	3	No drainage issues were observed.

▪ Irrigation System(s):	N/A	Irrigation system not visible.
▪ Site Lighting / Electrical:	2	Site lighting is handled with building mounted fixtures. The canopy between the buildings seems inadequate and the space feels very dark.
▪ Site Signage / Flag Pole	N/A	No flag was observed. Signage for building is building-mounted and not lit.
▪ Exterior Canopies	3	The ceiling of the canopy between main building and the covered play needs to be repaired as some of the wood is loose or possibly warped. It was also observed there is an issue with birds.
▪ Exterior Finishes:	3	Complete re-painting is recommended.
▪ Other:	2	The portable building is over 20 years old and is showing signs of age for all exterior finishes. The roof is known to have leaks. The adjacent ramp is not ADA compliant.

Part II –Unsafe / Undesirable Conditions

- N/A

Part III – Comments

1. See Visual Inspection – Interior – for comments.

Visual Inspection – Building Interior

Part I – Basic Components – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Sprinkler System / Location(s):	--	See Consultant's comments.
▪ Walls – Repair and Refinishes:	3	Walls need to be repainted; repairs in various areas (mainly at corners).
▪ Ceilings (mostly ACT & glue-up tiles):	2	There is evidence of damaged tiles throughout the entire facility.
▪ Window Coverings:	3	Windows have vertical blinds.
▪ Doors & Hardware	2	Most interior doors and frames are worn and are in need of paint as well as kickplates on the doors.

Part II – Fixtures and Equipment – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Casework & Cabinetry:	2/3	Most casework (including the portable) is original and showing signs of its age. Cabinets and sinks (where applies) could be replaced to comply with ADA standards.
▪ Tackboards / Tacksurface:	3	There are very few tackboards around the corridors. The existing ones are in fair condition.
▪ Markerboards \ Projection Screens:	3	Markerboards have been installed over chalkboards in most if not all classrooms.
▪ Plumbing Fixtures:	2	ADA upgrades were made within the last several years, but not to all toilet rooms. Walls, fixtures and floors need to be repaired and/or replaced.

- | | | |
|-----------------|-----|--|
| ▪ Acoustics: | 3 | There is a significant amount of hard surfaces throughout the school. The cafetorium, however, has acoustic treatment, although there are a few panels that need to be repaired/replaced. |
| ▪ PE Equipment: | 3/4 | There are no bleachers or electronic score boards in the cafetorium; however there are manual backstops and wall padding. The stage has a vertical lift for access |
| ▪ Kitchen: | 2 | The kitchen appears in fair condition. However some kitchen components do not meet ADA standards. Doors and aisle into the kitchen service line are not ADA compliant and should be addressed immediately. |
| ▪ Signage: | 2 | Interior signage is not adequate and needs to be code compliant with Braille letters. |

Part III – Unsafe or Undesirable Conditions

- N/A

Part IV – Comments

1. Most of the flooring, ceilings, and other interior finishes are original. Due to the age of this facility along with asbestos, these should be considered for replacement. The finishes in the portable building are showing signs of age and wear as well.
2. The main entry to the facility is not in view of the street or the parking area and can't provide any supervision to the classrooms located adjacent to the main building.
3. Replacement of the portable facility is recommended.



Main entry – office has no visibility to parking



Covered walkway ceiling



Portable building



Damaged exterior



Damaged exterior



Interior – flooring



Exterior – façade and exposed piping



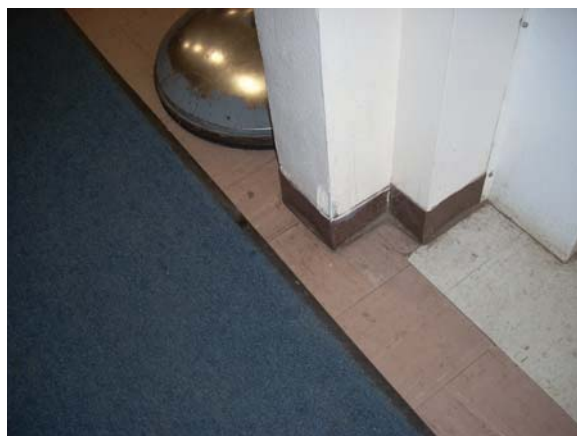
Portable classroom – noncompliant hardware



Kitchen storage room – ceiling damage



Gymnasium flooring



Interior walls / finishes

Russell Academy



Address: 2700 NE 127th Ave
Portland, Oregon 97230

Approx Area: 40,036 sq. ft.
Approx Acres: 9.83 acres

Buildings: Original Building:1963
Seismic Upgrades / Fire and Life Safety:1996

INTRODUCTION

Russell Academy is an older facility located in a residential neighborhood and adjacent to a park. The building is approximately 40,000 square feet. The facility includes a Cafetorium, Library, Kitchen, Classrooms, and Administration Areas.

After reviewing the existing conditions throughout the building, the building generally appears to meet general life safety and code requirements. The building, although well maintained, is in need of cosmetic upgrades. Both the interior and exterior are in good shape; however, the parking and drop-off areas appear undersized. The main canopy in front of the building is in need of repairs and/or replacement. There is some cracking in the floor and ceiling in certain parts of the building; a separate detailed review of the structure would accurately indicate the present structural condition of the building. Structural review is not part of this assessment or scope of work.

The detailed review below describes general observations of current conditions.

Building & Site

The exterior windows are single pane aluminum windows. It appears door hardware has been replaced or upgraded; however, there did not appear to be any ADA automatic operators at any main entry doors. There is a significant amount of glazing at the main entry and the exterior doors to the play area; the glazing is wire glass, which is no longer code compliant.

There is one parking lot serving the school and contains 28 standard stalls and 2 accessible stalls the Traffic is one-way. It is assumed buses line up on the residential street. There is no site lighting for the parking area. Building lighting is handled via building mounted light fixtures, although there is one pole mounted light in the hard play area. There are some cracks in the sidewalk and asphalt.

There are 2 playgrounds onsite and both appear to be in very good condition. The site is completely fenced in. The lawn areas have been well maintained. One area to note is the lawn adjacent to the metal covered play, which drops off considerably from the paved area.

The exterior is in good condition with the exception of several areas that need to be re-painted. It was observed there are several utility boxes on the exterior, that although have locks on them, are mounted low and additional protection should be considered. The roof; however, has several areas of ponding and leaks; the exterior wall below the roof leak has been damaged and needs to be repaired. The brick chimney has some issues with bricks falling off the chimney and is not seismically braced. As stated above, the exterior canopy/covered walk needs to be repaired or possibly replaced.

Building Interior

The building has many finishes and materials that are beyond their useful life. Exterior corners have endured the most damage over time, as rubber base has been damaged and/or removed and wall corners show signs of wear. Several ceiling tiles have damage, both by water and by people. The exposed wood on the interior of the building, seen in the library and the hallway, is in excellent shape. As stated earlier, there are various cracks in both flooring (kitchen) and in gypsum ceilings, such as the main office. Wood window sills need to be re-painted. There is limited carpeting in the school; what is installed is older and worn and should be replaced.

Doors and frames throughout the building are both wood with the exception of a few metal frames, and are in fair condition; many of them show signs of wear, all of them need to be refinished / repainted. It is suggested to install kickplates on the classroom doors to prevent damage. Classrooms are equipped with sinks, although the sinks as well as the cabinets appear to be too narrow and aged. Casework in general is in fair shape.

ADA and Life Safety

Toilet facilities were upgraded to provide accessible stalls. However, not all toilet rooms are ADA compliant. Fixtures are older. Additionally, the exhaust system for all toilet rooms needs to be replaced or added. The door into the kitchen and the serving counter do not appear to meet accessibility requirements. The circulation desk in the library does not meet ADA requirements. The drinking fountain needs to be repaired in this space. ADA compliant room signage needs to be installed at every room (currently restrooms have proper signage).

Mechanical, Electrical & Plumbing Systems - Findings

General

The facility was upgraded in 1996 for seismic issues and to improve information technology infrastructure as well as ADA upgrades and fire sprinklers. This is one of the facilities in the district that did not receive a glass upgrade. There is a high amount of single pane glass which causes heating issues when temperatures fall below 40.

See the attached spreadsheet for recommended budgets. All recommended budgets are in current dollars without contingency or soft costs, and do not include contracts for non MEP trades such as carpenters for cutting and patching.

Fire Sprinkler System

The building is partially protected by wet and dry pipe sprinklers. Sprinklers protect exit corridors and openings to exit corridors, including doorways, with heads extending into rooms. Piping runs exposed in corridors, as there is no ceiling cavity to conceal the piping. The system is served from NE 127th to a vault with a Fire Department connection just inside the property fence to a fire riser in the boiler room. This "life safety exiting" system was a common retrofit in the 1970's, but it does not meet current code. Any significant renovation will likely trigger full sprinkler coverage.

HVAC Systems

Building Envelope: The building envelope is inefficient by current standards. Windows are single glazed and wall and roof insulation is likely below current efficient standards. Which in conjunction with temperature control problems (see temperature controls), likely results in high energy use and energy bills. The orientation of classrooms is ideal for a sustainable renovation including insulation, efficient glass with shading on the south, daylighting, and new HVAC.

Heating and Cooling: The primary heating and cooling source for the school is the original Heat pump (1,750 mbh) supplemented by a fire tube, hot water boiler (1,750 mbh). Heating and chilled water from heat pump with change over valves serves coils in heating ventilation fan unit and unit ventilators. Heating equipment is operational; and, with good maintenance, can continue to operate in the future. Several potential downstream issues are possible:

1. The extent of deferred maintenance is unknown. Many components, including the heating / chilled water pumps, appear to need preventive maintenance.
2. While good maintenance can extend the life of the equipment, replacement may be a better option in the future. Failing equipment or major renovation could trigger an upgrade to a newer, significantly more efficient system.
3. The boiler appears to have been originally fired by oil as there is an oil tank vent outside the south of the boiler room. It was not known whether the oil tank had been removed or decommissioned. If not, this would be a liability.

Cooling: The school has no cooling systems. Data closets and computer rooms are in need of cooling at a minimum.

Ventilation: Most spaces are ventilated by perimeter unit ventilators. Interior spaces and spaces requiring make up air are ventilated by heating/ventilation units located in a mechanical room above the kitchen. Some air is recirculated via a return/exhaust fan located in the fan room. Ventilation air out of unit ventilators is relived via relief air plenum routed to a penthouse roof head. Kitchen ventilation and hood make-up air were not observed. There were no problems identified with the ventilation systems.

Exhaust Systems: Toilets and janitors rooms are exhausted by gravity vents. It is recommended that mechanical exhaust be added to these spaces.

Temperature Controls: Temperature controls are mostly original pneumatic. The controls air compressor and after dryer are located in the boiler room. It appears that minimal electronic DDC controls were installed in the 1996 upgrade to schedule system operation. Thermostats are in disrepair throughout the school. This may be contributing to the temperature control problems previously discussed. Controls should be upgraded for future operation of the building, whether renovated or not.

Plumbing Systems

Roof Drainage: Roofs drain by both gutters and downspouts and interior drains via storm sewer piping, reportedly to drywells on the site. Interior roof drains do not have overflow drains, and any significant renovation would likely trigger an upgrade to include overflow.

Sanitary Waste and Vent: Building plumbing systems originally drained via waste piping to a Septic tank and leaching wells. This waste has since been connected to the city sewer system. It is not known if the septic tank was properly decommissioned. It does not appear that a grease trap serves the kitchen. There are no current reported problems with the waste and vent systems.

Domestic Cold and Hot Water: Domestic cold water is served from NE 127th to a trench on the west side of the building. Water piping is mostly original galvanized steel. No significant rusting problems were noted in plumbing fixture. Domestic hot water is generated by a gas hot water heater in the fan room above the kitchen. No problems were noted with hot and cold water systems. Significant renovation should use copper piping.

Natural Gas: Natural gas serves a meter outside the south end of the boiler room. The boiler is served with 5 PSIG gas, and the pressure is likely reduced to serve the water heater and kitchen equipment. No problems are reported with the natural gas system.

Plumbing Fixtures: Most plumbing fixtures are original. During the 1996 upgrade, toilet rooms were modified to meet ADA requirements with some fixtures relocated or replaced. They are high in water consumption. There is no immediate need to upgrade fixtures.

Electrical Power

Normal Power: Power is provided by Portland General Electric from pole mounted transformers at the south via buried feeders to a meter on the south exterior wall of the boiler room and to switchgear in the boiler room. The service is a 120/208 volt, 3 phases, and 4 wires. The service and switchgear is of original vintage and is manufactured by Frank Adams Electric which is no longer in business. New dedicated IT panels were installed during the IT upgrade in 1996. Although the panels are outdated, the custodian indicated that he has not had issues with the electrical system.

Emergency Power: Emergency power is provided by battery packs mounted in selected corridor fixtures.

Lighting

Site Lighting: There did not appear to be any pole fixtures illuminating the parking lot. Additional site lighting would be desirable. The exterior lighting under the canopy was changed out to high pressure sodium. Again, it appears the photoelectric controls were not functioning properly as the lights were still on during the day.

Interior Lighting: Interior lighting throughout is surface mounted fluorescent with T-8 lamps, upgraded as part of an energy efficiency project. Additional efficiency could be achieved with occupancy sensors and daylighting. As discussed, emergency exit lighting and exit signs are likely included with the new fixtures as no battery pack were observed.

Fire Alarm

The building is served by an updated Notifier AFP -200 fire alarm system, including ADA strobe lights. This system should serve the needs of the school for the future. But as the system gets older, the detectors will start to get dirty causing sporadic "Trouble" alarms.

Data and Telephone

As previously discussed, data and telephone systems were upgraded in 1996. The MDF room is located at the Administration area and the IDF room is located at the north classroom wing. Data and telephone cable routing is extensive, but suffers from the same lack of flexibility as IT power due to limited pathways. The overall IT infrastructure should be sufficient for future use of the school.

Security

The school is served by an extensive Sonitrol security system that includes sensors in classrooms, door entry sensors, cameras covering exterior and interior locations, a camera monitor in the office, and 24 hour monitoring.

Improvement	Critical Priority	High Priority	Low Priority	Total
Site Improvements				
Re-stripe and Repave parking lot			39,606	39,606
Building Exterior				
Repair canopy in front of main entry	28,500			28,500
Repair Chimney			4,800	4,800
Replace windows with thermally efficient glass	453,840			453,840
Replace exterior main entry doors and hardware with new aluminum storefront		11,400		11,400
Replace windows at main entry with aluminum storefront		26,040		26,040
Repair and paint wood fascias			22,410	22,410
Paint exterior of Building			29,880	29,880
Repair roof		67,500		67,500
Repair damaged wall below roof leak		11,250		11,250
Building Interior				
Replace carpeting		19,980		19,980
New rubber base			48,300	48,300
Repair/ paint all interior walls			122,400	122,400
Replace damaged ceiling tile			105,000	105,000
Address cracking in office walls		7,500		7,500
Address cracking in Kitchen floors		15,000		15,000
Modernize toilet rooms			134,400	134,400
Re-finish casework in Administration			5,625	5,625
Provide Reception Desk in Office			8,550	8,550
Casework Replacement in Classrooms			171,990	171,990
Add corner guards			7,500	7,500
Refinish/Paint Classroom Doors			10,125	10,125
Add Kick plates to Classroom Doors		2,250		2,250
Fire, Life safety & ADA				
Kitchen Upgrades		204,000		204,000
ADA Compliant Signage		21,017		21,017
100% Fire Sprinklers		225,000		225,000
ADA Compliant Circulation Desk in Library		7,125		7,125
Miscellaneous				
Oil Tank Decommissioning		67,500		67,500
Heating, Ventilation, and Cooling				
Deferred Maintenance - Allowance		75,000		75,000
Replace Boiler Plant			180,000	180,000
Add Cooling - Classrooms			600,000	600,000
Add Cooling - Administration		30,000		30,000
Add Cooling - data rooms		15,000		15,000
Add cooling - computer classroom		60,000		60,000

Replace Temperature Controls		150,000		150,000
Plumbing				
New ADA Plumbing Fixtures (assume 40)		180,000		180,000
Backflow Preventer		7,500		7,500
Domestic Water Piping Replacement			262,500	262,500
Electrical				
New Panels and Switchgear			102,000	102,000
Occupancy Sensor in Classrooms and Administration			17,250	17,250
			14,250	14,250
Total	482,340	1,203,062	1,886,586	3,571,988

Visual Inspection – Building Exterior

Part I – Building Exterior – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Window Frames & Glass:	2	Windows are single pane aluminum windows. There is a significant amount of glazing at the main entry and doors leading to the hard play areas.
▪ Doors & Frames:	2-3	Doors appear to be original and should be refinished. Exterior doors are not power actuated. Main entry doors are largely composed of glass; the exterior doors are wire glass doors.
▪ Exterior Walls:	3-4	Exterior walls are in good shape with the exception of a few areas where there appears to be some water damage. Paint is needed on most exterior components.
▪ Roof Condition:	2	The roof has some ponding issues, particularly at the NE corner of the roof. Ponding also occurs at the roof drains. The roof on the covered walk in front of the main entrance is in poor condition and should be fully replaced at a minimum.
▪ Site Sidewalks & Stairs:	3	The existing sidewalks are in fair to good condition.
▪ Hard Surface Play Areas:	3	The hard surface play areas are in good condition.

▪ Parking & Drive Surfaces:	3	The parking areas are being resealed and re-striped. Drop-off loop is one-way and adds to traffic congestion at drop-off and pick-up.
▪ Bus Loop and Circulation:	1	There is no bus loop. Congestion is an issue.
▪ Landscaping:	4	Landscaping is in good condition.
▪ Grading & Drainage:	3	The lawn adjacent to the covered play structure seems to have an abrupt slope/transition.
▪ Irrigation System(s):	N/A	Irrigation system not visible.
▪ Site Lighting / Electrical:	3-4	Site lighting is handled with building mounted fixtures and one pole mounted fixture at the hard surface play area.
▪ Site Signage / Flag Pole	N/A	No flag pole or site sign was observed.
▪ Exterior Canopies	4*	Wood decking is in good shape. Some painting of other canopy elements is needed. (* - see comments under roof for exception to comments above.)
▪ Exterior Finishes:	3	The wall on the NE corner needs to be repaired (directly under roof leak).
▪ Other:	3	Chimney needs to be repaired as bricks are falling off onto the roof.

Part II –Unsafe / Undesirable Conditions

- N/A

Part III – Comments

1. See Visual Inspection – Interior – for comments.

Visual Inspection – Building Interior

Part I – Basic Components – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Sprinkler System/Location(s):	--	See Consultant's comments.
▪ Floor Finishes – VCT/Vinyl:	1	The floor is suspect of VAT and could be to replaced throughout the facility. Wall base needs to be removed and replaced on all walls.
▪ Walls –Repair and Refinishes:	3	Walls need to be repainted; repairs in various areas (mainly at corners).
▪ Ceilings tiles damaged (Mostly ACT & glue-up tiles):	2	There is evidence of damaged throughout the entire facility.
▪ Window Coverings:	3	Windows have blinds.
▪ Doors & Hardware	3	Most interior doors and frames are worn and are in need of paint / refinished as well as adding kickplates to the doors.

Part II – Fixtures and Equipment – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Casework & Cabinetry:	2/3	Most casework is original and showing signs of its age. Cabinets and sinks (where applies) could be replaced and fully comply with ADA standards.
▪ Tackboards / Tacksurface:	3	There are very few tackboards around the corridors. The existing ones are in fair condition.
▪ Marker boards / Projection Screens:	3/4	Markerboards have replaced chalkboards in most if not all classrooms. Projectors are also installed.
▪ Plumbing Fixtures:	2	ADA upgrades were made within the last several years, but not to all toilet rooms. Walls, fixtures and floors need to be repaired and/or replaced.
▪ Acoustics:	2	There is a significant amount of hard surfaces throughout the school. The Cafetorium could benefit from acoustical wall and/or ceiling treatment.
▪ PE Equipment:	2	There is no wall padding, bleachers, or electronic score boards in the cafetorium.
▪ Kitchen:	2	The kitchen appears in moderate condition. However the kitchen does not meet ADA standards. The main entry door and aisle into the kitchen service line are not ADA compliant and should be addressed immediately. There are some issues with the floor cracking.
▪ Signage:	2	Interior signage is not adequate and needs to be code compliant with Braille letters.

Part III – Unsafe or Undesirable Conditions

- N/A

Part IV – Comments

1. Most of the flooring, ceilings, and other interior finishes are original. Due to the age of this facility along with asbestos, these should be considered for replacement.
2. The exposed wood structure within the facility is in excellent condition and should be maintained.
3. A thorough inspection / analysis of the roof and roof structure are recommended.



Canopy at Main Entry



Roof - ponding



Brick chimney



Damaged exterior



Wall / sidewalk under roof leak



Wall crack in Main Office



Kitchen flooring



Typical Classroom sink



Interior wall / floor

Parkrose School District | Prescott Elementary School
Facility Assessment

Prescott Elementary School



Address: 10414 N.E. Prescott St.
Portland, Oregon 97220

Approx Area: 48,544 sq. ft. (Main Building and Annex)
Approx Acres: 5.75 acres

Buildings: Original Building:..... 1947
Annex:..... 1959
Fire & Life Safety Upgrades:.....1996
Other Remodels / Upgrades.....Data Not Available

INTRODUCTION

Prescott School is an older facility that is located in Northeast Portland. The building is approximately 50,000 square feet and contains three distinct sections constructed in 1947 with subsequent additions in 1959. The facility includes a Gym & Stage, Library, Student Services Room, Cafeteria, Kitchen, Classrooms, Administration Areas, Playground and two covered Play Areas.

After reviewing the existing conditions throughout the building, the building generally appears to meet general life safety and code requirements and appears not to present any hazards to occupants for its current daily use. The building, although well maintained, is in need of a renovation / remodel. Roof drainage, ceilings etc. are in need of repairs. Most parts of the flooring are in bad condition and will need to be replaced. There are indications of deterioration such as minor cracks on the exterior walls, damaged siding, windows that do not operate properly and toilets that need urgent attention. There is evidence of leakage in certain areas, especially in the library, which appear to be from roof drains. A visual inspection at the covered canopy leading to the annex in the damaged area revealed that there is rotting in the wooden structure above the ceiling. There is an area with glass blocks and it is recommended that a

separate review be conducted for its seismic integrity. Structural review is not part of this assessment or scope of work.

This report addresses energy issues pertaining to the building envelope particularly the exterior window glazing. Considering the age of the building it does not meet current energy codes, resulting in poor energy performance for the building.

Maintenance issues and accessibility appear to be of concern. As described below, accessibility upgrades are not required by code to be addressed until renovations or additions are made to the building. Most of the maintenance issues can be addressed and prevented through routine inspections by the maintenance staff.

The detailed review below describes general observations of current conditions. Maintenance and accessibility issues that should be addressed are listed and itemized by priority. The lists include possible solutions and estimated costs for repair or improvement.

The building contains suspect asbestos materials. Review of asbestos is not part of this assessment or scope of work. Additionally, review of current technology systems or suggestions for upgrades is not part of this assessment or scope of work.

Building Exterior & Site

The building has had very little or no remodeling in recent times and therefore many items need to be replaced or are not in compliance with current code. The exterior windows were replaced with energy efficient windows. However, at the main entrances there are single pane doors and windows in their original frames. The entrances can hence be considered as poor energy efficiency areas. The entrance doors and windows at the main entryways need to be replaced with energy efficient models. Several of the new windows have been reported to have problems in operating. A few of the screens of the operable windows need to be replaced as they appeared damaged. There are vertical blinds that need to be repaired at several locations. Some of the other exterior doors are old and need to be replaced with new doors. The window glass in the lower areas needs to be replaced with frosted glass for adequate privacy from the road side. The caulking at some windows needs to be repaired.

The exterior canopy roof structure leading to the annex will need to be thoroughly inspected for structural adequacy. The asphalt in the covered basketball area need to be patched or repaired in some areas and the old basketball equipment replaced with new. These areas also need to be striped.

Several of the roof drains showed signs of leakage especially the ones in the library. This issue needs to be address most urgently and roof repairs done as required. There appears to be signs of leakage on the walls at pipe penetrations. At several faulty roof drain locations the brick appears to be discolored. The exterior brick veneer walls need to be cleaned and sealed.

There are no parking lots available for the school. All parking and drop off is along the street curbside. There are several entrances into the building and other private parking areas around the facility that cause safety and security issues. There are a few ADA accessibility issues on the site as well.

The landscape, grading, sidewalks, curbs, exterior lighting, signage, etc. also have issues that need to be addressed. Drainage in the rear side of the school behind the classrooms will need to be addressed. Exterior lighting needs to incorporate daylight sensors for energy efficiency. All handrails and exterior building surfaces need to be painted or refinished. Miscellaneous repairs and maintenance needs to be done throughout the school.

Building Interior

The front office, Principal's office and conference rooms, staff rooms, etc. near the main entry will need to be remodeled with new reception desks, better furniture, appliances, storage, lighting, etc. The building has many finishes and materials that are beyond their useful life. This includes chalk boards, floors, ceilings in some areas, interior doors and especially the carpets which are out dated. Install new recessed entry mats at the main entryways. The doors are of wood and they are old and could be refinished. Wooden case work is old and needs to be refinished and new countertops installed, the hardware and pulls to be replaced with new. In the library new shelving is required for the curriculum storage since the present storage is inadequate. Some of the shelving also needs to be repaired and backing to be replaced with new. There appears to be insufficient storage shelves for non-library items. There is insufficient storage in the lower areas for general storage. The wooden wainscot along the corridors will need to be refinished and new tack surfaces installed in the corridors and classrooms. There is also need for a coat storage closet near the entryway. Shelving for storage is required in this room. The toilet facilities are limited with old plumbing fixtures, and most are non ADA compliant. All toilets need to be modernized. The kitchen is old and several pieces of equipment are out-dated and have operational problems.

Acoustic wall panels need to be installed in the Gym for better acoustics. The rear curtain in the stage is stained and old. This will need to be replaced with new. The wooden floor in the Gym and stage needs to be refinished.

There is some ongoing work to rectify the walls within which a water pipe had broken. In a couple of places a small area of the ceiling, in the corridor in close proximity to this work, appeared to be demolished.

New signage needs to be installed and the building needs to be painted as required. Install missing escutcheons wherever needed. The boiler room requires new ships ladder for access, better lighting, and the ceiling needs to be repaired. A few light fittings need to be changed as they are old and not working. Lighting needs to incorporate occupancy sensors for more energy efficiency.

ADA, Life & Safety and Code Issues

There is only one ADA entrance on the east side into the main school building with a ramp and an ADA automatic operator. There is no other ADA automatic operator for the annex building or for any other entrances. There is no ADA access to the side play area except from this single door. The wheelchair lift in stage area is used for miscellaneous storage. Casework handles and sinks are not ADA compliant; replace these with new wherever applicable. A few doors have door knobs that are not ADA compliant. Most of the interior glass

is wired glass which does not comply with the current code. Even though its replacement is not required by code at this time, the issue could be considered at a later date.

Mechanical, Electrical & Plumbing Systems – Findings

General

Prescott School was originally built in 1947; the building is approximately 37,416 gross square feet and includes classrooms, gym, kitchen, assembly room, administration and counseling. The building was added to in 1959 bringing the total building area to 48,554 gross square feet.

The facility was upgraded in 1975, 1996 and 2002 for seismic issues and to improve information technology infrastructure. IT power and data improvements, including new electrical service, switchgear and panels; a new emergency generator; and updated ADA fire alarm. Windows were also upgraded to double pane as part of these upgrades.

See the attached spreadsheet for recommended budgets. All recommended budgets are in current dollars without contingency or soft costs, and do not include contracts for non MEP trades such as carpenters for cutting and patching.

Fire Sprinkler System

The building is partially protected by wet and dry pipe sprinklers. Sprinklers protect exit corridors and openings to exit corridors, including doorways, with heads extending into rooms. Piping runs exposed in corridors, as there is no ceiling cavity to conceal the piping. The system is served from NE 105th to a vault with a Fire Department connection just inside the property fence to a fire riser in the boiler room. This “life safety exiting” system was a common retrofit in the 70’s, but it does not meet current code. Full sprinkler coverage was provided for the building which includes the IMC room, Gym and some office and computer spaces on the main level, and the cafeteria, kitchen, boiler room, fan room and crawl space on the lower level. Area C crawl space also appears to have full coverage. Any significant renovation will likely trigger full sprinkler coverage.

HVAC Systems

Building Envelope: Windows are double glazed and wall and roof insulation is likely below current efficient standards.

Heating: The primary heating source for the school is the original, high fire box, fire tube, low pressure steam boilers. Steam is used directly for perimeter fin tube and coils in fan systems / unit ventilators. Most heating equipment is operational; and, with good maintenance, can continue to operate in the future. It was reported that the ventilation units serving the gym and the library have been shut off due to leaks in the steam coils. There have been recent leaks in the steam piping system which have been repaired. There was however an issue reported that the steam leak caused mold issues in the attic, walls, and crawl space. Due to this, we were unable to investigate these areas. Several potential downstream issues are possible:

1. The extent of deferred maintenance is unknown. Many components, including the condensate pumps and heating water pumps, appear to need preventive maintenance.
2. While good maintenance can extend the life of the equipment, replacement may be a better option in the future. Failing equipment or major renovation could trigger an upgrade to a newer, more efficient system.
3. The boilers appear to have been originally fired by oil as there is an oil tank vent outside the Southeast corner of the boiler room. It was not known whether the oil tank had been removed or decommissioned. If not, this would be a liability.

A boiler plant replacement, if desired in the future, would run around \$ 140,000.

Cooling: The school has new rooftop gas pack units that were installed in 2002 in the 1959 building addition. Each classroom has an individual gas pack cooling unit. No cooling was present in the other areas. Both the data room and the computer room require cooling.

Ventilation: Most spaces are ventilated by unit ventilators. The gym, cafeteria and gymnasium are heated and ventilated by a cabinet fan with a steam heating coil. Kitchen ventilation and hood make-up air were not observed. There were no problems identified with the ventilation systems.

Exhaust Systems: Toilets and janitors rooms are exhausted by gravity vents. It is recommended that power exhaust be added to these spaces.

Temperature Controls: Temperature controls are mostly original pneumatic. The controls air compressor and after dryer are located in the boiler room. Controls should be upgraded for future operation of the building, whether renovated or not.

Plumbing Systems

Roof Drainage: Roofs drain by both gutters and downspouts and interior drains via storm sewer piping, reportedly to drywells on the site. Interior roof drains have experience leaks over the years; however, there are no current problems noted.

Sanitary Waste and Vent: Building plumbing systems drain via waste piping to a municipal sewer. A grease trap likely serves the kitchen, but was not observed. There are no current reported problems with the waste and vent systems.

Domestic Cold and Hot Water: Domestic cold water is served from NE 105th to a water heater in the boiler room. Water piping is mostly original galvanized steel. No significant rusting problems were noted in plumbing fixture. Domestic hot water is generated by a gas hot water heater in the boiler room. No problems were noted with hot and cold water systems. Significant renovation should use copper piping and include a reduced pressure backflow preventer.

Natural Gas: Natural gas serves a meter outside the south end of the boiler room. The boiler is served with 5 PSIG gas, and the pressure is likely reduced to serve the water heater and kitchen equipment. No problems are reported with the natural gas system.

Plumbing Fixtures: Most plumbing fixtures are original. During the 1996 upgrade, toilet rooms were modified to meet ADA requirements with some fixtures relocated or replaced. While still functional, fixtures have several problems. There is no immediate need to upgrade fixtures.

Electrical Power

Normal Power: Power is provided by Portland General Electric from pole mounted transformers at the East via buried feeders to a meter on the South exterior wall of the boiler room and to switchgear in the boiler room. The service is 120/208 volt, 3 phases, and 4 wires. The switchgear and panel boards were replaced in 1987 and are manufactured by Siemens. New dedicated IT panels were installed in 1996 with the IT upgrade. Branch circuits are both original concealed conduits and new surface mounted raceways. The power infrastructure is sufficient to support the ongoing use of the school, but limited paths for raceways will continue to limit flexibility.

It was mentioned in the initial walkthrough of the school that in some areas, the wiring is original cloth covered wiring over 50 years old and is not enclosed in conduit. This should be replaced sometime in the future as the cloth covering can become brittle over time and be a fire hazard

Emergency Lighting: Emergency Lighting is provided by battery packs and meets existing code requirements for the school.

Lighting

Interior Lighting: Interior lighting throughout the school is surface mounted fluorescent with T-8 lamps and electronic ballasts, and was upgraded as part of an energy efficiency project. Additional efficiency could be achieved with occupancy sensors and daylighting sensors in the classrooms and offices. It was noted that the lighting in the gymnasium was upgraded to fluorescent surface mounted fixtures and is controlled via occupancy to save energy.

Exterior lighting is very minimal and is primarily located over exterior doors.

Fire Alarm

The building is served by an addressable Pyrotronics Fire Alarm System which was installed in the 1996 upgrade, including ADA strobe lights. Detectors were installed throughout the school except in classrooms and offices, although over 10 years old, this system should serve the needs of the school for the future. But as the system gets older, there can be sporadic trouble alarms as the detectors get dirty.

Data and Telephone

As previously discussed, data and telephone systems were upgraded in 1996. The MDF room is located at the north classroom wing and the IDF room is located at the south classroom wing. Most of the Data and telephone cable routing is extensive and is located in either the crawlspace or the attic. Cables are routed exposed on "D" hooks and then extend into the surface mounted raceways in classrooms. The overall IT infrastructure should be sufficient for future use of the school.

Security

The school is served by an extensive Sonitrol Security System that includes sensors in classrooms, door entry sensors, and cameras covering exterior and interior locations, a camera monitor in the office, and 24 hour monitoring.

Improvement	Critical Priority	High Priority	Low Priority	Total
Site Improvements				
Canopy repairs		43,125		43,125
Asphalt repairs			28,313	28,313
New basket ball equipment			37,500	37,500
Landscaping			20,356	20,356
Grading / drainage		25,560		25,560
Sidewalk repairs			2,625	2,625
Curb repairs			1,050	1,050
Exterior signage	7,500			7,500
General maintenance and cleaning of clogged drains etc.		11,250		11,250
Striping in play area			1,575	1,575
Building Exterior				
Repair leaking roof and drains	46,023			46,023
Leaks in walls at pipe penetrations	15,750			15,750
Exterior brick veneer cleaning and Sealing			33,120	33,120
Exterior PVC Siding and trim repair			1,665	1,665
Paint exterior of Building and other building			5,625	5,625
Replace single pane double doors at entry with energy efficient ones	28,500			28,500
Replace single pane windows at entry with energy efficient ones	22,320			22,320
Building Interior				
Remodel Principal's office, back office, storage etc.			198,750	198,750
Upgrade staff toilet			39,375	39,375
New flooring in entire building	56,156			56,156
Refinish wood floor in the multi-purpose room, including the wood paneling behind the stage areas			45,000	45,000
New entry mats at entry		2,723		2,723
Repair damaged ceiling	15,434			15,434
Replace old ceiling with new		46,241		46,241
Refinish interior doors			26,325	26,325
Refinish all casework, install new hardware			12,375	12,375
New countertops and backsplash			183,750	183,750
Refinish wainscot in Corridors and in Multi-purpose room			65,138	65,138
New shelving in library for curriculum storage			13,500	13,500
Repair shelving		3,750		3,750
New secured storage in library			27,000	27,000
New tack surfaces in corridors		12,000		12,000
New coat closet			5,250	5,250
New open shelving - After school Program			2,250	2,250
Upgrade and modernize all toilets in main building		315,000		315,000
Clean toilets in Annex			918	918

Upgrade kitchen	255,000			255,000
New acoustical wall panels in the Multi-purpose room		22,500		22,500
New rear stage curtain			21,000	21,000
New interior signage	18,204			18,204
Interior Painting			107,100	107,100
New ships ladder in boiler room	1,313			1,313
Replace wired glass in relites with plain code compliant glass			1,688	1,688
Fire, Life safety & ADA				
ADA door operator at all main entry doors	30,000			30,000
100% Fire Sprinklers		150,000		150,000
New ADA Plumbing Fixtures - Assume 40 Fixtures		120,000		120,000
Miscellaneous				
Miscellaneous upgrades, Demolition (floors, ceiling etc)	45,000			45,000
Heating, Ventilation, and Cooling				
Deferred Maintenance - Allowance		50,000		50,000
Replace Boiler Plant			120,000	120,000
Add Cooling - Classrooms			400,000	400,000
Add Cooling - Admin only		25,000		25,000
Replace Temperature Controls		150,000		150,000
Exhaust for Restrooms		10,000		10,000
Plumbing				
Backflow Preventor		5,000		5,000
Electrical				
Occupancy sensors in Classrooms & Admin		9,500		9,500
Exterior lighting and daylight sensors		10,500		10,500
Replace wiring		37,000		37,000
Total	541,199	1,049,149	1,401,246	2,991,594

Visual Inspection – Building Exterior

Part I – Building Exterior – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Structural Condition:		Structural Analysis not in this scope of work.
▪ Exterior Window Frames & Glass:	4	All windows were upgraded however there are some windows that do not operate properly and will need to be repaired. A few screens and window blinds needs to be repaired as well
▪ Doors & Frames:	2	All exterior entry doors and adjacent relights to be replaced with new energy efficient ones. Replace other exterior door with new. Refinish interior doors and install new hardware as required.
▪ Exterior Walls:	3	The exterior walls appear to be cracked at a few locations. The existing PVC siding appears damaged in a few locations. The exterior brick veneer also needs to be cleaned and sealed.
▪ Roof Condition:	3	There appears to be leakage near the internal down spouts and these need to be repaired. The roof also needs some miscellaneous repair. The fascia need to be replaced on the east side. Install new dormer windows to enable better day lighting into the main school corridor.
▪ Site Sidewalks & Stairs:	1	The existing sidewalks and curbs appear cracked in a few areas. These items need to be repaired.
▪ Hard Surface Play Areas:	1	The covered asphalt paved basketball play area is cracked in a few location and needs to be repaired and re-stripped for safety concerns.

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| ▪ Parking & Drive Surfaces: | 1 | There is no parking spaces or parking lots for this school and could be an issue that needs to be considered. |
| ▪ Bus Loop and Circulation: | 1 | There is no bus loop or bus parking. Bus drop-off is mostly on the front curbside on the busy Prescott Street and on 105 th Ave. |
| ▪ Landscaping: | 2 | There is some landscaping on site. Grass and other landscaping need some kind of maintenance and irrigation. Weed growth was observed mostly along the rear side. A maintenance plan for the landscaping is required. |
| ▪ Grading & Drainage: | 2 | There are several areas that need proper grading and drainage. Area drains that are blocked needs cleaning and repairing. Some drains appeared to be clogged. Storm water from the sloping lawn on the rear side needs to be addressed. |
| ▪ Irrigation System(s): | 1 | Irrigation system not visible. |
| ▪ Site Lighting / Electrical: | 2 | There seems to be very little site lighting, new site lighting is required. The existing site lighting system does not appear to be on a day light sensor system and hence is not energy efficient. |
| ▪ Site Signage / Flag Pole | 3 | The school signage needs to be repainted and repairs to the brick wall at signage to be redone. Paint the existing flag pole and improve the landscaping around the area. New signage for ADA entry, Annex, etc. needs to be installed |
| ▪ Covered Play Areas | 3 | The exterior covered play areas are in fair condition however they need to be refinished and new lighting to be installed. Repair the ceiling tiles in the east play area. Install new basketball hoops and |

fresh striping at play areas are recommended.

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| ▪ Exterior Finishes: | 2 | The exterior of the building, fascia, etc. need cleaning and painting. The siding needs repair in a few areas in the rear side. The metal mesh ramp, handrails etc. needs to be repainted. |
| ▪ Other: | 1 | New ADA entry is required at the main building entries with ramps and handrails per code. Paint the metal baseball back stop which appears rusted. |

Part II –Unsafe / Undesirable Conditions

1. Site grading and storm water drainage to be addressed at the rear side of classrooms by the sloping lawn.
2. The leaking internal drains and leaking roof to be repaired at the earliest.

Part III – Comments

1. Better ADA access into the school to be considered at the earliest.
2. The roof vents appear to be rusted and it is important that a through roof inspection be conducted at the earliest.

Visual Inspection – Building Interior**Part I – Basic Components – Rated on a Scale of 1 (poor) to 5 (excellent)**

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Sprinkler System / Location(s):	1	See Consultant's comments.
▪ Floor / Finishes - Carpeting:	1	Carpeting in some of the administration is very old and could be replaced with new.
▪ Floor Finishes – VAT:	2	Most of the school has VAT (Vinyl Asbestos Tile) that is very old and has been patched in several areas. There is damage in some areas. In several locations the base is cracking, old and could be replaced.
▪ Walls – Repair and Refinishes:	2	Several areas of walls are in need of repair and paint. Wainscot along the corridor to be refinished.
▪ Ceilings (mostly glue-up tile):	2	In the library and in the corridor the ceilings are old, stained and needs replacement. Ceiling in some other area needs to be replaced, patched and painted as required.
▪ Window Coverings:	2	The vertical blind system needs to be replaced in some rooms. At several locations the lower part of the blinds are damaged due to heat from the heaters while some of them do not operate properly.
▪ Doors & Hardware	2	Most interior doors, frames, and hardware are old and need to be refinished. A few door knobs are not ADA complaint. Replace wired glass at reights and doors with code compliant ones.

Part II – Fixtures and Equipment – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Casework & Cabinetry:	2	Most casework is original and thus old and outdated. Cabinet hardware and sinks need to be upgraded to meet ADA standards. Replace counter top with new. Provide new reception counter. Refinish existing shutters for storage under the stage in the gym.
▪ Tackboards / Tacksurface:	2	There are very few tackboards around the corridors. The ones that do exist are in poor condition. These should be replaced and more added.
▪ Markerboards \ Projection Screens:	2	Remove unused all chalk boards. The school has very few interactive white boards for the classrooms. There are also several unused projection screen brackets on the classroom walls that need to be discarded.
▪ Plumbing Fixtures:	2	There are a few ADA stalls in the building, however most of the toilets are old and non-ADA compliant. All drinking fountains and toilet plumbing fixtures needs to be replaced with new.
▪ Acoustics:	1	Due to the amount of hard surface, the school is noisy and needs acoustical treatment. The Gym room does not have any acoustical paneling which could be installed.
▪ PE Equipment:	2	There is no wall padding, or electronic score boards in the Gym. PE equipment like basketball hoops need to be replaced.
▪ Kitchen:	2	The kitchen and its equipment is old, but in moderate condition. A

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| | | major remodel should consider a new kitchen. |
| ▪ Signage: | 2 | Interior signage is not adequate and needs to be code compliant with Braille letters. |
| ▪ Other: | 1 | The rear curtain at stage is stained and dull and needs to be replaced. Replace the ships ladder in the boiler-room. The wheelchair lift room near the stage is used as a toy storage room and lift is not accessible. Student chairs, some of them that are original, need to be replaced with new. Provide storage in the Student Service district office. |

Part III – Unsafe or Undesirable Conditions

1. Many toilets are not ADA compliant.
2. The building has asbestos in several areas. Asbestos has been contained; however there seems to be damage to the contained asbestos in certain areas. The entire facility needs to be checked to make sure that the asbestos still remains contained.

Part IV – Comments

1. Most of the flooring, ceilings, and other interior finishes are original. Due to the age of this facility along with asbestos, these should be considered for replacement.
2. Doors and hardware should be upgraded to be handicap accessible. Replace door wire glass with code compliant glass.
3. Provide separate ADA Staff toilet.
4. The principal's office and the main reception, back office and storage for the school need remodeling, new reception counters, etc.



Non ADA entry



Damaged sealant at new windows



Clogged catch basin



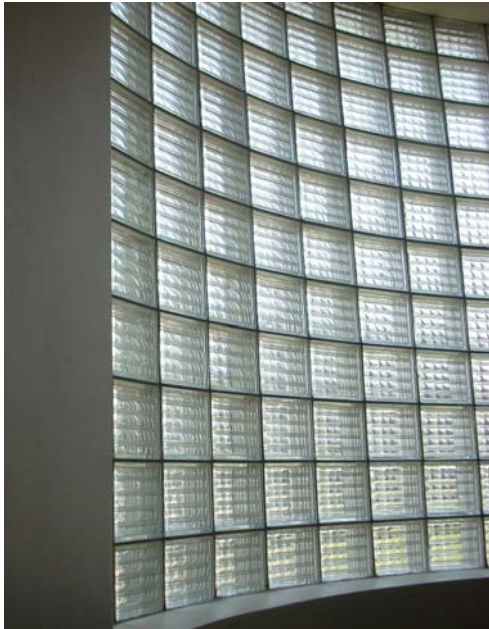
Basketball hoop



Non-energy efficient glass



Wired glass



Glass block



Non-compliant door knob



Damaged VAT flooring tile



Discolored floor tile



Ceiling under repair



Water damaged glue-up ceiling tile



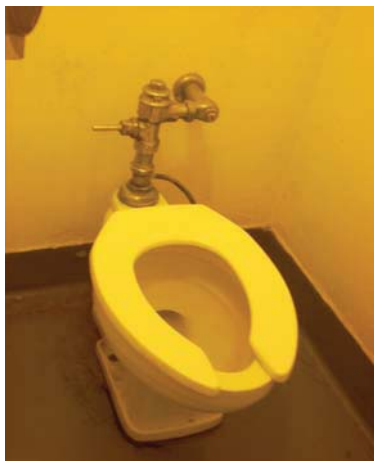
Original kitchen needs remodeling



Casework below stage



Original sink to be replaced



Toilets to be remodeled



Install acoustical panels



Replace stained stage curtain



Requires additional storage



Remove all chalk boards



Requires coat storage area



Blinds damaged from heat



Daylight sensors required



Insufficient site lighting

Parkrose School District | Sumner Elementary School
Facility Assessment

Sumner Elementary School



Address: 8678 N.E. Sumner
Portland, Oregon 97220

Approx Area: 40,000 sq. ft.
Approx Acres: 8.9 acres

Buildings: Original Building:.....1954
Library Addition:1968
Remodel:1996
Seismic Upgrades / Reroofing:1998

INTRODUCTION

Sumner Elementary School is an older facility that is near a major highway and a major intersection. The building is approximately 40,000 square feet and contains three distinct sections constructed in 1954 with subsequent remodels / renovations in 1968, 1996, and 1999. The facility includes a Multipurpose Room, Kitchen, Assembly Room, Classrooms, Administration and Counseling Areas. The school is currently operated as an Alternative High School by the Multnomah Educational School District on a lease from Parkrose School District.

After reviewing the existing conditions throughout the building, the building generally appears to meet general life safety and code requirements and appears not to present any hazards to occupants for its current daily use. The building is beyond its expected life expectancy, although well maintained, it is in need of a major remodel or replacement. The exterior canopy structure columns appear to be in bad condition and needs to be replaced. There are indications of deterioration such as cracks on the exterior walls, evidence of leakage in the roofs, rusted canopy columns, etc. A separate detailed review of the structure would accurately indicate the present structural condition of the building. Structural review is not part of this assessment or scope of work.

This report addresses energy issues pertaining to the building envelope particularly the exterior window glazing. Considering the age of the building it is recommended that a thorough inspection of the roof and exterior wall systems be done, which should reveal the existing condition building insulation and its efficiency.

Maintenance issues and accessibility appear to be the main concerns that directly affect building use. As described below, accessibility upgrades are not required by code to be addressed until renovations or additions are made to the building. Most of the maintenance issues can be addressed and prevented through routine inspections by the maintenance staff.

The detailed review below describes general observations of current conditions. Maintenance and accessibility issues that should be addressed are listed and itemized by priority. The lists include possible solutions and estimated costs for repair or improvement.

The building contains suspect asbestos materials. Review of asbestos is not part of this assessment or scope of work. Additionally, review of current technology systems or suggestions for upgrades is not part of this assessment or scope of work.

Building & Site

The building has had very little or no remodeling in recent times and therefore many items need to be replaced or are not in compliance with current code. The exterior windows are single pane in their original frames and lack energy efficiency and need to be replaced. The exterior doors are old, which need to be replaced with ADA automatic operator's at all main entry doors.

The exterior canopy columns are rusted and need to be thoroughly inspected for structural adequacy. The hard paved areas at the basketball area need to be resurfaced and new play equipment installed.

The East parking areas were recently re-stripped to improve circulation. This has helped, but there are still many entrances and parking areas around this facility that cause safety and security issues. The rear parking lot is in urgent need of repair. There are several ADA accessibility issues on the site as well.

The landscape, grading, paving, sidewalks, curbs, exterior lighting, signage, etc. have serious issues that need to be addressed.

Building Interior

The building has many finishes and materials that are beyond their useful life. This includes markerboards, floors, ceilings, and interior doors and especially the carpet is out of date. The toilet facilities are limited with old plumbing fixtures, and most are non ADA compliant. There are places where the floor is not level and the kitchen service counter is not ADA accessible. The kitchen also is not code compliant in terms of required clearances.

Most of the South side classrooms and its toilets are not handicap accessible due to threshold and door width.

Mechanical, Electrical & Plumbing Systems - Findings

General

Sumner was upgraded in 1996 for seismic issues and to improve their information technology infrastructure. Changes that significantly affected MEP systems include, removal of glass block

from classroom window walls, IT power and data improvements, including new electrical service, switchgear and panels; a new emergency generator, and updated ADA fire alarm.

All recommended budgets are in current dollars without contingency or soft costs, and do not include contracts for non MEP trades such as carpenters for cutting and patching.

Fire Sprinkler System

The building is partially protected by wet and dry pipe sprinklers. Sprinklers protect exit corridors and openings to exit corridors, including doorways, with heads extending into rooms. Piping runs are exposed in corridors, as there is no ceiling cavity to conceal the piping. The system is served from NE 87th to a vault with a fire department connection just inside the property fence to a fire riser in the boiler room. This “life safety exiting” system was a common retrofit in the 70’s, thus it does not meet current codes. Any significant renovation will likely trigger full sprinkler coverage.

Plumbing Systems

Roof Drainage: The roofs drain by gutters, downspouts as well as interior drains via storm sewer piping which reportedly drains to drywells on the site. Interior roof drains have experienced leaks over the years however, there are no current problems noted.

Sanitary Waste and Vent: Building plumbing systems drain via waste piping to a municipal sewer. A grease trap likely serves the kitchen, but was not observed. There are no current reported problems with the waste and vent systems.

Domestic Cold and Hot Water: Domestic cold water is served from NE 87th to a water heater in the boiler room. Water piping is mostly original galvanized steel. No significant rusting problems were noted in plumbing fixture. Domestic hot water is generated by a gas hot water heater in the boiler room. No problems were noted with hot and cold water systems. Significant renovations should use copper piping and include a reduced pressure backflow preventer.

Natural Gas: Natural gas serves a meter outside the south end of the boiler room. The boiler is served with 5 PSIG gas, and the pressure is likely reduced to serve the water heater and kitchen equipment. No problems are reported with the natural gas system.

Plumbing Fixtures: Most plumbing fixtures are original. While still functional, fixtures have several problems. Designed for an elementary school, they do not support the current use, meet ADA standards, and they are high in water consumption. There is no immediate need to upgrade fixtures, but renovation would likely trigger ADA upgrades.

HVAC Systems

Building Envelope: The building envelope is inefficient by current standards. Windows are single glazed, as well as wall and roof insulation is likely below current efficient standards. This in conjunction with temperature control problems (see temperature controls) are likely to result in high energy use and energy bills. The orientation of classrooms is ideal for a sustainable renovation including insulation, efficient glass with shading on the south, daylighting, and new HVAC.

Heating: The primary heating source for the school is the original, high fire box, fire tube, low pressure steam boiler. Steam is used directly for coils in fan systems and converted to heating water in the boiler room and pumped to floor panel and fin pipe heating throughout the school. Heating equipment is operational. With good maintenance the heating equipment can continue to operate in the future.

Several potential downstream issues are possible:

1. The extent of deferred maintenance is unknown. Many components, including the condensate pumps and heating water pumps, appear to need preventive maintenance.
2. While good maintenance can extend the life of the equipment, replacement may be a better option in the future. Failing equipment or major renovation could trigger an upgrade to a newer, more efficient system.
3. Floor panel heating systems are good for the radiant heat effect, but are difficult to control and are susceptible to failure over time. Floor panel take several hours to warm up and several hours to cool down. If controls don't anticipate this time lag, spaces can be cold in the morning and hot in the afternoon. Rooms were observed with open windows on a cold afternoon, indicating control problems exist. It was also reported that systems are operated over night in cold weather, adding to energy use. Many schools of this vintage and design have already replaced floor panel heating systems due to control problems or pipe failure.
4. The boiler appear to have been originally fired by oil as there is an oil tank vent outside the southeast corner of the boiler room. It was not known whether the oil tank had been removed or decommissioned. If not, this would be a liability.

A boiler plant replacement, if desired in the future, would run around \$ 120,000.

We recommend budgeting \$ 6000 per classroom for replacing floor panel heating.

Cooling: The school has no cooling systems; however, spot cooling units were observed. The school program is evolving toward more 12 month operation and should consider a cooling upgrade.

Ventilation: Most spaces are ventilated by fans distributing outside air via tunnels below corridors to rooms. It is not clear whether all of the air is exhausted, or if some is re-circulated. Systems of this design and vintage did both. Outside air is taken in via roof heads and heated with steam coils. There is one tunnel system per wing. The multipurpose room is heated and ventilated by a cabinet fan with a steam heating coil. Kitchen ventilation and hood make-up air were not observed for inclusion in this report. There were no problems identified with the ventilation systems.

Exhaust Systems: Toilets and janitors rooms are exhausted to roof top exhaust fans or gravity vents.

Temperature Controls: Temperature controls are mostly original pneumatic. The controls air compressor and after dryer are located in the boiler room. It appears that minimal electronic DDC controls were installed in the 1996 upgrade to schedule system operation. Thermostats are in disrepair throughout the school. This may be contributing to the temperature control

problems previously discussed. Controls should be upgraded for future operation of the building, whether renovated or not.

Electrical Power

Normal Power: Power is provided by Pacific Power at 480 volt, 3 phases, and 4 wires from a pole mounted transformers at the South end via buried feeders to a meter on the south exterior wall of the boiler room and to switchgear located in the boiler room. The service and switchgear were replaced in 1996 with the IT upgrade. New dedicated IT panels were installed, and original panels were upgraded. Branch circuits are both original concealed conduits and new surface mounted raceways. Even with upgraded power distribution to classrooms, limited pathways have resulted in wide use of extension cords. The power infrastructure is sufficient to support the ongoing use of the school, but limited paths for raceways will continue to limit flexibility.

Emergency Power: Emergency power is provided by an oil fired generator outside the boiler room to the east to emergency switchgear in the boiler room. The generator is new and was likely installed with the IT upgrade or the lighting retrofit. Emergency power appears to serve emergency lighting and may also serve IT rooms. Emergency power should be sufficient for continued use of the school.

Lighting

Site Lighting: The only site lighting is a single pole fixture illuminating the northeast parking lot. The southeast parking lot is not illuminated. Additional site lighting would be desirable.

Interior Lighting: Interior lighting throughout is surface mounted fluorescents with T-8 lamps, upgraded as part of an energy efficiency project. Additional efficiency could be achieved with occupancy sensors and daylighting. As discussed, emergency exit lighting and exit signs are likely included with the new fixtures as no battery packs were observed.

Fire Alarm

The building is served by an updated fire alarm system, including ADA strobe lights. This system should serve the needs of the school for the future.

Data and Telephone

As previously discussed, data and telephone systems were upgraded in 1996. The MDF room is located at the north classroom wing and the IDF room is located at the south classroom wing. Data and telephone cable routing is extensive, but suffers from the same lack of flexibility as IT power due to limited pathways. Cables are route exposed on "D" hooks in corridors and the surface mounted raceways in classrooms. The overall IT infrastructure should be sufficient for future use of the school.

Security

The school is served by an extensive Sonitrol security system that includes sensors in classrooms, door entry sensors, 20 cameras covering exterior and interior locations, a camera monitor in the office, and 24 hour monitoring.

Improvement	Critical Priority	High Priority	Low Priority	Total
Site Improvements				
Improve parking and driveway grades			961,875	961,875
Striping			1,125	1,125
Wheel stops			4,688	4,688
Repair damaged curbs		3,750		3,750
Regrading and landscaping/drainage @ bldg			341,400	341,400
Irrigation			90,000	90,000
Regrade, pave and stripe hard play area			89,964	89,964
Basketball equipment			7,500	7,500
Repair of low wall			4,680	4,680
Flag pole			2,400	2,400
Exterior school / other signage			13,500	13,500
Misc site demo /saw cut, curbs etc.			11,250	11,250
Bike rack			1,950	1,950
Outdoor children's play equip			37,500	37,500
Building Exterior				
Repair damaged exterior walls		11,775		11,775
Replace windows with thermally efficient glass		172,050		172,050
Replace damaged window sills		1,125		1,125
Replace exterior doors and hardware with new aluminum storefront - single doors		6,000		6,000
Replace exterior doors and hardware with new aluminum storefront - double doors		17,100		17,100
Storefront windows at main entry		4,650		4,650
Replace exterior doors and hardware with new HM .		22,680		22,680
Repair and paint wood fascias			2,531	2,531
Repaint exterior of building			23,550	23,550
Repair any roof leakage and all damaged		42,000		42,000
Solar tubes for corridor natural light			27,300	27,300
Replace columns and downspouts south walkway		4,950		4,950
Replace canopy	21,750			21,750
Replace cracked concrete slab at small canopy	1,011			1,011
Enlarge principal's office, reception and back office and kitchen			158,438	158,438
Repair chimney		5,250		5,250
Refinish wood planks along the walkway and canopy ceilings			7,320	7,320
New metal panel & exterior walls at demolished window etc			10,238	10,238
New brick masonry wall at damaged			6,000	6,000
Building Interior				

Replace damaged floors w/ new			47,200	47,200
New entry mats			2,599	2,599
Quarry tile in kitchen			16,268	16,268
New Rubber base			6,563	6,563
Repair/ repaint all interior walls as needed.			15,938	15,938
Repaint all ceiling as needed.			22,680	22,680
Replace damaged ceilings and add new as reqd.		41,250		41,250
Replace window coverings			9,713	9,713
Replace marker boards			27,000	27,000
Tack surfaces			22,080	22,080
Replace interior doors and hardware			99,000	99,000
Replace double door and hardware			2,700	2,700
Repaint (e) doors			10,725	10,725
Modernize toilet rooms		170,100		170,100
New casework in Principal's, reception & staff, Multi purpose room			54,000	54,000
Close the roof opening on walkway.			1,440	1,440
New ships ladder in boiler room		1,313		1,313
Acoustical panels in multi-purpose room			28,800	28,800
Stage curtain			23,625	23,625
Fire, Life safety & ADA				
ADA compliant reception counter		6,413		6,413
Replace entry threshold add new entry mats		4,394		4,394
Signage with Braille		21,000		21,000
Replace casework and sink with new code compliant casework in classrooms		58,500		58,500
New door at sound proof room for ADA accessibility.		1,650		1,650
Redo Wood shop floor with recessed mats.		5,046		5,046
Install ADA accessible shower in Janitor's room		4,500		4,500
Refinished floor in janitor's for ADA accessibility.		3,375		3,375
Kitchen modification		362,100		362,100
ADA compliant casework and sink in health room		3,750		3,750
100% Fire sprinkler upgrades		15,000		15,000
New ADA plumbing fixtures		180,000		180,000
Miscellaneous				
Miscellaneous demolition - building			18,000	18,000
Site clearing			3,855	3,855
Oil tank decommissioned and removed		67,500		67,500
Heating, Ventilation, and Cooling				
Deferred maintenance allowance		75,000		75,000

Replace boiler plant			180,000	180,000
Add cooling in classrooms			300,000	300,000
Add cooling in admin only		30,000		30,000
Replace temperature controls		150,000		150,000
Plumbing				
Backflow preventer		7,500		7,500
Electrical				
New site lighting - 8 poles		60,000		60,000
New lighting - exterior canopy		3,000		3,000
Occupancy sensors in classrooms and admin		11,250		11,250
Hardwire projector in music room	3,000			3,000
Total	25,761	1,573,970	2,695,391	4,295,123

Visual Inspection – Building Exterior

Part I – Building Exterior – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Window Frames & Glass:	1	Original frame with single pane glazing. The window sealants seem to be damaged at several locations. All windows to be upgraded for code compliance. Louvers at Boiler room are also damaged and should be repaired.
▪ Doors & Frames:	2	Some of doors are not ADA accessible. These need to be replaced with new doors, frames and hardware. Most thresholds do not meet ADA standards. All doors appear to be old and should be refinished. Some of the exterior metal doors and frames that are rusted and damaged need to be replaced. Provide a canopy at south entry to protect door from weather damage. Front entry door is dented at several locations and could be replaced.
▪ Exterior Walls:	2	Exterior bearing walls are 8" concrete walls with 2x4" flat furring @ 16" o.c. exterior walls appear to be cracked at several locations and are more visible at class rooms 2, 4, 6, & 8. All exterior walls that are damaged need to be replaced. The windows that were closed off earlier appear to have gaps along the joints. Repair these gaps to prevent any water seepage. Window sills are also cracked at several locations.
▪ Roof Condition:	4	Most of the original roof was replaced and is a built-up roof over ¾" diagonal sheathing over 2x joists at 16" or 24" o.c. with acoustical tile on wood stripping. However there is urgent need of repair. There appears to be leakage near the internal down

		<p>spouts. At the exterior canopy, the drain pipes from the roof appear to be leaking through the structural columns which now are rusted. These columns support the walkway roof and needs to be checked by a Structural expert for stability.</p>
▪ Chimney at Boiler Room	2	<p>The brick chimney from the boiler room is cracked and calls for immediate repair.</p>
▪ Site Sidewalks & Stairs:	1	<p>The existing sidewalks, are in bad condition and curbs appear cracked in several areas. This repair is urgent</p>
▪ Hard Surface Play Areas:	1	<p>The hard basketball play area is cracked, it needs to be repaved and re-striped for safety concerns. It is also overgrown with moss and weeds. Provide new basketball hoops and other associated accessories.</p>
▪ Parking & Drive Surfaces:	1	<p>The parking areas were striped and reconfigured to improve parking and student drop off congestion. Improvements are still not adequate. There are areas with water ponding problems. There are 2 handicap stalls designated in the front and one at the rear entry. The rear parking lot needs to be redone since the asphalt parking area and driveways are severely cracked and damaged.</p>
▪ Bus Loop and Circulation:	3	<p>Bus loop and parking are located at the main entry which is not ideal because there is more adequate land area available for improvement.</p>
▪ Landscaping:	2	<p>There is very little landscaping on site. The grass in the open areas is not properly maintained. There are areas with moss growth close to the building. Adequate</p>

		landscaping and maintenance is required. There is weed growth at edge of building.
▪ Grading & Drainage:	2	There are several areas that need proper grading and drainage. Area drains that are blocked needs cleaning and repairing.
▪ Irrigation System(s):	1	Irrigation system not visible.
▪ Site Lighting / Electrical:	3	There seems to be some site lighting, however some upgrades could be made for safety reasons. Several exterior electrical conduits are surface-mounted. Conceal all conduits for aesthetics and safety. The lighting system does not appear to be on a sensor system and hence does not switch off automatically. This needs to be checked for proper operation of the sensor.
▪ Site Signage / Flag Pole	3	The school signage needs to be repainted and repairs to the brick wall at signage to be redone. Also the flag pole is rusted. Therefore install new flag pole and improve the landscaping around the area.
▪ Exterior Canopies	2	Exterior NW canopy, drainpipe and the supporting column is badly damaged / rusted. The concrete slab is cracked and the canopy needs to be replaced.
▪ Exterior Finishes:	3	The exterior of the building, fascia, doors etc. need cleaning and to be repainted, however the metal siding appears to be sufficient. Exterior wood ceiling planks at Canopies are discolored and recommended cleaning and refinishing of all ceiling planks.
▪ Other:	1	Service to kitchen is directly off the rear entry. Heavy vehicular traffic in the area is continuing to damage the exterior asphalt paving. Remove the temporary

frame of unused parking structure in the rear side. Repair the damaged rear low wall and install new entry mats at rear entry, which were missing.

Part II –Unsafe / Undesirable Conditions

1. Site repairs and canopy rusted canopy structures need urgent attention and to be addressed at the earliest.
2. The exterior moss filled basketball court to be repaired and resurfaced.
3. Rear parking and driveway to be repaired at the earliest. The rear access into the building from the ADA parking not code compliant due to threshold problems.

Part III – Comments

1. Window frames and glazing are original and not energy efficient.
2. On the south classroom wing the openings in the walkway roof are now covered up with board. The boards could be demolished and the opening could be covered with wooden planks to match the surrounding ceiling.

Visual Inspection – Building Interior

Part I – Basic Components – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Sprinkler System / Location(s):	1	See Consultant's comments.
▪ Floor / Finishes - Carpeting:	2	Carpeting in some of the classrooms are old and could be replaced with new. The base is damaged and missing in several locations.
▪ Floor Finishes – VCT/Vinyl:	2	All the VCT (Vinyl Composition Tile) needs repair in several areas. The VCT in entire school could be replaced. The base throughout the facility is cracking, old and could be replaced.
▪ Walls – Repair and Refinishes:	2	Interior bearing walls and partition walls are 2x6 wood stud @ 16" o.c. with lath and plaster. Several areas of walls are in need of repair, wainscots and paint.
▪ Ceilings (mostly ACT & glue-up tiles):	2	In the gym, some classrooms, and in the corridor the ceilings are old and damaged, which need to be replaced. Some damage is seen in the Multi-purpose room, the library / student room.
▪ Window Coverings:	2	Many classrooms have an outdated curtain system and curtains need to be replaced with window blinds. Some offices have window blinds that are in poor condition and need to be replaced. There are unused window curtain tracks that also need to be removed.
▪ Doors & Hardware	2	Most interior doors, frames, and hardware are dented, old and need to be replaced. Some doors and door knobs are not ADA complaint. Door into classrooms do not have relights.

Part II – Fixtures and Equipment – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Casework & Cabinetry:	2	Most casework is original and thus old and outdated. Cabinets and sinks need to be replaced to meet ADA standards, especially in the classrooms in the South wing where they were designed for an elementary school. Reception counter is not ADA compliant. Provide shutters for the open storage area under the stage in the multipurpose room.
▪ Tackboards / Tacksurface:	2	There are very few tackboards around the corridors. The ones that do exist are in poor condition. These should be replaced and more added.
▪ Markerboards \ Projection Screens:	2	Some marker boards do not have frames around them and needs to be replaced with new ones. Others are old and could be repaired or refinished. The school lacks modern audio-visual presentation technology for the classrooms. There are some unused projection screen brackets on the classroom walls that need to be discarded.
▪ Plumbing Fixtures:	2	There are a few ADA stalls in the building, however most of the toilets are old and non-ADA compliant. Drinking fountains and toilet plumbing fixtures are old and need replacement and most are not ADA compliant. The toilets in the South wing are not ADA accessible, however one common ADA accessible toilet is provide for 10 classrooms.
▪ Acoustics:	2	Due to the amount of hard surface, the school is noisy and needs acoustical treatment. The Multi-purpose room does not have any acoustical paneling which could be installed.

- | | | |
|-----------------|---|---|
| ▪ PE Equipment: | 2 | There is no wall padding, bleachers, or electronic score boards in the multi-purpose room. Lighting seems to be inadequate and these should be addressed. |
| ▪ Kitchen: | 1 | The kitchen equipment is old, but in moderate condition. However the kitchen does not meet ADA standards. Doors and Aisle into the kitchen service line are not ADA compliant and should be addressed immediately. The drawer on the desk near the exterior door opens to the exit way. |
| ▪ Signage: | 3 | Interior signage is not adequate and needs to be code compliant with Braille letters. |
| ▪ Other: | 1 | There is no stage curtains. The ships ladder in the boiler-room are in bad shape and should be replaced. The wheelchair lift room near the stage is used as a storage room and lift is not accessible. |

Part III – Unsafe or Undesirable Conditions

1. Many toilets are not ADA compliant.
2. The building has asbestos in several areas. Asbestos has been contained; however there seems to be damage to the contained asbestos in certain areas. The entire facility needs to be checked to make sure that the asbestos is still remains contained.
3. There are several thermostats that do not have covers. There is urgent need to look into providing proper and safe electrical power for the music room with more acoustical upgrades

Part IV – Comments

1. Most of the flooring, ceilings, and other interior finishes are original. Due to the age of this facility along with asbestos, these could be considered for replacement.

2. Doors and hardware should be upgraded to be handicap accessible. Replace door wire glass with code compliant glass. The metal detector and the tables placed for security reasons at the front entry interferes with the path of exit. These needs should be addressed. The area for inspection of visitors and their personal belongings should not be in the path of travel. The unused grill doors in the corridors need to be remodeled.
3. The Music room projector system has electrical wires and chords installed in a temporary manner. These need to be modified and the data and power installed per code. The Sound Proof Music room Door is less than 36" and needs to be upgraded to meet ADA standards. The Music Room floor has temporary electrical power wiring running along the floor with rubber mats placed over them at high traffic areas. At several locations the level difference in the floor is more than ½" which is not ADA compliant.
4. The Wood shop room floor has temporary rubber mats on each side of the equipment table. At several locations the level difference in the floor is more than ½". Flooring need to be upgraded to meet ADA and code requirements with recessed mats.
5. The stage in the Assembly room # 25 is not ADA accessible. Install ramp or wheel chair lift as required.
6. Floor drains in the toilets are in the middle of the room and in the path of Wheel chair travel.
7. The Shower located in the Janitor's room is not ADA accessible. Install new shower that is ADA compliant. Moreover the various floor levels in the rooms shall be repaired.
8. In the staff room the sink and counters to be ADA compliant. Shutters and Drawers open into the doorway.
9. Provide an ADA Staff toilet.
10. The principal's office and the main reception, back office and storage for the school are small and inadequate. The book shelf and temporary storage is blocking the heater grills. The principal's room lacks areas for a conference or proper storage.
11. The door frames at two locations along the corridors still remain long after the doors have been demolished. These door frames could be removed and replaced with a cased opening for better aesthetic appeal.
12. There are red and green colored exit signs in the building. Standardize all the exit signs to one single code approved color.



Damaged curb at Main Entry



Cracked driveway / ponding



Moss growth at exterior wall



Damaged column at canopy



Cracked walls



Damaged basketball court



Damaged column / leaking drain



Damaged sealants at window



Damaged sill at window



Damaged column at canopy



Damaged brick chimney



Puddle at drain and damaged driveway



Cracked exterior wall



Damaged parking lot – rear side



Leakage in roof



Leakage in roof



Non-compliant threshold



Non-compliant shower



Non-compliant main egress



Crowded reception area



Entry door needs upgrades

Parkrose School District | Thompson Elementary School
Facility Assessment

Thompson School



Address: 14030 NE Sacramento St.
Portland, Oregon 97230

Approx Area: 40,000 sq. ft.
Approx Acres: Data Not Available

Buildings: Original Building:..... 1958
Renovation – Seismic Upgrades..... Data Not Available
Information Technology Upgrades....Data Not Available

INTRODUCTION

Thompson School is currently operated as an early childhood learning school by the Multnomah Educational School District on a lease from Parkrose School District and is situated in Northeast Portland. The building is approximately 40,000 square feet and was constructed in 1958 with subsequent remodels and renovations at various periods. The building was originally an elementary school and the facility includes the administration, multi-purpose rooms, gym, classrooms, parent room, kitchen etc. A portion of the building is sub-leased to the Mount Hood Head Start Program. The kitchen functions as a central kitchen; however it also supports the Early Childhood Program.

After reviewing the existing conditions throughout the building, the building generally appears to meet general life safety and code requirements and appears not to present any hazards to occupants in its current state. This facilities is well maintained however is in need of a remodel and upgrades. There is no immediate evidence of major structural damage to the building on a visual inspection. However there are indications of deterioration such as, cracks on the exterior walls, some minor leakage in roofs, rusted eave flashing, sagging roof edge, etc. which may indicate some minor structural issues.

This report addresses energy issues pertaining to the building envelope particularly the exterior window glazing. Considering the age of the building it does not meet current energy codes, resulting in poor energy performance for the building.

Maintenance issues and accessibility appear to be the main concerns that directly affect building use. Accessibility upgrades are not required by code to be addressed until renovations or additions are made to the building. Most of the maintenance issues can be addressed and prevented through routine inspections. Toilets and doors are old and needs to be upgraded to meet ADA standards. Several pieces of equipment in the kitchen equipments are original and needs to be updated.

The detailed review below describes general observations of current conditions. Maintenance and accessibility issues should be addressed are listed and itemized. The list includes possible solutions and estimated costs for repair or improvement.

Building Exterior

The building has had very little remodeling in recent times and therefore a few things need to be addressed for compliance with current codes. The exterior windows are single pane in their original frames and lack energy efficiency and need to be replaced. The exterior doors are older and need to be replaced and with automatic operators installed at main entry doors.

The rear exterior canopy columns are rusted and need to be thoroughly inspected for structural adequacy. The rear play area needs to be resurfaced.

The East parking areas were recently re-striped to improve circulation. This has helped, but there are still many entrances and parking areas around this facility that cause safety and security issues. The rear parking lot is in urgent need of repair. There are several ADA accessibility issues on the site.

The landscape, grading, paving, sidewalks, curbs, exterior lighting, signage, etc have a few issues that need to be addressed.

Building Interior

The interior of the building has a few issues that include changing floors, doors, hardware, and the carpet is out of date and needs to be replaced. The toilet facilities are limited with old plumbing fixtures, and most are non ADA compliant. There are places where the floor is not level and the kitchen service counter is not ADA accessible.

Most of the South side classrooms and toilets are not handicap accessible due to threshold and door width.

Mechanical, Electrical & Plumbing Systems - Findings

General

The school has been upgraded for seismic issues and to improve information technology infrastructure. Changes that significantly affected MEP systems include removal of glass block

from classroom window walls. IT power and data improvements, including an upgraded electrical service and updated ADA fire alarm.

All recommended budgets are in current dollars without contingency or soft costs, and do not include contracts for non MEP trades such as, carpenters for cutting and patching.

Fire Sprinkler System

The building is not protected by fire sprinklers. Any significant renovation will likely trigger full sprinkler coverage.

HVAC Systems

Building Envelope: The building envelope is inefficient by current standards. Windows are single glazed and wall and roof insulation is likely below current efficient standards. This likely will result in high energy use and energy bills. The orientation of classrooms is ideal for a sustainable renovation including insulation, efficient glass with shading on the South, daylighting, and new HVAC.

Heating: The primary heating source for the school is the original, high fire box, fire tube, low pressure steam boiler. Steam is used directly for coils in fan systems and converted to heating water in the boiler room and pumped to floor panel, reheat coils, and fin pipe heating throughout the school. Heating equipment is operational; and, with good maintenance, can continue to operate in the future.

Several potential downstream issues are possible:

1. While good maintenance can extend the life of the equipment, replacement may be a better option in the future. Failing equipment or major renovation could trigger an upgrade to a newer, more efficient system.
2. Floor panel heating systems are good for the radiant heat effect, but are difficult to control and are susceptible to failure over time. Floor panels take several hours to warm up and several hours to cool down. If controls don't anticipate this time lag, spaces can be cold in the morning and hot in the afternoon. Many rooms have already replaced floor panel heating systems due to control problems or pipe failure, and installed a hot water reheat coil in the ventilation supply duct.
3. The boiler appears to have been originally fired by oil as there is an oil tank vent outside the boiler room. It was not known whether the oil tank had been removed or decommissioned. If not, this would be a liability.

Cooling: The school has added a cooling system through the wall air conditioning units. The school program is a 12 month operation and needs air conditioning. The service life of through the wall air conditioners is limited. For ongoing 12 month operation, a more durable cooling solution should be considered.

Ventilation: Most spaces are ventilated by fans distributing outside air via tunnels below corridors to rooms. It is not clear whether all of the air is exhausted, or if some is re-circulated.

Systems of this design and vintage did both. Outside air is taken in via a sidewall louver and heated with steam coils. There is one tunnel fan system. The multipurpose and parents' rooms are heated and ventilated by cabinet fans with a steam heating coils. Kitchen hood make-up air is transferred from the Parent room. There were no problems identified with the ventilation systems.

Exhaust Systems: Toilets and janitors rooms are exhausted to the roof top exhaust fans or gravity vents.

Temperature Controls: Temperature controls are mostly original pneumatic. The controls air compressor and after dryer are located in the boiler room. It appears that minimal electronic DDC controls were installed to schedule system operation. Thermostats are in disrepair throughout the school. Controls should be upgraded for future operation of the building, whether renovated or not.

Plumbing Systems

Roof Drainage: Roofs drain by interior drains via storm sewer piping, reportedly to drywells on the site. There are no current problems noted.

Sanitary Waste and Vent: Building plumbing systems drain via waste piping to a municipal sewer. A grease trap likely serves the kitchen, but was not observed. There are no current reported problems with the waste and vent systems.

Domestic Cold and Hot Water: Domestic cold water is served to a water heater in the boiler room. Water piping is mostly original galvanized steel. No significant rusting problems were noted in plumbing fixture. Domestic hot water is generated by a gas hot water heater in the boiler room. No problems were noted with hot and cold water systems. Significant renovation should use copper piping and include a reduced pressure backflow preventer.

Natural Gas: Natural gas serves a meter outside the South end of the boiler room. The boiler is served with 2 PSIG gas, and the pressure is likely reduced to serve the water heater and kitchen equipment. No problems are reported with the natural gas system.

Plumbing Fixtures: Most plumbing fixtures are original. While still functional, they do not meet ADA standards in many cases; and they are high in water consumption. There is no immediate need to upgrade fixtures, but renovations would likely trigger ADA upgrades.

Electrical Power

Normal Power: Power is provided by PGE at 480 volt, 3 phases, and 4 wires from a pole mounted transformers via buried feeders to a meter in the boiler room. New electrical panels were installed for the IT upgrade. Branch circuits are both original concealed conduits and new surface mounted raceways. Even with upgraded power distribution to classrooms, pathways are limited to walls. The power infrastructure is sufficient to support the ongoing use of the school, but limits paths for raceways will limit flexibility.

Emergency Power: Emergency power is likely provided by branch panel fed from the main distribution panel. Emergency power appears to serve emergency lighting and fire alarm. This is no longer an acceptable method of providing emergency power. Renovation would trigger an emergency generator, or alternate emergency power source.

Lighting

Site Lighting: The only site lighting is a single, two head, pole fixture illuminating the North parking lot. Additional site lighting would be desirable.

Interior Lighting: Interior lighting is throughout are surface mounted and suspended fluorescent fixtures with T-8 lamps, upgraded as part of an energy efficiency project. Additional efficiency could be achieved with occupancy sensors and daylighting. As discussed, emergency exit lighting and exit signs are likely included with the new fixtures as no battery packs were observed.

Fire Alarm

The building is served by an updated fire alarm system; including ADA strobe lights and existing pull stations. This system should serve the needs of the school for the future.

Data and Telephone

As previously discussed, data and telephone systems were recently upgraded. Two MDF rooms are located at the West classroom wing and adjoining the gym. Data and telephone cable routing is extensive, but suffers from the same lack of flexibility as IT power due to limited pathways. Cables are exposed in surface mounted raceways in corridors and classrooms. The overall IT infrastructure should be sufficient for future use of the school.

Security

The school is served by an extensive Sonitrol Security System that includes sensors in classrooms, door entry sensors.

Improvement	Critical Priority	High Priority	Low Priority	Total
Site Improvements				
Paint curb at front parking lot			3,375	3,375
Landscaping @ bldg periphery at entry areas			12,803	12,803
Irrigation			3,375	3,375
Regrade, pave and stripe hard play area - west and southern side		346,875		346,875
Flag pole brick base to be cleaned / repaired			2,400	2,400
Repaint exterior school signage			750	750
Repair cracked concrete slab walkway in covered area			7,500	7,500
Repair cracked pathways			11,250	11,250
Clean existing walkways from stains / moss etc.			15,000	15,000
Repaint 2 batting cages that are rusted			4,500	4,500
Building Exterior				
Repair damaged cracks and damages on exterior walls		11,250		11,250
Exterior brick veneer - clean/apply anti-graffiti coating			35,880	35,880
Replace windows with thermally efficient glass		234,546		234,546
Replace exterior main entry doors and hardware with new aluminum storefront		17,100		17,100
Replace exterior single doors and hardware with new HM .			12,960	12,960
Replace exterior double door and hardware with new HM .			2,775	2,775
Replace exterior door hardware			16,875	16,875
Replace metal eaves flashing		6,300		6,300
Aluminum coping @ parapet near entry			2,250	2,250
Paint exterior of Building			20,550	20,550
Repair roof leakage and all damaged downspouts		33,750		33,750
Replace damaged canopy on south west corner	29,250			29,250
Replace cracked concrete slab at rear canopy	1,360			1,360
Building Interior				
Replace damaged floors w/ new		49,320		49,320
New recessed entry mats		13,125		13,125
Repair/ paint all interior walls.			183,218	183,218
Install wainscot in corridors			51,829	51,829
Paint all ceiling as needed.			30,000	30,000

Replace damaged ceilings and add new as reqd.			52,500	52,500
Replace window coverings			7,875	7,875
Replace marker boards			27,000	27,000
Tack surfaces			22,080	22,080
Replace interior doors and hardware		89,100		89,100
Replace double door and hardware		8,100		8,100
Install exit signs above all egress doors.		0		0
Modernize toilet rooms			317,625	317,625
New ships ladder in boiler room		1,313		1,313
Acoustical panels in multi-purpose room and library			28,800	28,800
Replace stage curtain			23,625	23,625
Re-finish all casework.			5,160	5,160
Replace counters			72,188	72,188
Fire, Life safety & ADA				
ADA compliant reception counter		6413		6,413
Signage with Braille		21000		21,000
Kitchen modification		285000		285,000
Install wheelchair lift at stage & modifications		30000		30,000
100% fire sprinklers		100000		100,000
New ADA plumbing fixtures - assume 40 fixtures		120000		120,000
Miscellaneous				
Miscellaneous demolitions for grill door/ ADA toilet etc			18,000	18,000
Site clearing			1,500	1,500
Oil tank decommissioning /removal		67,500		67,500
Heating, Ventilation, and Cooling				
Replace boiler plant			120,000	120,000
Replace air conditioners			100,000	100,000
Replace temperature controls		100000		100,000
Plumbing				
Backflow preventer		5000		5,000
Electrical				
New site lighting - 8 poles		40000		40,000
New lighting - exterior canopy		2000		2,000
Occupancy sensor in classrooms & admin		7500		7,500
Total	30,610	1,595,191	1,213,642	2,839,443

Visual Inspection – Building Exterior

Part I – Building Exterior – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Window Frames & Glass:	1	Original frame with single pane glazing. The window sealants seem to be damaged at several locations. All windows to be upgraded for code compliance.
▪ Doors & Frames:	2	Some of doors are not ADA accessible and old which need to be replaced with new doors, frames and hardware. As well as most of the exterior metal doors and frames and hinges are rusted and needs to be replaced.
▪ Exterior Walls:	3	Exterior bearing walls appear to be cracked at several locations and are more visible outside classrooms on the East side. Parapet needs aluminum coping at the front entry.
▪ Roof Condition:	4	There appears to be stains on the interior ceiling due to leakage at the stage and in the library. The exterior canopy roof in the rear side is in need of repairs. The pre-finished eave flashing is rusted and needs to be replaced in several areas.
▪ Site Sidewalks & Stairs:	2	The existing sidewalks, are in bad condition at several areas. Repair is urgent for safety reasons mainly in the rear areas. The sidewalks at the main entry (North side) appear to be in good condition.
▪ Hard Surface Play Areas:	1	The hard basketball play area is cracked, it needs to be repaved and re-stripped for safety concerns. It is also overgrown with moss and weeds. Provide new basketball hoops and other associated accessories.

- | | | |
|-------------------------------|---|---|
| ▪ Parking & Drive Surfaces: | 4 | The parking areas were striped and reconfigured to improve parking and student drop off congestion. There are 2 handicap stalls designated near the front entry. The Northwest parking lot is in good condition. The curbs near the entry need to be repainted. |
| ▪ Bus Loop & Circulation: | 5 | Bus loop and parking is at the main entry. The covered drop off seems well maintained and is sufficient. |
| ▪ Landscaping: | 3 | There is very little landscaping on site except for the grass and older trees. The grass in the open areas is appears to be maintained, however there are areas with moss and weed growth close to the building. New landscaping and maintenance is required along with irrigation. |
| ▪ Grading & Drainage: | 4 | There are some areas that need proper grading and drainage. However this is quite negligible and is not a priority at this time. |
| ▪ Irrigation System(s): | 1 | Irrigation system not visible. |
| ▪ Site Lighting / Electrical: | 3 | There seems to be some site lighting, however some upgrades could be made for safety reasons. The lighting system did not appear to be on a sensor system. |
| ▪ Site Signage / Flag Pole | 3 | The school signage needs to be repainted. Repairs needed at the brick wall at the flag pole. Refinish the flag pole and improve the landscaping around the area. |
| ▪ Exterior Canopies | 2 | Exterior South East canopy appears to be damaged and needs to be repaired. |
| ▪ Exterior Finishes: | 3 | The exterior of the building, brick veneer, fascia, etc. need cleaning and repairs. The metal siding appears to be sufficient. Exterior |

wood ceiling planks at canopies are discolored. Clean and refinish all ceiling planks.

▪ Other:

1

Install new recessed entry mats at all entries.

Visual Inspection – Building Interior

Part I – Basic Components – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Sprinkler System / Location(s):	-	See Consultant's comments.
▪ Floor/Finishes - Carpeting:	2	Carpeting in some of the classrooms are old and could be replaced with new.
▪ Floor Finishes – VAT/Vinyl:	1	The VAT flooring and base in the entire school is old and could be replaced.
▪ Walls –Repair & Refinishes:	3	Interior bearing walls and partition walls are 2x6 wood studs with lath and plaster. Some areas of walls, wainscots and paint are in need of repair.
▪ Ceilings (Gyp Bd / Glue-up Tiles):	4	Mostly the ceiling appears to be painted gypsum board and glue-up ceilings. In the gym, some classrooms, and in the stage area these appear to be damaged and needs to be replaced.
▪ Window Coverings:	2	Many classrooms have an outdated Window covering system. Replace these with new window blinds.
▪ Doors & Hardware	1	Most interior doors, frames, and hardware are old and need to be replaced. Some doors and all knobs are not ADA complaint.

Part II – Fixtures and Equipment – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Casework & Cabinetry:	2	Most casework is original and thus old and outdated. Reception counter is not ADA compliant. Refinish original casework and

		replace reception counter with new.
▪ Marker Boards / Tack-surface:	2	There are very few tackboards around the corridors. Add new tack surfaces.
▪ Plumbing Fixtures:	2	There are a few ADA stalls in the building, however most of the toilets are old and non-ADA compliant. Drinking fountains and toilet plumbing fixtures are old and need replacement. Most are not ADA compliant.
▪ Acoustics:	3	Due to the amount of hard surface, this school is noisy and needs some acoustical treatment. The Multi-purpose room and Gym does not have any acoustical panels and could be installed as required.
▪ PE Equipment:	4	There seems to be children's play equipment in the gym and the multi-purpose room, they appear to be in good condition.
▪ Kitchen:	3	The kitchen equipment is old, but in moderate condition.
▪ Signage:	2	Interior signage not adequate and needs to be code compliant with added Braille letters.
▪ Other:	1	The Stage Curtains are ripped and needs to be replaced. The stage is also used as storage for student records. A ships ladder is required in the boiler room in lieu of the ladder. There is no wheelchair lift near the stage and hence the stage is not accessible.

Part III – Unsafe or Undesirable Conditions

1. Many toilets are not ADA compliant.

2. The building has asbestos in several areas. Asbestos has been contained; however there seems to be damage to the contained asbestos in certain areas. The entire facility needs to be checked to make sure that the asbestos still remains contained.
3. There are thermostats that do not have covers.

Part IV – Comments

1. Most of the flooring, ceilings, and other interior finishes are original. Due to the age of this facility along with asbestos, these should be considered for replacement.
2. Doors and hardware should be upgraded to be handicap accessible. The unused grill doors in the corridors should to be demolished.
3. Provide an ADA staff toilet and upgrade other existing toilets.
4. There are exit signs without any color. Standardize all the exit signs to one single code approved color. Install exit signs at all exit doors.



Damaged hard play area



Damaged hard play area- rear side



Damaged pathway



Rusted eave flashing



Rusted eave flashing



Damaged overhang



Cracked brickwork



Base of Flag post at Main Entry



Damage at covered walkway



Coping needed @ entry



Damaged sealants @ single pane window



Non-compliant door knobs



Exit doors without exit sign



Install automatic operator



Rusted hinges at exterior door



Adequate signage is needed.



Leaks in library ceiling



Leaks in main stage ceiling



Stage used as store room



Existing VAT floor tiles



Damaged flooring at toilet



Toilets to be modernized



Toilets need to be modernized



Casework to be refinished



Interior wall to be patched and painted



Front curb to be repainted



Roof edge appears sagged



Asbestos to be inspected

Knott School



Address: 11456 NE Knott St.
Portland, Oregon 97220

Approx Area: 32, 592 sq. ft.
Approx Acres: 5.29 Acres

Buildings: Original Building:.....1951

INTRODUCTION

Knott School is one of the oldest facilities in the District. It is located in a residential neighborhood. The building is approximately 32,600 square feet. The building is not a traditional school; this facility houses the Morrison Center and Mt. Hood Community College Head Start.

After reviewing the existing conditions throughout the building, the building does not appear to have had any major upgrades or remodels since it was originally built, although some roofing working has been recently done.

It would be recommended that for this facility to continue its current function or to function as a traditional school, extensive remodeling and upgrades would need to occur. Facility replacement may also be an option. The detailed review below describes general observations of current conditions.

Building & Site

The exterior windows appear to be original single pane glazing that is detrimental to the heating and cooling of this facility. Window frames show rust and appear well beyond their useful life. In addition, there is a significant amount of glass block in the facility. The building's façade has some damage and cracking; there is water damage on the underside of several wood canopies. Gutters have been damaged. Metal siding also shows areas of damage and age due to the elements.

There are 44 standard parking stalls and 2 handicapped parking spaces; buses pull up in front of the building and block several of the parking stalls. Both the asphalt paving and adjacent sidewalks are in fair condition. There was some ponding around the cleanout in the parking lot area. For the current function of the facility the parking appears adequate; however, this would have to be re-evaluated should this facility return to function as a traditional elementary school.

Building Interior

The building has many finishes and materials that are beyond their useful life. The majority of finishes, hardware and fixtures (i.e. cabinetry and toilet rooms) are original and not only show signs of age but do not meet current accessibility or code requirements. Some spaces are not accessible, including the stage. The gymnasium has many hard surfaces and lacks proper equipment. The flooring is a variety of different materials. There are leaks from the roof affecting the ceiling; one such area is the electrical room. The carpeting in many of the office spaces is well beyond its life, but is also buckling.

Mechanical, Electrical & Plumbing Systems - Findings

General

See the attached spreadsheet for recommended budgets. All recommended budgets are in current dollars without contingency or soft costs, and do not include contracts for non MEP trades such as carpenters for cutting and patching.

Fire Sprinkler System

There are currently no Fire sprinklers in this facility.

HVAC Systems

Building Envelope: The building envelope is inefficient by current standards. Windows are single glazed and wall and roof insulation is likely below current efficient standards. Which in conjunction with temperature control problems (see temperature controls), likely results in high energy use and energy bills.

Heating: The primary heating source for the school is the original, high fire box, fire tube, low pressure steam boiler. Steam is used directly for coils in fan systems and converted to heating water in the boiler room and pumped to floor panel and fin pipe heating throughout the school. Heating equipment is operational; and, with good maintenance, can continue to operate in the future. Several potential downstream issues are possible:

1. The extent of deferred maintenance is unknown. Many components, including the condensate pumps and heating water pumps, appear to need preventive maintenance.

2. While good maintenance can extend the life of the equipment, replacement may be a better option in the future. Failing equipment or major renovation could trigger an upgrade to a newer, more efficient system.
3. Floor panel heating systems are good for the radiant heat effect, but are difficult to control and are susceptible to failure over time. Floor panel take several hours to warm up and several hours to cool down. If controls don't anticipate this time lag, spaces can be cold in the morning and hot in the afternoon. Rooms were observed with open windows on a cold afternoon, indicating control problems exist. It was also reported that systems are operated over night in cold weather, adding to energy use. Many schools of this vintage and design have already replaced floor panel heating systems due to control problems or pipe failure. It was reported that there are a number of areas that have been shut off due to leaks. They include the library, and adjacent office spaces.
4. The boiler appear to have been originally fired by oil as there is an oil tank vent outside the southeast corner of the boiler room. It was not known whether the oil tank had been removed or decommissioned. If not, this would be a liability.

Cooling: The school has no cooling systems. It is recommended that that at a minimum cooling be added to the data rooms and computer classrooms.

Ventilation: Most spaces are ventilated by fans distributing outside air via tunnels below corridors to rooms. It is not clear whether all of the air is exhausted, or if some is recirculated. Systems of this design and vintage did both. Outside air is taken in via roof heads and heated with steam coils. There is one tunnel system per wing. The multipurpose room is heated and ventilated by a cabinet fan with a steam heating coil. Kitchen ventilation and hood make-up air were not observed. There were no problems identified with the ventilation systems.

Exhaust Systems: Toilets and janitors rooms are exhausted by gravity vents. It is recommended that mechanical exhaust be added to the restrooms.

Temperature Controls: Temperature controls are mostly original pneumatic. The controls air compressor and after dryer are located in the boiler room. Controls should be upgraded for future operation of the building, whether renovated or not.

Plumbing Systems

Roof Drainage: Roofs drain by both gutters and downspouts and interior drains via storm sewer piping, reportedly to drywells on the site. Interior roof drains do not have overflow drains, and any significant renovation would likely trigger an upgrade to include overflow.

Sanitary Waste and Vent: Building plumbing systems originally drained via waste piping to a Septic tank and leaching wells. This waste has since been connected to the city sewer system. It is not known if the septic tank was properly decommissioned. It does not appear that a grease trap serves the kitchen. There are no current reported problems with the waste and vent systems.

Domestic Cold and Hot Water: Domestic cold water is served from NE 127th to a trench on the west side of the building. Water piping is mostly original galvanized steel. No significant rusting problems were noted in plumbing fixture. Domestic hot water is generated by a gas hot water

heater in the fan room above the kitchen. No problems were noted with hot and cold water systems. Significant renovation should use copper piping and include a reduced pressure backflow preventer.

Natural Gas: Natural gas serves a meter outside the south end of the boiler room. The boiler is served with 5 PSIG gas, and the pressure is likely reduced to serve the water heater and kitchen equipment. No problems are reported with the natural gas system.

Plumbing Fixtures: Most plumbing fixtures are original. They are high in water consumption. There is no immediate need to upgrade fixtures. Restrooms should be upgraded to meet ADA requirements.

Electrical Power

Normal Power: Power is provided by Portland General Electric from pole mounted transformers at the northeast corner of the property along NE Knott St. The feeders are then routed via buried feeders to a meter on the east exterior wall of the multipurpose room and to switchgear in the stage area. The service is 480 volt, 3 phase, 4 wire and distributes power via a tunnel to transformers and panels. The service and switchgear are original Coast Electric Panels which is no longer in business. The power infrastructure is sufficient to support the ongoing use of the school, but limited paths for raceways will limit flexibility.

Emergency Power: Emergency power does not exist in this school. Emergency lighting is very minimal.

Lighting

Site Lighting: The site lighting is only present on the east parking area and includes three pole fixtures. The west parking lot is not illuminated. Additional site lighting would be desirable.

Exterior Lighting: The exterior lighting under the canopy is HID, high pressure sodium, which is switched at the front entrance. Unfortunately the switch was left on so the lights were on during the day. Suggest adding controls to save energy.

Interior Lighting: Interior lighting throughout the school is a mixture of incandescent and fluorescent fixtures with T-12 lamps and magnetic ballasts. Additional efficiency could be achieved by upgrading to T-8 lamps and electronic ballasts and also add occupancy sensors and daylighting controls to classrooms and offices. As discussed, emergency exit lighting and exit signs need to be included with the new fixtures as no battery packs were observed.

Fire Alarm

The building is served by an outdated fire alarm system and does not meet American with Disabilities Act (ADA) by not having strobe lights in classrooms, Hallways and restrooms. This system should be upgraded if the school district continues to use this building.

Data and Telephone

Since the building is leased by the school district, there has not been an upgrade to the IT.

Security

The school is served by a simple security system that includes sensors in corridors and selected locations and 24 hour monitoring.

Improvement	Critical Priority	High Priority	Low Priority	Total
Site Improvements				
Grading in parking lot			7,500	7,500
Building Exterior				
Replace all exterior window w/ energy efficient windows		186,000		186,000
Demo glass block and replace windows		340,308		340,308
Repair damaged siding		40,500		40,500
Replace canopies		19,800		19,800
Replace entry doors with storefront		22,800		22,800
Replace exterior doors and hardware		12,000		12,000
Repair and paint wood fascias		18,326		18,326
Replace metal eave flashing / gutter			36,653	36,653
Paint exterior		20,214		20,214
Misc Exterior Repairs			7,500	7,500
Roof Repairs		73,125		73,125
Building Interior				
Replace Carpeting		65,205		65,205
Repair/ repaint all interior walls as needed.			32,636	32,636
Replace damaged ceilings and add new as needed			67,221	67,221
Replace interior doors and hardware - classrooms and office		54,600		54,600
Replace misc. interior doors and hardware		49,500		49,500
Modernize toilet rooms		189,000		189,000
New casework in classrooms		80,640		80,640
Removal of glass block/replace with windows			33,780	33,780
New casework - administration			18,000	18,000
Modernize Toilet rooms in Classrooms			63,000	63,000
New Blinds for Classrooms			8,820	8,820
Misc. Interior Repairs			4,500	4,500
Provide casework for a library			27,443	27,443
Fire, Life safety & ADA				
ADA Compliant Signage		12,222		12,222
ADA modifications to inaccessible spaces		37,500		37,500
100% Fire Sprinklers		225,000		225,000
Miscellaneous				
Oil Tank Decommissioning		67,500		67,500
Kitchen Upgrade			207,900	207,900
Heating, Ventilation, and Cooling				
Deferred Maintenance - Allowance		75,000		75,000
Replace Boiler Plant			180,000	180,000

Replacement of Floor Panel Heating (classrooms)		75,000		
Add Cooling - Classrooms			600,000	600,000
Add Cooling - Administration		45,000		45,000
Add Cooling - Server Room		15,000		15,000
Add Cooling - Computer Classroom		60,000		60,000
Replace Temperature Controls		225,000		225,000
Plumbing				
New ADA Plumbing Fixtures (assume 40)		180,000		180,000
Backflow Preventer		7,500		7,500
Domestic Piping Replacement		262,500		262,500
Electrical				
New Lighting with T8 Lamps and Electronic Ballasts			104,700	104,700
New Panels and Switchgear			63,000	63,000
Occupancy Sensors in Classrooms and Administration			14,250	14,250
Site Lighting - west parking area			22,500	22,500
Total		2,459,240	1,499,402	3,883,642

Visual Inspection – Building Exterior

Part I – Building Exterior – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Window Frames & Glass:	1	Windows are original. Many frames are rusted. Glazing is not energy efficient. Some windows appear to have been painted over.
▪ Doors & Frames:	1/2	All doors appear to be old and should be refinished. Exterior doors are not power actuated; hardware in general does not meet ADA requirements.
▪ Exterior Walls:	2	Exterior walls are in poor to fair shape. There are damaged walls and metal siding. Gutters are damaged. In addition, paint is chipped off most exterior materials
▪ Site Sidewalks & Stairs:	2	The existing sidewalks are in poor condition.
▪ Hard Surface Play Areas:	N/A	Not observed.
▪ Parking & Drive Surfaces:	2	The parking lot is in fair condition; there are some drainage issues at the catch basin.
▪ Bus Loop and Circulation:	3	Buses line up in front of the main entry and block several standard parking stalls. Due to the unique use of this facility, it is unknown if there is traffic congestion.
▪ Landscaping:	3	Landscaping is in good condition, particularly the adjacent lawn/park space.
▪ Grading & Drainage:	N/A	
▪ Irrigation System(s):	N/A	Irrigation system not visible.
▪ Site Lighting / Electrical:	2/3	It is not certain if site lighting exists, none was noted at time of

observation. If none exists, site lighting for security should be added around the building and in the parking area.

- | | | |
|----------------------------|-----|--|
| ▪ Site Signage / Flag Pole | 2/3 | There was no evidence of a flagpole of permanent site signage. |
| ▪ Exterior Canopies | 1 | The wood canopy ceilings are showing signs of rot and water damage. Other canopy elements show signs of age and exposure to the elements. |
| ▪ Exterior Finishes: | 2 | The exterior of the building, fascia, doors etc. need cleaning and to be repainted. There are several areas around the perimeter that need to be repaired. |

Part II –Unsafe / Undesirable Conditions

1. It appears no significant upgrades have been done to this facility since it was built. Areas of concern are the suspect asbestos materials, glass block and water damage to the ceiling in the electrical room.

Part III – Comments

1. The exterior appear to have had little if no work done. Exterior components are showing that they are at the end of their useful life.
2. A detailed structural analysis is recommended.
3. A thorough evaluation of the roof and roof structure is recommended.

Visual Inspection – Building Interior**Part I – Basic Components – Rated on a Scale of 1 (poor) to 5 (excellent)**

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Sprinkler System/Location(s):	--	See Consultant's comments.
▪ Floor Finishes – VCT/Vinyl:	1	The majority of the floor is suspect of VAT and needs to replace throughout the facility. Wall base needs to be removed and replaced on all walls.
• Floor Finishes – Carpet:	1	Carpet is damaged and beyond its useful life. Carpet is rippling in several rooms.
▪ Walls –Repair and Refinishes:	2	Walls show signs of wear and damaged in various locations throughout the entire facility. Wall base is pulling off of the wall surface.
• Ceilings:	1	There is evidence of damaged tiles throughout the entire facility. Ceiling tile is suspect of containing asbestos.
• Window Coverings:	1	Blinds do not appear to be new and are damaged / bent. Blinds are a combination of horizontal and vertical blinds.
▪ Doors & Hardware	2	Interior doors and frame are original and show signs of wear and age. Some doors contain wire glass; hardware in general does not comply with accessibility guidelines.

Part II – Fixtures and Equipment – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Casework & Cabinetry:	2	Most casework is original and showing signs of its age.

Cabinets and sinks need to be replaced and comply with ADA standards.

- | | | |
|--------------------------------------|-----|--|
| ▪ Tackboards / Tacksurface: | N/A | |
| ▪ Markerboards \ Projection Screens: | N/A | Most classrooms were unable to be observed due to programs offered at this facility. Those observed have markerboards and projection screens mounted over chalkboards. |
| ▪ Plumbing Fixtures: | 1 | Upgrades need to be done in all restroom facilities. Cosmetic upgrades should occur as well. |
| ▪ Acoustics: | 2 | There is a significant amount of hard surfaces throughout the facility. |
| ▪ PE Equipment: | 2 | There is no wall padding, bleachers, or electronic score boards in the gymnasium. There is a stage with steps. There does not appear to be ADA access. The stage is currently used as storage and barricaded off from gymnasium. |
| ▪ Kitchen: | 2 | The kitchen equipment is old, but in moderate condition. Cabinetry appears to be original and is showing its age. It is not certain if it functions as a traditional kitchen facility. |
| ▪ Signage: | 1 | Compliant interior signage needs to be provided for all rooms. |
| ▪ Other: | 2 | Several interior spaces contain glass block windows. |

Part III – Unsafe or Undesirable Conditions

Part IV – Comments

1. It appears that most of this facility has original components that do not meet current standards. In addition, there are nearing or beyond their useful life. Accessibility issues need to be addressed if this building continues its current function or is used as a traditional school facility.



Exterior wall



Damage at canopy



Exterior windows



Fascia and overhang



Wall / roof conditions



Carpet



Cabinetry



Damaged ceiling



Interior window



Interior windows



Door / door hardware



Door / hardware and countertop



Main entry

Parkrose School District | District Administration & Maintenance Facility
Facility Assessment

District Administration & Maintenance Facility



Address: 10636 N.E. Prescott St.
Portland, Oregon 97220

Approx Area: 20,700 sq. ft. (Main Building, Operations, and Warehouse)
Approx Acres: 2.13 acres

Buildings: Operations:..... 1955
Warehouse:..... 1955
Main Building:..... 1963
Other Remodels / Upgrades.....Data Not Available

INTRODUCTION

The District Administration and Maintenance Facility is an older facility that is located in Northeast Portland. The building is approximately 20,000 square feet, and was constructed in two parts in 1955, with a subsequent addition in 1963. The facility includes the Main Building, Operations, District Warehouse and School Bus Parking.

After reviewing the existing conditions throughout the building, the building generally appears lacks some life safety and code requirements. However it does not appear to present any hazards to occupants for its current daily use. The Main Building, although well maintained, the operations and the warehouse are in need of a renovation / remodel. Roof drainage, ceilings etc are in need of repairs. Some parts of the flooring are in bad condition and will need to be replaced. There are indications of deterioration such as minor cracks on the exterior walls, doors that do not operate properly and toilets that need ADA upgrades. There is minor evidence of leakage in certain areas, especially in the maintenance shop. A visual inspection revealed that there are problems with interior doors, ceilings, flooring, and other general maintenance issues like painting etc. A separate detailed review of the roof and the structure would

accurately indicate the present structural condition of the building. Structural review is not part of this assessment or scope of work.

This report addresses energy issues pertaining to the building envelope particularly the exterior window glazing. Considering the age of the building its insulation does not meet current energy codes.

Maintenance issues and accessibility appear to be of concern. As described below, accessibility upgrades are not required by code to be addressed until renovations or additions are made to the building. Most of the maintenance issues can be addressed and prevented through routine inspections by the maintenance staff.

The detailed review below describes general observations of current conditions. Maintenance and accessibility issues that should be addressed are listed and itemized by priority. The lists include possible solutions and estimated costs for repair or improvement.

The building contains suspect asbestos materials. Review of asbestos is not part of this assessment or scope of work. Additionally, review of current technology systems or suggestions for upgrades is not part of this assessment or scope of work.

Building Exterior & Site

The building has had very little or no remodeling in recent times and therefore many items need to be replaced or are not in compliance with current code. The exterior windows need to be replaced with energy efficient windows. Some of the other exterior doors could be upgraded with panic hardware.

The asphalt paving in the parking and driveways have minor cracks and need to be repaired. The parking areas also need to be striped. The drainage in the middle of the paved area by the fuel pumps needs to be addressed as there appears to be some drainage problems. Minor cracks were seen on the sidewalk by the entry and the curb appeared to be cracked in that location. Other minor site issues were the lack of bollards, The exterior brick veneer to be cleaned and sealed. The single pane exterior doors and window need to be replaced with energy efficient ones. Repairs to ceilings, floors, replacement of doors, etc are some other minor issues.

Building Interior

The building has many finishes and materials that are fairly old. This includes floors especially the carpets which are out dated. Install new recessed entry mats at the main entryways. The doors are of wood and they are old and could be refinished. Wooden case work is old and needs to be refinished and new countertops installed, the hardware and pulls to be replaced with new. There appears to be insufficient storage shelves in the warehouse and the other maintenance areas. New signage needs to be installed and the building needs to be painted. Install new window blinds at new windows.

ADA, Life & Safety and code issues

The toilet facilities in the operations / maintenance area are non ADA compliant and need to be upgraded. There is no ADA curb cut by the building and these needs to be installed. Sinks at casework sinks are not ADA compliant; replace these with new. A few doors have non compliant door knobs while most fire doors do not have panic hardware. There are no fire exits in the warehouse, and maintenance shop, vehicle maintenance areas.

Mechanical, Electrical & Plumbing Systems Findings - District Office

General

The District Office was originally built in 1963; the building is approximately 4,000 gross square feet.

All recommended budgets are in current dollars without contingency or soft costs, and do not include contracts for non MEP trades such as carpenters for cutting and patching.

Fire Sprinkler System

There are currently no fire sprinklers in this facility.

Plumbing Systems

Roof Drainage: Roofs drain by gutters reportedly to drywells on the site.

Sanitary Waste and Vent: Building plumbing systems originally drained via waste piping to a Septic tank and leaching wells. This waste has since been connected to the city sewer system. It is not known if the septic tank was properly decommissioned. There are no current reported problems with the waste and vent systems.

Domestic Cold and Hot Water: Domestic cold water is served from NE Prescott on the North side of the building. Water piping is mostly original galvanized steel. No significant rusting problems were noted in plumbing fixture. Domestic hot water is generated by a gas hot water heater in the fan room. No problems were noted with hot and cold water systems. Significant renovation should use copper piping and include a reduced pressure backflow preventer.

Natural Gas: Natural gas serves a meter outside the Southeast side of the building. No problems are reported with the natural gas system.

Plumbing Fixtures: Most plumbing fixtures are original. They are high in water consumption. There is no immediate need to upgrade fixtures. Restrooms should be upgraded to meet ADA requirements.

HVAC Systems

Building Envelope: The building envelope is inefficient by current standards. Windows are single glazed and wall and roof insulation is likely below current efficient standards.

Heating: The primary heating source for the building is gas fired furnace with spit system cooling (4 zones). It appears these are probably from the late '90's. There were no problems reported with these systems.

Exhaust Systems: Toilets and janitors rooms are exhausted by room exhaust fans.

Electrical Power

Normal Power: Power is provided by Pacific Power & Light from pole mounted transformers at the west corner of the building near the entrance to the Bus Maintenance Facility. The feeders are then routed via buried feeders to a meter on the south exterior wall of the mechanical room. The service is a 400 amp, 240 volt, 3 phases, and 3 wire system. The switchboard and panels are original Cutler Hammer panels and in poor shape. One breaker was tripped but could not be reset which is an indication of the age when breakers will fail.

Emergency Power: Emergency power does not exist in this school. Emergency lighting is very minimal and primarily consists of battery packs at the end of the hallways. The exit sign do not have battery packs.

Exterior Lighting: The exterior lighting under the canopy is incandescent in the front entrance and HID, high pressure sodium in the south entrance. It was noted that the lighting was on during the day. Suggest adding controls to save energy.

Interior Lighting: Interior lighting throughout the school is a mixture of incandescent and fluorescent fixtures with T-12 and magnetic ballasts, and T-8 lamps and electronic ballasts. Additional efficiency could be achieved by upgrading to T-8 lamps and electronic ballasts and also add occupancy sensors to the offices. As discussed, emergency exit signs need to be included with the new fixtures as no battery packs were observed as well as additional emergency battery packs in the fluorescent fixtures to meet the 1 footcandle average per code.

Fire Alarm/ Security

The District office is served by a simple security system that includes sensors in corridors and selected locations and 24 hour monitoring as well as some detectors in the corridors. The building does not meet American with Disabilities Act (ADA) by not having strobe lights in Hallways and restrooms. This system should be upgraded if the school district continues to use this building.

Findings - Maintenance Facility

General

The Maintenance Facility was originally built in 1955, the building is approximately 4,700 gross square feet for Operations, and 12,000 gross square feet for warehouse and maintenance.

See the attached spreadsheet for recommended budgets. All recommended budgets are in current dollars without contingency or soft costs, and do not include contracts for non MEP trades such as carpenters for cutting and patching.

Fire Sprinkler System

There are currently no Fire sprinklers in this facility.

Plumbing Systems

Roof Drainage: Roofs drain by gutters reportedly to drywells on the site.

Sanitary Waste and Vent: There are no current reported problems with the waste and vent systems.

Domestic Cold and Hot Water: Domestic cold water is served from NE Prescott on the North side of the building. Water piping is mostly original galvanized steel. No significant rusting problems were noted in plumbing fixture. Domestic hot water is generated by a gas hot water heater. No problems were noted with hot and cold water systems. Significant renovation should use copper piping and include a reduced pressure backflow preventer.

Natural Gas: Natural gas serves a meter outside the north east side of the building. No problems are reported with the natural gas system.

Plumbing Fixtures: Most plumbing fixtures are original. They are high in water consumption. There is no immediate need to upgrade fixtures. Restrooms should be upgraded to meet ADA requirements.

HVAC Systems

Heating: The primary heating source for the buildings are gas fired unit heaters. Ventilation is provided by operable garage doors and windows. There is a furnace with spit system cooling for the administration areas. It appears these are probably from the late '90's. There were no problems reported with these systems.

Exhaust Systems: Toilets and janitors rooms are exhausted by room exhaust fans. There were no problems identified with the ventilation systems.

Electrical Power

Normal Power: Power is provided by Portland General Electric from pole mounted transformers at the northeast corner of the property along NE Knott St. The feeders are then routed via buried feeders to a meter on the east exterior wall of the multipurpose room and to switchgear in the stage area. The service is 480 volt, 3 phase, 4 wire and distributes power via a tunnel to transformers and panels. The service and switchgear are original Coast Electric Panels which is no longer in business. The power infrastructure is sufficient to support the ongoing use of the school, but limited paths for raceways will limit flexibility.

Emergency Power: Emergency power does not exist in this school. Emergency lighting is very minimal.

Lighting

Exterior Lighting: The exterior lighting is HID, high pressure sodium wall packs controlled via photocell.

Interior Lighting: Interior lighting throughout the facility is a mixture of incandescent and fluorescent fixtures with T-12 lamps and magnetic ballasts. Additional efficiency could be achieved by upgrading to T-8 lamps and electronic ballasts. As discussed, emergency exit lighting and exit signs need to be included with the new fixtures as no battery packs were observed.

Fire Alarm

The building does not have a fire alarm system.

Security

The facility is served by a simple security system that includes sensors in selected locations and 24 hour monitoring by Sonitrol.

Parkrose School District | District Administration & Maintenance Facility

Facilities Assessment

Improvement	Critical Priority	High Priority	Low Priority	Total
Site Improvements				
Repair / patch sidewalk			2,250	2,250
Repair cracked curb			1,800	1,800
Striping in parking lot			3,375	3,375
Paint bollards		600		600
New bollards		15,000		15,000
Repair cracks on exterior concrete wall		1,500		1,500
Site drainage upgrades			6,750	6,750
Infill 2' CMU at bottom of fence to retain soil and debris from adjacent yard			2,250	2,250
Maintenance of landscape			3,750	3,750
Building exterior				
Replace single pane windows with energy efficient ones in Admin offices and Facilities Dept.	119,040			119,040
New window sill under at new windows	18,000			18,000
New aluminum storefront entry window system	18,507			18,507
New aluminum storefront entry double door with hardware	5,700			5,700
New main doors with panic hardware and ADA operators	11,400			11,400
Repair any roof leaks in the Maintenance shops as needed.	2,813			2,813
Overhead door need painting and maintenance			1,200	1,200
Repair concrete beams that are damaged		15,000		15,000
Clean exterior brick , sealing, graffiti coating			6,624	6,624
Building Interior				
Replace carpet in Facilities Dept office with new			1,850	1,850
Patch floors in damaged areas with similar flooring material		2,063		2,063
New storage casework for Facilities Dept office			27,000	27,000
New heavy duty storage racks for Maintenance shops			15,000	15,000
Repair cracked floors in Maintenance shop		15,469		15,469
Floor base to be re- fixed		150		150
New entry mats at entry			495	495
Replace damaged ceiling with new in the Maintenance shop	15,469			15,469
Replace damaged ceiling tiles in office areas			600	600
Paint all interior walls		2,741		2,741
Refinish all existing doors & frames and replace all hardware with new in the Facilities Dept office, Maintenance shops and storage areas		1,658		1,658
Install kick plate			150	150
Replace cracked lens of the 2x4 Fluorescent light			150	150
Refinish interior doors and frame			3,443	3,443
Refinish all casework, install new hardware			1,444	1,444
New countertops and backsplash			13,125	13,125
New window blinds at new windows		7,200		7,200

Parkrose School District | District Administration & Maintenance Facility

Facilities Assessment

Replace wired glass in relites with plain code compliant glass			1,350	1,350
Fire, Life safety & ADA				
ADA ramp at curb near building			1,500	1,500
Remodel toilet in Facilities Dept office to be ADA compliant		26,250		26,250
Widen door and remodel toilet in Maintenance shop to be ADA compliant		26,250		26,250
Install ADA Fire exit doors and panic hardware in Maintenance shop, storage etc.		45,000		45,000
Install panic hardware at exit doors		15,000		15,000
Install ADA compliant door knobs at doors		40,500		40,500
Interior signage with Braille		10,868		10,868
100% Fire Sprinklers - District office			15,000	15,000
100% Fire Sprinklers - Maintenance Facility			60,000	60,000
New ADA Plumbing Fixtures - Assume 6 fixtures - District Office			24,000	24,000
New ADA Plumbing Fixtures - Assume 6 fixtures - Maintenance Facility		18,000		18,000
Domestic Piping Replacement - District Office			20,000	20,000
Miscellaneous				
Miscellaneous repairs and maintenance - District Office		37,500		37,500
Heating, Ventilation, and Cooling				
Deferred Maintenance – Allowance - District Office		20,000		20,000
Deferred Maintenance – Allowance - Maintenance Facility		5,000		5,000
Plumbing				
Backflow Preventor - District Office		2,500		2,500
Backflow Preventor - Maintenance Facility		5,000		5,000
Domestic Piping Replacement - Maintenance Facility			20,000	20,000
Electrical				
New lighting with T8 lamps & Electronic Ballasts- District Office			9,800	9,800
New lighting with T8 lamps & Electronic Ballasts- Maintenance Facility			25,600	25,600
New Panels & Switchgear - District Office			20,000	20,000
New Panels & Switchgear- Maintenance Facility			12,000	12,000
Occupancy Sensor in offices - District Office			4,500	4,500
Occupancy Sensors in offices- Maintenance Facility			1,500	1,500
Total	190,928	313,248	306,505	810,681

Visual Inspection – Building Exterior

Part I – Building Exterior – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Exterior Window Frames & Glass:	1	Original frames with single pane glazing. All windows to be upgraded for code compliance.
▪ Interior Relights & Glass:	4	Few interior relights are of wired glass and these need to be replaced with code compliant glass
▪ Doors & Frames:	2	All exterior entry doors and adjacent relights to be replaced with new energy efficient ones. Other exit doors to be upgraded with panic hardware
▪ Exterior Walls:	4	The exterior walls appear to be cracked at a few locations. The exterior brick veneer needs to be cleaned and sealed.
▪ Roof Condition:	3	There appears to be signs of leakage in the maintenance shop.
▪ Site Sidewalks & Stairs:	2	The existing sidewalks and curbs appear cracked in a few areas. These need to be repaired.
▪ Parking & Drive Surfaces:	3	The parking area needs to be restriped.
▪ Bus Parking:	4	There does not seem to be any problems at the bus parking area except that bollards are needed at a few places near the building.
▪ Landscaping:	2	There is some landscaping on site which needs maintenance and irrigation.
▪ Grading & Drainage:	3	There is an area in the middle of the asphalt parking area that needs proper grading and drainage.

▪ Irrigation System(s):	1	Irrigation system not visible.
▪ Site Lighting / Electrical:	3	There seems to be site lighting, however install daylight sensors.
▪ Site Signage	2	Install new site signage
▪ Exterior Finishes:	2	The exterior of the building, fascia, etc. need cleaning and painting. Exterior concrete walls needs repair in a few areas.
▪ Other:	1	Provide ADA door operator at all main entrances.

Part II –Unsafe / Undesirable Conditions

1. Install fire exits in maintenance areas and panic hardware for existing fire exit doors.

Part III – Comments

1. Better ADA access into the building to be considered.

Visual Inspection – Building Interior**Part I – Basic Components – Rated on a Scale of 1 (poor) to 5 (excellent)**

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Sprinkler System / Location(s):	1	See Consultant's comments.
▪ Floor / Finishes - Carpeting:	1	Carpeting in some areas are old and could be replaced with new.
▪ Floor Finishes VAT:	2	Most of the flooring is VAT and is very old and has been repaired in several areas. The base needs repairs in a few areas.
▪ Walls – Repair and Refinishes:	3	Some areas of walls are in need of repair and paint.
▪ Ceilings (mostly glue-up tile):	3	The ceilings needs a repairs in some other areas.
▪ Window Coverings:	3	The window blind system are in working condition, however could be upgraded with new.
▪ Doors & Hardware	2	Most interior doors, frames, and hardware are old and need to be refinished. A few door knobs are not ADA complaint. Replace few of the wired glass at relights and doors with code compliant ones.

Part II – Fixtures and Equipment – Rated on a Scale of 1 (poor) to 5 (excellent)

<u>Area</u>	<u>Rating</u>	<u>Comments</u>
▪ Casework & Cabinetry:	3	Most casework is original and thus old and outdated. Cabinet hardware and sinks need to be upgraded to meet ADA standards. Replace counter top with new. Provide new reception counter. Refinish existing shutters for storage under the stage in the multipurpose room.
▪ Tackboards / Tacksurface:	4	There are very few tackboards around the corridors. The ones that do exist are in good condition

- | | | |
|----------------------|---|---|
| ▪ Plumbing Fixtures: | 2 | There are a few ADA stalls in the building, however most of the toilets are old and non-ADA compliant. All drinking fountains and toilet plumbing fixtures needs to be replaced with new. |
| ▪ Signage: | 2 | Interior signage is not adequate and needs to be code compliant with Braille letters. |
| ▪ Other: | 2 | Storage appears inadequate in several areas and needs to be addressed. |

Part III – Unsafe or Undesirable Conditions

1. Some toilets are not ADA compliant.

Part IV – Comments

1. Doors and hardware should be upgraded to be handicap accessible. Replace wired glass with code compliant glass at relights.



Cracked curbs & sidewalk



Install ADA curb cut



Earth and other debris at fence



Site drainage issues



More bollards required at several places on site



Exposed overhead cables



Cracks on exterior of building



Bottom of beams needs repair



Panic hardware missing



Overhead doors need repair



Non compliant door knob



Toilet not ADA compliant



Toilet not ADA compliant



Ceiling to be replaced in Maintenance Shop



Install new carpet



Casework and counter









Storage Warehouse



Fine Arts Building
(Further to the West)
 4 Electives
 2 Classrooms

**+ Upstairs: 2 Science Rooms
 7 Classrooms**

-  Classroom
-  Science Rooms
-  Elective Rooms
-  Library
-  Gym
-  Cafeteria
-  Office
-  Denotes that currently these classrooms are being used for pull out programs or special services




-  Classroom
-  Science Rooms
-  Elective Rooms
-  Library
-  Gym
-  Cafeteria
-  Office
-  Denotes that currently these classrooms are being used for pull out programs or special services



PARKROSE MIDDLE SCHOOL

June 2009

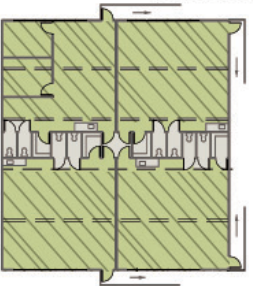
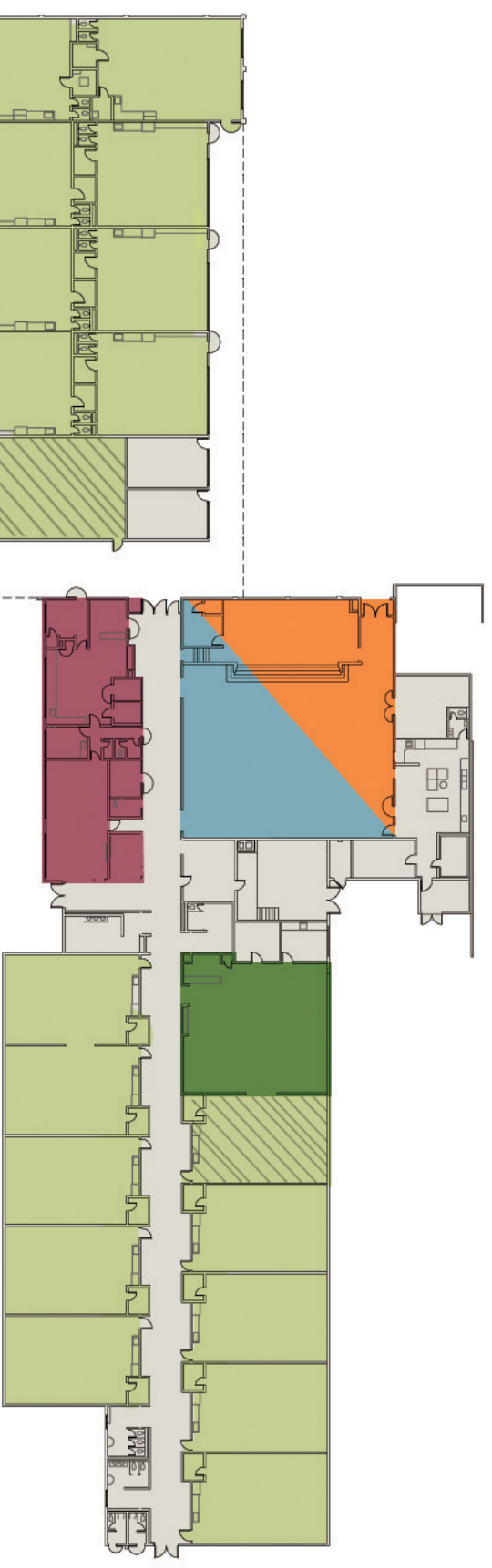





- Classroom
- Science Rooms
- Elective Rooms
- Library
- Gym
- Cafeteria
- Office

Denotes that currently these classrooms are being used for pull out programs or special services



SHAYER ELEMENTARY SCHOOL

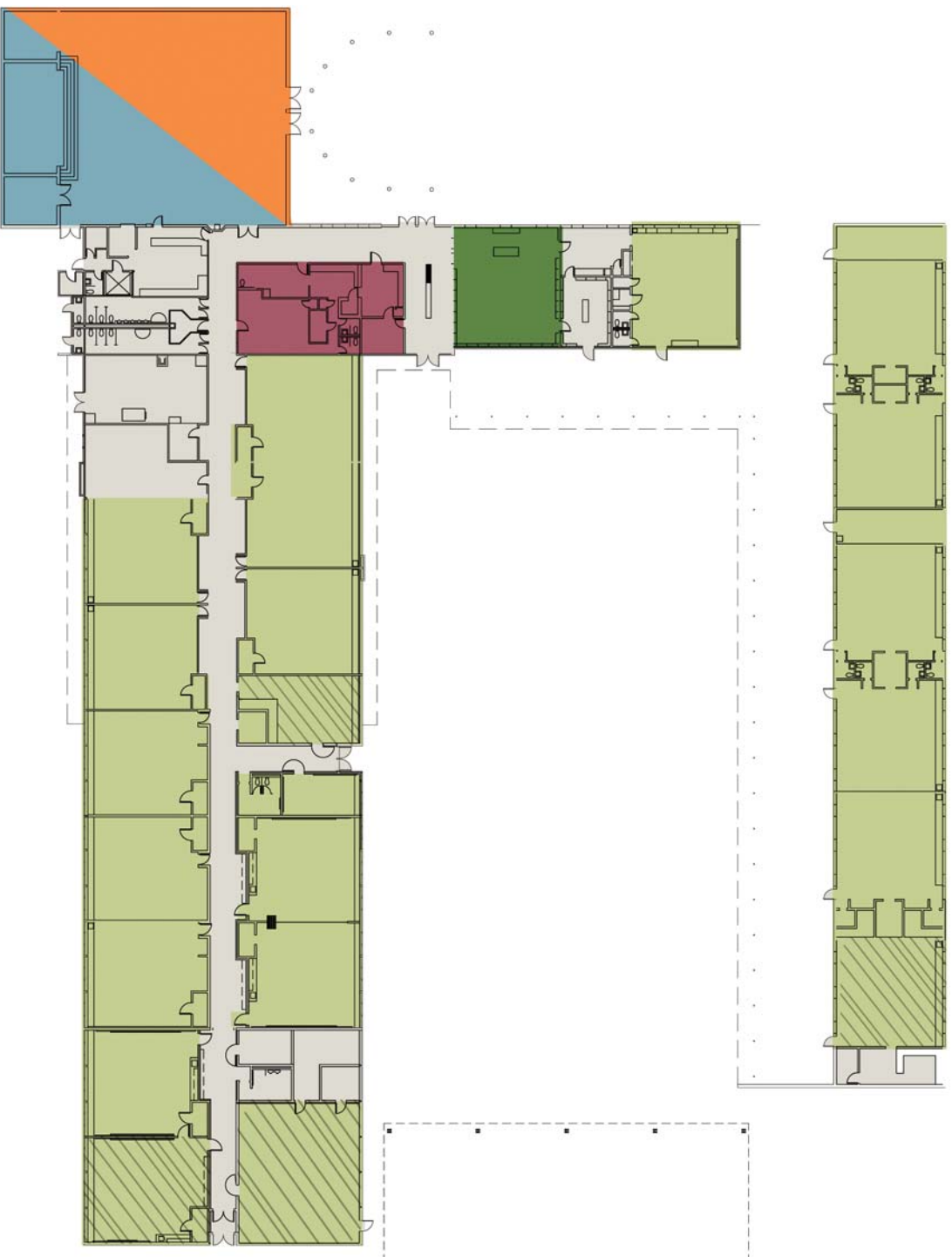


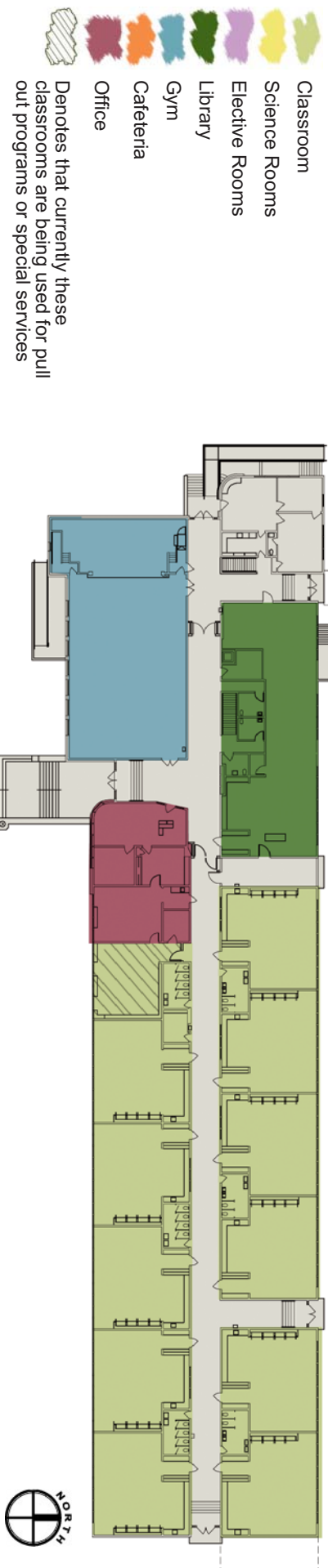
-  Classroom
-  Science Rooms
-  Elective Rooms
-  Library
-  Gym
-  Cafeteria
-  Office
-  Denotes that currently these classrooms are being used for pull out programs or special services





SACRAMENTO ELEMENTARY SCHOOL

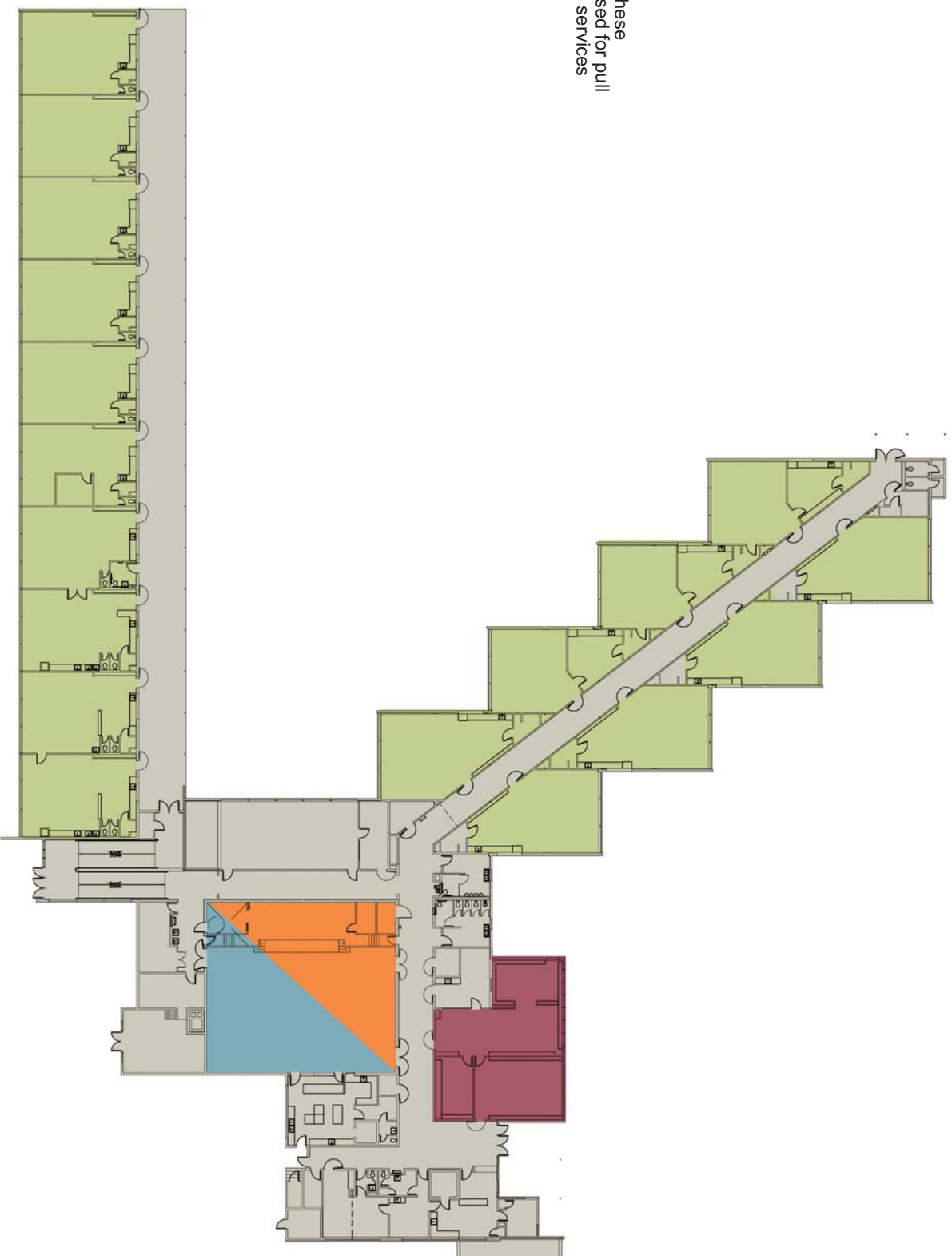
- Classroom
 - Science Rooms
 - Elective Rooms
 - Library
 - Gym
 - Cafeteria
 - Office
- Denotes that currently these classrooms are being used for pull out programs or special services





PRESCOTT ELEMENTARY SCHOOL

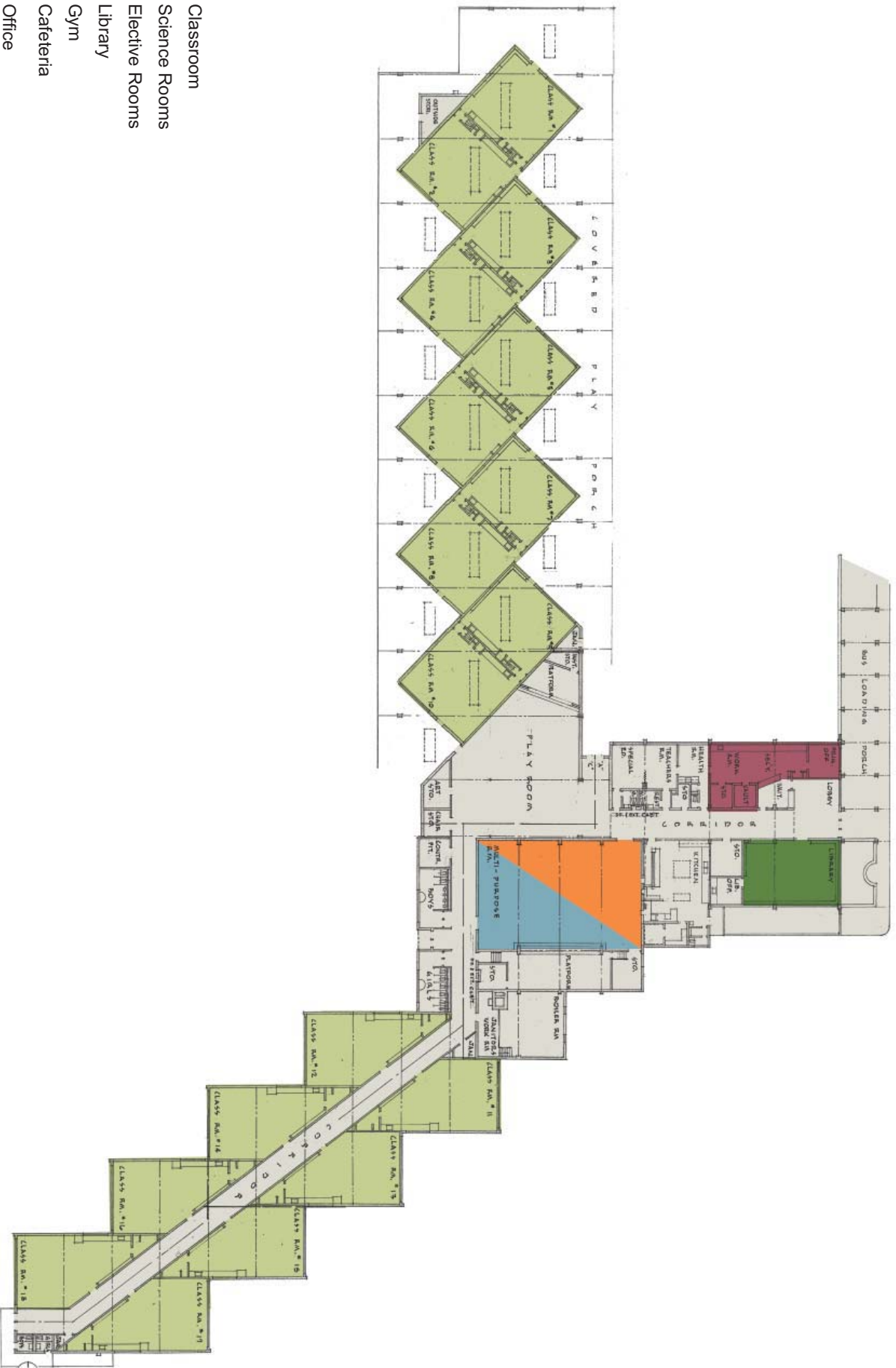
-  Classroom
-  Science Rooms
-  Elective Rooms
-  Library
-  Gym
-  Cafeteria
-  Office
-  Denotes that currently these classrooms are being used for pull out programs or special services




SUMNER ELEMENTARY SCHOOL

June 2009

-  Classroom
 -  Science Rooms
 -  Elective Rooms
 -  Library
 -  Gym
 -  Cafeteria
 -  Office
- Denotes that currently these classrooms are being used for pull out programs or special services



THOMPSON SCHOOL

-  Classroom
-  Science Rooms
-  Elective Rooms
-  Library
-  Gym
-  Cafeteria
-  Office
-  Denotes that currently these classrooms are being used for pull out programs or special services



KNOTT SCHOOL

June 2009

Bus Garage



pavement

Maintenance Shops



Administration Building

