mahlum

FACILITY ASSESSMENT REPORT
HILLSBORO SCHOOL DISTRICT
HILLSBORO, OREGON

6 APRIL 2012

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PARTICIPANTS

2011 FACILITIES ASSESSMENT UPDATE

The 2006 Facilities Assessment was updated with the collaboration of Facility Personnel through a series of interviews. District facilities not included in the original report were included in this report.

Reference Use

:: HSD Facilites Handbook, January 2010

:: Tremco Roofing Report titled HSD IJ Roof Budget Forcasts for 2010-2017

HILLSBORO SCHOOL DISTRICT FACILITIES

:: Loren Rogers, *Executive Director of Facilities, Planning, and Property*

:: Jim Peterson, *Hillsboro SD*

:: Stan Deweber, *Hillsboro SD*

:: Scott Ruyle, *Hillsboro SD*

MAHLUM

:: Gregg Stewart, *Principal in Charge*

:: Kurt Zenner, *Project Architect*

:: Jennifer Lupin, *Planner*

HERNDON ENGINEERS

:: Ray Herndon, *Principal*

EXECUTIVE SUMMARY

2011 FACILITY ASSESSMENT UPDATE

In 2011, the Hillsboro School District hired Mahlum to update their Facilities Assessment Report. The purpose of the update was to document the changes made to District facilities since the report was completed in 2006. Since 2006 upgrades have been made to several buildings as well as four new elementary schools and one middle school were constructed. Properties changed function, Boscow Elementary became the Boscow Center and David Hill Elementary School became the Miller Education Center West. The district sold a property and a middle school was decomissioned. The 2006 report did not include the Administration Center, Facilities and Support Services, Transportation Services and Hare Field Stadium; they have been included in this update.

The update involved a number of steps. Input was gathered from facility personnel regarding outstanding issues with each building. A walk -through of buildings not included in the 2006 report was conducted. Reports prepared regarding the district's facilities were reviewed. This new information was incorporated into the update.

INTRODUCTION AND PROCESS

In the spring of 2006, the Hillsboro School District hired Mahlum Architects to develop a Facilities Assessment Report. The purpose of the report was to evaluate the adequacy of existing facilities. It was found that on average buildings district-wide are generally in good condition and well maintained. There are no school facilities that are unsafe for occupancy in the Hillsboro School District.

The evaluation of the building involved several steps. The building plan and program information were reviewed. Input was gathered from school principals and the facilities department regarding outstanding issues with each building, and FEMA reports were reviewed. This information, along with information gathered during walk-through of each facility, was incorporated into the final assessment. Each facility was given a numerical rating. The primary structure, interior finishes, mechanical and electrical systems, safety standards and functional standards were rated.

The numerical rating given to each building is related to a percentage of replacement cost to fully upgrade the building to a 50-year standard. A score 95 to 100 points is satisfactory (no immediate upgrades are required at the time of the study), a score of 75 to 94 points required restoration, (spending less than 25 percent of replacement cost), a score of 55 to 74 point represents major modernization (spending between 25 to 50 percent of replacement cost), a score of 35 to 54 points represents major remodeling (spending more than 50 percent of replacement cost) and a score of under 34 points denotes the systems are unsatisfactory and it may be more cost effective to replace the school.

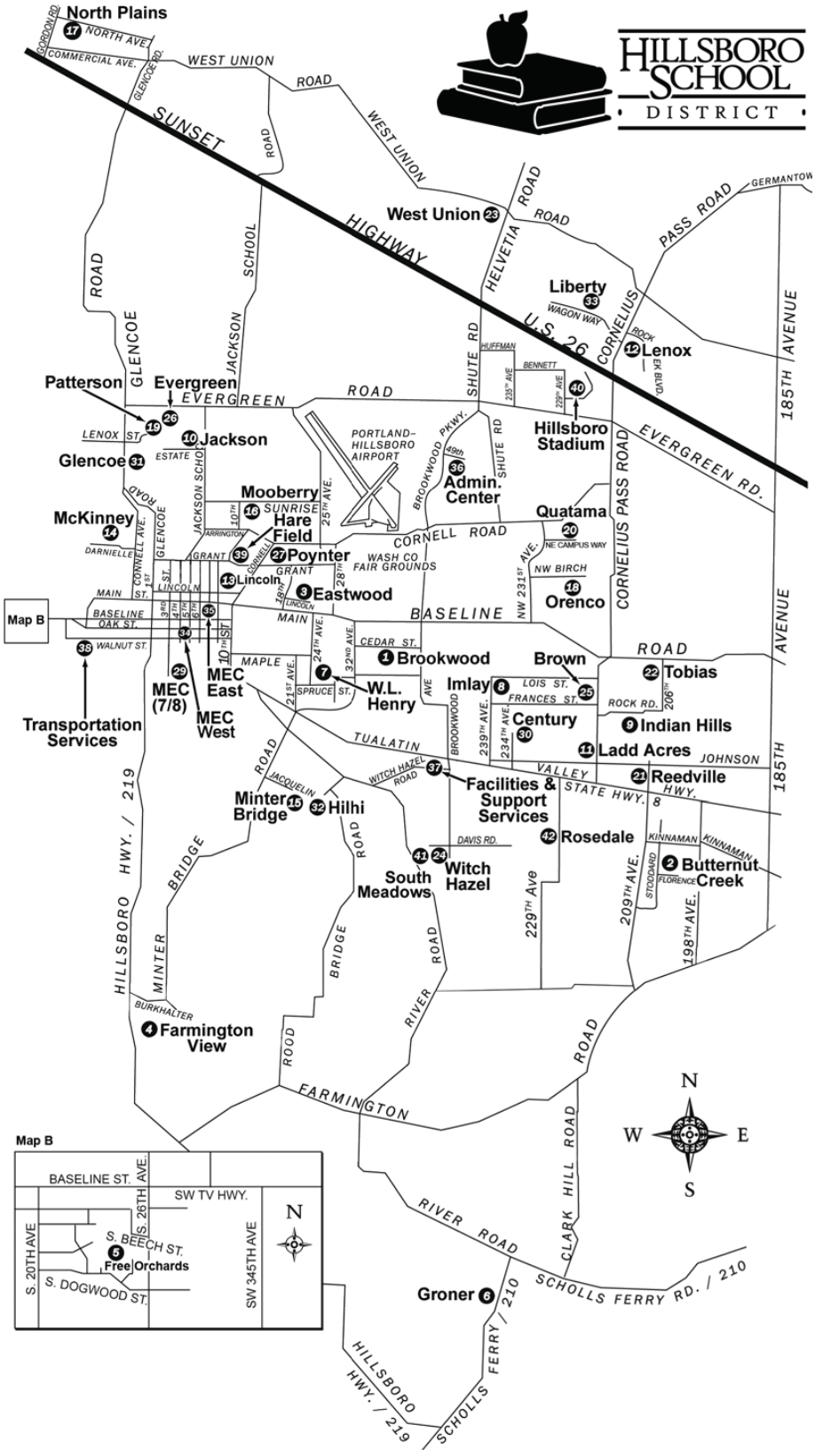
In addition to the rating, program enhancements were considered, including additional work that would bring the school up to the current program standards of the Hillsboro School District and expansion required at each school. The combination of the renovation, program enhancement and expansion provided a percentage of replacement cost to bring the existing facility to a 50-year facility

EXISTING CONDITIONS

The District consists of 25 elementary schools, four middle schools, four core high schools and four other learning centers. While the District has several recently built or remodeled schools, many of the schools were originally constructed prior to 1950, with additions in following years. Some of the building systems are outdated, inefficient and in need of significant repair or replacement to meet current educational goals, address failing building systems and achieve full code compliance.

The physical facility assessment of each educational building indicated there are __ buildings requiring minor modernization, __ facilities requiring modernization and __ facilities requiring major modernization.

The District will decide on the amount of funds to be expended at each school to repair and upgrade the existing facilities. In deciding the course of action it might be useful to consider the "two-thirds rule," which is a "rule of thumb" in the building industry. If you consider only the cost, it is generally thought to be more cost effective to consider replacement of an existing facility if the cost of modernization is two-thirds or greater than the replacement cost.


HILLSBORO SCHOOL DISTRICT
North Plains
NORTH AVE.
COMMERCIAL AVE.
GORDON RD.
GLENCOE RD.
WEST UNION ROAD
SUNSET HIGHWAY
WEST UNION ROAD
West Union
HELVETIA ROAD
PASS ROAD
GERMANTOWN
Liberty
WAGON WAY
U.S. 26
CORNELIUS
ROCK CREEK BLVD
Lenox
HUFFMAN
BENNETT
235TH AVE
229TH AVE
185TH AVENUE
ROAD
GLENCOE
JACKSON SCHOOL
SHUTE RD
Patterson
Evergreen
EVERGREEN ROAD
Hillsboro Stadium
EVERGREEN RD.
LENOX ST.
Jackson
ESTATE
PORTLAND-HILLSBORO AIRPORT
BROOKWOOD PKWY.
49th
Admin. Center
Glencoe
Mooberry
SUNRISE
Hare Field
McKinney
DARNELL AVE.
CONNELL AVE.
JARRINGTON
10TH
25TH AVE.
CORNELL ROAD
Quatama
NE CAMPUS WAY
GRANT
Poynter
WASH CO FAIR GROUNDS
CORNELIUS PASS ROAD
NW BIRCH
NW 231ST AVE.
Lincoln
Eastwood
Orenco
MAIN ST.
1ST
LINCOLN
BASELINE
OAK ST.
Map B
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4TH
5TH
6TH
MAIN
BASELINE
CEDAR ST.
24TH AVE.
32ND AVE.
Brookwood
Brown
ROAD
Tobias
WALNUT ST.
MAPLE
10TH ST
MEC (7/8)
MEC East
MEC West
21ST AVE.
SPRUCE ST.
W.L. Henry
Imlay
LOIS ST.
FRANCES ST.
ROCK RD.
206TH
Century
Indian Hills
Transportation Services
TUALATIN
BROOKWOOD
239TH AVE.
234TH AVE.
Ladd Acres
JOHNSON
VALLEY
WITCH HAZEL ROAD
Reedville
HWY.
STATE HWY. 8
185TH
Facilities & Support Services
JACQUELIN
Minter Bridge
Hilhi
Rosedale
DAVIS RD.
KINNAMAN
South Meadows
Witch Hazel
Butternut Creek
STODDARD
FLORENCE
209TH AVE.
198TH AVE.
229TH Ave
HILLSBORO HWY. / 219
MINTER BRIDGE ROAD
BURKHALTER
Farmington View
RIVER ROAD
FARMINGTON ROAD
CLARK HILL ROAD
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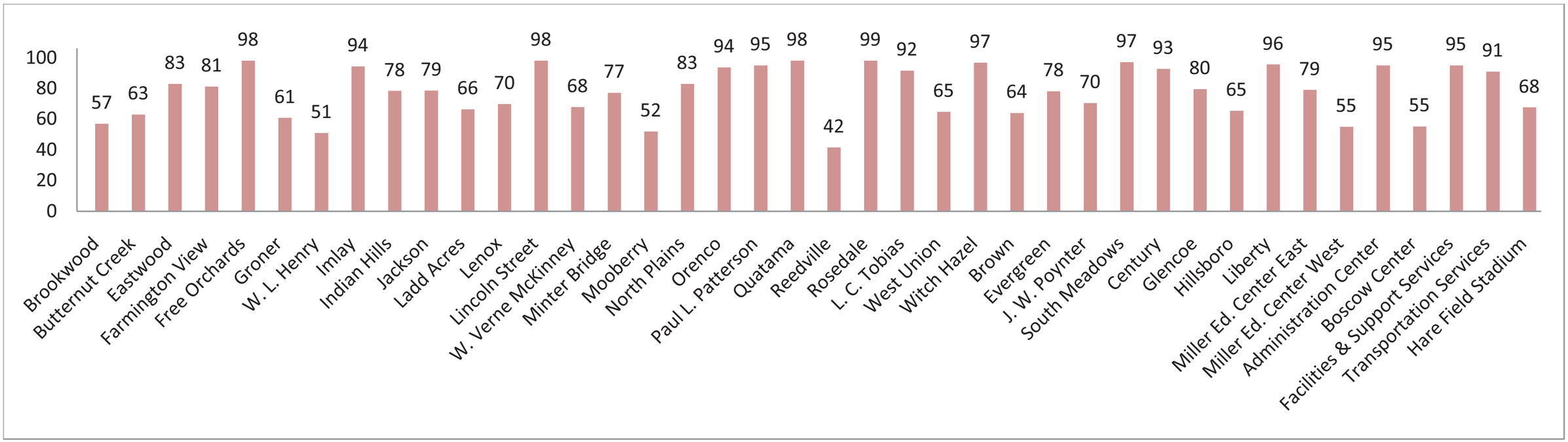
Map B
BASELINE ST.
SW TV HWY.
S. 26TH AVE.
S. 20TH AVE
S. BEECH ST.
Free Orchards
S. DOGWOOD ST.
SW 345TH AVE
Groner
SCHOLLS FERRY RD. / 210
HILLSBORO HWY. / 219
SCHOLLS FERRY / 210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Brookwood
Butternut Creek
Eastwood
Farmington View
Free Orchards
Groner
W. L. Henry
Imlay
Indian Hills
Jackson
Ladd Acres
Lenox
Lincoln Street
W. Verne McKinney
Minter Bridge
Mooberry
North Plains
Orenco
Paul L. Patterson
Quatama
Reedville
Rosedale
L. C. Tobias
West Union
Witch Hazel
Brown
Evergreen
J. W. Poynter
South Meadows
Century
Glencoe
Hillsboro
Liberty
Miller Ed. Center East
Miller Ed. Center West
Administration Center
Boscow Center
Facilities & Support Services
Transportation Services
Hare Field Stadium

FACILITY ASSESSMENT SUMMARY

SCHOOL	DATE OF CONSTR.	AREA: PRIMARY STRUCTURE	SECONDARY STRUCTURE	SERVICE SYSTEMS	SAFETY STANDARDS	FUNCTIONAL STANDARDS	RATING SCORE	BUILDING RATING
Elementary Schools								
Brookwood	1953	32.0	5.0	10.0	3.0	7.0	**57**	Modernization
Butternut Creek	1977	19.5	6.2	24.4	4.5	8.4	**63**	Modernization
Eastwood	1977	33.3	7.8	26.9	4.5	10.4	**83**	Minor Modernization
Farmington View	1940	30.1	8.5	29.0	3.5	10.0	**81**	Minor Modernization
Free Orchards	2008	39.0	9.0	33.0	5.0	12.0	**98**	Satisfactory
Groner	1957	25.5	6.4	16.3	3.0	9.6	**61**	Modernization
W. L. Henry	1968	25.0	7.0	13.0	3.0	3.0	**51**	Major Modernization
Imlay	2002	39.0	8.7	29.7	5.0	11.8	**94**	Minor Modernization
Indian Hills	1979	31.4	8.1	23.5	4.5	10.8	**78**	Minor Modernization
Jackson	1990	31.9	7.8	24.1	3.5	11.2	**79**	Minor Modernization
Ladd Acres	1967	31.4	6.2	19.9	2.5 *	8.8	**66**	Modernization
Lenox	1978	25.5	8.0	21.1	3.5	11.6	**70**	Modernization
Lincoln Street	2008	39.0	9.0	33.0	5.0	12.0	**98**	Satisfactory
W. Verne McKinney	1970'S	30.1	6.9	18.0	4.0	8.8	**68**	Modernization
Minter Bridge	1979	32.7	7.1	24.6	3.5	9.2	**77**	Minor Modernization
Mooberry	1963	22.6	5.9	13.5	3.5	6.4	**52**	Major Modernization
North Plains	1954	37.3	8.5	22.2	4.5	10.4	**83**	Minor Modernization
Orenco	2000	38.0	7.9	32.0	4.5	11.2	**94**	Minor Modernization
Paul L. Patterson	2000	37.3	8.7	32.0	5.0	12.0	**95**	Satisfactory
Quatama	2008	39.0	9.0	33.0	5.0	12.0	**98**	Satisfactory
Reedville	1922	20.6	6.0	10.0	2.0 *	5.0	**42**	Major Modernization
Rosedale	2009	39.0	9.0	34.0	5.0	12.0	**99**	Satisfactory
L. C. Tobias	1992	38.7	8.6	28.1	5.0	11.2	**92**	Minor Modernization
West Union	1948	26.8	7.5	16.4	4.0	10.0	**65**	Modernization
Witch Hazel	2003	40.0	8.5	32.0	5.0	11.2	**97**	Satisfactory
Middle Schools								
Brown	1963	30.1	6.2	13.6	4.0	10.0	**64**	Modernization
Evergreen	1981	32.7	7.0	22.9	4.5	11.0	**78**	Minor Modernization
J. W. Poynter	1959	31.3	6.5	16.6	5.6	10.4	**70**	Modernization
South Meadows	2009	38.0	9.0	33.0	5.0	12.0	**97**	Satisfactory
High Schools								
Century	1997	37.3	8.3	30.5	5.0	11.6	**93**	Minor Modernization
Glencoe	1980	36.6	6.9	21.9	4.5	9.6	**80**	Minor Modernization
Hillsboro	1968	28.5	6.3	19.9	3.5	7.2	**65**	Modernization
Liberty	2003	40.0	8.7	30.2	5.0	11.6	**96**	Satisfactory
Miller Ed. Center East	1958	35.3	7.2	26.2	3.5	6.8	**79**	Minor Modernization
Miller Ed. Center West	1943	23.0	7.0	15.0	3.0	7.0	**55**	Modernization
Other Facilities								
Administration Center	2001	36.0	9.0	34.0	5.0	11.0	**95**	Satisfactory
Boscow Center	1947/85	25.5	5.3	14.1	2.5	7.8	**55**	Modernization
Facilities & Support Services	2004	36.0	9.0	34.0	5.0	11.0	**95**	Satisfactory
Transportation Services	1990	38.7	8.6	25.0	5.0	10.5	**88**	Minor Modernization
Hare Field Stadium	1967	26.0	7.3	20.6	2.5	11.2	**68**	Modernization

AREA	EXPLANATION		HIGHEST POSSIBLE BUILDING RATING FOR EACH AREA
Primary Structure:	Foundation System, Column and Exterior Wall System, Floor System, and Roof System		40
Secondary Structure:	Ceiling System, Interior Walls and Partitions, Window System, and Door System		9
Service Systems:	Cooling and Ventilation, Heating, Plumbing, and Electrical		34
Safety Standards:	Overall Safety Standards		5
Functional Standards:	Assignable Space, Adaptability, and Suitability		12
		POSSIBLE BUILDING RATING TOTAL	100

BUILDING RATING	EXPLANATION	
95 - 100 points:	Satisfactory	
75 - 94 points:	Remodeling C	(Minor Modernization; less than 25% of replacement cost)
55 - 74 points:	Remodeling B	(Modernization; 25% - 50% of replacement cost)
35 - 54 points:	Remodeling A	(Major Modernization; over 50% of replacement cost)
0 - 34 points:	Demolition	(System is unsatisfactory and cannot be remodeled)

* Ladd Acres Elementary - The school is safe for occupancy. However, the safety rating for this school is low due to the open layout of the school. Concern is based on the potential for an undetected intruder and the poor ability to supervise the school buildings.

* Reedville Elementary - The school is safe for occupancy. However, the safety rating for this school is low due to the age of the building, the absence of handrails at the main entrance and site considerations due to traffic loads and layout of the parking and access to school by students.

ASSESSMENT SUMMARIES: ELEMENTARY SCHOOLS

INTRODUCTION

The Hillsboro School District has 25 elementary schools. The schools range in age and condition, from Reedville Elementary, built in 1922, to Rosedale Elementary, which was completed in 2009.

The following assessment summaries provide a narrative of building conditions for each facility, as well as site and plan information, and photographs highlighting key conditions. Detailed assessment forms can be found in the appendices.

ELEMENTARY SCHOOLS

Brookwood Elementary | Aerial/Site Plan

BROOKWOOD ELEMENTARY SCHOOL

ASSESSMENT SCORE 57: MODERNIZATION

GENERAL INFORMATION

:: Address: 3960 SE Cedar Street, Hillsboro, OR 97123-7467

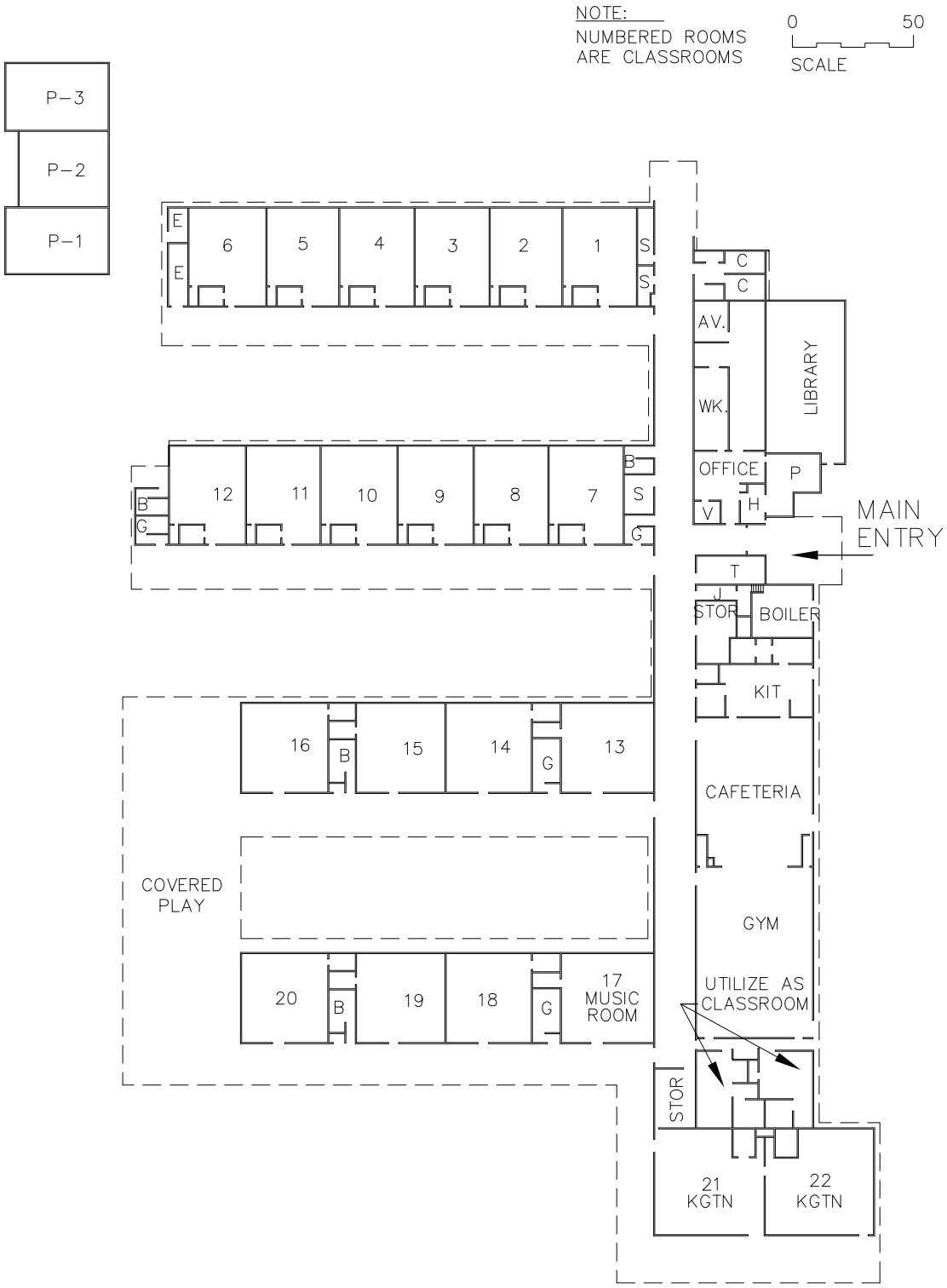
:: Construction dates:
- Original school constructed in 1953
- Second phase in 1957
- Library and administration in 1977

:: Site area: 10.00 acres

:: Building area: 43,041 square feet

:: Population: 560 students

Brookwood Elementary | Floor Plan



BROOKWOOD ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: Primary structure is a combination of reinforced concrete walls and concrete pilasters, with a flat slab and concrete footings.

:: Roof structure is wood rafters, trusses and glu-lam beams with sheathing

Deficiencies

:: Needs roof replacement between 2010 – 2017 in three phases

:: The 2001 FEMA report recommends a number of seismic upgrades

:: Some of the VAT* in the building has been abated in a few areas, but a large amount remains

:: Insulation is only present in administration and library addition

:: Kraft-faced insulation needs replacement

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- Ceiling systems are lay-in metal grid, concealed metal grid and attached to structure
- Exterior walkway ceilings are wood, they are discolored from weather and low maintenance
- Majority of school does not have accessible ceiling spaces, as a result new wiring is exposed in wire mold

:: Walls
- Interior walls are metal and wood stud with plaster and drywall
- Vinyl board wall surface in administration offices

:: Windows / Doors
- Windows are steel and aluminum, single glazed, fixed and awning
- Exterior doors are steel, most classroom doors are exterior doors
- Interior doors are wood
- Doors have a variety of hardware
- Doors re-keyed in the summer of 2005 due to safety concerns

Deficiencies

:: Windows / Doors
-Blinds and window coverings are in the process of being upgraded
- Window caulking is failing

- Replace single-glazed windows

:: Miscellaneous
Insulation:
- Replace paper face insulation
- There is some R-19 foil face and some paper face (unreadable).
- Paper face at Kitchen ceiling
- Portable 1 and 3 – Black plastic/Nylon, no label

SERVICE SYSTEMS

Existing Conditions

:: Heating system
- Library roof top unit has electric duct heater
- Natural gas fired low pressure steam cast iron boiler with steam to hot water heating converter.
- Classroom wings have hydronic heating unit ventilators.

:: Heating system is hot water and steam, radiators and radiant floor slab, gas energy source with electric controls
- Control type DDC
- Tunnel fans

:: Plumbing
- Domestic hot water is heated from the boiler via steam heat exchanger, with large capacity storage tank.

:: Electrical
- Alarm system is new
- Some exterior lights are controlled by photo cells
- Classroom and corridor lighting upgraded to electronic ballasts and T8 lamps; 2008
- Occupancy sensors installed throughout

the school; 2008
- Emergency battery backed ballasts installed in corridor lighting fixtures; 2008

:: Technology
- New main data frame cabling
- One computer lab has 32 computers
- Library lab has 15 computers

Deficiencies

:: Cooling system
- Partial air conditioning (Administration/ Library)
- Library has roof top packaged A/C unit
- Remaining area not air conditioned

:: Heating System
- Administration offices have radiant floor heat. Piping is corroding and leaks have occurred.
- Replace, kitchen, multi-purpose/ cafeteria, gym units.

:: Plumbing
- No sprinkler system
- Fixtures are not low-flow.
- Toilet rooms are not ADA compliant.

:: Electrical
- Has not received any upgrades
- Bathrooms have no emergency lighting, rooms are black if lights go out
- No emergency lighting or battery back-up
- Main electric service: 400 amp, 208Y/120 volts. Main distribution panel board is obsolete.
- Additional emergency battery backed ballasted light fixtures needed in multi-purpose room and gym.
- Exit landing lighting not on emergency power

SITE

Existing Conditions

:: Some exterior lights are controlled by photo cells

Deficiencies

:: Standing water at end of parking lot

:: Exterior lighting poor, a safety concern
- Covered walkway lights have been decommissioned

:: Traffic is a concern
- Bus drop off and parent drop off not separated, safety concern

:: Lack of continuous fencing makes it difficult to monitor site, entries and restrooms

:: Parking space limited at school

:: To improve traffic flow it would help to be able to exit site through neighborhood to the south

SAFETY STANDARDS

Existing Conditions

:: Stairs between cafeteria and gymnasium are concrete and narrow

:: Accessibility to building is tolerable since the building is one story

:: Building has portable extinguishers

:: Fire alarm system is new, system includes visual, audible smoke detectors

:: School has Sonitrol audio sensor type security system

Deficiencies

:: Ramp in hallway, slope not to current code

:: Ramps are not to code

:: No emergency power generator

FUNCTIONAL STANDARDS

Deficiencies

:: Safety, security and supervision are the biggest concerns

:: Building is designed so that students go outside to change classrooms
- Restroom facilities are unavailable for students and staff in main building
- Problematic for kindergarten students

:: No restroom for gymnasium/cafeteria area of building
- Students use staff restroom

:: Main entry sequence into building is confusing due to reconfigured bus drop off and earlier remodel

:: Kitchen needs walk-in space

PRINCIPAL REQUESTS

Deficiencies

:: Minimum Facility Requirements
- Restrooms need to be upgraded

:: Minimum Facility Additions
- Large gymnasium

Butternut Creek Elementary | Aerial/Site Plan

BUTTERNUT CREEK ELEMENTARY SCHOOL

ASSESSMENT SCORE 63: MODERNIZATION

GENERAL INFORMATION

:: Address: 20395 SW Florence Street, Aloha, OR 97007-2243

:: Site upgrades - 2010

:: Construction date:
- Original school constructed in 1977

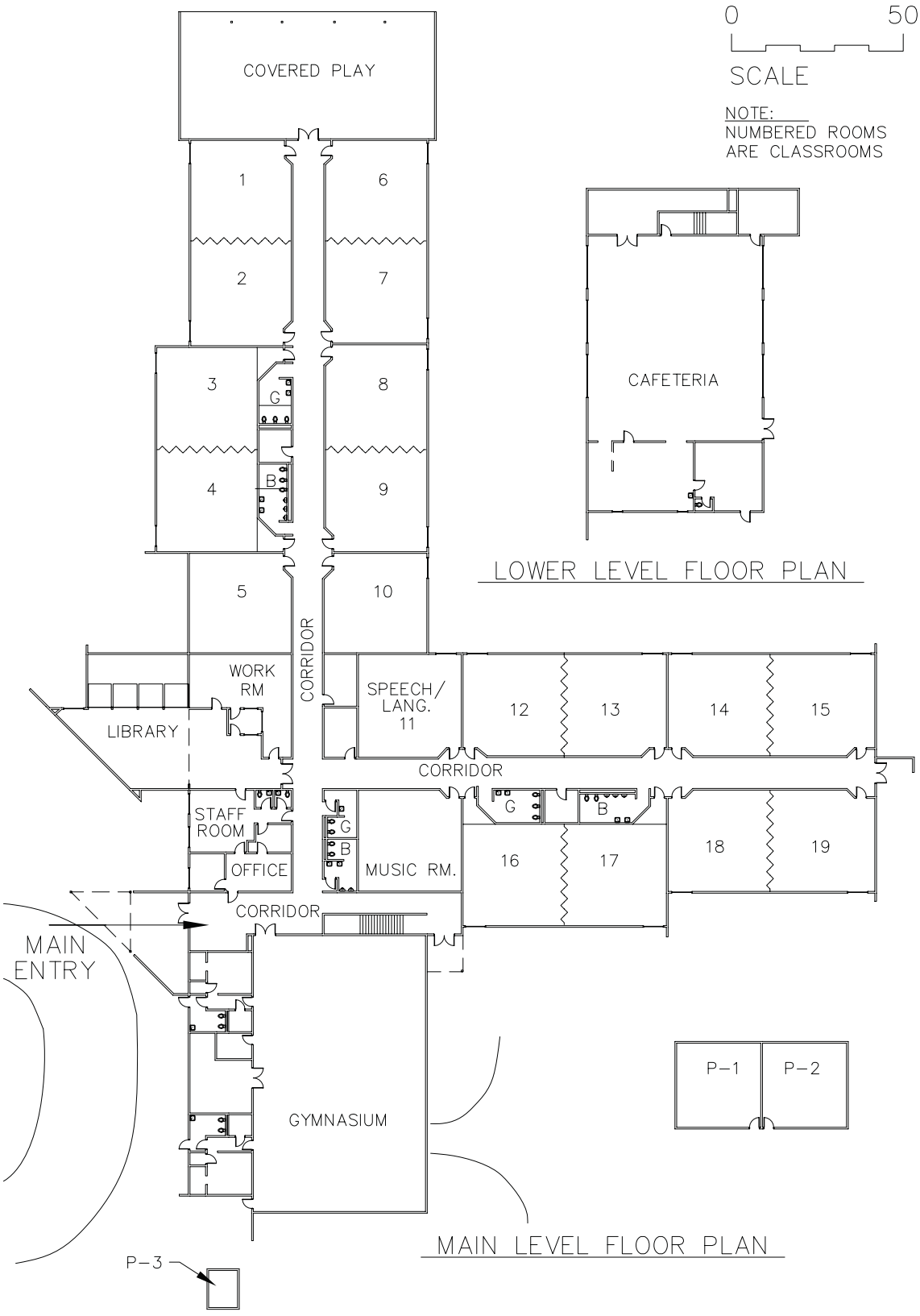
:: Site area: 13.64 acres

:: Building area: 34,840 square feet

:: Population: 430 students

BUTTERNUT CREEK

Butternut Creek Elementary | Floor Plan



ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing conditions

:: Primary structure is structural wood with reinforced concrete columns with continuous concrete footings with a sloped roof

:: The 2001 FEMA report recommends seismic upgrades to the structure

:: Siding on portable was replaced

:: Carpet is in fair condition

:: New roof was installed in 2005

Deficiencies

:: The exterior of the building is in poor condition, substantial damage to siding from water, sun and fungus
- It has been over five years since the building was painted

:: Replace siding

:: Cafeteria ceiling vibrates when gymnasium is in use

:: Epoxy floor in restrooms is difficult to clean

:: Drainage pipes at exterior are clogged, downspouts were not replaced when the roof was upgraded, and many drains have holes and leak into siding. It is especially problematic where the drain pipes are clogged

:: Maintenance shed roof leaks, it has no gutters, it is not usable in current state

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- Ceiling system is a combination of lay-in tiles and hard ceilings

:: Wall
- Interior walls are wood stud with plaster or drywall, several classrooms have accordion walls
- Accordion walls are not used in lower grades, however, they are used in upper grades

:: Windows / Doors
- The window system is single glazed, aluminum, casement.
- The doors are steel interior and exterior
- New door hardware in 2005

:: Miscellaneous
- Security system was recently upgraded

Deficiencies

:: Ceiling
- Ceiling in kitchen needs to be replaced with Mylar faced tiles, existing difficult to clean and maintain

:: Windows / Doors

- Windows are a security problem, it is possible to remove window pane at operable units and enter building. Thefts have occurred in the building as a result of this window system
- Replace single-glazed windows

:: Miscellaneous

Insulation:
- R-19 foil face at Entry Hall, Rooms 3, 15, 18, cafeteria and hall
- No insulation at kitchen or Portable #2
- R-11, paper face at Portable # 3

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- Air conditioning only in teacher lounge

:: Heating system
- HV units have electric duct heaters. Classrooms also have electric baseboard heaters.

:: Plumbing
- Gutters replaced with roof, but not downspouts

:: Electrical system
- Main electric service: 2000 amp, 208Y/120 volt fusible switchboard. The switchboard has four main switches.
- New lighting in staff restroom
- Rewired for computer lab

- Gym HID lighting upgraded to T5HO fluorescent; 2010

Deficiencies

:: Cooling system
- school does not have air conditioning

:: Heating system
- Fans in unit ventilators are noisy

:: Plumbing
- Water lines are corroding, runs brown if not used for a week
- Toilets & sinks are difficult to clean
- Low water pressure

:: Electrical system
- Fans in kitchen do not work well
- Covered play need to have vandal proof light on a timer to discourage illegal activities
- Staff restrooms and entry lights are incandescent, need to be upgraded
- Gym egress lighting needs to be upgraded, does not meet egress code requirements
- Classroom lighting needs to be upgraded
- Occupancy sensor systems need to be provided. Occupancy sensors only in staff lounge and health room.
- Corridor egress lighting is not on emergency power
- Cafeteria egress lighting is not on emergency power
- Exit landing lighting is not on emergency power

SITE CONDITIONS

Existing Conditions

:: ADA accessible parking added in 2010

:: ADA accessible ramp to front door added in 2011

Deficiencies

:: Parking lot and wall ball areas subject to flooding

:: Sink hole problem in lower field

:: Exterior drain at cafeteria door clogs and water migrates into cafeteria

:: Grounds need storm piping

SAFETY STANDARDS

Existing Conditions

:: School has full fire alarm system

:: School has Sonitrol audio sensor type security system

:: Emergency lighting only in gymnasium

Deficiencies

:: No fire sprinkler system

:: Bathroom, music room, few offices are interior rooms without emergency lighting

:: Refrigerator walk-in door can not be opened from the inside

FUNCTIONAL STANDARDS

Deficiencies

:: Sinks, faucets and sink cabinets in classrooms need to be replaced due to water damage

:: Movable walls in primary wing should be changed to stud walls with a door, team teaching does not occur in this area, the wall space is needed

:: Circulation congested where halls meet in center of school

PRINCIPAL REQUESTS

Deficiencies

:: Minimum Facility Requirements
- Air conditioning throughout
- ADA restroom
- ADA cafeteria access
- Remove accordion walls in primary classrooms

:: Minimum Facility Additions
- Additional office space

Eastwood Elementary | Aerial/Site Plan

EASTWOOD ELEMENTARY SCHOOL

ASSESSMENT SCORE: 83
MINOR MODERNIZATION

GENERAL INFORMATION

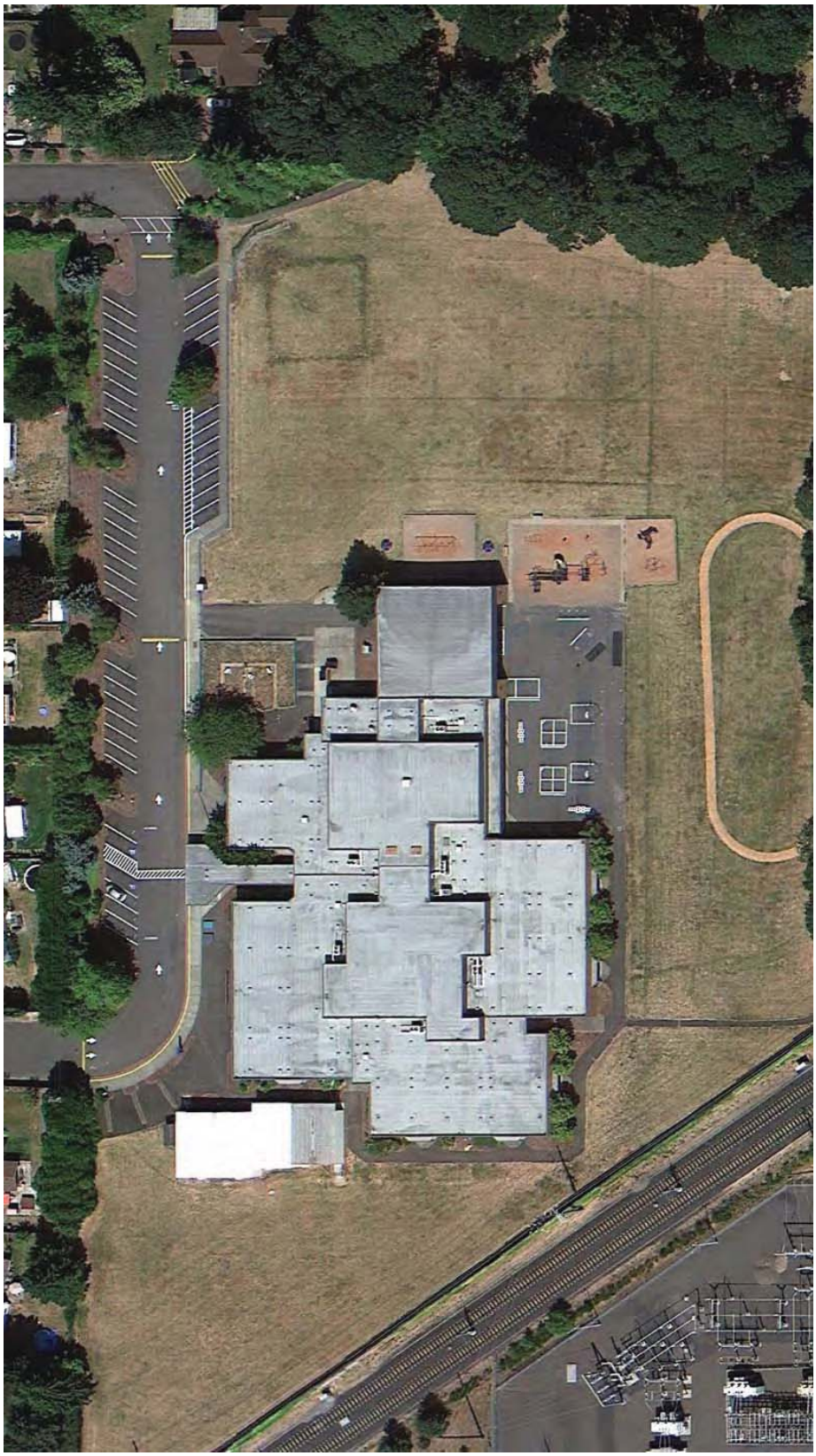
:: Address: 2100 NE Lincoln Street, Hillsboro, OR 97124-3575

:: Construction date:
- Original school constructed in 1977

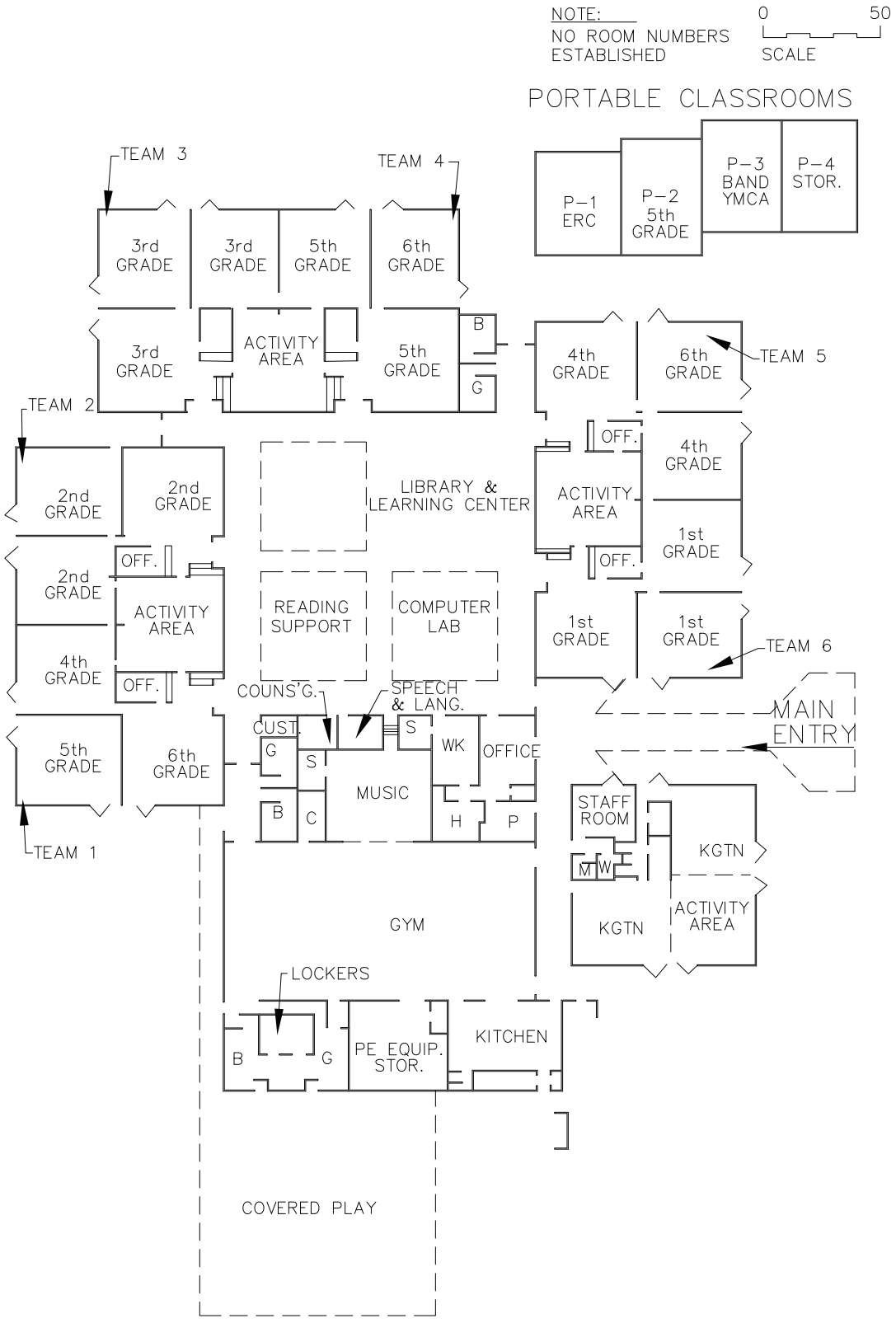
:: Site area: 10.00 acres

:: Building area: 49,163 square feet

:: Population: 495 students



Eastwood Elementary | Floor Plan



EASTWOOD ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: Primary structure is a combination of structural steel and structural wood on concrete footings with a flat roof

:: The 2001 FEMA report recommends a number of seismic upgrades to the structure
- Carpet has been replaced over the course of three to five years

:: Roof was replaced around 1995

Deficiencies

:: Exterior painting is needed at the canopy and exterior windows

:: Ceramic tile floor in some restrooms is cracking and is difficult to clean

:: Roof is leaking, problems have been discussed with facilities

:: The alcoves have serious drainage problems that affect the structure, windows and doors below

:: The custodian cleans the alcove roofs frequently but the drains are still subject to clogging

:: Need to keep alcove roofs free of debris or drains will clog and continue to damage the windows, ceilings and doors below

:: Needs roof replacement in two phases (2010-2014)

:: Clean and seal brick veneer

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- Ceiling Systems are a lay-in metal grid, gypsum and exposed structure
- Tiles are replaced when stained
- The gymnasium has fiber Tectum panels to improve the acoustics

:: Walls
- The interior walls are wood stud with gypsum or wood paneling, the walls are in good condition

:: Windows / Doors
- The window system is double glazed, fixed aluminum
- New vertical blinds were installed in 2005
- The door system is exterior steel doors and interior wood doors

Deficiencies

:: Ceiling
- Stains could be related to sprinkler system or roof drains. A persistent maintenance issue.

:: Walls
- The bathroom walls are gypsum, children scratch into the walls, hard surface is recommended

:: Windows / Doors
- Door closers do not work, fire doors are propped open. A school wide upgrade is needed.

:: Miscelaneous

Insulation:
- East portable clear plastic face Insulation, remaining portables black poly/plastic faced

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- school has air conditioning
- condensing units replaced; 2009

:: Heating system
- Forced air electric heating system works well, although energy usage may be high since it is electric
- Pneumatic temperature control system replaced with DDC; 2009

:: Electrical system
- Main electrical service: 1000 amp, 480Y/277 volt, distribution panel has six mains

- Incandescent fixtures with bulbs have been switched to fluorescent
- Fluorescent lighting upgraded to electronic ballasts and T8 lamps; 2007
- Occupancy sensors installed in classrooms, multi-purpose area, Library and administration offices; 2007

Deficiencies

:: Heating system
- Electric duct heaters do not have capacity to temper code required ventilation air quantities, additional heating capacity is needed.
- Building has significant dust problems, filters need to be replaced frequently

:: Plumbing
- Restroom fixtures are old and difficult to clean
- Restroom partitions are failing and unstable
- The school does not have accessible fixtures

:: Electrical system
- Electric service needs to be upgraded. Additional capacity required when heating system upgrade is done to meet ventilation requirements
- Corridor egress lighting is not on emergency power
- Multi-purpose/Cafeteria egress lighting does not meet egress code requirements.
- Library/Media Center egress lighting does not meet egress code requirements, and is not on emergency power
- Exit landing lighting not on emergency power
- Classrooms need additional convenience outlets

SITE CONDITIONS

Deficiencies

:: Site drainage at play area near swing set gets clogged by bark chips

SAFETY STANDARDS

Existing Condtions

:: School has full fire alarm system. Beam detectors used in IMC. Gym detection coverage inadequate.

:: School has Sonitrol audio sensor type security system

:: Smoke detection beam system in learning center

Deficiencies

:: School has partial fire sprinkler system. Coverage in corridor only.

:: Bus and parent drop off has circulation conflicts

FUNCTIONAL STANDARDS

Deficiencies

:: The gym/cafeteria creates scheduling and use conflicts

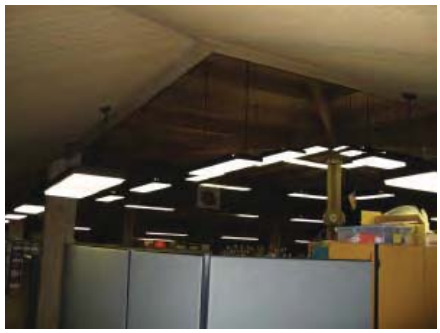
:: Staff needs the ability to secure property at night. Would eliminate undesirable activity that occurs due to the secluded nature of the site

PRINCIPAL REQUESTS

Deficiencies

:: Minimum Facility Requirements
- Restrooms need to be upgraded, including ADA upgrade
- Resolve bus and parent drop off conflicts
- New ramp at portables
- Hard surface on restroom walls
- Ability to secure property at night

:: Minimum Facility Additions
- New cafeteria
- Larger covered play
- Covered walkway between building and portable



Farmington View Elementary | Aerial/Site Plan

FARMINGTON VIEW ELEMENTARY SCHOOL

ASSESSMENT SCORE 81: MINOR MODERNIZATION

GENERAL INFORMATION

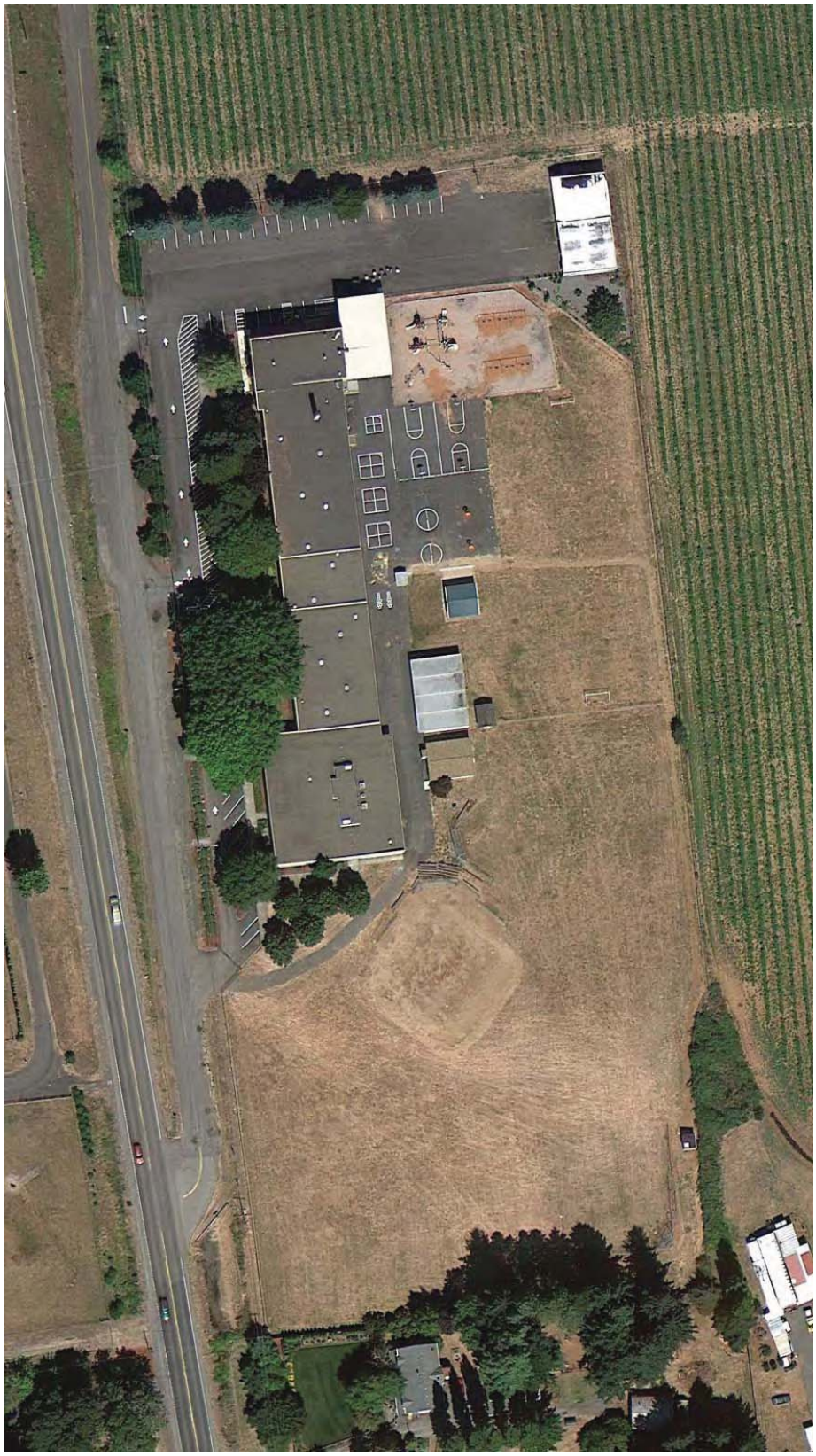
:: Address: 28300 SW Hillsboro Highway, Hillsboro, OR 97123-9284

:: Construction dates:
- Original school constructed in 1949
- Two-classroom addition in 1959
- Four-classroom addition in 1965
- Classrooms and offices in 1987
- Seismic upgrade drawings dated 1993 (work not performed)
- Mechanical/Plumbing upgrade in 2010

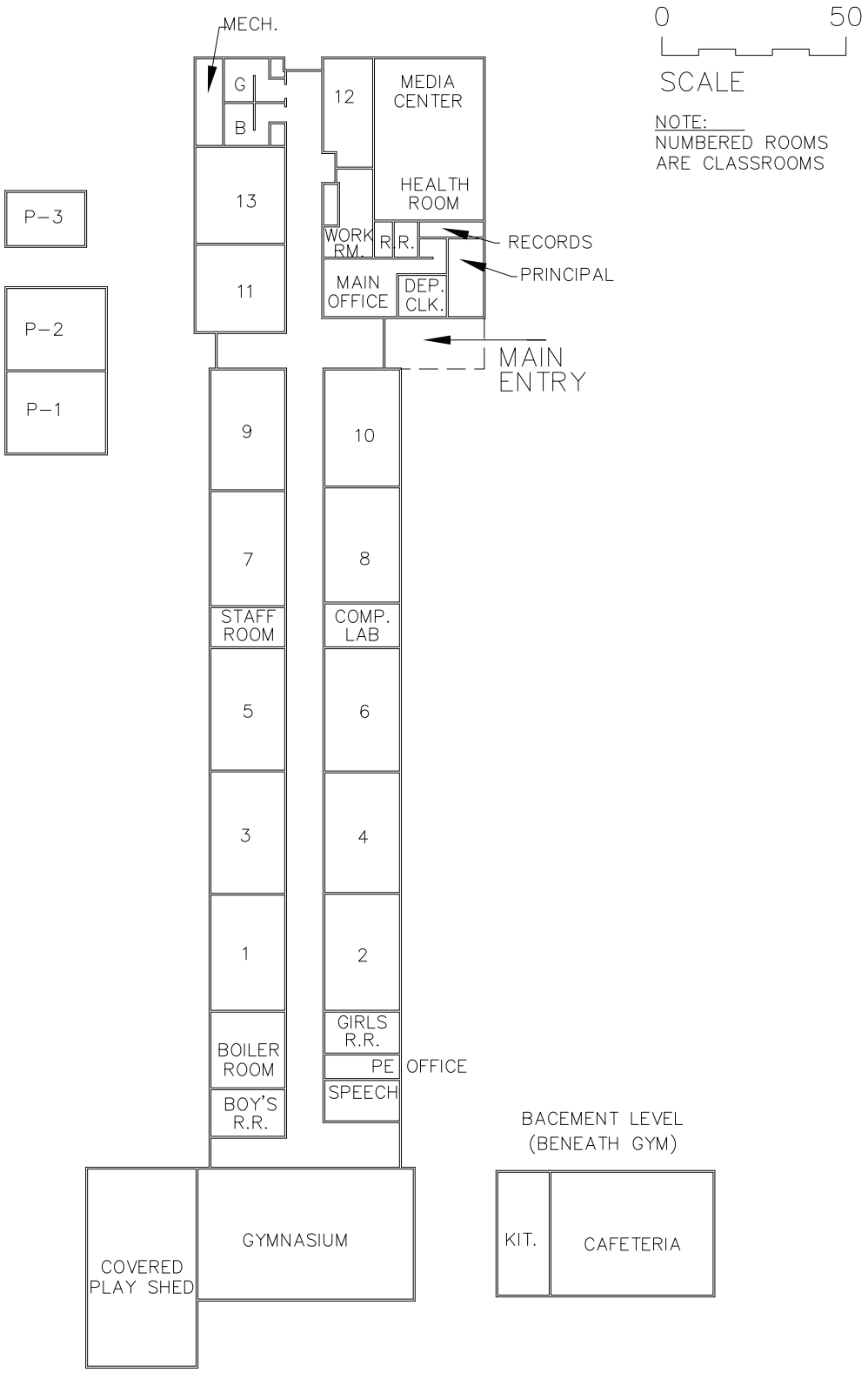
:: Site area: 7.88 acres

:: Building area: 22,867 square feet

:: Population: 217 students



Farmington View Elementary | Floor Plan



FARMINGTON VIEW ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: Primary structure is reinforced concrete walls and structural wood with concrete footings and slab

:: 2001 FEMA report indicates building needs seismic upgrades

:: Roof structure is sloped, combination of rafters and glu-lams

Deficiencies

:: Structural drawings for seismic upgrades prepared in 1993 do not appear to have been implemented

:: Exterior paint starting to peel

:: One fourth of the building still has VAT*, some minor flooring concerns in kitchen and hall

:: New roof within last five years

:: Roof on north portable has standing water

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- Ceiling is a combination of lay-in metal grid and plaster

:: Walls
- Interior walls are wood stud with plaster and are in excellent condition

:: Windows / Doors
- Exterior doors are steel, interior doors are wood; all are in good condition with upgraded hardware.
- The windows are single pane, aluminum
- Windows are in good condition

- R-11 at Library (?)
- None at Portables

Deficiencies

:: Ceiling
- Cafeteria has some acoustic problems
- Some ceiling tiles are stained

:: Windows / Doors
- Some doors at main entry do not close, assume it is either the HVAC system pressure or adjustment issues
- Replace single-glazed windows

:: Miscellaneous

Insulation:
- R-19 no face at Boys Restroom, Small Conference Room, Rooms 1,2,3,4
- None at by office and hall adjacent to office

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- Air conditioning is only in new portion of school

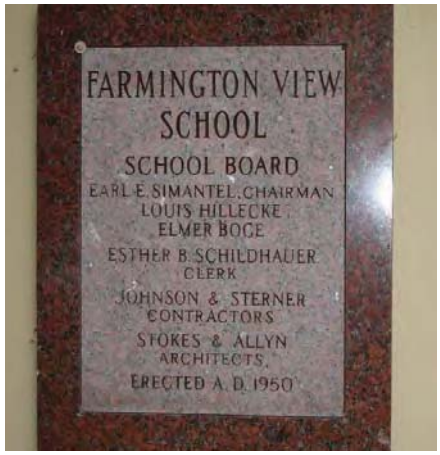
:: Heating system
- Classroom unit ventilators replaced, additional outside air introduced; 2010
- HVAC in new wing, included three classrooms, and office pneumatic controls - DDC
- Steam and condensate piping in steam access tunnels replaced; 2010

:: Plumbing
- Classroom sink/bubblers replaced; 2010

:: Electrical system
- Classroom lighting upgraded to high efficiency direct/indirect, with electronic ballasts and T8 lamps; 2005
- Gym lighting upgraded to T5HO with electronic ballasts; 2005
- Classrooms, gym, cafeteria and administration areas have occupancy sensors; 2005
- School had three electric services; the kitchen and south wing are modern and have capacity for current loads.

Deficiencies

:: Heating system
- PS3 oil fired steam boiler, parts becoming difficult to obtain, replace burners.



- Change fuel source from bulk oil (PS3) to gas.
- Temperature of HVAC difficult to control
- Some unit ventilators do not get air for outside air change requirements
- Upgrade air handlers; gym, kitchen, cafeteria
- Install burner assemblies

:: Plumbing
- Concerns about internal piping
- Hot water slow in restrooms
- No staff restroom in north wing
- No ADA toilets, requires remodeling in student restroom

:: Electrical system
- The classroom electrical service in the boiler room is antiquated and has no additional capacity.
- The Cafeteria egress lighting does not meet egress code requirements.
- The Gymnasium egress lighting does not meet egress code requirements.
- Corridor egress lighting does not meet egress code requirements, and not on emergency power.
- Exit landing lighting not on emergency power.
- Provide more exterior lighting

SITE CONDITIONS

Deficiencies

:: Fields have poor drainage

SAFETY STANDARDS

Existing Conditions

:: School has Sonitrol audio sensor type security system

:: School has full fire alarm system

:: Sprinklers in restrooms only

Deficiences

:: Possible need for center rail at stair to cafeteria

:: Gym and cafeteria have limited ADA exiting and accessibility

:: Cannot access cafeteria via a wheelchair

FUNCTIONAL STANDARDS

Deficiencies

:: Would be good to add door to storage area in classrooms, fire marshal does not like curtains

:: Staff restroom at gym end would be nice

PRINCIPAL REQUESTS

Existing Conditions

:: Minimum Facility Additions

Deficiences

:: Larger covered play
- Level ball fields, eliminate gophers

Free Orchards Elementary | Aerial/Site Plan

FREE ORCHARDS ELEMENTARY SCHOOL

ASSESSMENT SCORE 98: SATISFACTORY

GENERAL INFORMATION

:: Address: 2499 S. Beech Street, Cornelius, OR 97113

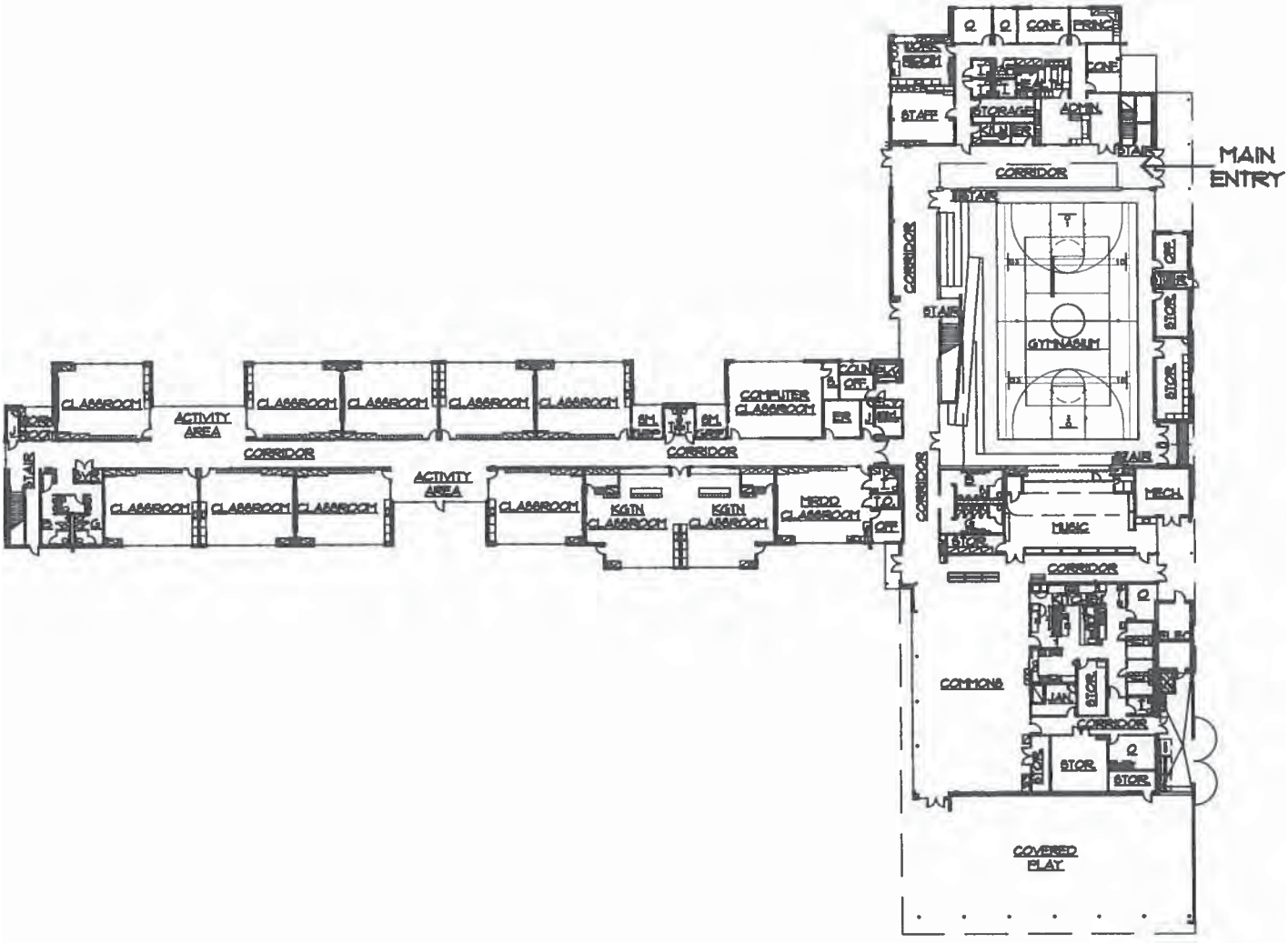
:: Construction date:
- Constructed in 2008

:: Site area: 11.26 acres

:: Building area: 72,500 square feet

:: Population: 457 students

:: Capacity 600 students



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FLOOR PLAN - MAIN LEVEL

FREE ORCHARDS ELEMENTARY SCHOOL - 247
2499 S BEECH STREET
CORNELIUS OR 97113

N

FREE ORCHARD ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: This school was constructed arter the 2001 FEMA report. It was built to meet the seismic requirments of the 2007 Oregon Structural Specialty Code.

:: Administration and Classroom Wing: Steel structure with CMU veneer and metal panel metal roof deck

:: Gym, adjacent storage rooms, Commons: Load bearing CMU at gym

SECONDARY STRUCTURE

Existing Condtions

:: Ceiling
- The school has primarily lay-in ceiling tiles, exposed structure at the gym

:: Walls
- Interior partitions are metal studs with drywall

:: Windows / Doors
- Windows are aluminum with fixed glass and operable units
- Exterior doors are aluminum and steel. Interior doors are solid core with plastic lamminate faces
- Roofing: Built up roof (Tremco)

Deficiencies
- Effervescent at CUM second floor (top of stair)

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- Roof top units with DX cooling systems

:: Heating system
- Natural gas fire high efficiency hydronic boilers
- Secondary hydronic circulation pumps AFD controlled
- Roof top units with hydronic heating coils
- Roof top unit supply fans AFD controlled
- Roof top units have heat recovery wheel
- Zoned variable volume terminal units with hydronic reheat coils
- DDC control system

:: Plumbing
- Natural gas fired high efficiency hot water heater
- Full kitchen for serving breakfast and lunch

:: Electrical system
- Main electric service is 480 volt, sized for 25% additional capacity
- Classroom lighting high efficiency direct/ indirect with electronic ballasts and T8 lamps
- Occupancy sensors installed throughout the school
- Corridor emergency egress lighting has battery backed ballasts
- Corridor lighting on lighting controller
- Classroom and administration area lighting controlled by occupancy sensors
- Gym and Multi-purpose area lighting fixtures use T5HO lamps
- Exterior lighting on lighting controller
- Exterior egress landing lighting battery backed

Deficiencies

:: Heating system
- Building does not meet current energy codes

SAFETY SYSTEMS

Existing Conditions

:: School has Sonitrol motion sensor type security system

:: School is fully fire sprinklered

:: School has full fire alarm system

SITE CONDITIONS NA

SAFETY STANDARDS NA

FUNCTIONAL STANDARDS NA

PRINCIPAL REQUEST NA

Groner Elementary | Aerial/Site Plan

GRONER ELEMENTARY SCHOOL

ASSESSMENT SCORE 61: MODERNIZATION

GENERAL INFORMATION

:: Address: 23405 SW Scholls Ferry Road, Hillsboro, OR 97123-9317

:: Construction dates:
- Original school constructed in 1957
- Six classrooms, boys' and girls' toilets and storage added to the west and north of gymnasium in 1968

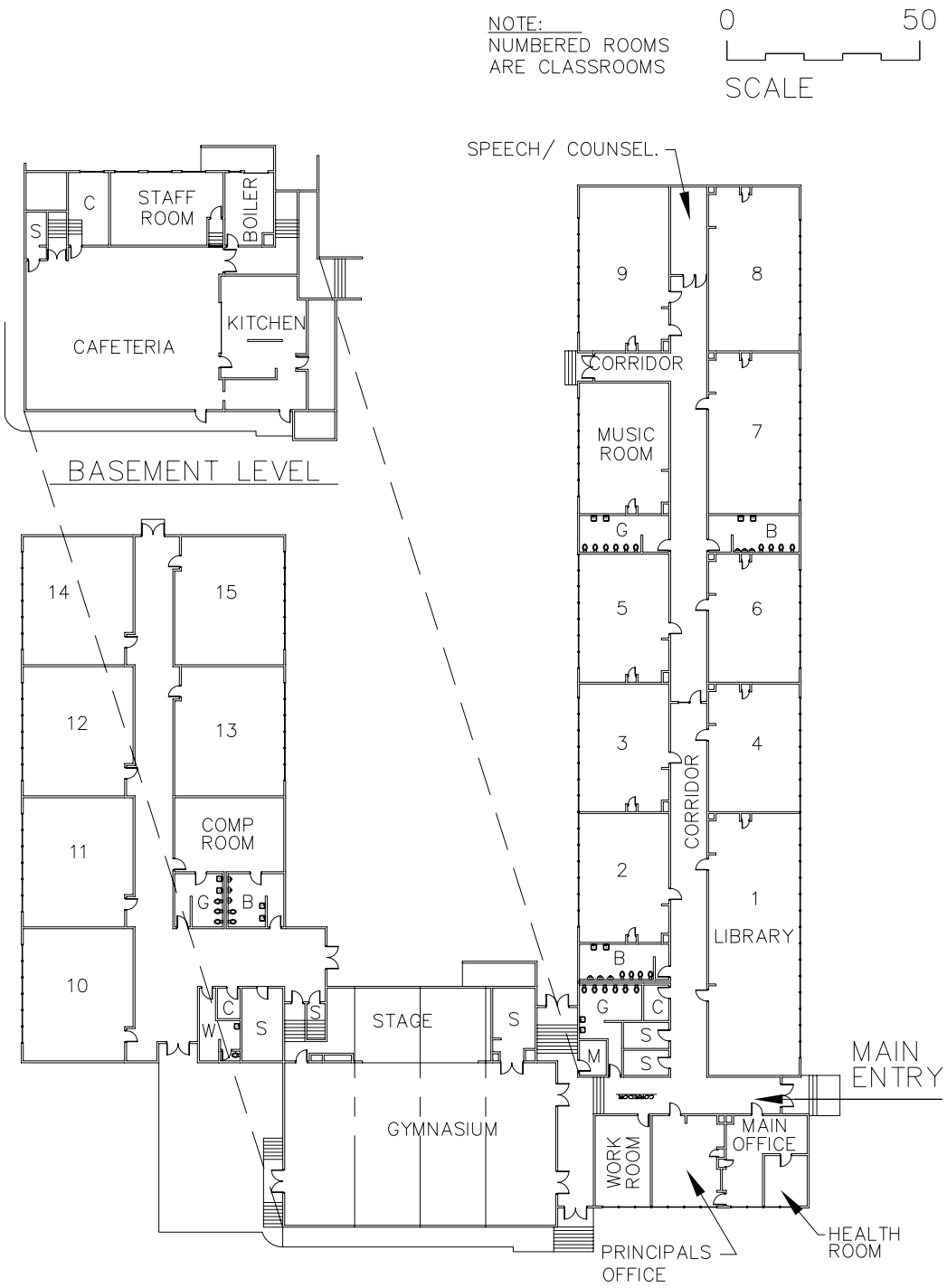
:: Site area: 10.00 acres

:: Building area: 32,402 square feet

:: Population: 227 students

GRONER ELEMENTARY SCHOOL

Groner Elementary | Floor Plan



PRIMARY STRUCTURE

Existing Conditions

:: The primary structure is wood stud walls on continuous concrete foundation with a concrete slab. The roof is a combination of wood joists and trusses.

:: Roof is approximately five years old

Deficiencies

:: 2001 FEMA report recommends a number of seismic upgrades to the primary structure
- FEMA report indicates exterior brick is not adequately anchored
- Dry rot on south elevation siding and overhang
- East side of west wing needs painting
- Brick needs to be cleaned and waterproofed
- Building needs to be scraped and painted
- Clean and seal brick veneer

:: Floor system
- 50% of VAT* has been removed, in process of abating the remaining amount
- Vibration of gym floor is a concern for lights in cafeteria
- West wing hall flooring has cracks
- Administration carpet is to be replaced summer 2006

:: Gutters are a continual maintenance issue

:: Remedial repairs to roof required between 2010 and 2017

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling system
- 12 x 12 glue-on in classroom

:: Walls
- Interior walls are wood stud with plaster

:: Windows / Doors
- Windows are single pane, wood or aluminum, casement and fixed

:: Exterior doors are a combination of steel and wood, interior doors are wood

:: Insulation
- Blown in insulation at the offices and primary wing
- None at the stage
- None at the Bus Garage

Deficiencies

:: Ceiling system
- Lay-in panels in gym are not a suitable choice for this area

:: Walls
- Acoustical tile on corridor walls are getting beat-up, they are fragile and break easily
- Vinyl wall panels are difficult to maintain
- Paint bathroom with anti-graffiti paint

:: Windows / Doors
- Windows experience air infiltration and unacceptable heat gain and loss
- Replace single-glazed windows

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- Chiller water cooling system installed in 2009
- Classroom unit ventilators provide chiller water cooling
- Small units provide cooling portables
- Administration offices roof top A/C replaced; 2009
- Gym roof top unit has A/C

:: Heating system
- Natural gas fired high efficiency boilers; 2009
- DDC control system
- Classrooms unit ventilators replaced; 2009
- Unit ventilators provide hydronic hot water heating
- Music room is off of the system, it has electric heat
- System is problematic in gym

- Fan noise in unit ventilators in west wing is problematic
- Air circulation and ventilation in room 9 is a concern

:: Plumbing
- Domestic hot water heater upgraded to natural gas; 2009

:: Electrical system
- New 208Y/120 volt, 2000 amp capacity electric serviced installed; 2009. Older panels and older main distribution panel sub-fed from new service.

Deficiencies

:: Heating system
- Provide heat in unconditioned space where HVAC chiller pump is located
- Heating system controls need to be converted from pneumatic controls-DDC to electricity
- Difficult to control temperature

:: Plumbing
- Girls restroom has no water pressure
- Air in water in 7 & 8 grade rooms
- Well needs repair
- Septic tank problem issues
- Building needs additional staff restrooms
- Faucets need to be replaced
- Fixtures are old and difficult to maintain

:: Electrical system
- Gym lighting uses T5HO lamps
- New lights needed in staff room and covered entry
- Classroom lighting has electronic ballasts and T8 lamps
- Occupancy sensors installed in classroom, Gym, Cafeteria and administration offices
- Occupancy sensor needs to be adjusted
- Emergency lighting needed in gym or hallway, areas are subject to black- outs
- Cafeteria egress lighting does not meet code requirements.
- Gymnasium egress lighting does not meet code requirements.
- Exit landing lighting not on emergency power.
- ADA ramp lighting does not meet egress code requirements.
- Sensor does not work for exterior lights
- Older panels; circuit breakers are not clearly marked, this is an concern given the age of the building

SITE CONDITIONS

Deficiencies

:: Asphalt at play structure surface is breaking up and needs to be replaced

:: Play structure has major leaks and needs to be repaired

SAFETY STANDARDS

Existing Conditions

:: Gym, staff lounge and boiler room are sprinklered

Deficiencies

:: School needs additional extinguishing systems

:: Building is not accessible throughout, required to go outside to get to all areas

:: Exterior ramp to cafeteria not to code, it is too steep for ADA purposes

:: Bus loop conflicts with parent drop-off staff monitors to provide safety

FUNCTIONAL STANDARDS

Deficiencies

:: Kitchen needs walk-in freezer space

:: No science area

:: Some book shelves, insufficient quantity of storage available in school

:: No adequate place for required testing

PRINCIPAL REQUESTS

Deficiences

:: Minimum facility requirements
- ADA upgrade
- Additional storage for PE
- Bus/parent drop-off needs to be reconfigured

:: Minimum Facility Additions
- Large covered play
- Two science classrooms
- Counseling room

W. L. Henry Elementary | Aerial/Site Plan

W. L. HENRY ELEMENTARY SCHOOL

ASSESSMENT SCORE5 51: MAJOR MODERNIZATION

GENERAL INFORMATION

:: Address: 1060 SE 24th Avenue, Hillsboro, OR 97123-7210

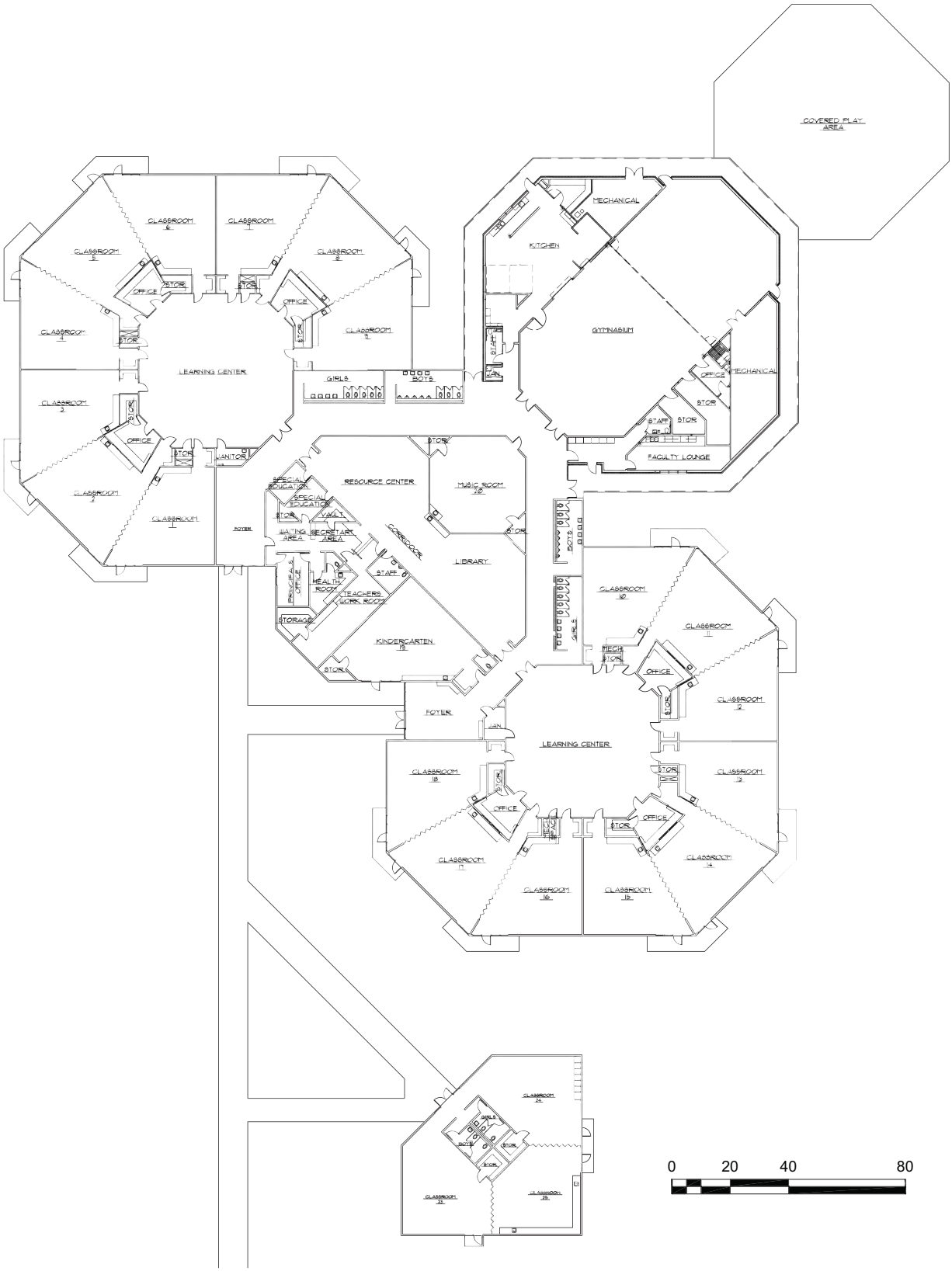
:: Construction dates:
- Original school constructed in 1968
- Kindergarten building in 1992
- Kitchen remodel and new staff lounge in 2010

:: Site area: 7.50 acres

:: Building area: 52,813 square feet

:: Population: 594 students

W. L. Henry Elementary | Floor Plan



W.L. HENRY ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: Primary structure a combination of structural steel and wood on continuous footings and piers with a truss roof system

:: Carpet in library, music, office, portables and kindergarten building

:: Ceramic tiles in restrooms on floors and walls

Deficiencies

:: Gym walls have cracks but no water infiltration

:: The 2001 FEMA report recommends seismic upgrades to the structure

:: Roof lacks insulation

:: Poor drainage on roof causes standing water

:: Clean and seal brick

:: Roof replacement (Area 6) 2012-2014

:: Repair dry rot in toilet rooms

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- Ceiling system is a lay-in metal grid

:: Walls
- The interior walls are wood stud with plaster and drywall and moveable walls

:: Windows / Doors
- Windows are aluminum, awning, single glazed with clear glass

:: Doors are steel and wood

:: Miscelaneous

Insulation
- Kraft Faced WR 13 C & F Thermafiber at all of the main school building
- No insulation at Kindergarten

Deficiencies

:: Walls
- The moveable walls are not serviceable
- Difficult to move so are not used
- Accordion type surface is not usable for display surface

:: Windows / Doors
- Drapes need replacing
- Replace single glazed windows
- Exterior doors and hardware need replaced, as repairs do not last

:: Miscelaneous

Insulation
- Replace kraft-face insulation (in all of main school)

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- School has partial cooling system, kitchen and staff lounge only have A/C.
- cooling added to new make-up air unit in kitchen; 2010
- Remodeled staff lounge had split system heat pump; 2010

:: Heating system
- Natural gas fire hydronic hot water boiler
- multi-zoned air handlers, with pneumatic controls

:: Plumbing
- New low flow toilets in 2005
- New staff toilet adjacent to staff lounge is ADA compliant, with low flow fixtures

:: Electrical system
- 208Y/120 volt, 1000 amp switchboard.
- New panels in kitchen; 2010
- Lighting system upgraded to electronic ballasts and T8 lamps; 2006
- Occupancy sensor system installed; 2006
- Multi-purpose/Gymnasium egress lighting upgraded; 2010
- Library egress lighting not on emergency power.

- Exit landing lighting fixtures, other than Multi-purpose/Gymnasium, not on emergency power.
- Electrical clocks do not work consistently

Deficiencies

:: Heating system
- Replace roof top multi-zone air handlers
- Building has poor ventilation
- Building overheats in spring and fall, most likely due to lack of insulation in the roof
- Upgrade pneumatic TC system to DDC.
- Replace boiler

:: Plumbing
- Domestic water piping in poor condition throughout school requires replacement.

:: Electrical system
- Power distribution inadequate for current technology
- Power supply is maxed out for technology
- Limited electrical capacity (sub-standard service), increase electrical service capacity.
- Lights fixtures are not secured to ceiling grid, difficult to re-lamp
- Corridor egress lighting not on emergency power.

SAFETY STANDARDS

Existing Conditions

:: School has full fire alarm system

:: Building has sprinklers and portable extinguishers

:: Detection and alarm systems are manual

:: Exit signs are in place

:: School has Sonitrol motion sensor type security system

Deficiencies

:: No stair enclosures

FUNCTIONAL STANDARDS

Existing Conditions

:: Open spaces used for ESL, Title 1 and special education

:: Offices used as one-on-one classrooms

Deficiencies

:: Poor assignable space ratio

:: Accordion doors are not functional and need to be replaced with walls and door

:: Spring and fall temperatures are a safety concern to the building occupants

PRINCIPAL REQUESTS

Deficiencies

:: Minimum Facility Requirements
- Connect kindergarten building to main with a covered walkway
- Many areas need more storage
- Kitchen needs more area
- Larger cafeteria
- Remodel learning centers into computer labs
- Remodel locker rooms into usable space

:: Minimum Facility Additions
- Four additional classrooms, six without portables
- New gymnasium, convert existing gymnasium into a cafeteria

Imlay Elementary | Aerial/Site Plan

IMLAY ELEMENTARY SCHOOL

ASSESSMENT SCORE 94: MINOR MODERNIZATION

GENERAL INFORMATION

:: Address: 5900 SE Lois Street, Hillsboro, OR 97123-7460

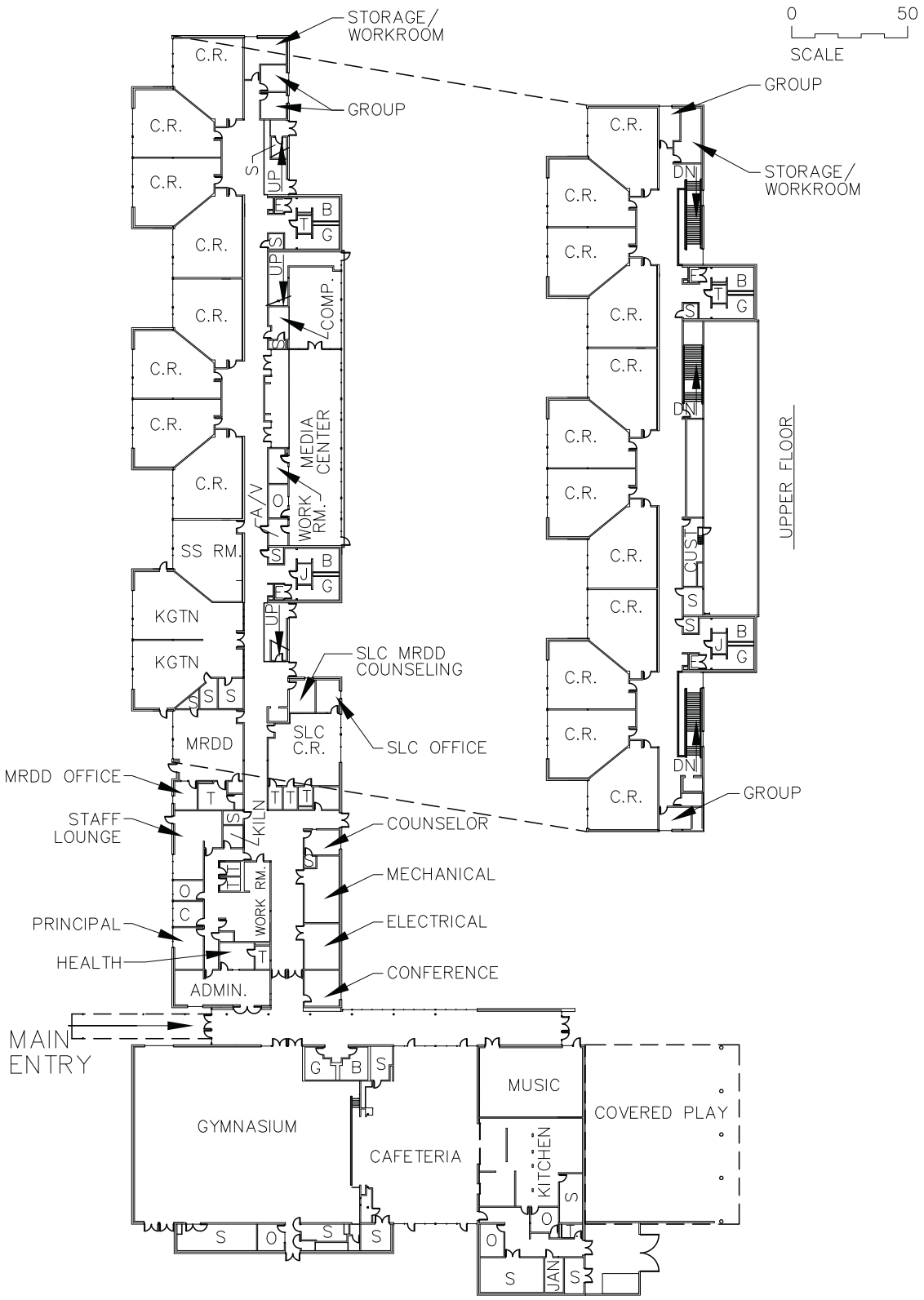
:: Construction date:
- Original school constructed in 2002

:: Site area: 8.68 acres

:: Building area: 69,435 square feet

:: Capacity: 600 students

Imlay Elementary | Floor Plan



IMLAY ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: Building was built after the 2001 FEMA Report. It is built to 2000 Oregon Structural Speacialty Code. The seismic codes have been changed

:: Primary structure is in good condition

Deficiencies

:: Carpet seams are in poor condition considering the age of the building

:: VCT seams are expanding

:: Clean and seal exterior block

SECONDARY STRUCTURE

Existing Conditions

:: Ceilings
- Ceilings are lay-in metal grid, gypsum and exposed to structure

:: Walls
- Interior walls are steel stud with drywall

:: Windows / Doors
- Windows are fixed, aluminum casement with double glazing
- Exterior doors are steel or aluminum, interior doors aresolid core with plastic lamenate faces or steel

Deficiences

:: Walls
- Acoustics in gym and café area a problem, acoustic panels are needed to improve facility

:: Windows / Doors
- Windows are difficult to open

SERVICE SYSTEMS

Existing Conditions

:: Cooling System
- Cooling/Ventilation system leaks at HVAC joints, on going in three or four locations
- Ventilation system leaks at HVAC joints, ongoing in 3 or 4 lacations.

:: Heating System
- Heating system is gas, central boiler with unit ventilators and VAV boxes
- Natural gas fired forced draft hydronic boilers
- HVAC units are mounted on roof top, in penthouse enclosure. Filter access is outside
- Temperature control system is Alerton DDC

:: Electrical
- Energy codes have changed since building was constructed
- Electrical service is 1200 amp 277Y/480volt switchboard
- 120Y/208 volt system is derived from 200 K va step-down transformer
- Gymnasium lighting is combination of fluorescent and 400 watt metal halide
- Lighting system control for corridors, flag pole, and toilet rooms
- Classrooms have direct/indirect suspended type fluorescent and 400 watt metal halide
- Classrooms have occupancy control for lighting
- Exit landing lighting is on emergency power

:: Plumbing
- Toilets are ADA compliant, low flow type
- Lavatories and sinks are ADA compliant, with low flow faucents
- Domestic water heaters are natural gas fired, high efficiency type

Deficiencies

:: Cooling System
- Restrooms need additional ventilation.
- HVAC system does not adjust to change in seasons well

:: Heating System
- Restrooms need additional ventilation
- Boilers are not high efficiency type

:: Electrical System
- Corridors have inadequate light
  1. Down light fixtures in hallways have electrical problems
  2. Down light lamps have to be replaced after 90 days of use

SAFETY SYSTEMS

Existing Conditions

:: School is fully fire sprinklered

:: Fire alarm smoke detectors and pull stations in corridors. No detectors in classrooms or administration offices

;; School has Sonitrol audio sensor type security system

Deficiencies

:: Fields have poor drainage, effects play area

SITE CONDITIONS

Deficiencies

:: Fields have poor drainage, effects play area

:: Some landscaping died, non-native plants

FUNCTIONAL STANDARDS

Deficiencies

:: Handles are breaking off case work

PRINCIPAL REQUESTS

Deficiences

:: Minimum facility requests
- Fence at top of covered area play area wall
- Covered play area gets wet as rain comes in from the south east
- Drainage poor at edge of play area
- Offices need more windows to the interior and exterior

Indian Hills Elementary | Aerial/Site Plan

INDIAN HILLS ELEMENTARY SCHOOL

ASSESSMENT SCORE 78:
MINOR MODERNIZATION

GENERAL

:: Address: 21260 SW Rock Road, Aloha, OR 97006-1542

:: Construction date:
- Original school constructed in 1979

:: Site area: 10.10 acres

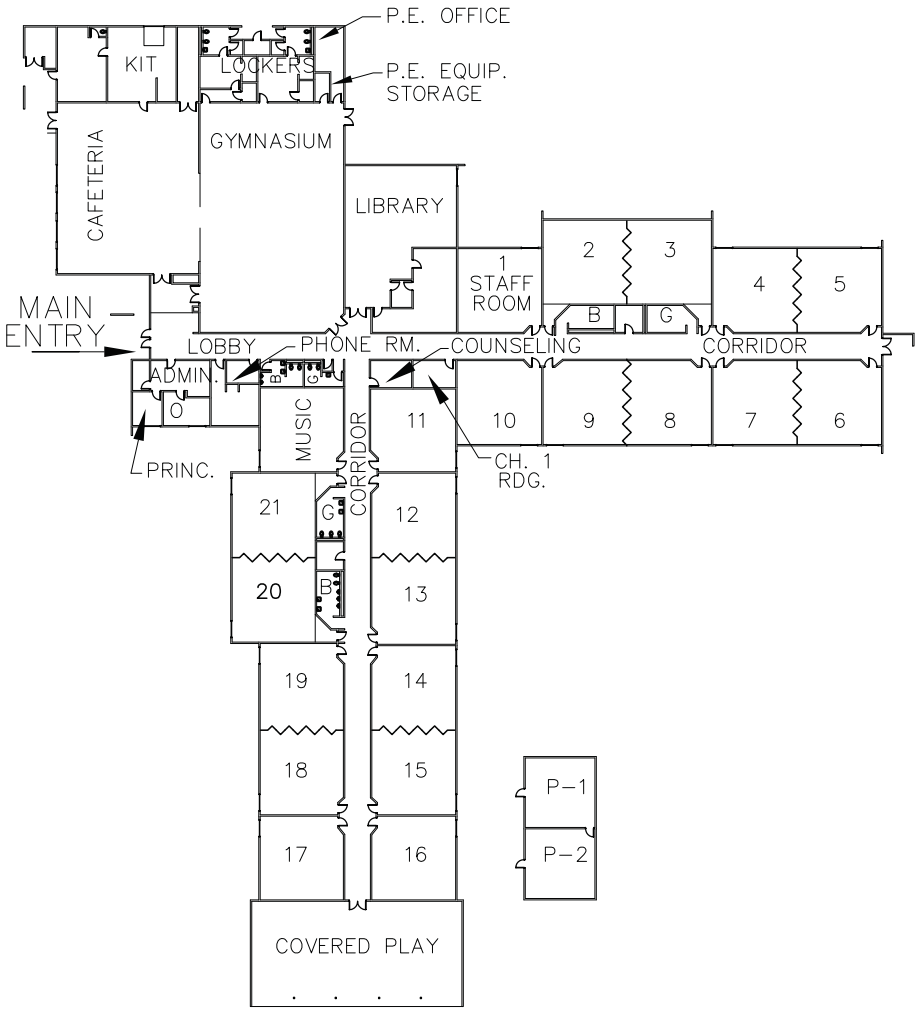
:: Building area: 40,219 square feet

:: Population: 407 students

Indian Hills Elementary | Floor Plan

NOTE:
NUMBERED ROOMS ARE CLASSROOMS EXCEPT ROOM 1

0 50
SCALE



INDIAN HILLS ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The primary structure of this building is a combination of wood frame walls at the classrooms and concrete at the gymnasium

:: Floor system
- Health room VAT flooring has been abated

:: New metal roof in 2005, major seismic work was done when the new roof was installed
- Insulation added in 2005

Deficiencies

:: FEMA report recommends significant seismic upgrades to walls

:: Floor system
- Floor in bathroom needs to be replaced
- Floor in hall has a crack

:: Existing down spouts were not replaced

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- The ceiling is primarily lay-in metal grid
- Tectum ceiling panels in gymnasium

:: Walls
- Interior walls are wood stud with dry wall and accordion doors

:: Windows / Doors
- Windows are single pane, aluminum awning and fixed glass
- New blinds in 2006
- Exterior doors are steel, interior doors are wood
- Lever hardware to be added in summer 2006

:: Miscellaneous
Insulation
- R-9 Foil face at kitchen, library, hallways

Deficiencies

:: Walls
- Building needs to be repainted throughout
- Accordion doors do not lock, some doors are coming away from the wall

:: Windows / Doors
- Exterior operable windows open too easily, are a security and safety issue
- Replace single-glazed windows
- Exterior doors need maintenance
- Center post not removable

:: Miscellaneous
Insulation
- R-11 paper face at shed (south)
- R-19 paper face at shed (north)

SERVICE SYSTEMS

Existing Conditions

:: Heating System
- Heating system is electric
- Large single zone systems

:: Electrical
- Office scheduled for a remodel this summer

Deficiencies

:: Cooling System
- Building is not air conditioned

:: Plumbing
- Insufficient staff toilets
- Urinals no water to fill basin, emits odors
- No ADA fixtures
- Caulking around sink in classrooms needs to be reapplied

:: Electrical
- Provide more exterior lighting

SITE CONDITIONS

Existing Conditions

:: Site drainage is fine

Deficiencies

:: Area around basketball court does not drain well

SAFETY STANDARDS

Existing Conditions

:: Emergency lighting in gym only

:: Sprinklers at kitchen, one custodial closet and entry

Deficiencies

:: Structure at primary means of egress has significant seismic concerns

:: Tubular shelves in classrooms have safety concerns, students are able to run into end of shelving in some rooms

:: Lack sprinklers in classroom, corridors, admin and gym.

FUNCTIONAL STANDARDS

Deficiences

:: Lack of small group areas

PRINCIPAL REQUESTS

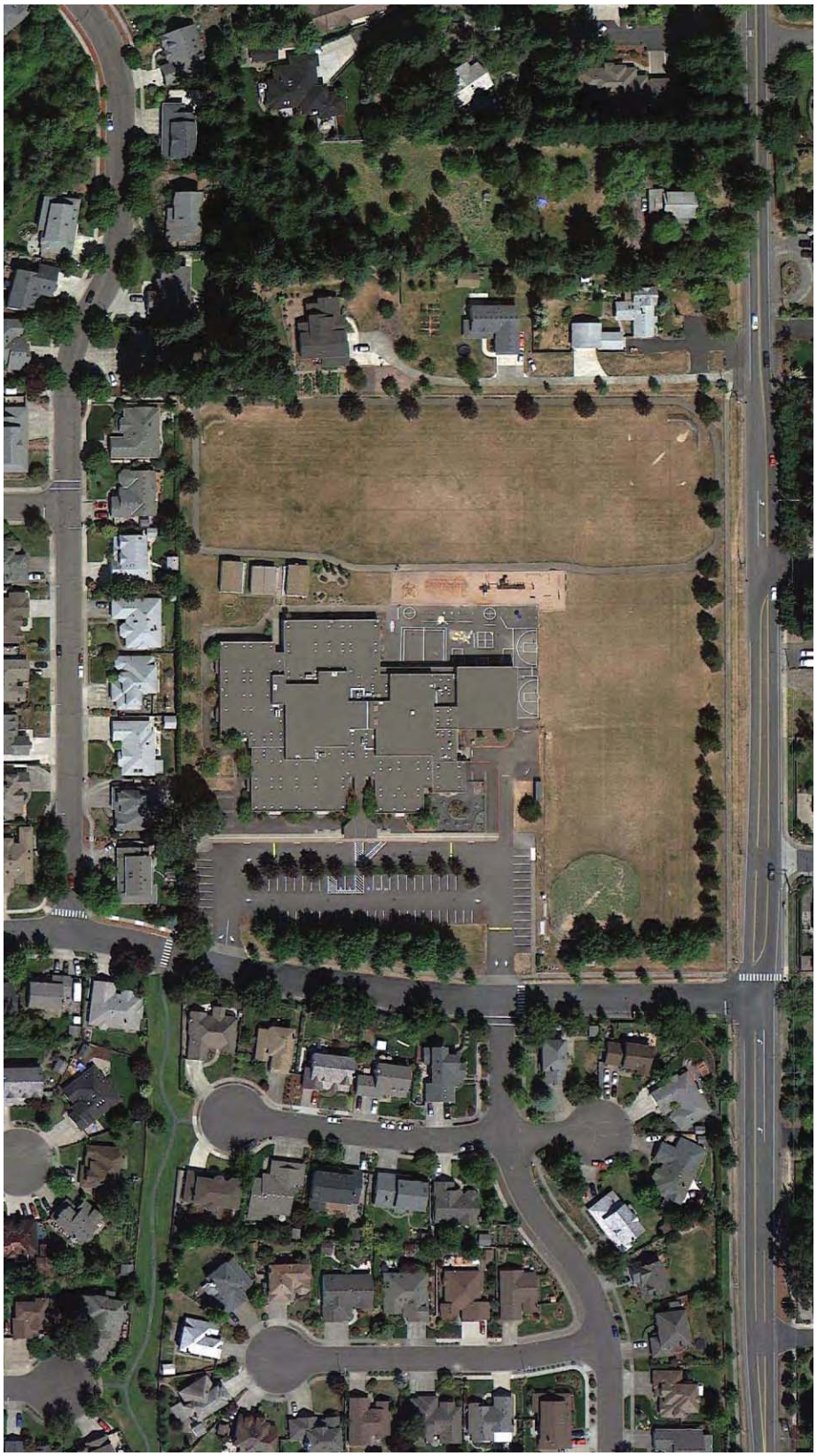
Deficiencies

:: Minimal Facility Requirements
- Air Conditioning
- Performance area
- New intercom system
- Timekeeping system

:: Minimal Facility Needs
- Larger, lighter, and taller covered play area

Jackson Elementary | Aerial/Site Plan

JACKSON ELEMENTARY SCHOOL



ASSESSMENT SCORE 79: MINOR MODERNIZATION

GENERAL INFORMATION

:: Address: 675 SE Century Boulevard, Hillsboro, OR 97124-2197

:: Construction date:
- Original school constructed in 1990

:: Site area: 10.00 acres

:: Building area: 50,767 square feet

:: Population: 640 students

Jackson Elementary | Floor Plan

NOTE:
DESCRIPTIONS (ROOMS) WILL CHANGE ANNUALLY

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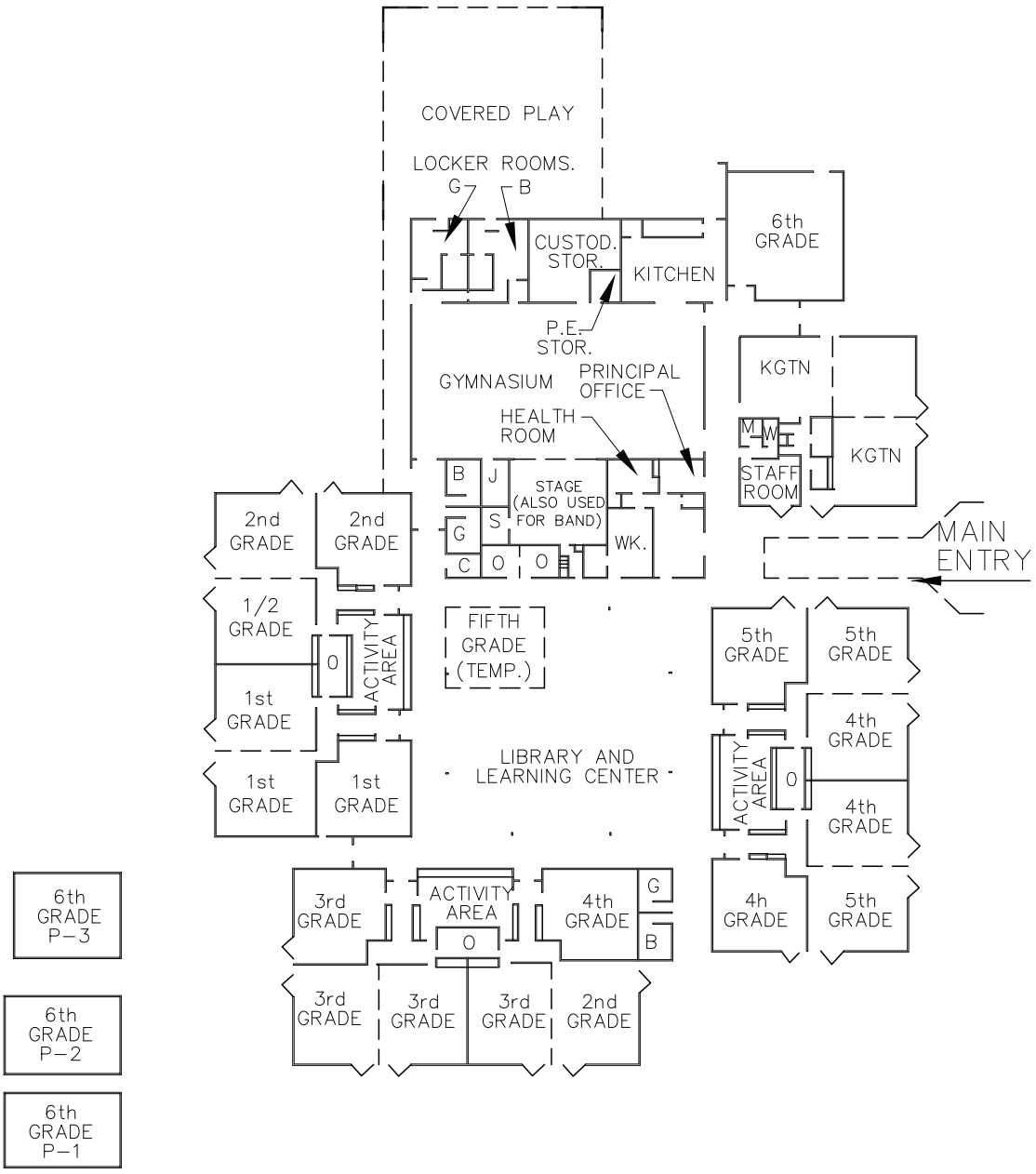
SCALE



JACKSON ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The primary structure is wood framed walls with brick sheathing, vertical supports are wood bearing walls with wood beams and wood or steel columns on a concrete stem wall

Deficiencies

:: The 2001 FEMA report indicates that the building needs seismic upgrades

:: Floor system
- VCT - joints in hallways are widening - may or may not be shrinking
- Carpet replaced within the past five to six years
- Kitchen sheet vinyl is starting to have punctures and tears; seams starting to come apart, making it difficult to clean

:: Roof system
- Roof leaks at west end of Library learning center; walls are damp
- Drains at alcove roofs do not drain, continually clog, causes standing water on the roof, drain is higher than the surface
- Roof surface is starting to bubble
- Roofs are starting to leak over classrooms
- Most alcove roofs in the building leak and damage the ceilings in the alcoves

:: Clean and seal brick veneer

SECONDARY STRUCTURE

Existing Conditions

:: Ceilings
- Ceilings are lay-in tiles and exposed structure

:: Walls
- Interior walls are wood stud with drywall or wood paneling, moveable walls are located between classrooms

:: Windows / Doors
- Windows are steel, fixed glass with double glazing
- All doors are steel

:: Miscellaneous

Insulation
- Black nylon cover on insulation, no label at portables

Definciencies

:: Ceilings
- Some lay in tiles in classrooms need to be replaced due to roof leaks

:: Walls
- Folding panel door at stage does not work well
- Tackable surfaces are showing wear, replace surface in one room
- Plaster walls in gym and shower area have cracks
- Learning center has poor acoustic issues

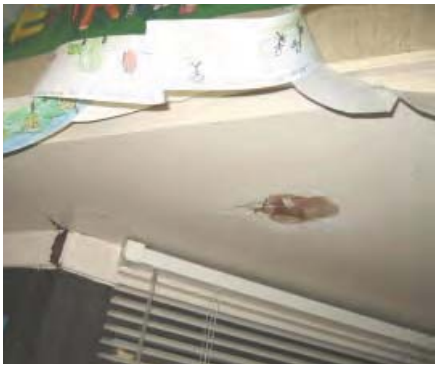
:: Windows / Doors
- Interior blinds at re-lites in classrooms needed
- Exterior doors need to be repainted
- Exit door threshold coming loose, due to settling

SERVICE SYSTEMS

:: Cooling system
- The school is air conditioned

:: Heating system
- Hot water, gas fired with electric controls
- New HVAC computer

:: Electrical systems
- Main electric service: 1600amp, 208Y/120 volt, fused switchboard, with single main switch
- Lighting in play areas in pods upgraded; 2007
- Lighting upgraded to electronic ballasts, T8 lamps; 2007



Deficiences

:: Cooling system
- System is difficult to control
- Library has one ceiling fan; as a result the room is normally too warm

:: Heating system
- Heating system has filtration problems and should be checked
- Replace condensing units
- Upgrade DDC controls

:: Plumbing system
- Penthouse has drain and flashing needs to be repaired
- Storm drain needs to be cleaned more often

:: Electrical systems
- Staff room microwave needs a separate circuit
- Emergency lighting does not work; it is needed in interior spaces
- Upgrade intercom
- Corridor egress lighting not on emergency power
- Multi-purpose/Cafeteria/Gmnasium egress does not meet egress code requirements
- Exit landing lighting not on emergency power

SITE CONDITIONS

Deficiencies

:: Covered play is not adequate due to wind blown rain

:: Water blows into play area of pod one and two and does not drain

:: Fields are unusable in winter

:: Parking is too small or poorly configured

SAFETY STANDARDS

Existing Conditions

:: Boiler room and basement are fired sprinklered

:: School has full fire alarm system

:: School has Sonitrol audio sensor type security system

PRINCIPAL REQUESTS

Deficiences

:: Minimal Facility Requirements
- A science lab area
- Wall to block rain at covered play
- Need acoustical treatment at covered play

:: Minimal Facility Needs
- Additional classroom, multipurpose room (science)
- Storage area

Ladd Acres Elementary | Aerial/Site Plan

LADD ACRES ELEMENTARY SCHOOL

ASSESSMENT SCORE 66: MODERNIZATION

GENERAL INFORMATION

:: Address: 2425 SW Cornelius Pass Road, Hillsboro, OR 97123-6736

:: Construction dates:
- Original school constructed in 1967
- Pods D, E, F, and G constructed in 1974
- Storage room constructed in 1987

:: Site area: 15.00 acres

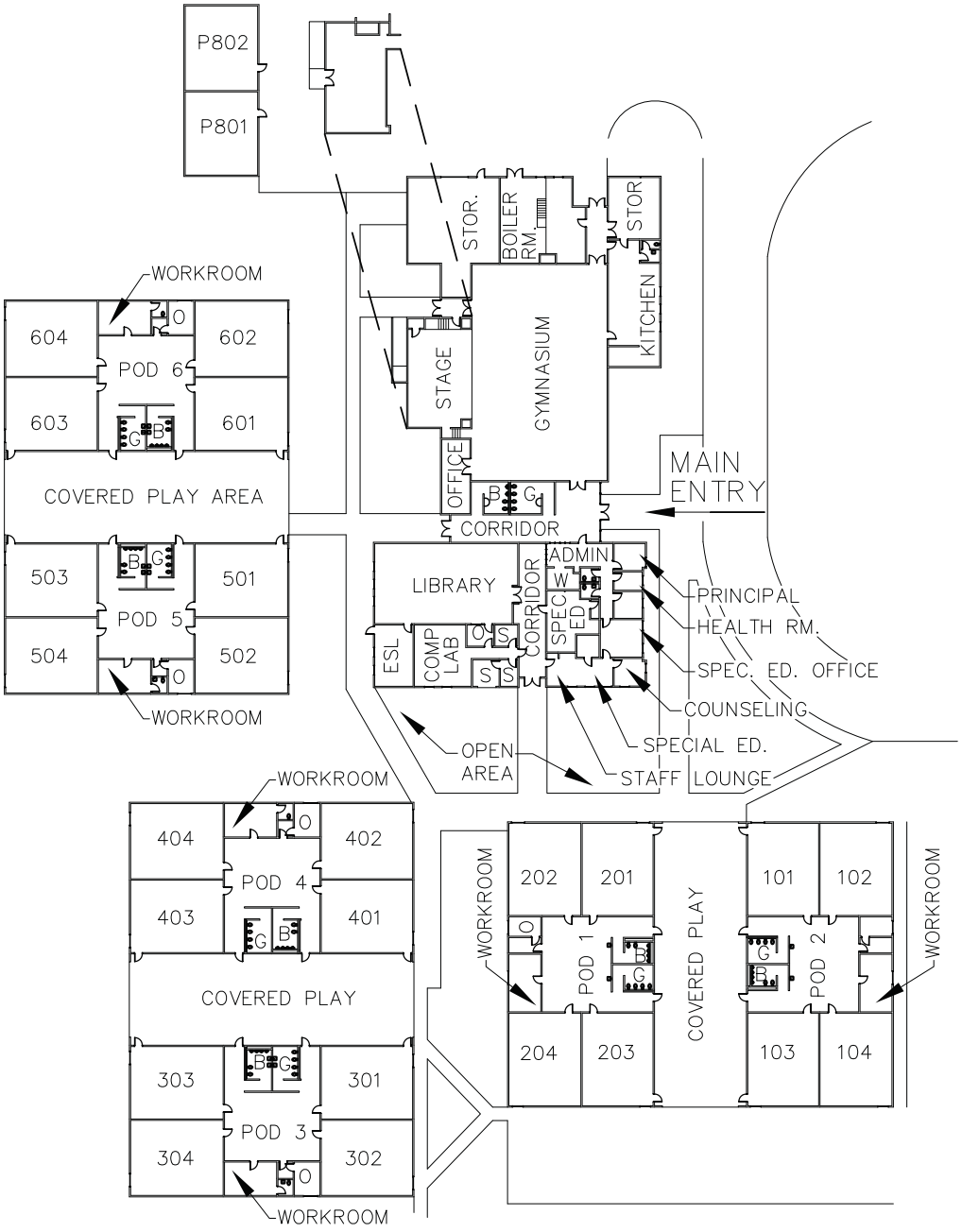
:: Building area: 60,825 square feet

:: Population: 600 students

Ladd Acres Elementary | Floor Plan

NOTE:
ROOMS ONLY HAVE 1 TO 4 ON DOORS.
PODS ARE IDENTIFIED BY THE NUMBER
OF STARS ON THE ENTRY AREA.

0 50
SCALE



LADD ACRES ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The primary structure is wood or concrete bearing walls with roof joists

:: The 2001 FEMA report recommends a number of seismic upgrades

:: The roof is fifteen or sixteen years old; it is holding up well
- Roof has been patched as needed
- Some areas of ponding on roof

Deficiencies

:: The exterior surface has a few small holes

:: Epoxy finish in bathrooms difficult to clean, trapped dirt a sanitation problem

:: There have been leaks at corner of gymnasium and door to library

SECONDARY STRUCTURE

:: Ceilings
- Ceilings are lay-in grid at classrooms; attached to structure at play areas and gymnasium
- Ceiling is insulated

:: Walls
- Interior walls are wood stud and movable walls between classrooms

:: Windows / Doors
- Windows are aluminum single-pane and in good condition
- Classrooms have only one large window in each room
- Exterior doors are steel; interior doors are wood and steel
- School was re-keyed in 2005

:: Miscellaneous

Insulation
- Black insulation, paper face at Pod 1 and 2, Gym, Office area, Library, and Kitchen
- Silver shield Therma Fiber Foil faced at Pod 2,3,4,5, and 6

Deficiencies

:: Ceilings
- Exterior play area at Pod 1 needs acoustical panels

:: Walls
- Movable walls no longer work properly, inhibit cleaning, are unable to get parts and create sound issues between classrooms

:: Windows / Doors
- Drafty on cold days
- Exterior doors are in poor condition
- Replace single glazed windows

:: Miscellaneous

Insulation
- Replace paper face insulation in Pods 1 and 2, gymnasium, office, library and kitchen

SERVICE SYSTEMS

Existing Conditions

:: Cooling System
- Building is only partially air conditioned (only in administration area)
- Administration office area addition has a packaged roof top AC unit

:: Heating System
- The heating system is a natural gas fired steam boiler
- Steam piping running through tunnels connecting the schools
- DDC temperature control system

:: Electrical system
- Main electric service: 1600 amp, 208y/120 volt, fused switchboard, with single main switch.
- Lighting in play areas in pods upgraded; 2007
- Lighting upgraded to electronic ballasts, T8 lamps; 2007
- Occupancy sensor system installed; 2007

Deficiencies

:: Cooling System
- Classrooms are uncomfortable, but not

unbearable on hot days

:: Heating System
- The heating system is not adequate for winter. Classrooms are not warm enough in winter.
- Tunnels in school complex fill with water after heavy rains
- Replace piping in tunnels

:: Plumbing
- Fixtures are showing age; some drinking faucets don't work, some faucets drip, toilets are aging
- No HC accessible toilets, although grab bars have been added
- Replace plumbing piping throughout the school -Scheduled for 2012
- Upgrade lift station
- Domestic water piping in utility tunnels is failing

:: Electrical
- Play areas in pods are dark, need additional lighting
- No emergency lighting in school
- Convenience outlets are all in one location in classrooms
- Corridor egress lighting not on emergency power
- Multi-purpose/Cafeteria/Gymnasium egress does not meet egress code requirements
- Exit landing lighting not on emergency power
- Convenience outlets are all in one location in classroom

SITE CONDITIONS

Deficiencies

:: Water blows into play area of pod one and two and does not drain

:: Fields are unusable in winter

:: Parking is too small and poorly configured

SAFETY STANDARDS

Existing Conditions

:: Boiler room and basement are sprinklered

Deficiencies

:: Parent and bus drop off can back-up onto Cornelius Pass Road, needs to be reconfigured

:: Layout of school makes it unable to secure the entire facility. It has not been a problem, but it is a concern.
- Layout of school causes safety concerns for children moving between pods
- Layout has blind spots
- School has many points of entry
- Conflict at bus and parent drop-off

FUNCTIONAL STANDARDS

Deficiencies

:: Cabinets are showing wear

:: Need additional storage shelving for physical education

:: Suitability
- Classrooms lose flexibility if class size is over 30 children
- Entrance into school is too small, and creates congestion when students are released
- Gymnasium is too small for the whole school; need to schedule two assemblies
- Parking is too small or poorly configured
- Parent and bus drop-off needs to be reconfigured

PRINCIPAL REQUESTS

Deficiencies

:: Minimum Facility Requirements
- System to monitor school; prefers cameras over a fence

:: Minimal Facility Needs
- ESL classroom
- Special education classroom
- Music room
- New gymnasium with a stage
- Covered play structure

Lenox Elementary | Aerial/Site Plan

LENOX ELEMENTARY SCHOOL

ASSESSMENT SCORE 70: MODERNIZATION

GENERAL INFORMATION

:: Address: 21200 NW Rock Creek Boulevard, Portland, OR, 97229-1042

:: Construction date:
- Original school constructed in 1978

:: Site area: 9.95 acres

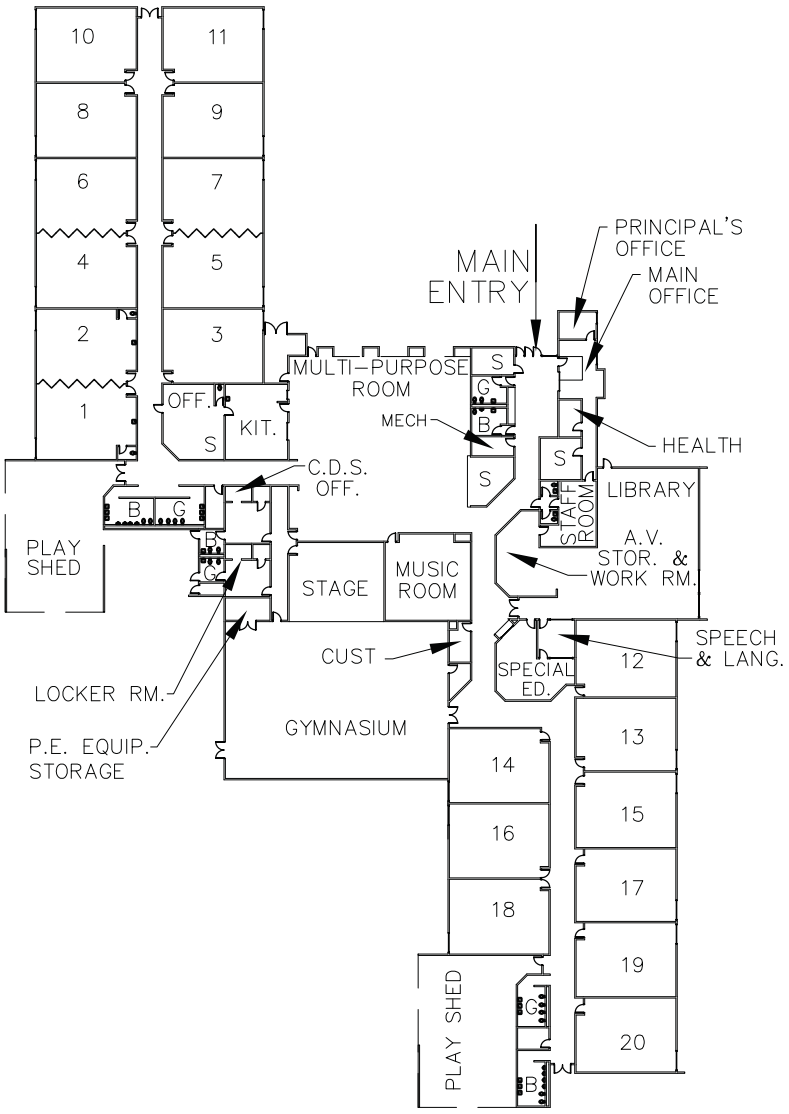
:: Building area: 51,074 square feet

:: Population: 450 students

Lenox Elementary | Floor Plan

NOTES
NO PORTABLES
NO NATURAL GAS

0 50
SCALE



LENOX ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The primary structure is wood walls and columns supporting wood beams and joists. Concrete grade beams are at bearing walls and concrete pad footings at columns

:: Front doors, storage building and intermediate play shed are subject to vandalism

:: Floor system
- One or two rooms a year receive new carpet

:: New roof installed in 2002

Deficiencies

:: The 2001 FEMA report recommends a number of seismic upgrades to the structure
- Exterior siding needs painting and some siding replacement

:: Floor system
- Epoxy finish in restrooms difficult to clean, and in poor condition

:: Roof
- Downspouts clog, gutters were not replaced when the school was re-roofed
- Skylights in play shed need replacing
- "Re-aluminized" roof in 2015

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- Ceiling are lay-in tiles or attached to structure

:: Walls
- Interior walls are wood stud with drywall and some movable walls between classrooms

:: Windows / Doors
- Windows are double glazed, aluminum
- Over 100 windows replaced 5 years ago, 4 or 5 more still need to be replaced
- Windows have a top vent window that is used to cool the un-air conditioned building
- Some classrooms still have roller shades
- Exterior of building was re-keyed one year ago
- Interior of building was re-keyed three years ago

:: Miscellaneous

Insulation
- None at the shed

Deficiencies

:: Ceiling
- A number of lay-in ceiling tiles are stained tiles from leaks in ceiling

:: Walls
- Movable walls in some classrooms sag and do not operate smoothly
- Rooms with movable walls have some acoustical problems
- Movable walls need adjustment

:: Windows / Doors
- Some fire doors are missing closers
- Closers need frequent adjusting
- Finish on exterior doors is dull, needs paint

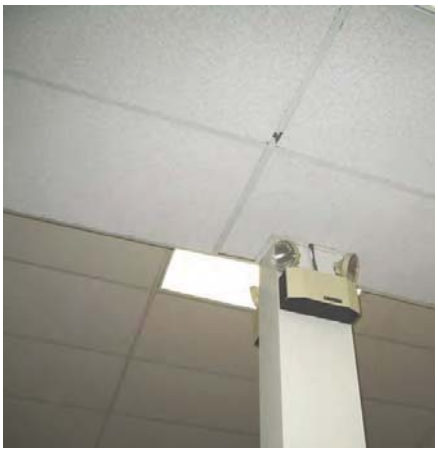
SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- The school does not have air conditioning
- Top vent window opens

:: Heating system
- Heating system is electric
- Strip heat in class rooms
- Wall heaters in hallways

:: Electrical systems
- Lighting system upgraded to electronic ballasts and T8 lamps; 2007
- Main electrical service: 1200 amp, 480Y 277 volt. 208Y/120 volt distribution system is 400 amp. Electric service is adequate for future needs
- Additional lighting in administration office area installed; 2007



- Gymnasium lighting upgraded to T%HO fluorescent fixtures; 2007
- Occupancy sensor system installed; 2007

Deficiencies

:: Cooling system
- South wing and computer room get unbearably hot
- Provide a different cooling system at kitchen compressor
- Replace HVAC system

:: Heating system
- North wing gets very cold
- Poor circulation in school is augmented by windows and floor fans
- Intake vents are located low on the wall, this location stirs up dust and clogs the system
- Roof vents over rooms 19-20 leak water into the classrooms in severe weather, staining ceilings
- System is difficult to control
- Replace HVAC
- Ventilation systems do not have air tempering capacity
- When outside air ventilation air is brought to Code requirements, additional electric heating capacity will be required

:: Plumbing system
- Classroom sinks do not drain well
- No ADA restrooms in school
- Gutters overflow during heavy rains
- Poor site drainage

:: Electrical systems
- Light levels in office and staff rooms are low and need to be upgraded
- No emergency lighting in restrooms or gym, may be dark in the event of a power outage
- Corridor egress lighting not on emergency power
- Gymnasium egress lighting does not meet egress code requirements
- Multi-purpose/Cafeteria egress lighting does not meet egress code requirements
- Multi-pupose/Cafeteria egress lighting not on emergency power
- Exit landing lighting not on emergency power

SITE CONDITIONS

Deficiencies

:: Drainage at play areas to north are problematic

:: Poor site drainage

SAFETY STANDARDS

Existing Conditions

:: Building security system was upgraded in 2004

:: School has Sonitrol motion sensor type security system

:: School has full fire alarm system

Deficiencies

:: Bus drop-off and parent drop-off share a common driveway, causing traffic to back up onto neighborhood streets. Improve circulation for bus and parent drop off.

FUNCTIONAL STANDARDS

Existing Conditions

:: One locker room has been configured for offices, the other is used for storage, it could also be configured for offices or better configured for storage

Deficiencies

:: Moveable walls do not always function

:: Hall into cafe congested when north wing lines up for lunch

:: Building needs air conditioning, at a minimum in the computer lab

Lincoln Street Elementary | Aerial/Site Plan

LINCOLN STREET ELEMENTARY SCHOOL

ASSESSMENT SCORE 98: SATISFACTORY CONDITION

GENERAL INFORMATION

:: Address: 801 N.E. Lincoln Street, Hillsboro, OR 97124

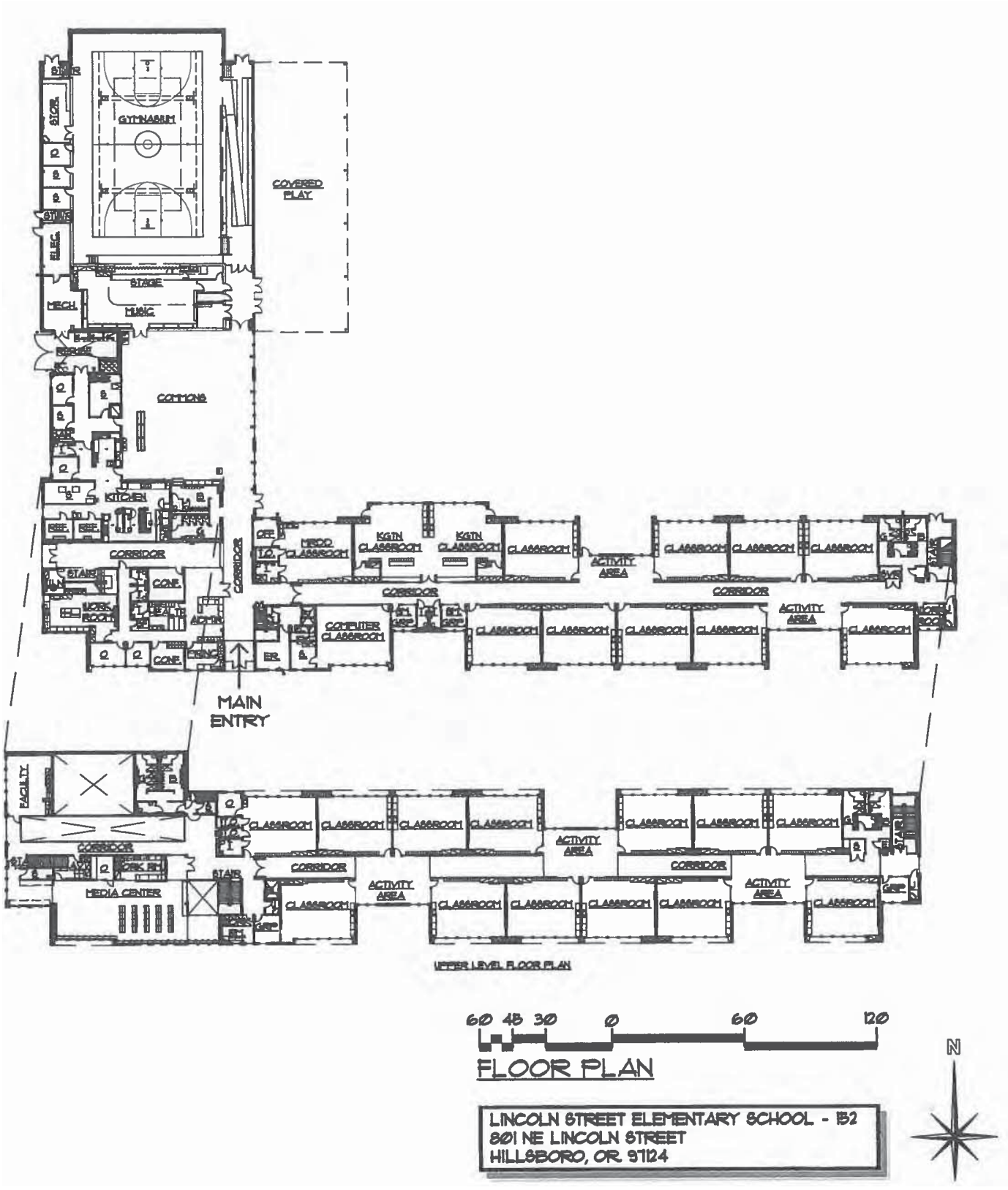
:: Construction date:
- Constructed in 2008

:: Site area: 11.79 acres

:: Building area: 71,513 square feet

:: Capacity: 600 students

Lincoln Street Elementary | Floor Plan



LINCOLN STREET ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: This school was constructed after the 2001 FEMA report. It was built to meet the seismic requirements of the 2007 Oregon Structural Specialty Code

:: Administration and Classroom Wing: Steel structure with brick veneer and metal panel metal roof deck

:: Gym, adjacent storage rooms, Commons: Load bearing CMU with brick veneer

SECONDARY STRUCTURAL

Existing Conditions

:: Ceiling
- The school has primarily lay-inceiling tiles, exposed structure at the gym

:: Walls
- Interior partitions are metal studs with drywall

:: Windows / Doors
- Windows are aluminum with fixed glass and operable units
- Exterior doors are aluminum and steel Interior doors are wood

:: Miscellaneous
- Roofing: Built up roof (Temco)

Deficiencies

:: Windows / Doors
- Window gasket in gym is failing

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- Roof top units with DX cooling systems

:: Heating system
- Natural gas fire high efficiency hydronic boilers
- Secondary hydronic circulation pumps AFD controlled
- Roof top units with hydronic heating coils
- Roof top unit supply fans AFD controlled
- Roof top units have heat recovery wheel
- Zoned variable volume terminal units with hydronic reheat coils
- DDC control system

:: Plumbing
- Natural gas fired high efficiency hot water heater
- Full kitchen for serving breakfast and lunch

:: Electrical system
- Main electric service is 480 volt, sized for 25% additional capacity
- Classroom lighting high efficiency direct/ indirect with electronic ballasts and T8 lamps
- Occupancy sensors installed throughout the school
- Corridor emergency egress lighting has battery backed ballasts
- Corridor lighting on lighting controller
- Classroom and administration area lighting controlled by occupancy sensors
- Gym and Multi-purpose area lighting fixtures use T5HO lamps
- Exterior lighting on lighting controller
- Exterior egress landing lighting battery backed

Deficiencies

:: Building does not meet current energy codes

W. Verne McKinney Elementary | Aerial/Site Plan

W. VERNE McKINNEY ELEMENTARY SCHOOL

ASSESSMENT SCORE 68: MODERNIZATION

GENERAL INFORMATION

:: Address: 23870 535 NW Darnielle Street, Hillsboro, OR 97124-2214

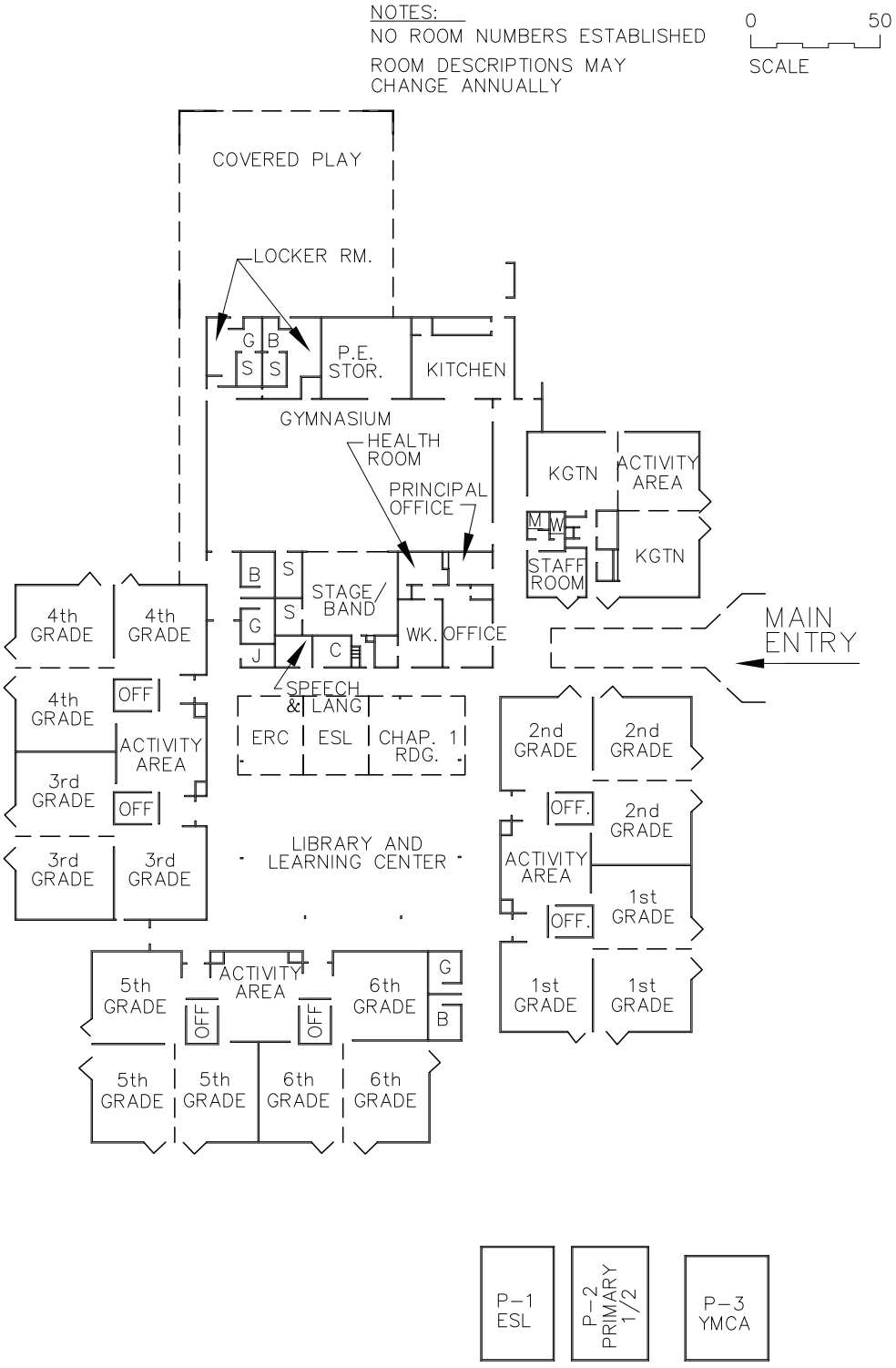
:: Construction date
- Original school constructed in early 1970's

:: Site area: 10.00 acres

:: Building area: 49,163 square feet

:: Population: 540 students

W. Verne McKinney Elementary | Floor Plan



W. VERNE MCKINNEY ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: Primary structure is wood framed walls with brick sheathing, vertical supports are wood bearing walls with wood beams and wood or steel columns.

:: New roof was installed in 2005

Deficiencies

:: The 2001 FEMA report indicates that the building needs seismic upgrades

:: Exterior brick need to be cleaned, re-sealed to remove the effloresce and moss

:: Walls at portables have mildew and are failing; railings at portables are in poor condition and children have gotten slivers

:: Floor system
- Ceramic tile in kindergarten boys' restroom smells and is difficult to clean
- Building has asbestos flooring
- Gymnasium floor has cracking
- Grade at the end of the ramp at the portables does not meet ADA code

:: Flat roofs at alcoves leak and cause significant damage to the windows, ceilings, walls and doors

:: Water stands on the roof and then backs-up into the wall behind

:: Portable roofs have moss

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- Ceiling system is primarily lay-in tiles. The learning center has an exposed wood ceiling system.

:: Walls
- Interior walls are wood studs with drywall and wood paneling

:: Windows / Doors
- Windows are fixed steel, with single-glazing
- Doors are steel exterior and interior and in poor condition
- Whole school has been re-keyed in 2006

:: Miscellaneous

Insulation
- Therma fiber Silver (3"?) at all class rooms
- Black Fiber Netting, no label at Portable 1 and 2
- Black Nylon, no label at Portable 3

Deficiencies

:: Ceiling
- Learning center and gymnasium are loud and need acoustical treatment
- Ceilings at classroom window alcoves have water damage

:: Walls
- Learning center walls are all hard surface, it is difficult to control noise in this space
- Special programs are located behind partitions in learning center. They need an acoustical solution to dampen sound yet keep the space open.

:: Windows / Doors
- Variety of blinds in the school, some rooms do not have them, some rooms do not have new vertical blinds
- Windows below alcove roofs at classrooms are in poor condition
- Some doors under alcoves do not latch and close
- Replace single glazed windows

SERVICE SYSTEMS

Exsiting Condtions

:: Cooling System
- Condensing units replace; 2008
- AHU's evaluated per FSSD

:: Heating system
- Heating system is hot water with electric controls
- Individual natural gas fire hydronic hot water boilers
- Multi-zoned foreced air

- Pneumatic temperature controls replaced with DDC system; 2008

:: Electrical systems
- Electrical system is at capacity
- The school received a technology upgrade
- Emergency lighting in learning center,
- School lighting upgraded to electronic ballasts and T8 lamps; 2006
- Occupancy sensor system installed in classrooms, administration offices, Multi-purpose area and library

Deficiencies

:: Cooling System
- Cooling system has been modified over the course of five years, but does not function adequately; it needs to be "babied"
- Condensers need to be replaced, AHU's evaluated per FSSD

:: Heating system
- Heating system is not flexible; boiler is turned off in the spring, so school can not account for infrequent cool days late in the season; the inverse is true for cooling seasons
- May need additional vents to increase circulation
- Vents blow into special programs area, which is uncomfortable for occupants

:: Plumbing system
- Need new sinks, drinking fountains and counters in pod areas
- Some faucets do not function, some faucets drip
- Some urinals do not flush properly
- Additional adult restrooms are needed. Adult restrooms added at locker rooms are remote and unused, old locker rooms are used for storage
- The school is scheduled to receive new toilets this fall

:: Electrical systems
- Hallway near kindergarten area is dark, it is scheduled to receive new fixtures
- Verify if emergency lighting is in gymnasium
- Corridor egress lighting not on emergency power
- Multi-purpose/Cafeteria egress lighting does not meet egress code requirements
- Library/Media Center does not meet egress code requirements
- Library/Media Center egress lighting not on emergency power
- Not all exit landing are lighted
- Exit landing lighting not on emergency power

SITE CONDITIONS

Deficiencies

:: Ponding occurs in the east parking lot

:: Grounds need storm drains, per FSSD

:: Inadequate parking

:: Pinch point for bus and parent drop off at east end

:: Black top near portables is in poor condition

:: Bus loop needs to be reconfigured

SAFETY STANDARDS

Existing Conditions

:: School has full fire alarm system

:: School has sonitrol motion sensor type security system

Deficiencies

:: Some exits do not have light signs

:: Music room is not ADA accessible

:: Some exit signs are difficult to see

FUNCTIONAL STANDARDS

Existing Conditions

:: Custodial storage in hall near cafeteria entrance

Deficiencies

:: Counters and sinks in activity areas are old and need to be replaced

:: Suitability
- Insufficient number of adult restrooms
- Difficult to teach in learning lab due to poor acoustics
- Route to gym/cafeteria is congested
- Gym has poor acoustics
- Refrigerator in hall near cafeteria entrance

PRINCIPAL REQUESTS

Deficiencies

:: Minimum facility requests
- More parking
- Large staff room
- Replace portables, Title 1, ESL and special education in portables

:: Minimum facility needs
- Cafeteria/multi-purpose room
- Covered play structure
- If population grows to 640, need four additional classrooms, in addition to portables

Minter Bridge Elementary | Aerial/Site Plan

MINTER BRIDGE ELEMENTARY SCHOOL

ASSESSMENT SCORE 77:
MINOR MODERNIZATION

GENERAL INFORMATION

:: Address: 1750 SE Jacquelin Drive, Hillsboro, OR 97213-5260

:: Construction date
- Original school constructed in 1979
- Structural drawings are missing

:: Site area: 10.00 acres

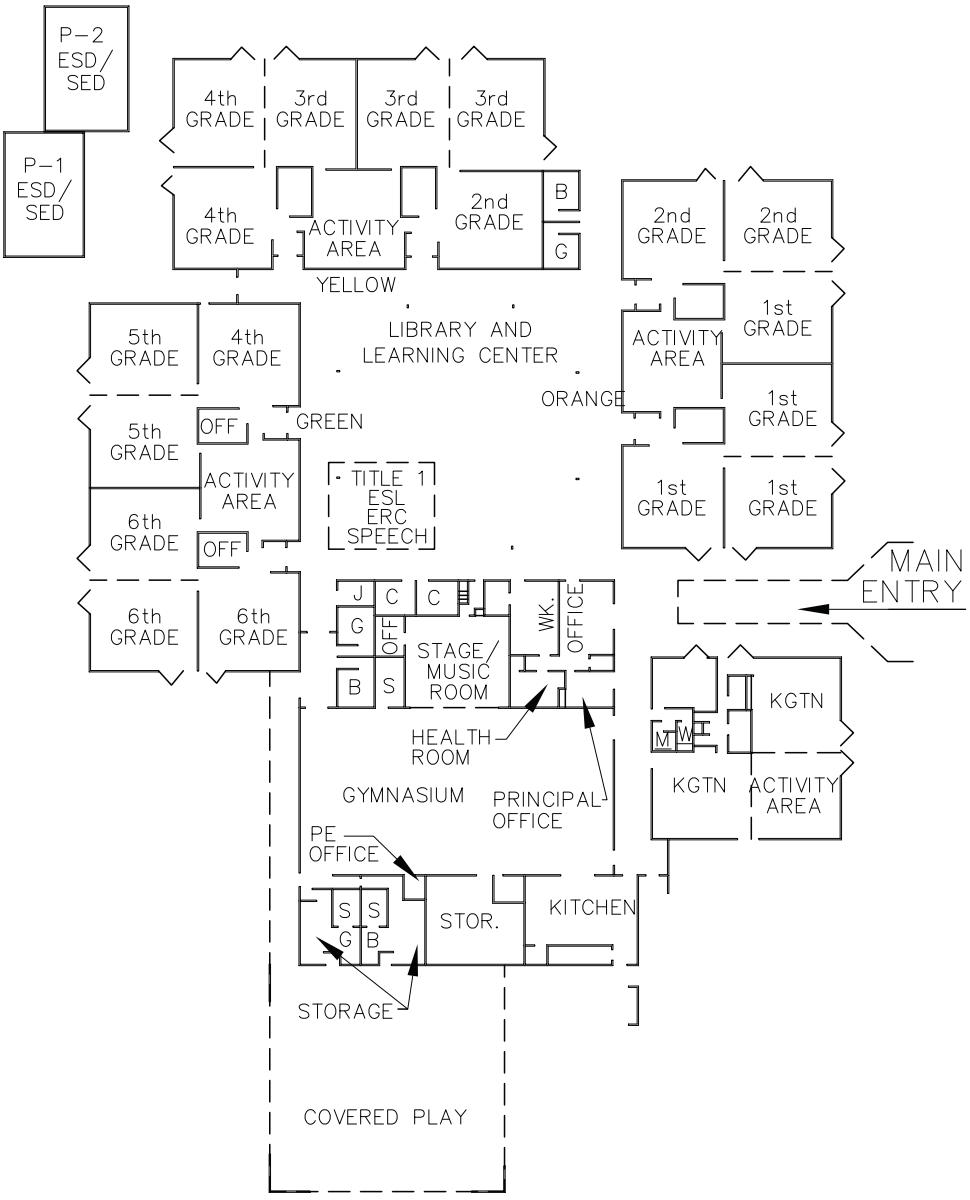
:: Building area: 49,163 square feet

:: Population: 381 students

Minter Bridge Elementary | Floor Plan

NOTES:
NO ROOM NUMBERS ESTABLISHED
ROOM DESCRIPTIONS MAY CHANGE ANNUALLY

0 50
SCALE



MINTER BRIDGE ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The primary structure is a combination of structural steel and structural wood walls on flat slab

:: The roof is a combination of flat roofs at the classrooms and sloped glulam beams at the learning center

:: The school was re-roofed in 2003

:: The structure is similar to Eastwood and Jackson; Eastwood drawings use FEMA evaluation

Deficiencies

:: Alcove roofs have poor drainage; the drain pipes are subject to clogging, which causes water to run into windows and ceilings; possible mold at these locations

:: The 2001 FEMA report recommends a number of seismic upgrades to the structure

:: Over 60% of floor coverings are original to construction and are showing wear
- Gymnasium floor has a large crack in the middle
- Tile in the hall outside the principal's office is cracking

:: Floors in portables may have dry rot

:: Clean and seal brick veneer

SECONDARY STRUCTURE

Existing Condtions

:: Ceiling
- Ceiling system is lay-in metal grid, gypsum and exposed structure

:: Walls
- Interior walls are wood stud with drywall and wood paneling; some classrooms have movable walls

:: Windows / Doors
- Windows are single-glazed, fixed aluminum
- Exterior doors are steel, interior doors are a combination of steel and wood

:: Miscellaneous
Insulation
- Foil Face at Kitchen Storage

Deficiencies

:: Ceiling
- Library ceiling has no acoustical treatment and the space can get very loud
- Ceiling in alcoves are damaged due to poor roof drainage

:: Walls
- Movable walls are not easy to move, stick, are inconvenient and contribute to acoustical problems between classrooms

:: Windows / Doors
- Exterior windows need to be repaired
- Window caulking is brittle
- Some windows are missing blinds
- Replace single-glazed windows
- Doors do not have accessible hardware

:: Miscellaneous
Insulation
- No insulation at Front Office, Rooms 4 through 21, Staff Room
- Replace unrated insulation

SERVICE SYSTEMS

Existing Condtions

:: Cooling system
- The school is air conditioned
- HVAC was redone in 2005, it is working well, and digital system has improved operation.
- Filters are changed three times a year. Some have excessive dust
- Condensing units repalced; 2008

:: Heating system
- Electric heating system works well

:: Electrical systems
- It is assumed that the electrical system has been upgraded
- Lighting upgrades throughout

- Maine electrical service: 1000 amp, 480Y/277 vold, distribution panel has six mains.

Deficiencies

:: Heating system
- Electric duct heater are under capacity for outside air ventilation requirements during cold weather

:: Plumbing system
- Drain at exterior classroom doors frequently clog, poor drainage
- Mens' and boys' restroom fixtures do not drain well
- Limited number of adult fixtures for evening use
- No accessible toilet rooms
- Teachers have complained about mold in the building

:: Electrical systems
- Inadequate number of outlets
- Floor outlets in media center can be a hazard, especially if they are missing covers
- Exit signs are inadequate; many are placed where view is obstructed
- Electric service needs to be upgraded. Additional capacity required when heating system upgrade is done to meet ventilation requirements
- Lighting system needs to be upgraded
- Corridor egress lighting is not on emergency power, emergency battery inverter has failed and needs to be replaced
- Multi-purpose/Cafeteria egress lighting does not meet egress code requirements
- Library/Media Center egress lighting does not meet egress code requirements, and is not on emergency power
- Exit landing lighting not on emergency power

SAFETY STANDARDS

Existing Conditions

:: School has full fire alarm system. Beam dectectors used in IMC

:: School has Sonitrol motion sensor type security system

Deficiences

:: Needs emergency lighting; gymnasium blacks out during power outages

:: Stage lacks ADA access

:: School has partial fire sprinkler system. Coverage in corridor only

FUNCTIONAL STANDARDS

Deficiencies

:: Dual use of cafeteria/gymnasium creates scheduling problems

:: Evening use of classrooms can create conflicts

PRINCIPAL REQUESTS

Deficiencies

:: Minimal Facility Needs
- New cafeteria and enlarged kitchen
- Larger classrooms for older students
- Covered garbage area
- Enlarge covered play

Mooberry Elementary | Aerial/Site Plan

MOOBERRY ELEMENTARY SCHOOL

ASSESSMENT SCORE 52:
MAJOR MODERNIZATION

GENERAL INFORMATION

:: Address: 1230 NE 10th Avenue, Hillsboro, OR 97124-5203

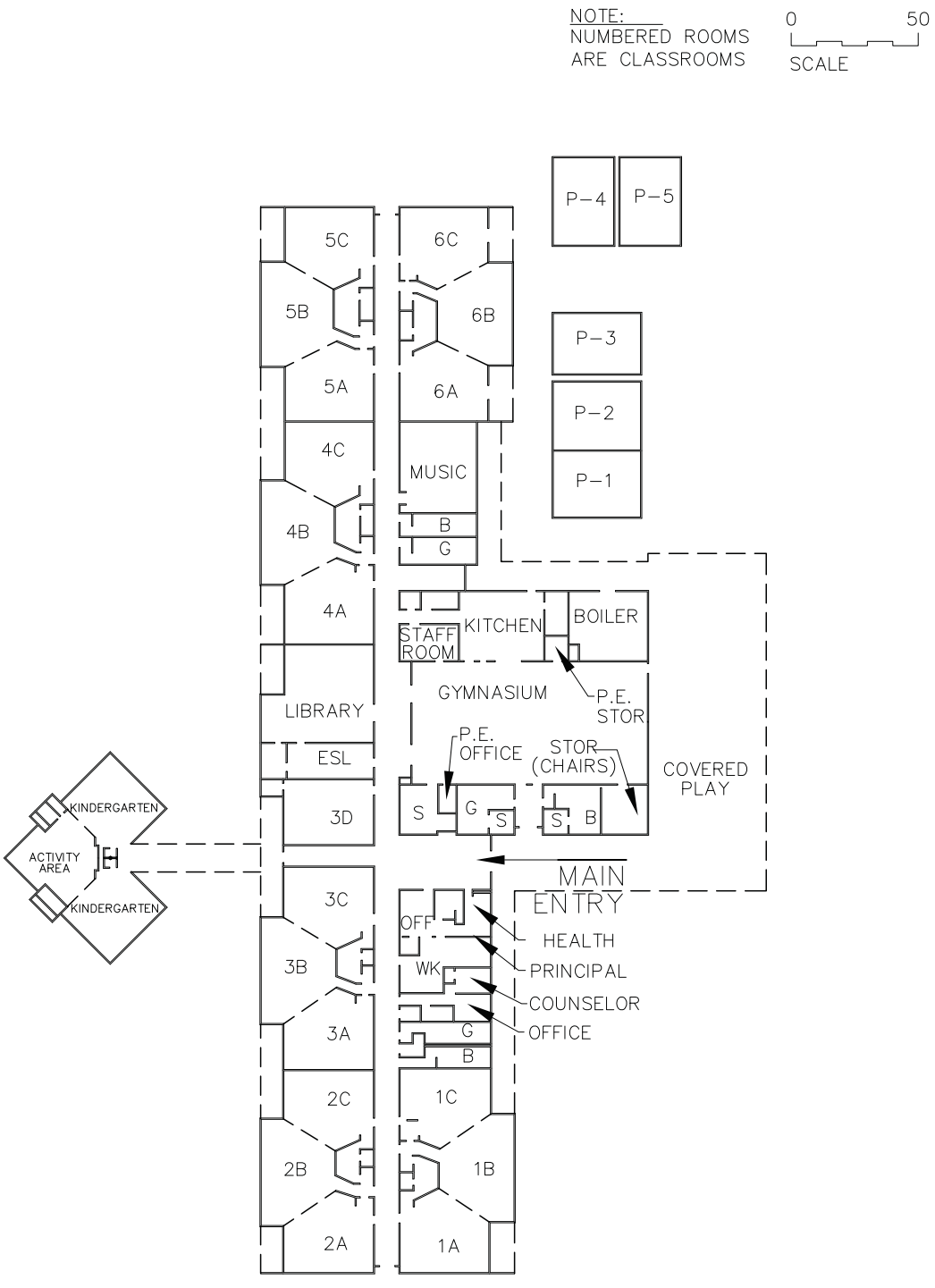
:: Construction dates:
- Original school constructed in 1963
- East portion added between 1963 and 1970
- Kindergarten constructed in 1970

:: Site area: 10.00 acres

:: Building area: 49,493 square feet

:: Population: 547 students

Mooberry Elementary | Floor Plan



MOOBERRY ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: Primary structure is structural wood and steel with concrete footings and slab

:: According to the 2001 FEMA report, the structure needs to be tied together

:: School has original VAT in classrooms, corridors, and gymnasium

:: The roof is a joist and beam system with sheathing

Deficiencies

:: Paint is chipping off metal portions of the building

:: The floor in kindergarten restroom needs replacing

:: Gutters and downspouts in building are in very poor condition; they were not replaced with the new roof and need to be replaced

:: The custodian does not think the roof is insulated

:: Clean and seal brick veneer

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- Ceiling is primarily lay-in grid that has been painted

:: Walls
- Interior walls are studs with drywall

:: Windows / Doors
- Aluminum windows are operable with single-pane glass
- Exterior doors are steel; interior doors are wood

sliders; security and operations are an issue

:: Miscellaneous

Insulation
- Feltrok (2"0 Foil face at Main Entry
- Black Plain Foil Face at Room 6, Room 9, Library (2"),
- Foil Face Encapsulated Plain, no writing at Hall by Library
- GSU Foil Face at Staff Room (2"), Room 20 (3")
- GSU Black at Room 10 (3"), Room 13,
- Owens Corning at Boys Restroom
- Foil Face at Room 15 (R-11, 3 ½"), Kraft Fiber Glass Insulation at hall by Room 16 (R-13), (3 different types of paper face flammable insulation in this area), and Kitchen
- Black Plain Insulation at Room 2

Deficiencies

:: Ceiling
- Ceiling tiles are water stained
- Ceiling tiles have been painted; this has an adverse effect on the acoustical performance
- Gymnasium has poor acoustics

:: Walls
- Most classrooms have accordion doors; they are never opened and do not provide good sound separation or adequate pin-up space

:: Windows / Doors
- Windows do not perform well in the winter
- Replace single-glazed windows
- Doors are old and worn, and in need of replacing
- Classrooms have exterior aluminum

:: Miscellaneous

Insulation
- Paper face Flammable at Main Hall
- Replace kraft-face insulation (location?)

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- Portables have window units
- School is not air conditioned (kindergarten building only)

:: Heating system
- Heating system is gas-fired, hot water with pneumatic controls
- Natural gas fired hydronic hot water boiler, evaluate for efficiency

- Multi-zone air handler in mechanical mezzanine. Water runs brown if unused for a week
- Pneumatic control system replaced with DDC system; 2008

:: Plumbing system
- Some fixtures have been replaced
- Hot water only in kindergarten, kitchen and health room

:: Electrical systems
- Electrical service is at capacity
- Wiring above ceiling is cloth-covered wires
- Classrooms are dim; halls are over lit
- Main Electrical services: 800 amp, 208Y/120 volt distribution panel board; new November 2009. Panel board has main fusible switch, circuit breaker distribution section
- School lighting system upgraded to electronic ballasts and T8 lamps; 2010
- Corridor egress lighting has battery backed ballasts
- Corridors are over lit

Deficiencies

:: Cooling system
- School is unusable in summer, and difficult to cool in spring and fall

:: Heating system
- Heating system is unreliable; it is in need of constant service
- It is not energy efficient and leaks water into ceiling
- Evaluate boiler for efficiency and gas pressure issues (boiler doesn't fire in cold weather?)
- Replace air handlers
- Multi-purpose/Cafeteria/Gymnasium area lighting upgraded to T5HO fluorescent fixxtures; 2010

:: Plumbing system
- Plumbing system and faucets are failing
- Some toilet fixtures have too much pressure and splash
- Water runs brown if unused for a week
- Push-button faucets do not work
- Drinking fountains do not function properly
- No ADA accessible facilities
- Need a restroom for adult males
- Replace domestic hot water located in the attic
- Replace domestic hot water piping located in the attic/mezzanine. Water runs brown if unused for a week
- Downspouts need to be replaced

:: Electrical systems
- Entry has insufficient lighting
- Lighting upgrades throughout
- Multi-purpose/Cafeteria/Gymnasium egress lighting does not meet egress code requirements
- Occupancy sensor system is needed
- Exit landing lighting not on emergency power

SITE CONDITIONS

Deficiencies

:: Ponding at playground and southwest corner of parking lot

:: Downspouts need to be replaced

SAFETY STANDARDS

Existing Conditions

:: Security system consists of motion detectors

:: Gymnasium has emergency lighting

:: School has Sonitrol motion sensor type security system

:: Facility has security concerns

Deficiencies

:: Building, grounds and play areas have many hidden areas and overgrown shrubbery

:: Site has insufficient security fencing

:: Parent and bus drop-off is a potential safety hazard

FUNCTIONAL STANDARDS

Deficiencies

:: Building is crowded; five portables on site

:: Adaptability

- Building is over capacity
- Cabinets are losing finish, handles and Formica is chipping
- Folding walls do not make a good surface for hanging
- Stairs and railings at portables are in poor condition; no ramps
- Wind blows into covered play structure along building
- Moveable partitions are kept closed, with cabinets and shelves lined up against them

:: Suitability concerns
- Classrooms are too small for twenty-eight children
- Specialists are doubled and tripled up in offices in portables
- Kindergarten classes are in separate locations
- Gymnasium/cafeteria combo creates scheduling and clean-up conflicts

PRINCIPAL REQUESTS

Deficiencies

:: Minimal Facility Requirements
- Bus/parent drop-off needs to be resolved; principal plays "traffic cop"

:: Minimal Facility Needs
- Five full classrooms
- Music room
- New gymnasium with stage
- Two new offices

North Plains Elementary | Aerial/Site Plan

NORTH PLAINS ELEMENTARY SCHOOL

ASSESSMENT SCORE 83: MINOR MODERNIZATION

GENERAL INFORMATION

:: Address: 32030 NW North Ave, North Plains, OR 97133

:: Construction dates:
- Original school constructed in 1954
- Building additions in 1960, 1968, and 1992

:: Site area: 14.00 acres

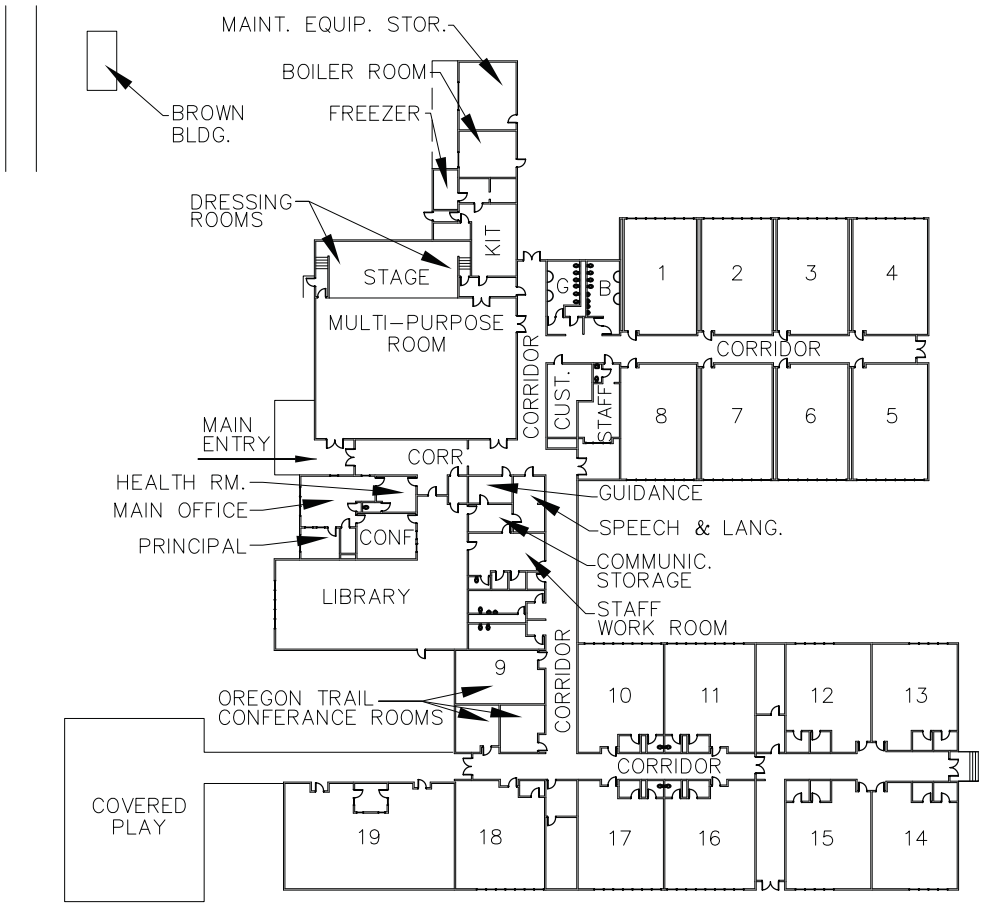
:: Building area: 46,913 square feet

:: Population: 292 students

North Plains Elementary | Floor Plan

NOTE:
NUMBERED ROOMS
ARE CLASSROOMS

0 50
SCALE



NORTH PLAINS ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: Structural issues were addressed in 2005 when the building was remodeled after the fire

Deficiencies

:: Floor in room four is bouncy

:: Roof system
- Lacks adequate gutters and down spouts at interior courtyard
- Moss on play structure roof
- Storm drain at canopy has no screen and roof does not slope toward the drain
- Roof drain at covered walk has no slope or screen

SECONDARY STRUCTURE

Exsiting Conditions

:: Walls
- Interior walls are wood studs with drywall
- Corner guards have been added to most walls

:: Windows / Doors
- Doors were replaced after the fire

:: Miscellaneous

Insulation
- Foil Face at North Hall and East Hall (no label)

Deficiencies

:: Floors
- Five classrooms have bubbles in rugs

:: Windows / Doors
- Window system in older portions of the building will need replacement in a few years
- Replace single-glazed windows

:: Miscellaneous

Insulation
- Paper Face at north side of west hall (R-11)

SERVICE SYSTEMS

Existing Conditions

:: Heating and Cooling Systems
- New construction has gas packs, older portions of the school utilize hot water heat with DX cooling
- Older portion of the school utilizes two air handlers with DX condensing units
- Old cast iron forced draft boiler is out of service. System was natural gas fired, low pressure steam
- New natural gas fired ydronic boiler feeds one AHU
- 2005 addition class wing, new natural gas fired hydronic boiler feeds one AHU

:: Plumbing system
- Fixtures in the newer addition are ADA compliant, low-flow type
- Domestic water heater in the 2005 addition is natural gas fired standard type
- Natural gas fired domestic water boiler and storage tank in old boiler room

:: Electrical systems
- Main electric service was installed in 2005. It is 1000 amp, 120Y/208 volt with no main disconnect. It sub-feeds the older Trumbull distribution panel (1954 vintage) in the boiler room. The main service has three main disconnected circuit brakers
- Classroom, administration office area, corridors and library have new fixtures with electronic ballasts and T8 lamps. Fixture types are both recessed and surface
- Corridors have emergency lighting units with battery packs
- Multi-purpose room has open incandescent lighting fixtures, no emergency egress lighting. No emergency power for lighting fixtures.

Deficiciencies

:: Heating and Cooling Systems
- One unit control for four rooms, uneven distribution of heat and cold
- One unit makes hissing noises

- Older portions of heating system do not work well
- Upgrade HVAC controls to electric

:: Plumbing system
- Fixtures in older portions of the school are standard, non-ADA complaint

:: Electrical systems
- West connector hall is dark
- Trumbull distribution panel should be replaced
- The classrooms do not have occupancy sensors for lighting controls
- Needs to be upgraded to fluorescent
- Exit landing lighting not on emergency power

SITE CONDITIONS

Existing Conditions

:: No drains in fields, not a problem

Deficiencies

:: Front driveway higher than school entrance, causes ponding; the drain is poorly designed and causes ponding west of the entrance

:: Provide drain/drainage to alleviate standing water at "back door"

:: The school needs additional exterior lighting
- No lighting in courtyard, lighting needed for anticipated changes to courtyard
- Parking lot has no lighting
- Front entrance has one light; inconvenient and dangerous for evening events
- Old storm drains need constant maintenance to keep free of debris
- Ponding on ground near play shed

SAFETY STANDARDS

Existing Conditions

:: The 2005 addition is not fire sprinklered, nor is the older portion of the school

:: The school has a full fire alarm system

:: School has Sonitrol motion sensor type security system

Deficiencies

:: 12 inch to 18 inch drop-off at picnic area needs a railing or the slope brought up to the slab

FUNCTIONAL STANDARDS

Deficiencies

:: Adaptability
- Limited break-out area; will be an issue if population increases
- Conflict between gymnasium, stage and cafeteria
- Potential conflict between bus and parent drop-off if school enrollment increases

:: Suitability
- Size of gymnasium limits size and number of activities for school or parent clubs
- Roof of school can be accessed via the play structure; this leads to vandalism of roof units and skylights
- Provide access to courtyard from staff room
- The exterior layout has a number of "blind spots" that are difficult to supervise

PRINCIPAL REQUESTS

Deficiencies

:: Minimal facility requirements
- Remove covered play area to east
- Would like secured ladder to access roof
- Enlarged parent drop off inadequate if school grows
- Learning Lab in courtyard needs ability to be secured, with zeroscape, bird and butterfly garden

:: Minimal facility needs
- New gym with adequate chair storage
- Break-out rooms
- New covered area at black-top

Orenco Elementary | Aerial/Site Plan

ORENCO ELEMENTARY SCHOOL

ASSESSMENT SCORE 94:
MINOR MODERNIZATION

GENERAL INFORMATION

:: Address: 22550 NW Birch Street, Hillsboro, OR 97124

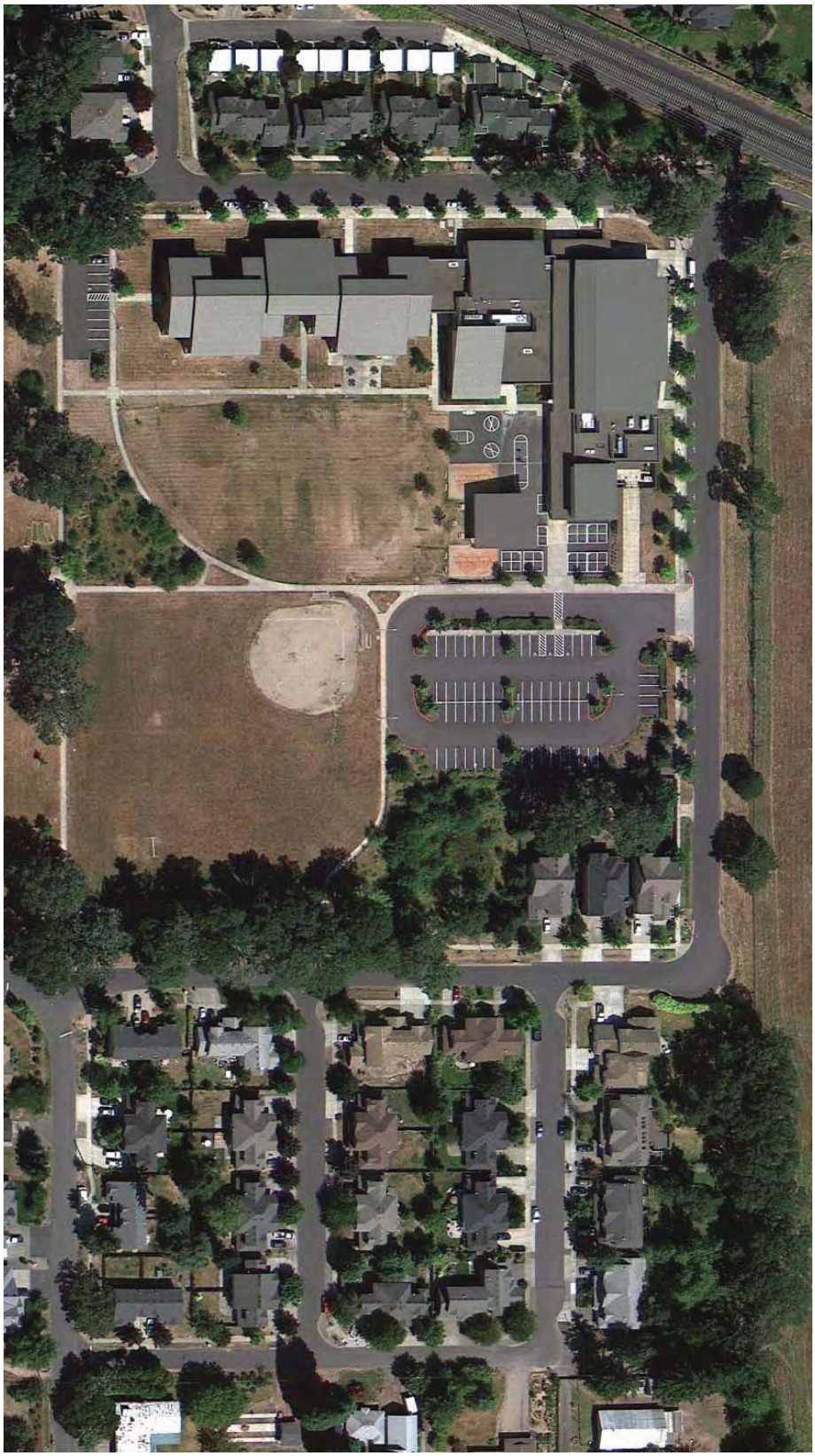
:: Construction date:
- Original school constructed in 2000

:: Site area: 13.52 acres

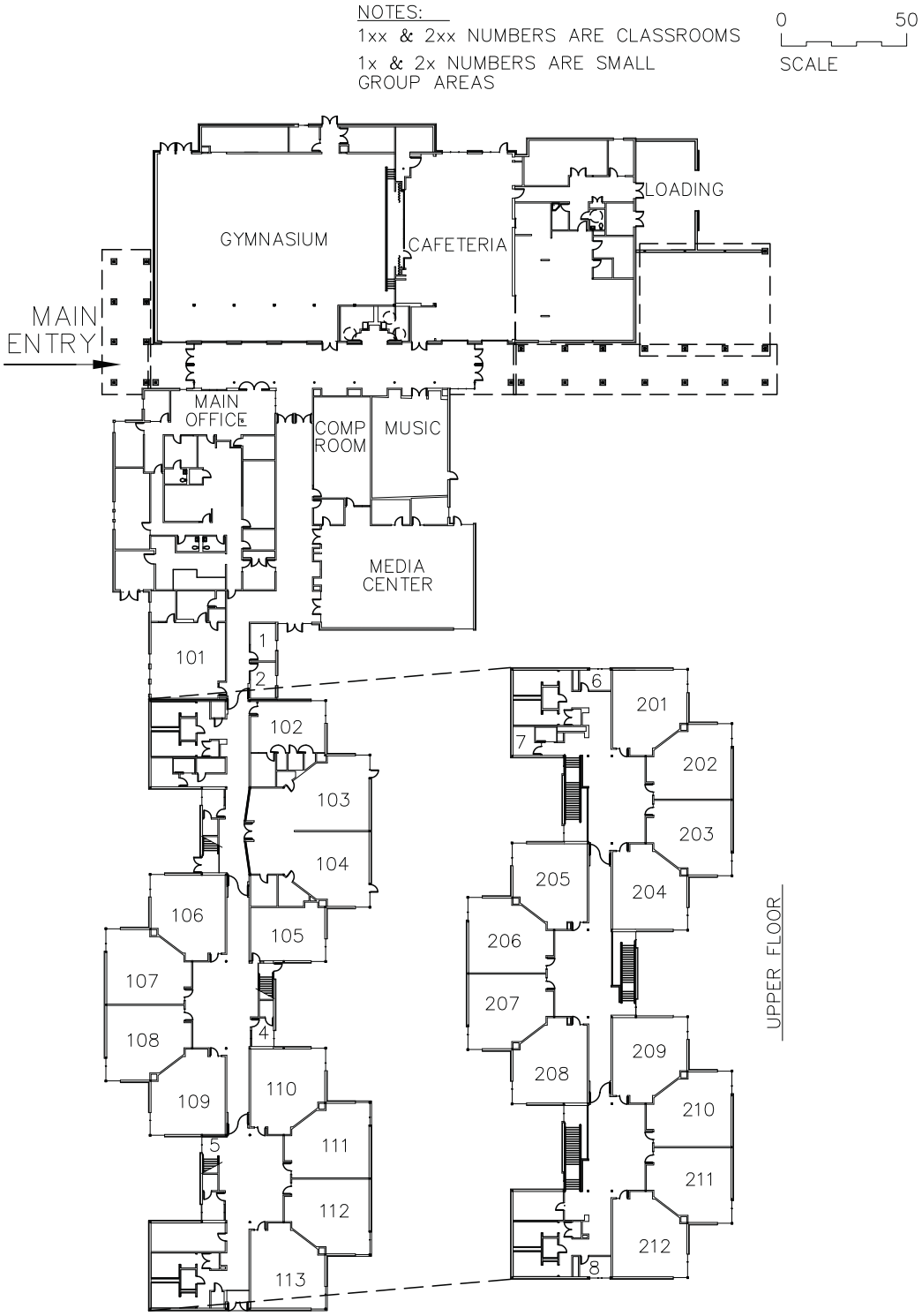
:: Building area: 69,435 square feet

:: Population: 583 students

:: Capacity: 600 students



Orenco Elementary | Floor Plan



ORENCO ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Condtions

:: This school was constructed after the 2001 FEMA report. It was built to current seismic codes.

Deficiencies

:: Brick wall and some brick columns have effloresce and need to be resealed

:: Floor system
- Bubbles in carpet in a few locations
- Grout is stained white in some restrooms

:: Snow guards came off roof in 2003 ice storm

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- The school has primarily lay-in ceiling tiles

:: Walls
- Interior walls and partition are wood stud with drywall

:: Windows / Doors
- Windows are aluminum with fixed glass and operable units
- Doors are aluminum steel, exterior, and wood interior doors

Deficiencies

:: Ceiling
- Gymnasium is a very loud space
- Ceiling under walkway, clean and paint, is experiencing moisture uptake and has black mold

:: Walls
- Concrete at lower part of gym is uneven color and needs to be painted
- Carpet on walls in gym is coming loose and being peeled off
- Fabric wall covering is difficult to clean, has been painted in the cafeteria

:: Windows / Doors
- Seven or eight windows in corners near heatilator have broken from heat stress cracks, replaced with tempered glass
- Horizontal window blinds are not appropriate at locations near where children sit, they get bent by children
- Door into cafeteria is bent
- Some entrance doors stick, it may be from the building settling

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- The school is air conditioned, chilled water with DX cooling
- Thermostat was relocated to get a more accurate temperature reading in the rooms; it was located low on the wall

:: Heating system
- The heating system is gas central boiler with unit ventilators or VAV boxes

:: Plumbing system
- Auto flushers have been removed from the urinals

:: Electrical systems
- Motherboard for exterior lights blew after a power surge; this took out exterior lighting; a timer has been added to correct the situation

Deficiencies

:: Cooling system
- Filters need cleaning

:: Plumbing system
- Sprinkler pipes under covered play have broken twice
- Paint is peeling off sprinkler pipes in canopy
- Faucets may need to be replaced soon; they do not hold up to use
- Gutters need to be cleaned more

frequently or covered with screens

SAFETY STANDARDS

Deficiencies

:: No alarm in recess area; leads to confusion when there is a fire drill during recess

:: Congested exiting in the middle of building; one stair for four classes; leads to one exit door for eight classes

FUNCTIONAL STANDARDS

Deficiencies

:: Formica is chipping at bottom of cupboards near corner seating areas

:: Cabinetry has loose corners

:: Composite board wainscoting may not withstand use over time; is starting to show wear

:: Some cabinets are missing handles; they swing open too far and bang into each other

:: Light bulbs in fixtures over stairs are almost impossible to change

:: Windows over stairs are difficult to clean

Paul L. Patterson Elementary | Aerial/Site Plan

PAUL L. PATTERSON ELEMENTARY SCHOOL

ASSESSMENT SCORE 95: SATISFACTORY CONDITION

GENERAL INFORMATION

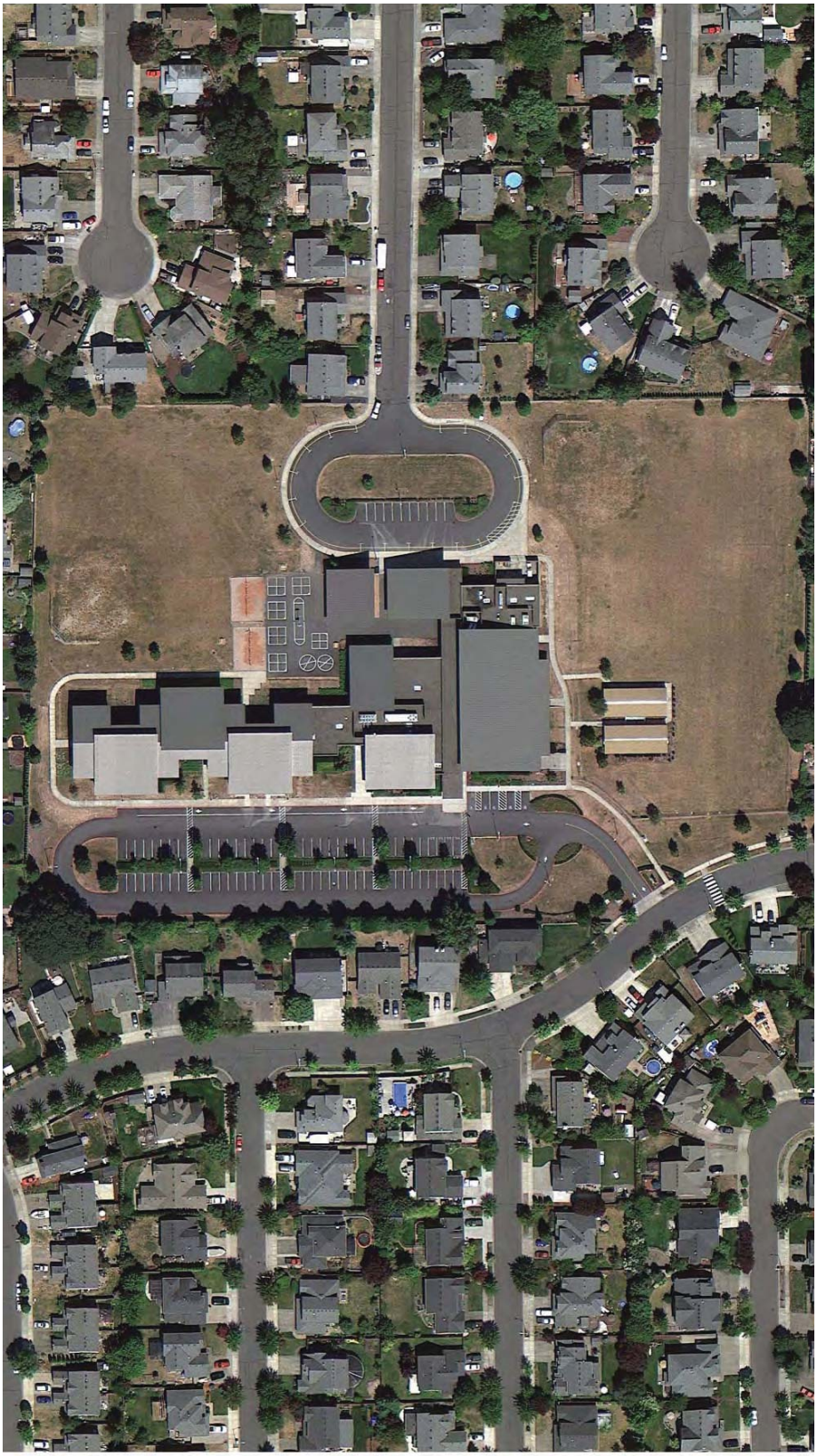
:: Address: 261 N. Lenox Street, Hillsboro, OR 97124

:: Construction date:
- Original building constructed in 2000

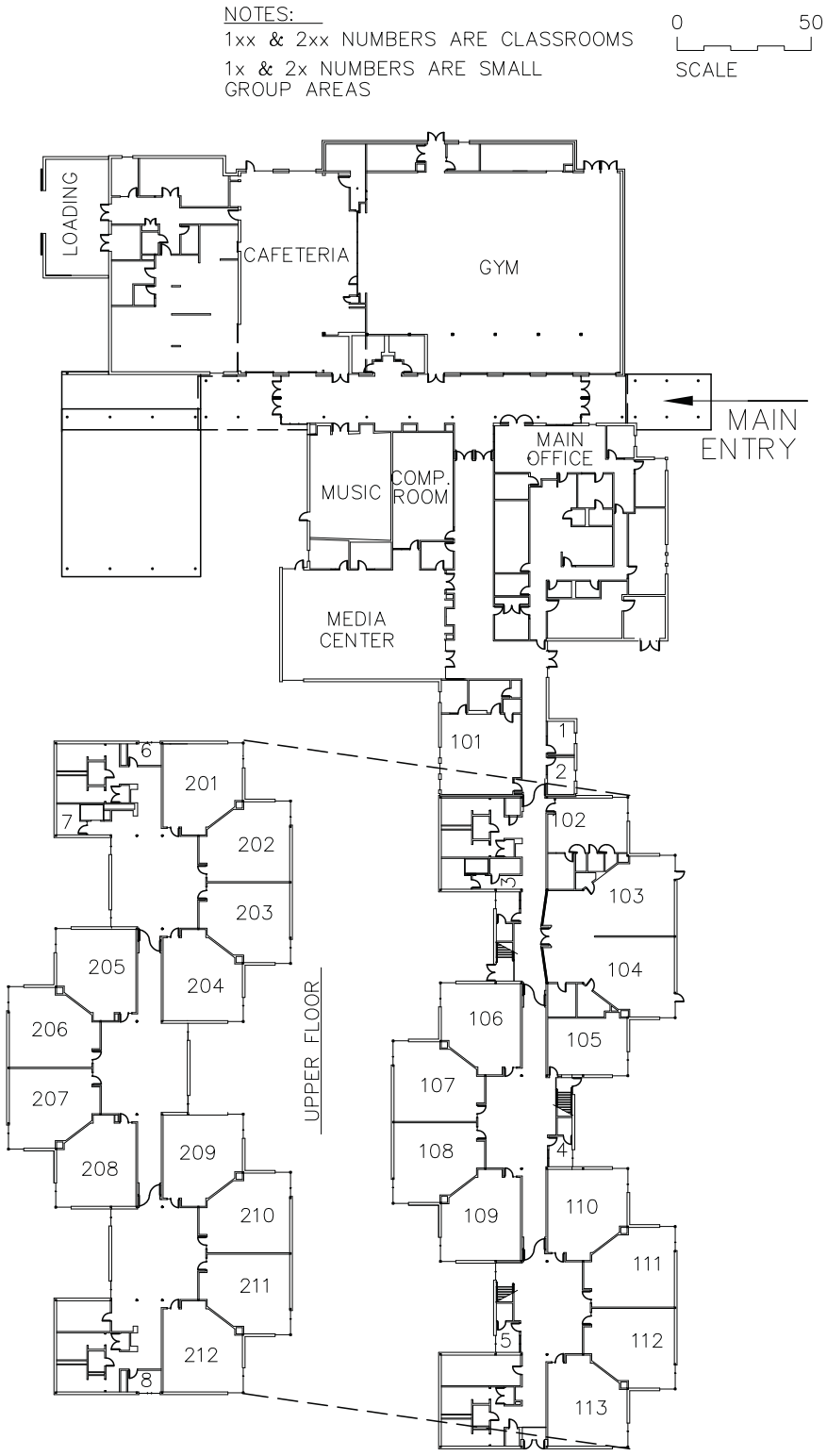
:: Site area: 10.00 acres

:: Building area: 69,435 square feet

:: Population: 508 students



Paul L. Patterson Elementary | Floor Plan



PAUL L. PATTERSON ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: This school was constructed after the 2001 FEMA report. It was constructed to current seismic codes.

Deficiencies

:: Brick at recycle/garbage surround showing some efflorescence, needs to be cleaned and resealed

:: Exterior canopy needs a coat of paint at main entry

:: VCT appears to be shrinking or moving in the main hallways; happened summer 2005. The problem is wide spread on the first floor. Use low water cleaning and no power scrubbing. Tiles bubble and have come up in the past.

SECONDARY STRUCTURE

Existing Conditions

:: Walls
- Interior walls are steel stud with drywall
- Folding panel in cafeteria/gym works great; lesson learned, due to number of kids in cafeteria bottom 6' of panels had to be painted, would recommend FRP surface next time.

:: Windows / Doors
- Windows are aluminum fixed glass and operable units
- Had some window glazing crack and seals broke. These have been replaced and there have been no further problems
- Exterior doors are steel or aluminum, interior doors are wood or steel

Deficiencies

:: Walls
- Tack boards in hallway show dirt - would choose darker color or different material next time

SERVICE SYSTEMS

Existing Condtions

:: Cooling system
- Building is air conditioned

:: Heating system
- Heating system is gas, central boiler with unit ventilators and VAV boxes

:: Plumbing system
- No issues

:: Electrical system
- No issues

Deficiencies

:: Cooling system
- Cooling system has a delay in two or three classrooms due to chiller load at start-up
- Teachers don't like the loss of floor area taken up by unit ventilators in classrooms

SAFETY STANDARDS

Existing Conditions

:: Main board and chip has been replaced at FSL alarm

PRINCIPAL REQUESTS

Deficiencies

:: Minimal facility requirements
- Provide exit door at bottom of west stair with sidewalk tie to playground, so that fire drills can all exit to same side of building; this would assist in speed and supervision of fire drills
- More storage
- Increased population requires use of portables on site

Quatama Elementary | Aerial/Site Plan

QUATAMA ELEMENTARY SCHOOL

ASSESSMENT SCORE 98: SATISFACTORY CONDITION

GENERAL INFORMATION

:: Address: 6905 N.E. Campus Way, Hillsboro, OR 97124

:: Construction date:
- Constructed in 2008

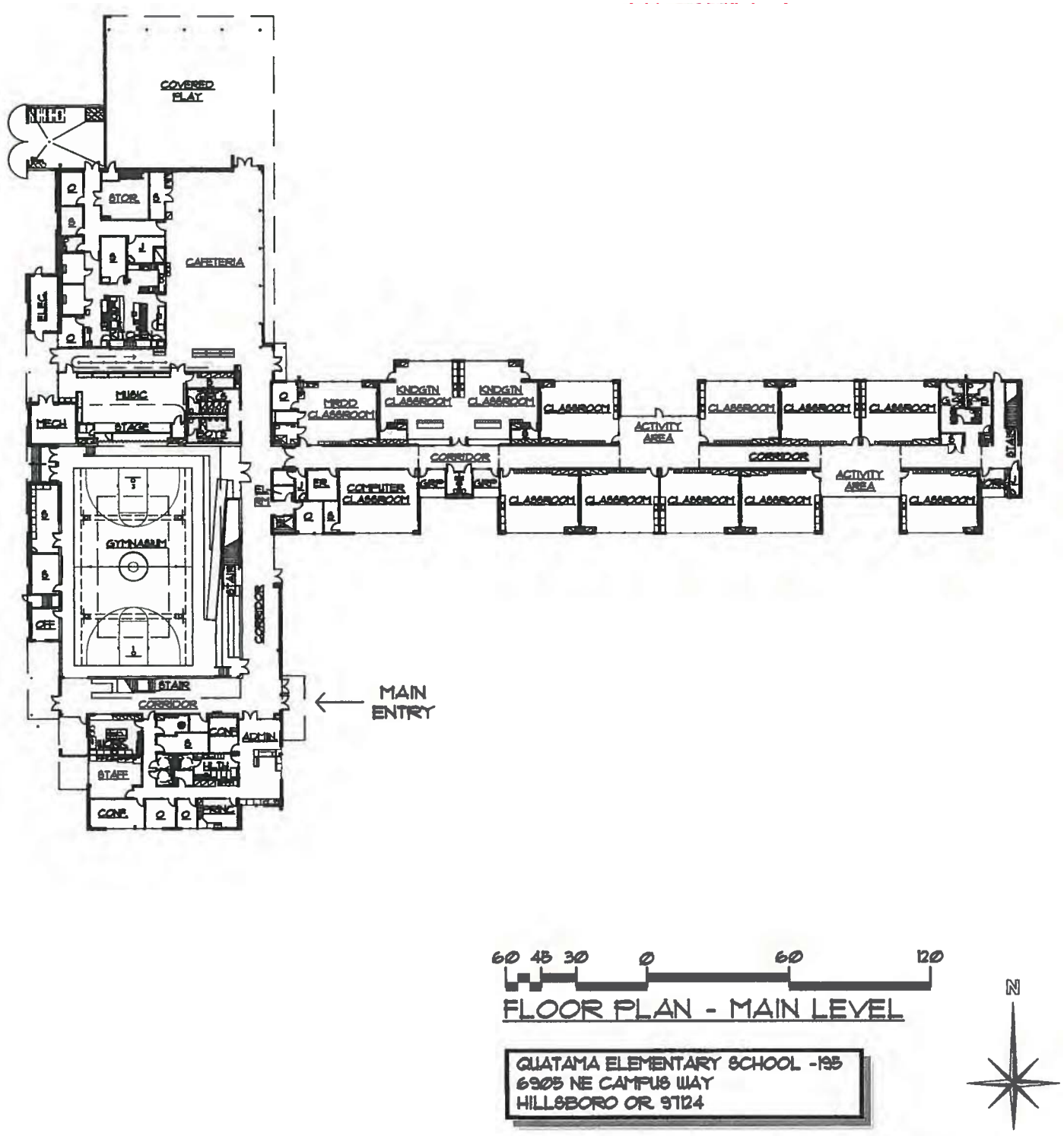
:: Site area: 10.02 acres

:: Building area: 73,000 square feet

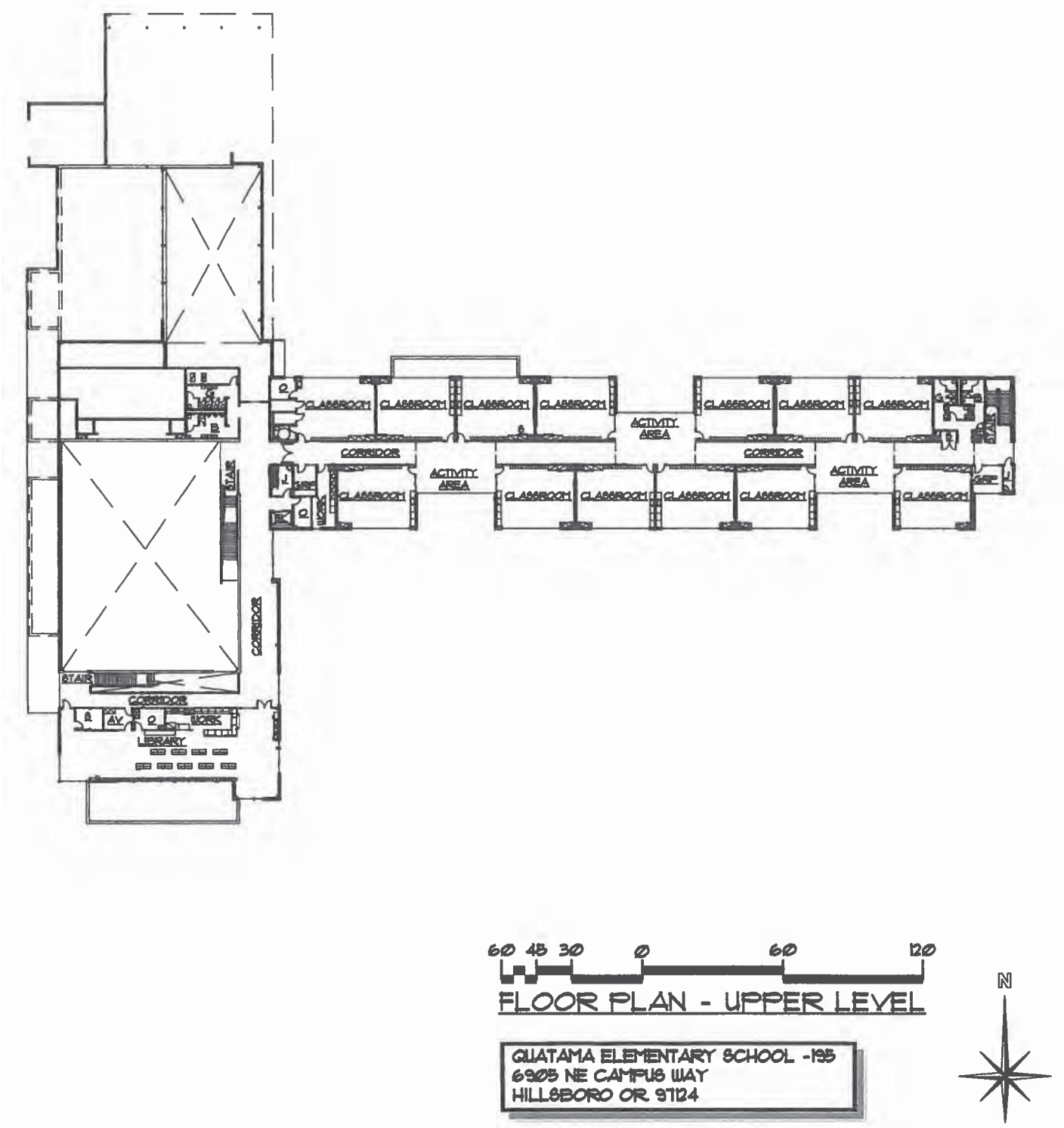
:: Population: 583 students

:: Capacity: 600 students

Quatama Elementary | Floor Plan



Quatama Elementary | Floor Plan



QUATAMA ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Exsiting Condtions

:: This school was constructed arter the 2001 FEMA report. It was built to meet the seismic requirments of the 2007 Oregon Structural Specialty Code.

:: Administration and Classroom Wing: Steel structure with CMU veneer and metal panel metal roof deck

:: Gym, adjacent storage rooms, Commons: Load bearing CMU at gym

Deficiencies

:: Clean and seal exterior block

SECONDARY STRUCTURE

Existing conditions

:: Ceiling
- The school has primarily lay-in ceiling tiles, exposed structure at the gym

:: Interior partitions are metal studs with drywall

:: Windows are aluminum with fixed glass and operable units

:: Exterior doors are aluminum and steel. Interior doors are wood

:: Roofing: Built up roof (Tremco)

Deficiencies

:: Does not meet with current energy codes

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- Roof top units with DX cooling systems

:: Heating system
- Natural gas fire high efficiency hydronic boilers
- Secondary hydronic circulation pumps AFD controlled
- Roof top units with hydronic heating coils
- Roof top unit supply fans AFD controlled
- Roof top units have heat recovery wheel
- Zoned variable volume terminal units with hydronic reheat coils
- DDC control system

:: Plumbing
- Natural gas fired high efficiency hot water heater
- Full kitchen for serving breakfast and lunch

:: Electrical system
- Main electric service is 480 volt, sized for 25% additional capacity
- Classroom lighting high efficiency direct/ indirect with electronic ballasts and T8 lamps
- Occupancy sensors installed throughout the school
- Corridor emergency egress lighting has battery backed ballasts
- Corridor lighting on lighting controller
- Classroom and administration area lighting controlled by occupancy sensors
- Gym and Multi-purpose area lighting fixtures use T5HO lamps
- Exterior lighting on lighting controller
- Exterior egress landing lighting battery backed

SAFETY SYSTEMS

Existing Conditions

:: School has Sonitrol motion sensor type security system

:: School is fully fire sprinklered

:: School has full fire alarm system

Reedville Elementary | Aerial/Site Plan

REEDVILLE ELEMENTARY SCHOOL

ASSESSMENT SCORE 35: MAJOR MODERNIZATION

GENERAL INFORMATION

:: Address: 2695 SW 209th Avenue, Aloha, OR 97006-1736

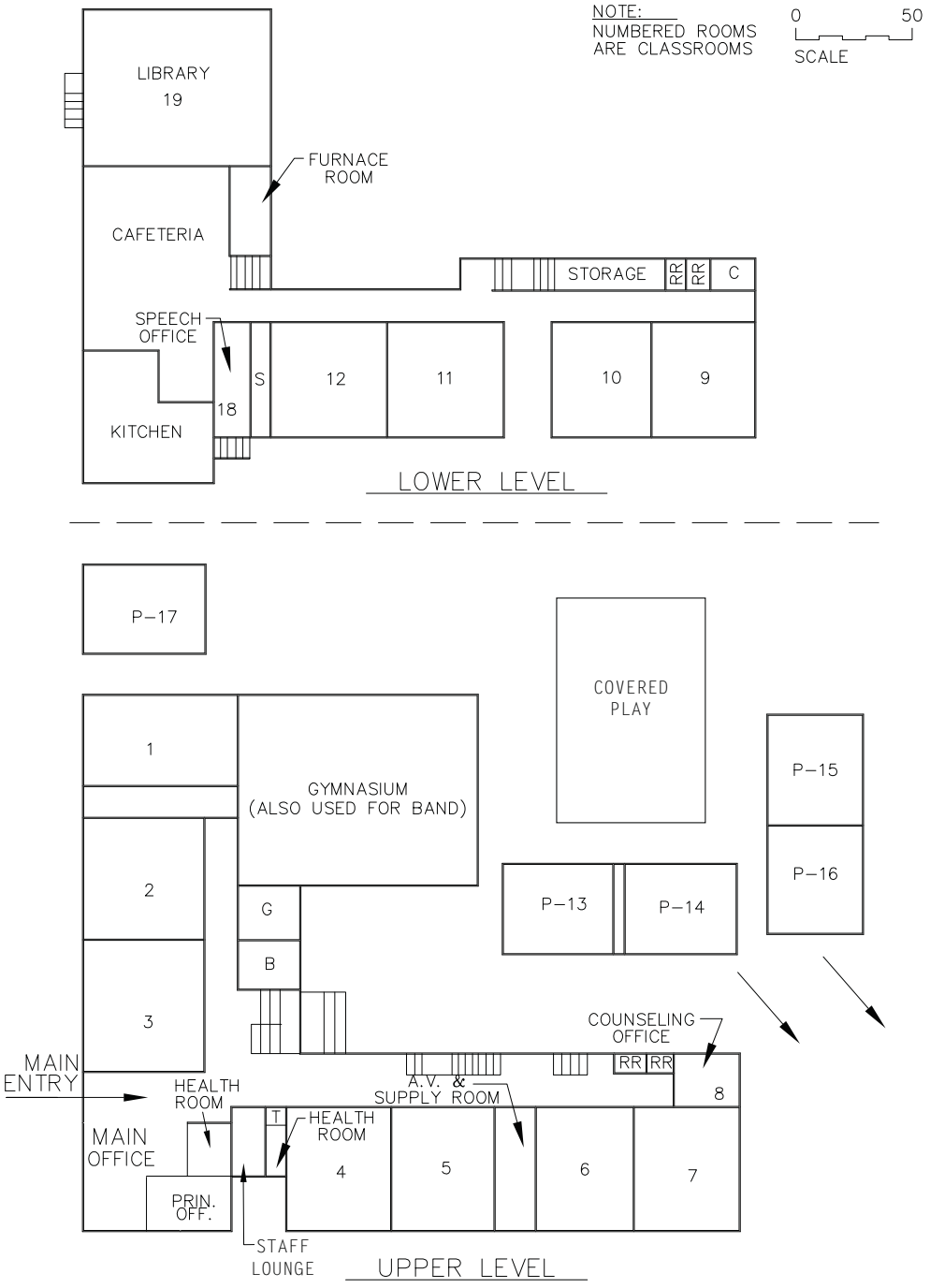
:: Construction dates:
- Original school constructed in 1922
- Southwest classrooms and gymnasium in 1938
- West wing in 1952
- Window replacement and siding replacement in 2010
- Covered play in 2009

:: Site area: 7.50 acres

:: Building area: 16,247 square feet

:: Population: 360 students

Reedville Elementary | Floor Plan



REEDVILLE ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The building structure is a combination of reinforced concrete and structural wood with continuous footings and individual footings

:: Wood floors are in good condition

:: The roof structure is a combination of truss and sheathing and raters with sheathing

Deficiencies

:: The 2001 FEMA report recommends seismic upgrades to the structure

:: Due to the age of the building it is assumed the exterior walls do not have insulation and are not energy code compliant

:: Additional area of VAT abatement needed
- Painted concrete floors in restrooms are in poor condition

:: Building lacks eaves, gutters overflow and water runs down the wall and into the building system

:: West wing has problems with drainage system

:: Portables have low slopes and drainage problems

:: Replace roof between 2010 and 2014

SECONDARY SYSTEM

Existing Conditions

:: Ceiling
- Main building has 12x12 direct glue ceiling tiles. Portables have a 2x4 lay-in ceiling
- Interstitial space is not accessible; this is not a problem due to the lack of mechanical and electrical systems in the facility

:: Walls
- Interior walls are wood stud with plaster, drywall and exposed concrete

:: Windows / Doors
- Doors are steel and wood

:: Miscellaneous
Insulation
- Office: Pink - blown in
- West Portable: Fiber netting, no label

Deficiencies

:: Miscellaneous
Insulation
- None at the remaining sections of the school

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- Building does not have air conditioning
- West-facing classrooms have ceiling fans
- Some classrooms have window air conditioning units

:: Heating system
- The building is heated with steam supplied to radiators

:: Plumbing system
- Piping is internal

:: Electrical systems
- New electrical service within last five years.

Deficiencies

:: Heating system
- Unit ventilators may provide a better delivery system than radiators
- Possible air in the pipes causes the system to knock in the morning
- Poor ventilation in most restrooms
- No exhaust fan in health room toilet
- Outside air replacement is needed

:: Plumbing system
- The facility has no ADA restrooms or fixtures
- Facility lacks adult restrooms
- Water is not used for drinking due to rust and age of pipes
- Internal domestic water piping needs to be replaced

:: Electrical system
- Electrical system functions but not adequate for current loads
- Additional electrical service needed in computer lab in library
- Data in building unable to utilize CATV signal connection which is needed for teaching purposes

SITE CONDITIONS

Deficiencies

:: Playground has drainage problems and cannot be used when wet

:: High drain near portable classrooms

:: Site access is via asphalt paved paths that are not code compliant in regards to slope and ADA standards

:: Poor drainage for walkways around building and play areas

SAFETY STANDARDS

Existing Conditions

:: Facility is sprinklered in hallways

Deficiences

:: Ramps do not meet ADA requirements

:: Parking is perpendicular to street, cars back out into traffic and in front of busses on a busy street

FUNCTIONAL STANDARDS

Deficiencies

:: Classrooms are too small for over 30 students, especially with computers

:: PE and Music use the same space

:: Library is low on space due to computers

:: Limited alternate spaces for teaching

:: Current classroom size adequate

PRINCIPAL REQUESTS

Deficiences

:: Minimum facility needs
- Need walk-in space in kitchen

:: Minimum facility additions
- Separate music room
- Larger library
- Lunch room/kitchen is too small; must have four lunches

Rosedale Elementary | Aerial/Site Plan

ROSEDALE ELEMENTARY SCHOOL

ASSESSMENT SCORE 98
SATISFACTORY CONDITION

GENERAL INFORMATION

:: Address: 3901 SW 229th Avenue, Hillsboro, OR 97007

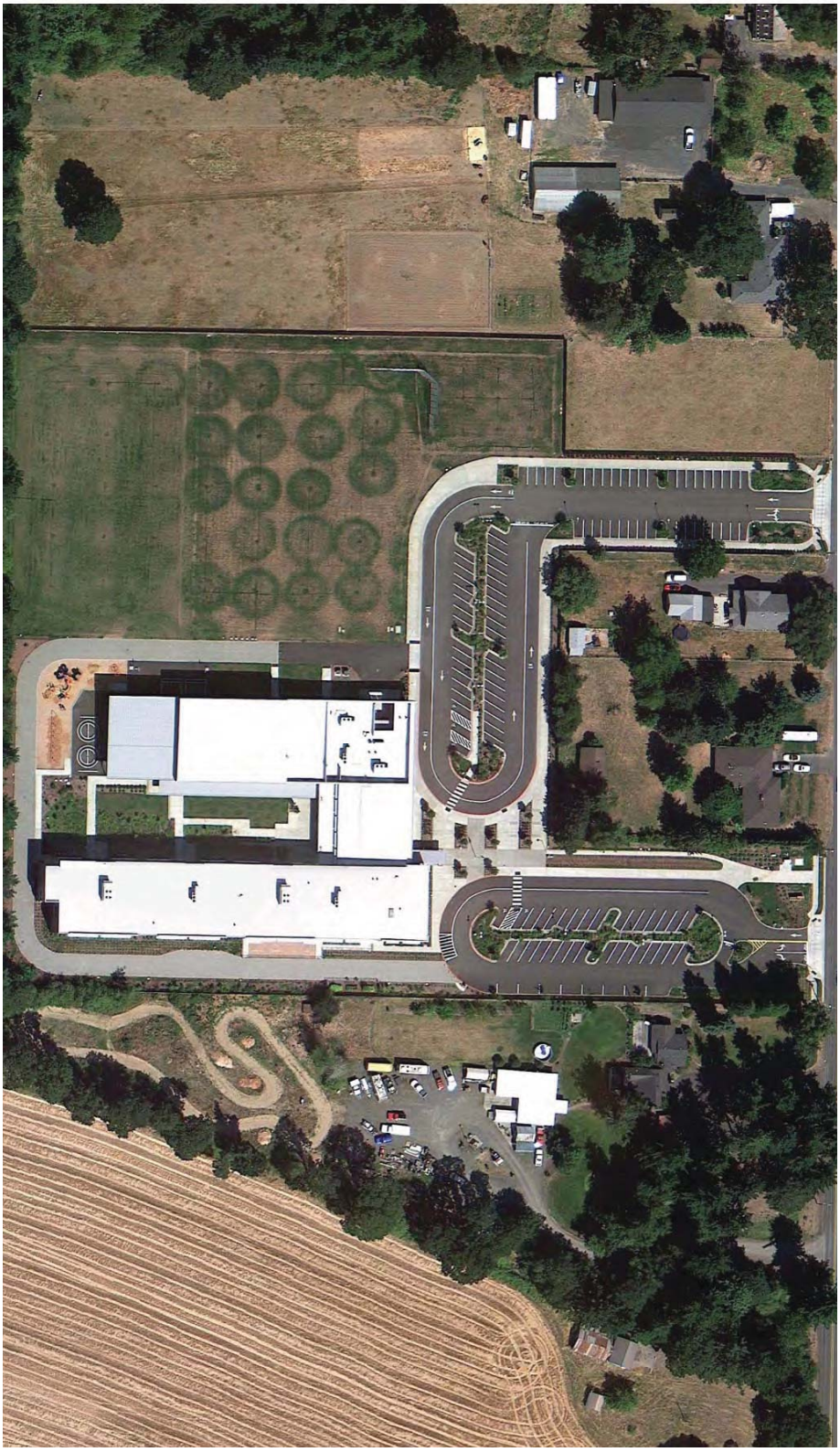
:: Construction date:
- Constructed in 2009

:: Site area: 9 acres

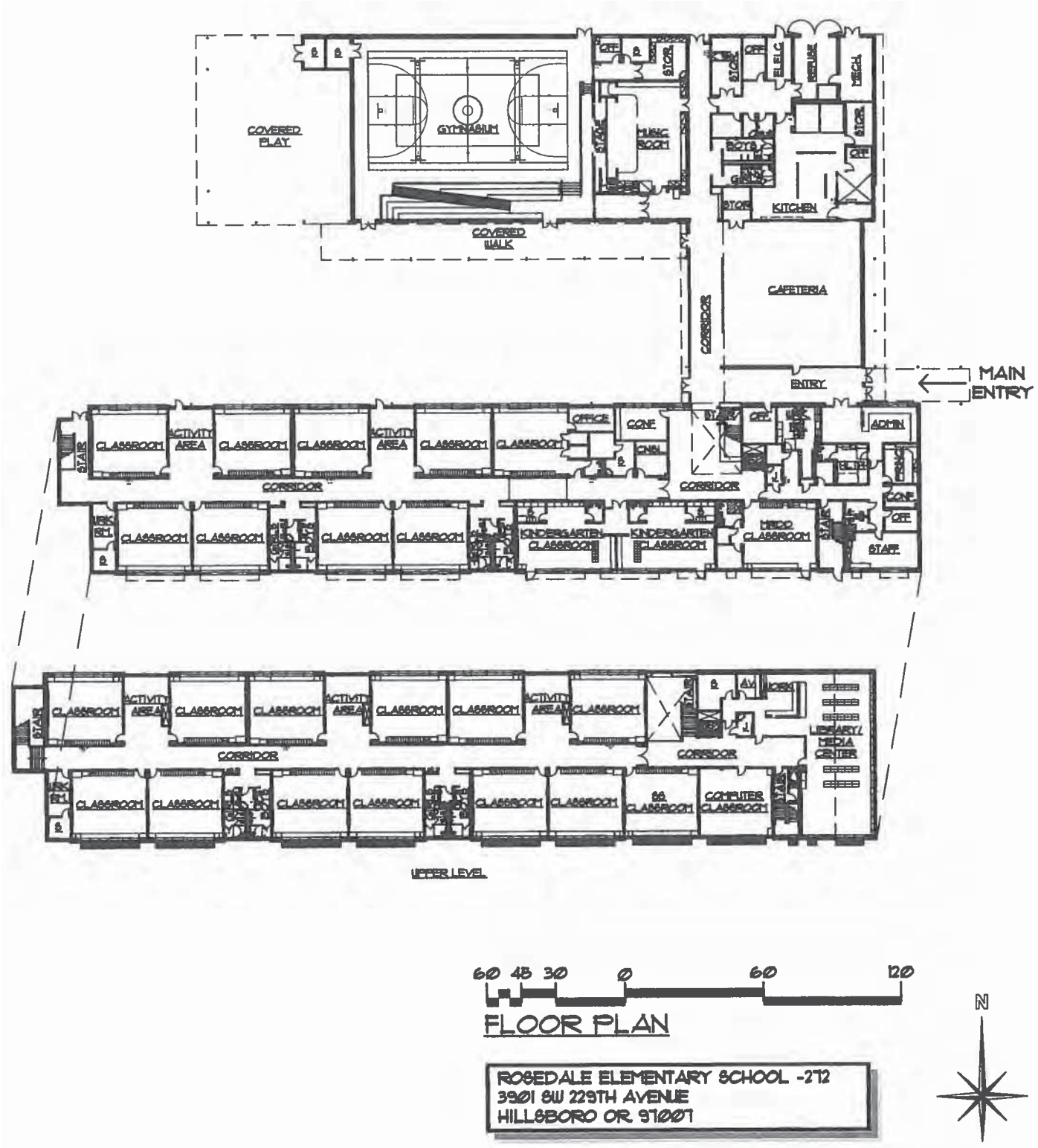
:: Building area: 73,700 square feet

:: Population: 334 students

:: Capacity: 600 students



Rosedale Elementary | Floor Plan



ROSEDALE ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: This school was constructed after the 2001 FEMA report. It was built to meet the seismic requirements of the 2007 Oregon Structural Specialty Code.

:: Slab on grade at first floor and Concrete Tilt walls with brick veneer, metal panel, exposed painted concrete. Steel floor and roof structure.

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- The school has primarily lay-in ceiling tiles, exposed structure at the gym.

:: Walls
- Interior partitions are metal studs with drywall

:: Windows / Doors
- Windows are aluminum with fixed glass and operable units
- Exterior doors are aluminum and steel. Interior doors are wood.

:: Roof
- Roofing: Built up Roof (Tremco)

SERVICE SYSTEMS

Existing Conditions

:: Mechanical
- Building is fully air conditioned
- Radiant Slat Heat at Commons, Entry and Corridor west of Commons
- Roof top Air Handling Units
- Heat Recovery System
- High Efficiency boiler (gas)
- VAV Distribution w/ fan power terminal units.

:: Electrical
- Occupancy sensor at Classrooms with master on/off switch and 3-way switch.
- 277/480V, anticipated load: 600A

FUCTIONAL STANDARDS

Exisitng Conditions

:: Sustainability
- LEED Gold for School
- Dual flush toilet
- Low-flow fixtures
- Rainwater harvest tanks (for irrigation)
- Reduce material use (exposed concrete floors)
- Highly insulated thermal envelope

L. C. Tobias Elementary | Aerial/Site Plan

L. C. TOBIAS ELEMENTARY SCHOOL

ASSESSMENT SCORE 92:
MINOR MODERNIZATION

GENERAL INFORMATION

:: Address: 1065 SW 206th Avenue, Aloha, OR 97006-1571

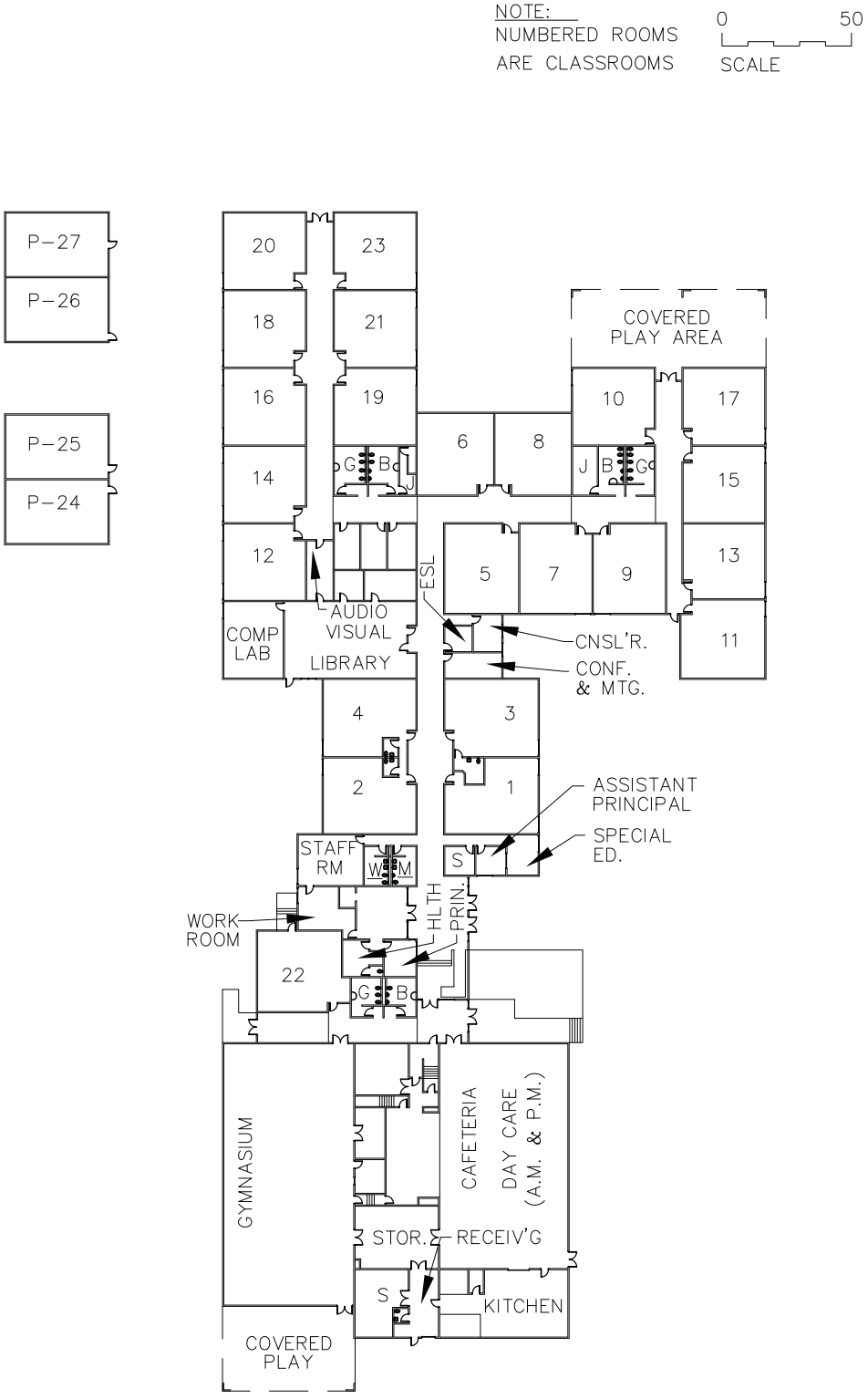
:: Construction date:
- Original school constructed in 1992

:: Site area: 9.00 acres

:: Building area: 50,000 square feet

:: Population: 575 students

L. C. Tobias Elementary | Floor Plan



L.C. TOBIAS ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The primary structure is stud wall with brick, veneer and pipe columns supporting glu-lam beams

:: The carpet has been replaced in most of the school

Deficiencies

:: Original carpet bubbles up

:: Roof surface has some bubbling
- Roof drain at east end of play structure has been repaired but it still does not function properly
- Roof replacement between 2012-2014
- Some ponding on roof

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- The ceiling is primarily lay-in grid and ACT

:: Wall
- Interior walls are primarily stud walls with drywall

:: Windows / Doors
- Window system is double glazed, a combination of steel and aluminum with either a fixed or casement system
- Doors are steel, exterior and interior

:: Miscellaneous

Insulation
- Black Plastic/Nylon, no label

Deficiencies

:: Ceiling
- Leak in PE storage from mechanical system
- Oil leaks (from boiler) on second floor to gymnasium below

:: Wall
- Vinyl wall covering coming off walls in some areas, worst in cafe
- Need additional pin-up space in corridors
- Some cracks in interior walls
- Movable walls on stage are in fair condition, stick, difficult to move

:: Windows / Doors
- School scheduled to be re-keyed
- Door closers to playground do not hold open; increases wear and tear on doors

:: Miscellaneous

Insulation
- None at Staff Room, Rooms 2, 5, 8, 13, 16

SERVICE SYSTEMS

Existing Condtions

: Cooling system
- The school is air conditioned

:: Heating system
- Heating system is hot water with a gas boiler
- Natural gas fire hydronic hot water boiler
- Forced air, multi-zone

:: Plumbing system
- Water temperature in restrooms is variable
- No toilets near playground
- Domestic and hydronic water share common piping (Domestic water system shares piping with hydronic heating system)

:: Electrical systems
- Lighting upgraded in 2005 with electronic ballasts and T8 lamps
- Main electrical service: 2000 amp, 208Y/120 volt main distribution panel. MDP has single main circuit breaker
- Classrooms and administration offices have occupancy sensor for control of lighting

Deficiencies

: Cooling system
- Recent upgrades of AC have not resolved all the functional difficulties of the system

- Ducts need to be thoroughly cleaned

:: Heating system
- Heating system is difficult to control and has similar operational difficulties as the cooling system
- Boiler replacement needed

:: Electrical systems
- Lights are needed in covered play areas
- Additional circuits are needed in staff room
- Intercom upgrade needed

SAFETY STANDARDS

Existing Conditions

:: School has Sonitrol motion sensor type security system

:: School has full fire alarm system

Deficiencies

:: Intercom, security and phone all upgraded within the last seven years, however the system does not always interface well

:: Intercom needs to be upgraded

:: Multi-purpose/Cafeteria area egress lighting does not meet egress code requirements

:: Gymnasium area egress lighting does not meet egress code requirements

:: Portable ramp needs to be replaced

FUNCTIONAL STANDARDS

Existing Conditions

:: Suitability
- Classrooms are adequate for up to 25 students
- Playground can only accommodate half the students at one time, recesses are split
- School has three lunches

Deficiencies

:: Hinges in cupboards need adjustment

:: Location of playground at the opposite end of the school from the cafeteria, requires additional time for faculty to escort children to activities

:: Bus loop may have some conflicts with parent drop-off

PRINCIPAL REQUESTS

Existing Condtions

:: Facility growth limited by space; currently at capacity

Deficiencies

:: Minimal facility requirements
- Stage to break through to gymnasium
- Restructure playground with more age appropriate structures
- Field area adjacent to playground
- Covered play over play structures
- New carpet in conference suite
- Hard paths in kinder play area to accommodate DD students

:: Minimal facility additions
- Four additional classrooms

West Union Elementary | Aerial/Site Plan

WEST UNION ELEMENTARY SCHOOL

ASSESSMENT SCORE 65: MODERNIZATION

GENERAL INFORMATION

:: Address: 23870 NW West Union Rd., Hillsboro, OR 97124-8545

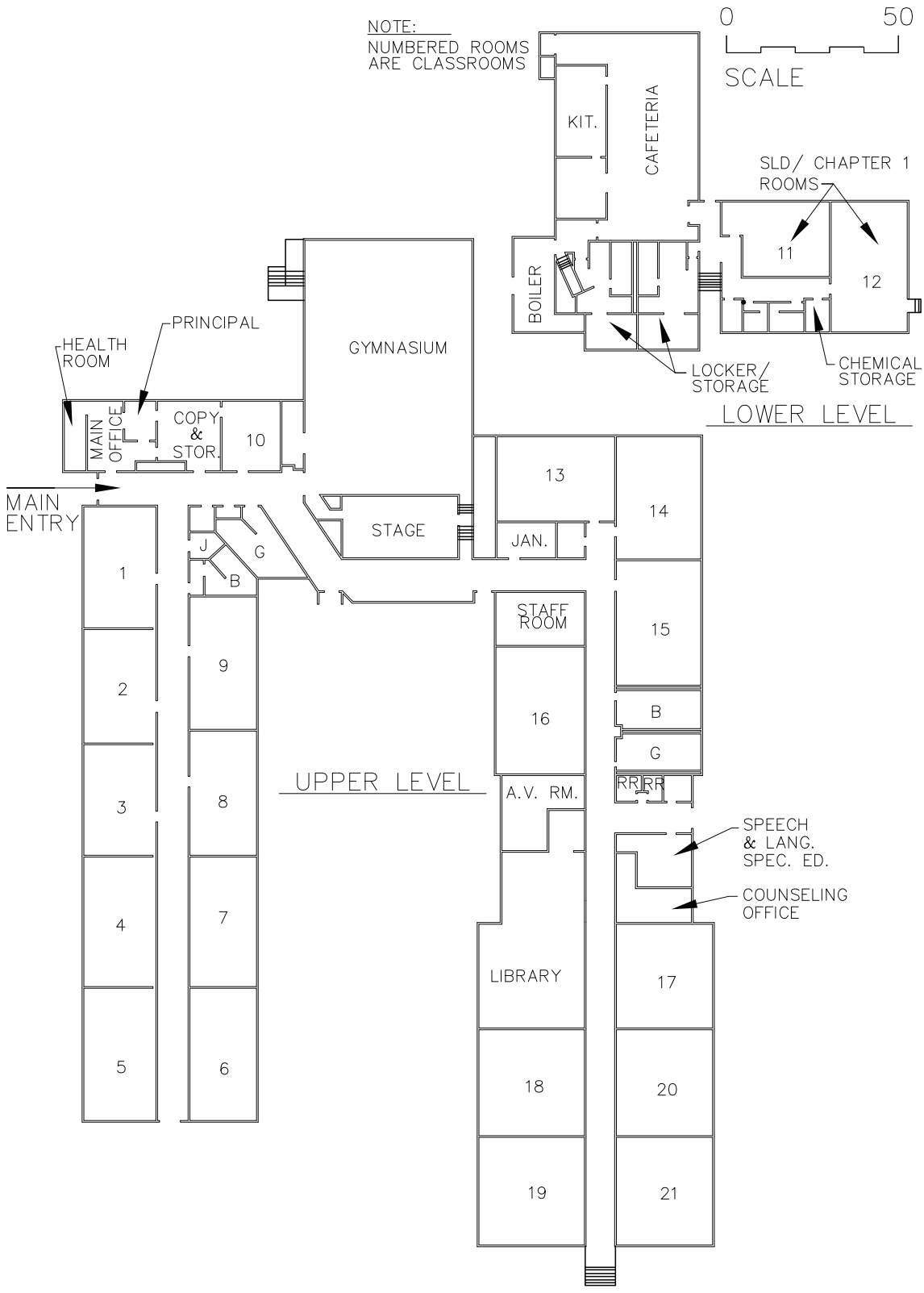
:: Construction dates:
- Original school constructed in 1948
- Extension of classroom wing at southwest corner in 1950
- Classroom addition at east in late 1950's to early 1960's
- Classroom wing at south end in 1986
- Gymnasium trusses bolted with steel plates in 1995

:: Site area: 12.34 acres

:: Building area: 42,757 square feet

:: Population: 500 students

West Union Elementary | Floor Plan



WEST UNION ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The primary structure of the building is a structural wood with a brick face on concrete footings and grade beams

:: No insulation in walls

:: Floor system is wood frame
- Lower level has original VAT*
- Carpet in classroom was replaced in the lower level

:: The roof was replaced two years ago
- Trusses in gym had steel plates bolted on in 1995

Deficiencies

:: Foundation has some cracking at classroom wings

:: The 2001 FEMA report indicated seismic upgrades needed for the structure
- Building needs exterior paint

:: Sheet vinyl in restrooms needs to be replaced

:: Some ponding occurs in upper wing of roof

:: Restore roof (Area 5) in 2010-2011

:: New roof drains needed

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- The ceiling is exposed or attached to structure
- New wiring requires use of wire mold

:: Walls
- Interior walls are wood stud with plaster

:: Windows / Doors
- The windows are original wood casements with limited operability
- The wood doors are original

:: Miscellaneous

Insulation
- None at rooms 16 through 21
- Owens Corning Foil Face at Gym/Stage

Deficiencies

:: Walls
- Some interior walls have cracks in walls over door

:: Windows / Doors
- Exterior doors are in poor condition and need to be replaced
- Gym door sticks, hinge is loose
- Crash bars need to be updated
- Closers need to be updated
- Exterior doors need to be re-keyed
- Replace single glaze windows

:: Miscellaneous

Insulation
- Paper Face (2 sides) at Rooms 1 through 9
- Replace paper-faced insulation

SERVICE SYSTEMS

Existing Condtions

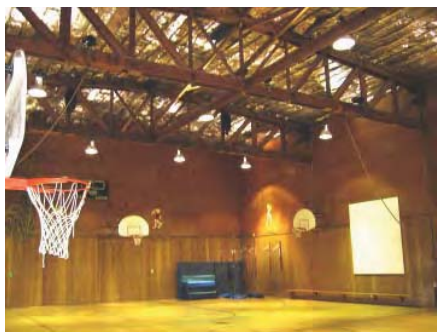
:: Cooling system
- School has partial air conditioning (one classroom)

:: Plumbing system
- School is on a well
- No hot water in staff lounge

:: Electrical systems
- Incandescent bulbs changed out to fluorescents
- Converting all fluorescents to T-8
- School has a number of different light fixtures, due to different ages of school
- School electrical service updated for computer lab

Deficiencies

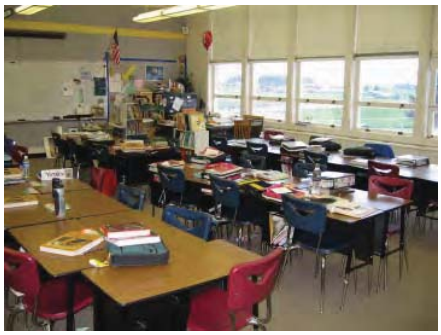
:: Cooling system
- Computer lab does not have air conditioning



:: Heating system
- There is unequal distribution of heat throughout school
- School does not have any ceiling fans
- Restrooms lack ventilation
- Replace air handlers

:: Plumbing system
- Toilets and urinals run
- Urinal valves get clogged with sand
- No HC toilets on lower level
- Additional staff restrooms are needed
- Replace galvanized piping

:: Electrical systems
- Switching in school is inconvenient



SITE CONDITIONS

Existing Conditions

:: District added large drains

Deficiencies

:: Courtyard drainage runs into play structure, no drainage under play structure

:: Asphalt in courtyard is sagging

:: Replace storm water drain lines

FUNCTIONAL STANDARDS

Deficiences

:: Limited activity areas if building is at full capacity

:: Currently there is no way to secure the building when it is used in the evening

:: Lower level playground and cafeteria are not accessible

PRINCIPAL REQUESTS

Deficiencies

:: Minimal facility requirements
- Planting and trees in courtyard with security fencing
- Health room is too small
- More storage

:: Minimal facility needs
- Larger covered play area, double in size, block from blowing rain

Witch Hazel Elementary | Aerial/Site Plan

WITCH HAZEL ELEMENTARY SCHOOL

ASSESSMENT SCORE 97: SATISFACTORY

GENERAL INFORMATION

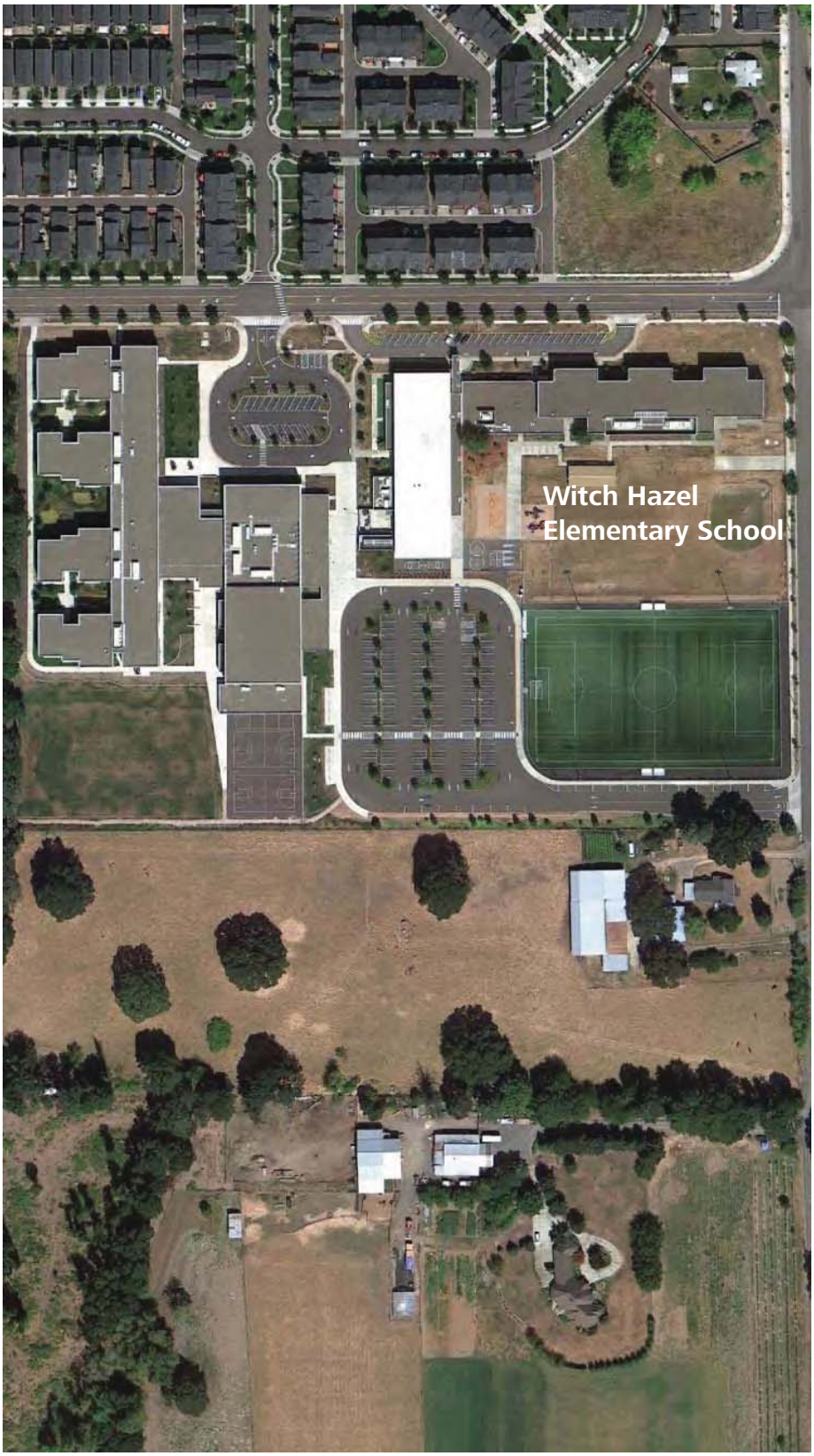
:: Address: 4950 SW Davis Road, Hillsboro, OR 97123-8523

:: Construction date:
- Original school constructed in 2003
- Middle school was added to site in 2009

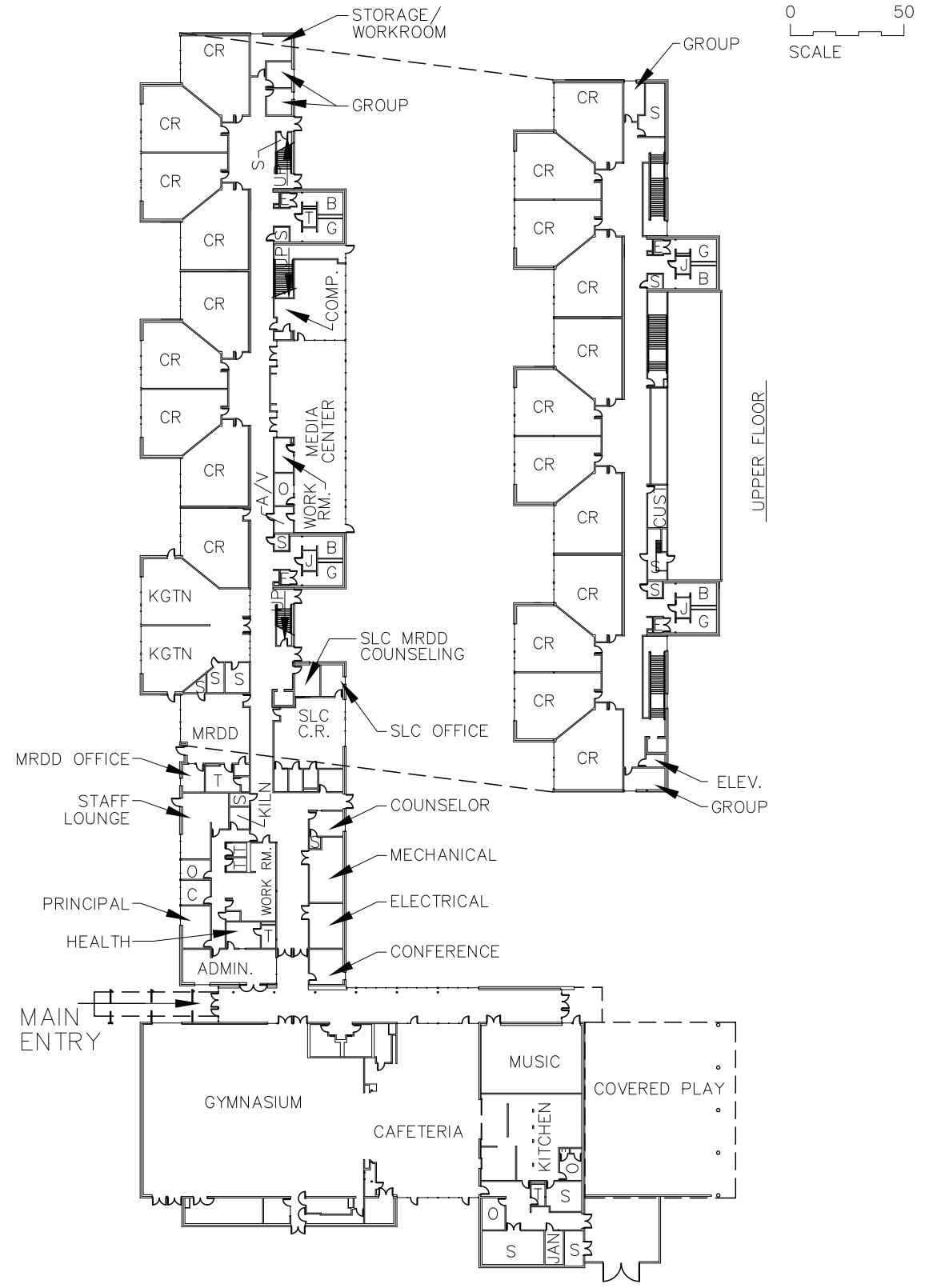
:: Site area: 9.00 acres

:: Building area: 69,435 square feet

:: Population: 600 students



Witch Hazel Elementary | Floor Plan



WITCH HAZEL ELEMENTARY SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: This school was constructed after the 2001 FEMA report and was built to current seismic codes

Deficiencies

:: Clean and seal block

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- The school has primarily lay-in ceiling tiles
- Stained tiles from leaks in HVAC

:: Walls
- Interior walls and partition are metal stud with drywall

:: Windows / Doors
- Windows are aluminum with fixed glass and operable units
- Doors are aluminum steel, exterior, and wood interior doors
- Exterior doors facing south will receive canopies to prevent water from blowing in under lintel

Deficiences

:: Walls
- Finish on wall thin. Paint and drywall poor finish - can't use "waxer"

:: Windows / Doors

SERVICE SYSTEMS

Existing Conditions

:: The school is air conditioned

:: The heating system is gas central boiler with unit ventilators or VAV boxes

Deficiencies
- Leaks in HVAC system causing stains on tiles

FUNCTIONAL STANDARDS

Deficiencies

:: Storage facilities needed in staff restrooms by office

ASSESSMENT SUMMARIES: MIDDLE SCHOOLS

INTRODUCTION

The Hillsboro School District has four middle schools. The schools range in age and condition. The two older facilities, Brown and Poynter, are both mid-century buildings. Evergreen was built in 1981 and South Meadows opened in 2009.

The following assessment summaries provide a narrative of building conditions for each facility, as well as site and plan information, and photographs highlighting key conditions. Detailed assessment forms can be found in the appendices.

MIDDLE SCHOOLS

R. A. Brown Middle | Aerial/Site Plan

R. A. BROWN MIDDLE SCHOOL

ASSESSMENT SCORE 64: MODERNIZATION

GENERAL INFORMATION

:: Address: 505 SW Cornelius Pass Road, Hillsboro, OR 97123-6727

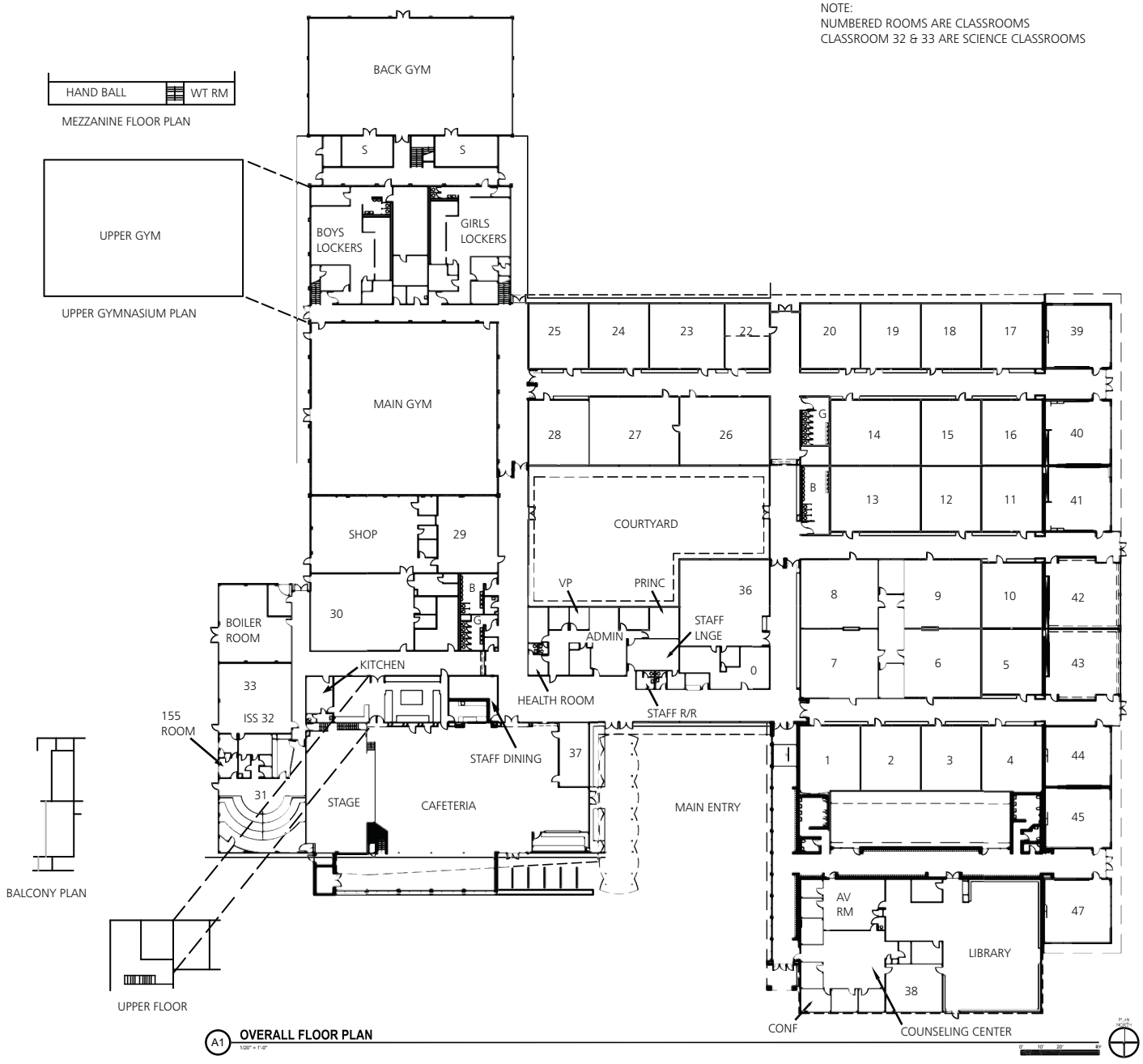
:: Construction dates:
- Original school constructed in 1963
- Second addition of classrooms at northeast corner construction set unavailable
- Library and gymnasium added in 1979
- Science classroom and expansion of the cafeteria in 2006
- Site improvements 2006

:: Site area: 30.00 acres

:: Building area: 95,414 square feet (east and west)

:: Population: 913 students

R. A. Brown Middle | Floor Plan



R. A. BROWN MIDDLE SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The primary structure is precast/tilt-up concrete walls, precast concrete frames and wood frame walls

:: Floor system is poured-in-place concrete
- All carpets have been replaced within the last 5-10 years

:: Roof was replaced in approximately 2001

Deficiencies

:: The 2001 FEMA report recommends numerous seismic upgrades

:: Some settlement cracks in hall tiles

:: Counseling center has old carpet

:: Drains at canopy and area over main office are subject to clogging

:: Re-aluminize Area 5 (2010-2011)

:: Roof restoration at Area 4 (2014-2017)

SECONDARY STRUCTURE

Existing Conditions

:: Ceilings
- Primarily tiles attached directly to the structure
- Most portions of the school have no interstitial space, new services have to be run in wire mold
- Lay-in tiles in wood shop, library and new portables

:: Walls
- Interior partitions are wood and metal studs with drywall and exposed masonry

:: Windows / Doors
- Existing single-glazed aluminum
- Doors are steel and wood

:: Miscellaneous
- New sanitary napkin dispensers are needed

Insulation
- No insulation in walls
- Above stage: none
- Concession Stand: none
- Computer Lab and Library: new insulation, foil face
- Upper Gym: none

Deficiencies

:: Ceilings
- Ceiling tiles in Room 17 are stained from previous leaks
- Acoustics in cafeteria are poor; problematic when used as the auditorium
- Building needs to be repainted, primarily the back gymnasium and library building

:: Walls
- Poor acoustics in rooms 31 and 33, wood shop and cafeteria

:: Windows / Doors
- Windows leak and need frequent maintenance; consider replacement
- Interior non-tempered glass doors are a possible safety issue

SERVICE SYSTEMS

Existing

:: Cooling system
- The building does not have centralized cooling
- 2007 addition has roof top HVAC systems

:: Heating system
- Gas-fired hot water boilers; heating system through radiators with pneumatic controls
- Big gym & weight room have stand alone units on the roof
- Room 37 has a wall mounted heater
- Filters are changed twice a year spring break and winter break

:: Electrical system
- Main electrical service: 1200 amp, 480Y/277 volt main distribution panel board. The MDP is at capacity with no room for expansion. The sub-distribution 208Y/120 volt panel is 600 amps, and is at capacity.
- Obsolete light fixtures replaced; 2006

- Lighting upgraded to electronic ballasts, T8 lamps; 2006
- Classroom addition lighting is direct/ indirect, electronic ballasts and T8 lamps; 2007
- Occupancy sensor system installed throughout school; 2007

Deficiencies

:: Cooling system
- Some interior classrooms have stand alone units that are problematic

:: Heating system
- Boilers need to be replaced
- Hydronic piping system needs to be replaced.
- Pneumatic TC system needs to be upgraded to DDC
- Increase ventilation intake in system
- Replace HVAC unit at Library

:: Plumbing system
- Additional staff restrooms are needed
- Only one ADA staff restroom
- Student restrooms are not ADA
- Toilets, sinks & faucets need to be replaced
- Domestic water system needs to be replaced, water runs yellow
- More isolation valves are needed
- Hot water supply is not consistent throughout school

:: Electrical system
- Need security light at exterior of gym N & NW
- Corridor egress lighting (older building) not on emergency power.
- Cafeteria/Multi-purpose area egress lighting not on emergency power.
- The main Gymnasium egress lighting does not meet egress code requirements.
- The three smaller Gymnasium areas do not have egress lighting systems.
- Need exterior entry lighting
- Exit landing lighting not on emergency power.
- Exterior egress landing lighting is on time clock, no emergency backup power

SITE CONDITIONS

Existing Conditions

:: Electrical system is at capacity with no room for expansion

Deficiencies

:: City main clogs frequently with leaves and backs up

:: Need security light at exterior of gymnasium to north and northwest

:: Courtyard needs solar lights

SAFETY STANDARDS

Existing Conditions

:: Fire alarm installed in 2004

:: School is fully fire sprinklered; 2007

:: School has Sonitrol motion sensor type security system

Deficiencies

:: Entry sequence is not ADA friendly

:: Parent drop-off backs up to Cornelius Pass Road

:: Crossing on Cornelius Pass at Jay is unsafe; need crosswalk

FUNCTIONAL STANDARDS

Deficiencies

:: Adaptability
- Need new clock and intercom system
- Need new clock and intercom system
- No general storage

:: Suitability
- Design is not flexible for current uses
- Stage is open, acoustics are problematic for band
- Kitchen is a stand alone, need additional space and walk-ins
- Classrooms too small, no flexibility
- No lecture hall
- Poor space for staff lounge
- Smooth circulation of students is compromised when the school exceeds capacity

- Science programs have inadequate space
- Library/multi-purpose room, theater and cafe have conflicting use problems, café is not large enough for school census

PRINCIPAL REQUESTS

Deficiences

:: Minimal Facility Needs
- Classrooms in pods, eight rooms, two-four classroom pods
- Lecture hall without fixed seats, able to hold 100-120 students
- Large assembly space
- Covered play for 100-120 students
- Speech room and conference rooms, two rooms
- One computer lab, 30 students
- Servery needs to have additional lines
- Staff room, with improved work area
- Science rooms
- Additional parking
- ADA restroom
- Covered bus waiting
- MRDD facility
- Larger cafeteria
- Office remodel

Evergreen Middle | Aerial/Site Plan

EVERGREEN MIDDLE SCHOOL

ASSESSMENT SCORE 78:
MINOR MODERNIZATION

GENERAL INFORMATION

:: Address: 29850 NW Evergreen Road, Hillsboro, OR 97124-1822

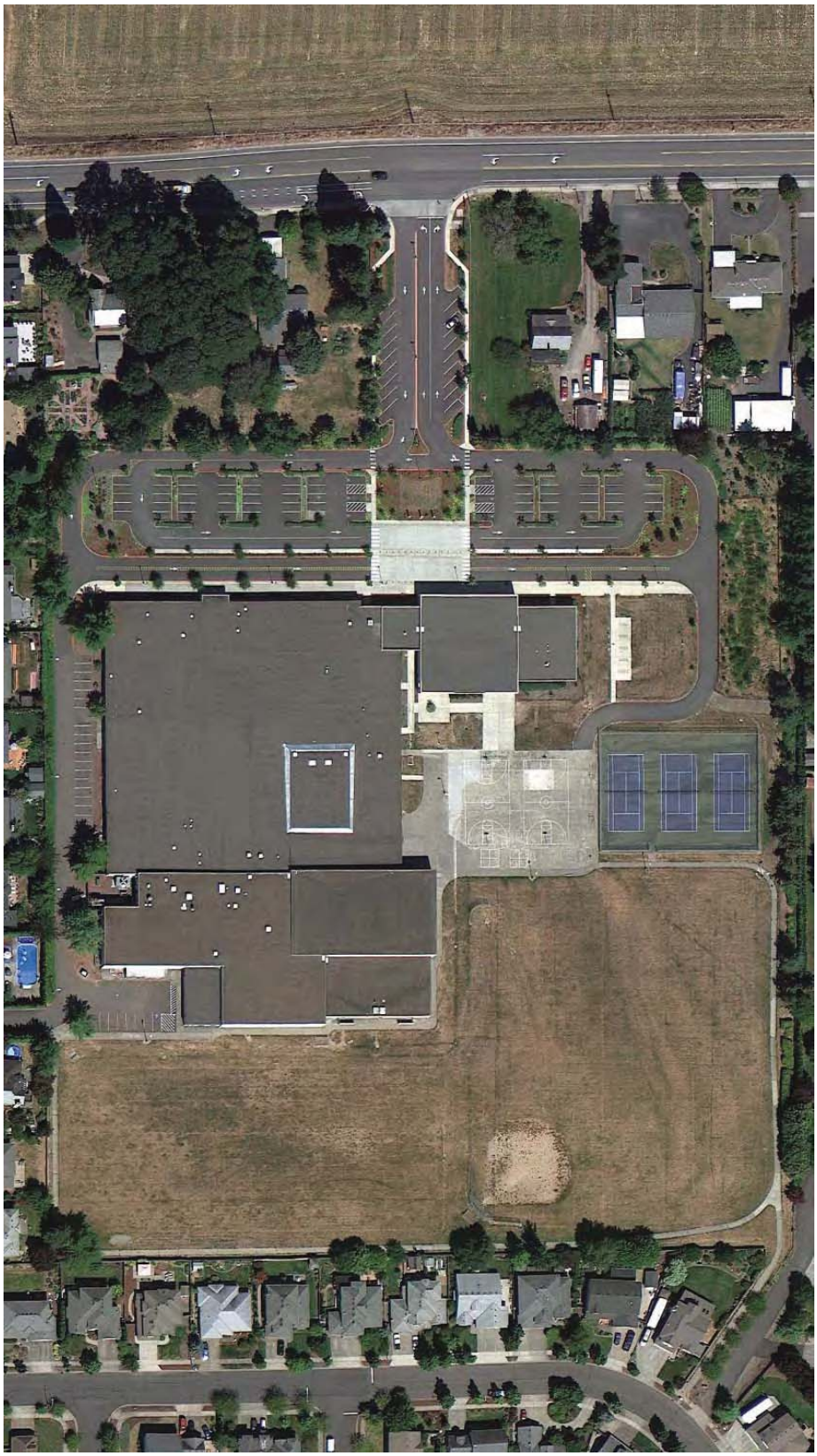
:: Construction date:
- Original school constructed in 1981
- Counseling office addition in 2009

:: Site area: 15.00 acres

:: Building area: 120,000 square feet (east and west)

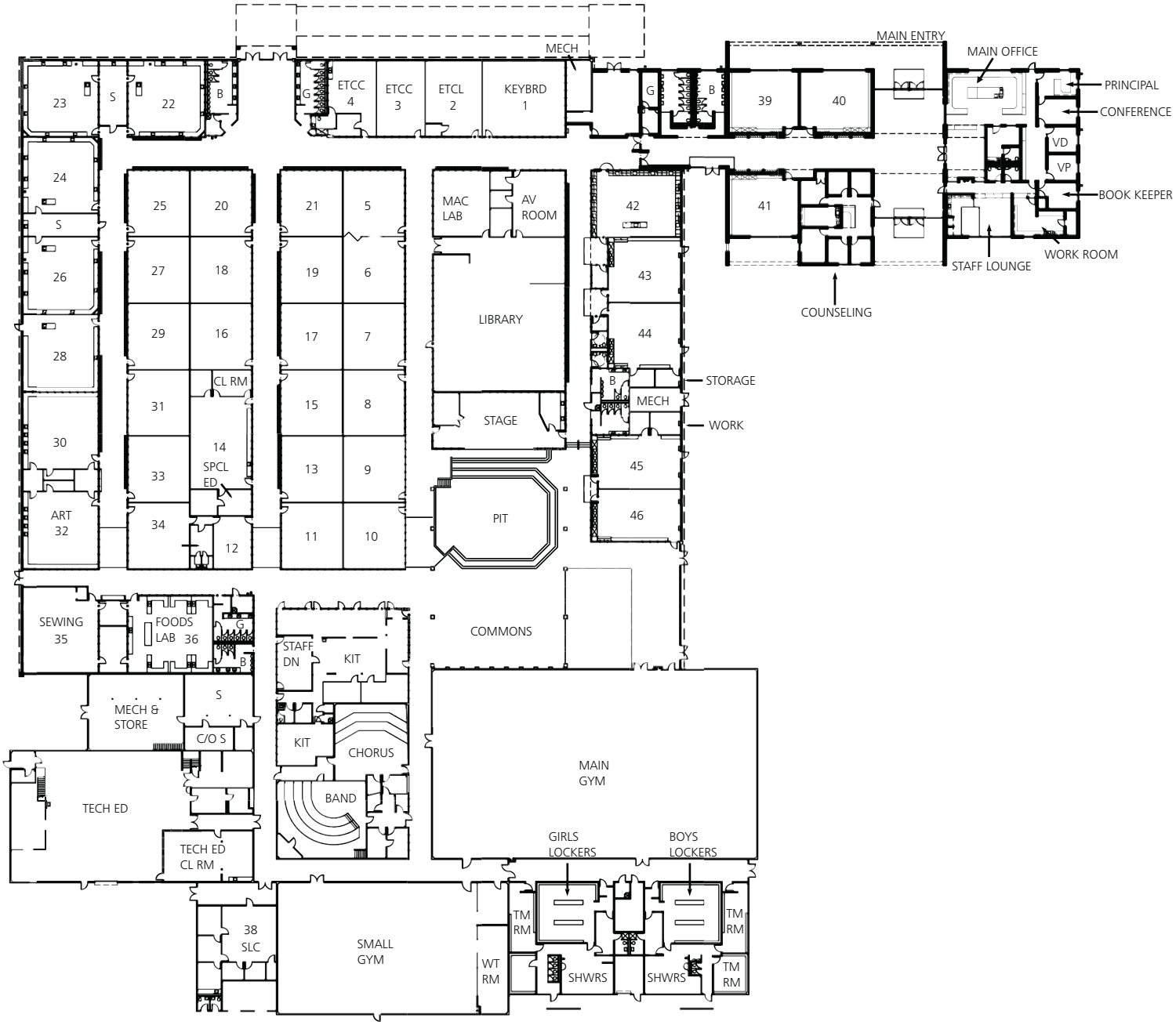
:: Population: 767 students

:: Classroom addition / remodel - 2009



Evergreen Middle | Floor Plan

NOTES:
NUMBERED ROOMS ARE CLASSROOMS



A1 **OVERALL FLOOR PLAN**
1/20" = 1'-0"

EVERGREEN MIDDLE SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The primary structure is tilt-up concrete

:: Floor system consists of isolated footings at tilt-up panels and slab-on-grade that is thickened at interior bearing walls
- Commons area has new carpet

:: Roof system is open web joists and pre-cast members at lockers and gymnasium

Deficiencies

:: The 2001 FEMA report indicates seismic bracing needed

:: Crack in the wall above the Pit; may be from settling

:: Wood shop exterior wall has cracks

:: Paint coming off exterior wall at gymnasium

:: Exterior of school needs to be caulked and repainted

:: Some ceramic tiles are popping up near urinals in restrooms

:: Standing water on roof over the Pit

:: Roof replacement of Area 5 (2012-2014)

:: Roof restoration of Area 2 (2010-2011)

:: Roof restoration of Area 4 (2015-2017)

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
- The ceiling is primarily a lay-in grid

:: Walls
- Interior walls and partitions are wood stud and masonry unit bearing walls
- Interior of school was just painted

:: Windows / Doors
- Windows are aluminum double-glazed with fixed glass
- Exterior doors are glass and steel; interior doors are steel and wood
- ADA hardware consists of plastic levers added to existing hardware

:: Miscellaneous

Insulation
- R-11, paper Face at Rooms 8,14, 18,21, 25,33,Team Room, AV Room, Library, Stage, Mech Room Pit, Kitchen
- None at Choir Small Room, Boys Locker Room, Hall by Room 38, Hall outside Choir room

Deficiences

:: Ceiling
- Ceiling in team room has failed
- Corridors and commons have poor acoustics
- Ceiling in green room near stage is damaged due to pump failure

:: Walls
- Movable partitions do not open or seal; creates acoustic problems in nearby spaces
- Corridors have no acoustical treatment and are very loud

:: Windows / Doors
- Window seals are problematic; they allow moisture and insects between glass
- Exterior steel doors need to be replaced
- Building scheduled to be re-keyed
- Some exterior doors do not close well, may be from static pressure

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- The air conditioning system has DDC controls
- Chiller plant upgraded, new chiller, cooling tower, pumps; 2007

:: Heating system
- Heating plant upgraded, new high efficiency boilers, pumps rebuilt; 2007

:: Electrical system
- Main electric service: 2000 amp, 480Y/277 volt, switchboard, with a 600 amp sub-feed distribution panel. Main service has six disconnect switches
- Emergency panel is fed from the main 2000 amp bus.

- The 208Y/120 volt system is fed from a 300 Kva transformer, with a 1200 amp main bus with a 600 amp sub-feed distribution panel. 208 switchboard has six disconnect switches.
- Classroom and corridor lighting upgrade to electronic ballasts and T8 lamps; 2010
- Corridor emergency lighting upgraded with battery backed ballasted fixtures; 2010

Deficiencies

:: Cooling system
- System has wide swings in temperature
- System is subject to smells from inside and outside the building
- Install split A/C in computer labs

:: Heating system
- Upgrade air distribution system; replace the VAV terminals
- Limited air exchange within school

:: Plumbing system
- Additional staff restroom needed in back of building
- No HC restroom for staff
- Student restrooms do not meet ADA requirements

:: Electrical system
- HID Gymnasium lighting needs upgrading to fluorescent
- Gymnasium egress lighting not on emergency power
- Occupancy sensor system needs to be installed
- Interior classrooms do not have emergency lighting
- Most exit landings have light fixtures which are not on emergency power

SITE CONDITIONS

Exsiting Conditions

:: New irrigation system at fields

SAFETY STANDARDS

Existing Conditions

:: School has Sonitrol motion sensor type security system

:: School has full fire alarm system

Deficiences

:: No ADA access into the Pit

:: Vertical lunch room tables in commons are not safe to use

FUNCTIONAL STANDARDS

Deficiences

:: No covered space outside of commons for students

:: The school needs another set of movable walls between classrooms

:: Noise level in commons is a concern; affects usability of classrooms 8, 9, and 10

:: Circulation "pinch point" in hallway near bus loading

PRINCIPAL REQUESTS

Deficiencies

:: Minimal facility requirements
- Expand size of eating area
- Need additional storage if shop is used

:: Minimal facility additions
- Covered eating area outside commons
- Need six more classrooms if population increases to 900 - added in 2008

J. W. Poynter Middle | Aerial/Site Plan

J. W. POYNTER MIDDLE SCHOOL

ASSESSMENT SCORE 70: MODERNIZATION

GENERAL INFORMATION

:: Address: 1535 NE Grant Street, Hillsboro, OR 97124-3421

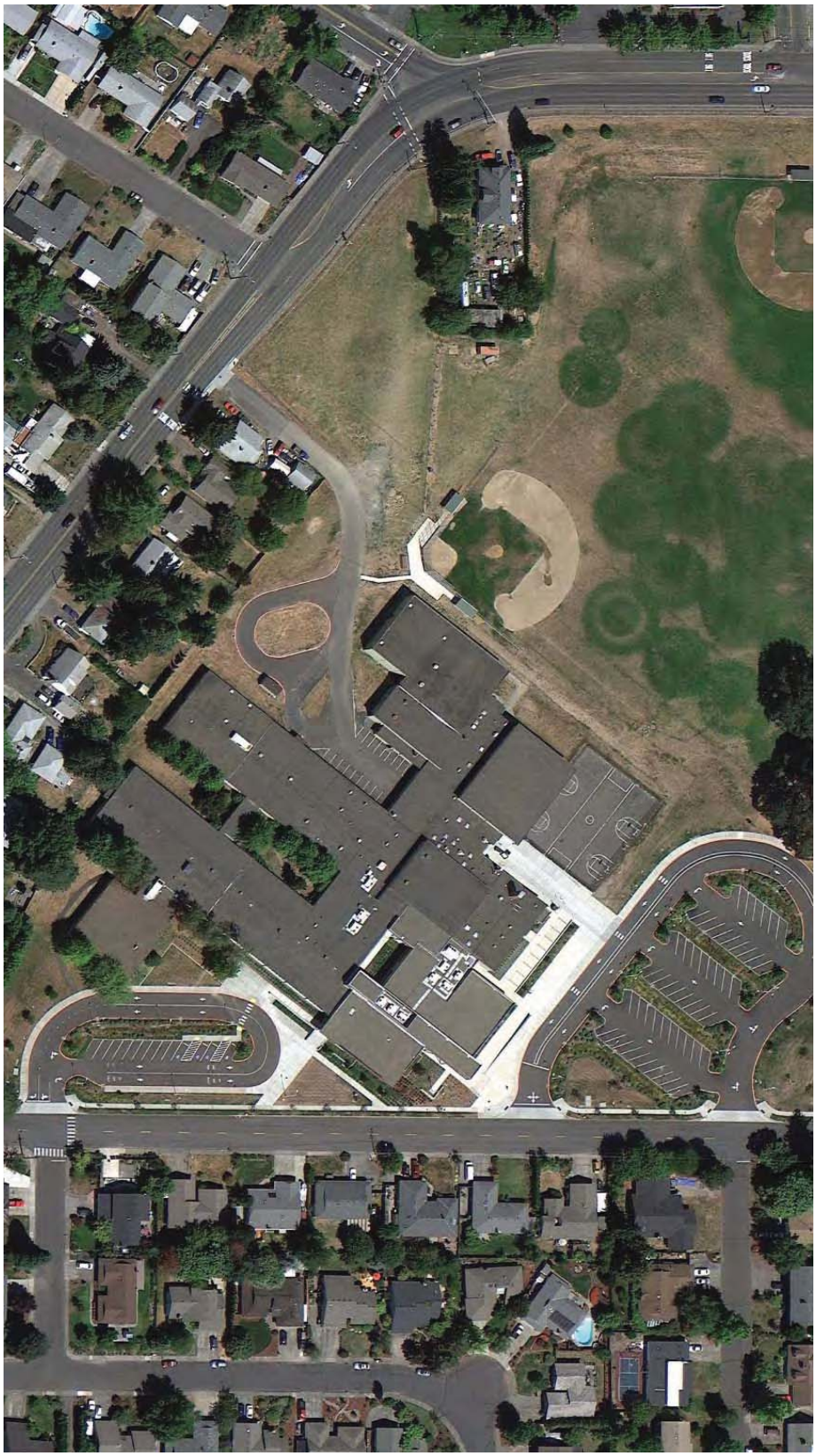
:: Construction dates:
- Original school constructed in 1959
- Additions in 1979
- Addition of classroom, administration and remodel in 2009

:: Site area: 19.58 acres

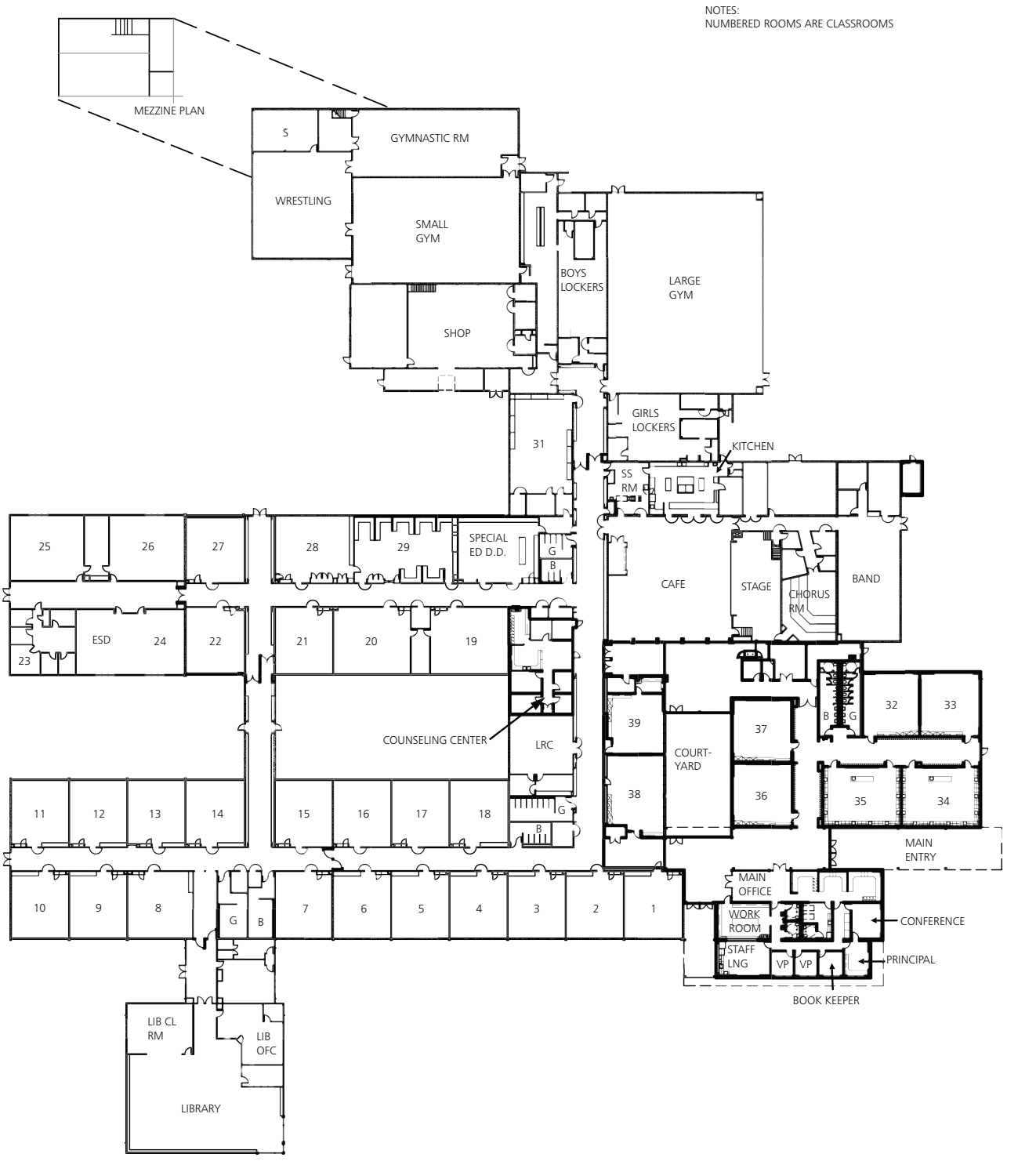
:: Building area: 83,200 square feet

:: Population: 720 students

J. W. POYNTER MIDDLE



J. W. Poynter Middle | Floor Plan



A1 OVERALL FLOOR PLAN
1"-0" = 20'-0"

SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: Primary structure is reinforced concrete wall and structural steel with concrete footing on a flat slab

:: East portions of the building subject to graffiti

:: Floor surfaces are showing wear
- About 5% of VAT* have been replaced, especially in high wear areas such as the hallway
- Wood floor in main gym experienced water damage in 2005

:: Bathroom terrazzo has lost its finish and needs to be refinished

:: The school has a flat roof
- Leak and drain problems on the roof have been addressed
- Roof restoration (2012-2014)

Deficiencies

:: 2001 FEMA report indicates the school is in need of a seismic upgrade
- Paint peeling off building at gym

SECONDARY STRUCTURE

:: Ceilings
- Ceiling is primarily attached to structure, lay-in metal grid are located in a few locations
- Additional electrical services need to be exposed
- Hallway ceilings stained from water damage

:: Walls
- Interior walls are wood stud with plaster and masonry

:: Windows / Doors
- Most blinds in school have been replaced
- Exterior doors are steel, interior doors are wood
- School re-keyed in 2006

:: Miscellaneous

Insulation
- R-19, Kraft face at Rooms 22, 23, 27, Library area

Deficiencies

: Walls
- Wall of small gym has cracks
- Plaster walls are difficult to match repairs and difficult to hang items
- Restrooms surfaces are difficult to clean

:: Windows / Doors
- Single pane aluminum awning windows are old and leaky
- Exterior doors need to be replaced
- ADA hardware upgrade scheduled for school
- Replace single glazed windows

SERVICE SYSTEMS

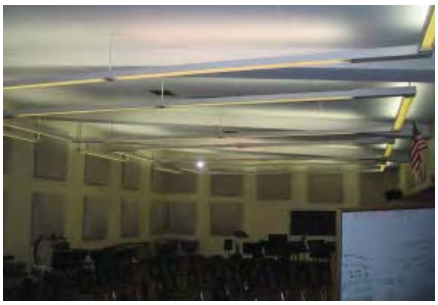
Existing Conditions

:: Cooling system
- Majority of building is not air conditioned
- Counseling Center has a unit air conditioner
- Library has air conditioning
- 2008 addition has roof-top HVAC systems

:: Heating system
- Natural gas-fired steam boiler
- Radiators have pneumatic controls
- Science wing has heating units with fans
- Cafeteria and girls locker room have ventilation system updated; 2008

:: Plumbing system
- School has two ADA accessible restrooms

:: Electrical system
- New pad-mounted utility transformer
- Main service distribution panel, 208Y/120 volt, 1600 amp, and sub-main service disconnect upgrade; 2008
- Computer room has had an electricity upgrade
- Classroom addition has direct/indirect



light fixtures with electronic ballasts and T8 lamps; 2008
- Corridor and classroom lighting upgraded to electronic ballasts and T8 lamps; 2010
- Corridor emergency lighting upgraded to battery backed ballasts fixtures; 2010
- 2008 addition has occupancy sensor system

Deficiencies

:: Cooling system
- Replace water cooled condenser for freezer in kitchen

:: Heating system
- Replace burner assemblies
- System is failing and difficult to maintain
- Controls are electronic DDC, but it is difficult to maintain even temperatures in the school
- Sump pumps in tunnels failed in the winter, creating a moisture problem in the tunnels
- Pneumatic/electric TC system needs to be upgraded to DDC

:: Plumbing system
- Inadequate water pressure in women's staff restroom
- Inadequate number of staff restrooms; current restrooms are very small
- Fixtures showing wear and age; finish is gone on many fixtures, and difficult to clean
- Consider water flow at freezer (constant flow of water goes into waste?)
- Install burner assemblies

:: ELECTRICAL SYSTEM

- Older main 1200 amp distribution switchboard; three-section is obsolete
- Four different types of light fixtures; some have very yellow covers and some fixture replacement lenses do not fit
- Multi-purpose/cafeteria area egress lighting does not meet egress code requirements
- Exit landing lighting in older portion of building is not on emergency power
- HID and incandescent lighting need to be replaced in all four gymnasium areas
- Gymnasium areas do not have egress lighting on emergency power
- Older areas of school need occupancy sensor system

SITE CONDITIONS

Deficiencies

:: Poor exterior drainage at blacktop and basketball court

:: Track and baseball fields have standing water

SAFETY STANDARDS

Existing Conditions

:: School has Sonitrol motion sensor type security system

:: School has full fire alarm system

Deficiencies

:: Security system is unreliable

:: The north of building is unlit, out of camera range and prone to graffiti

FUNCTIONAL STANDARDS

Existing Conditions

:: Classrooms are large

:: Old team room near gymnasium is unused

Deficiencies

:: Cabinets need to be replaced

:: School has a very active fine arts program; conflicts with cafeteria

:: "Pinch point" where several corridors converge

PRINCIPAL REQUESTS

Deficiencies

:: Minimal facility requirements
- New lighting throughout
- New flooring throughout
- New lockers in boys' and girls' locker rooms
- Closed circuit TV network throughout school

South Meadows Middle | Aerial/Site Plan

SOUTH MEADOWS MIDDLE SCHOOL

ASSESSMENT SCORE 97: SATISFACTORY

GENERAL INFORMATION

:: Address: 4690 SE Davis Road, Hillsboro, OR 97123

:: Construction date:
- Constructed in 2009

:: Site area: 9.01 acres

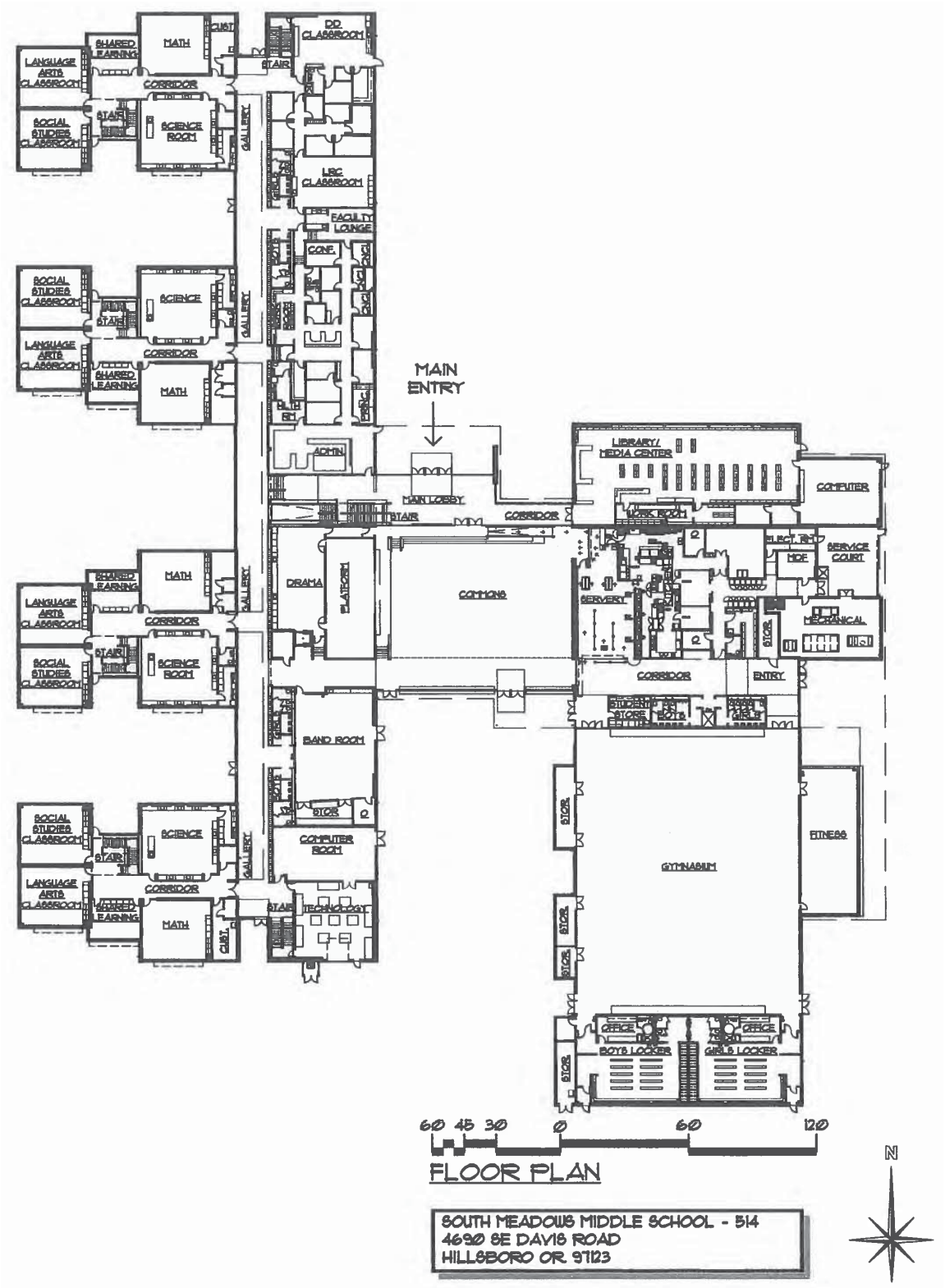
:: Shares Site with elementary school

:: Building area:152,8775 square feet

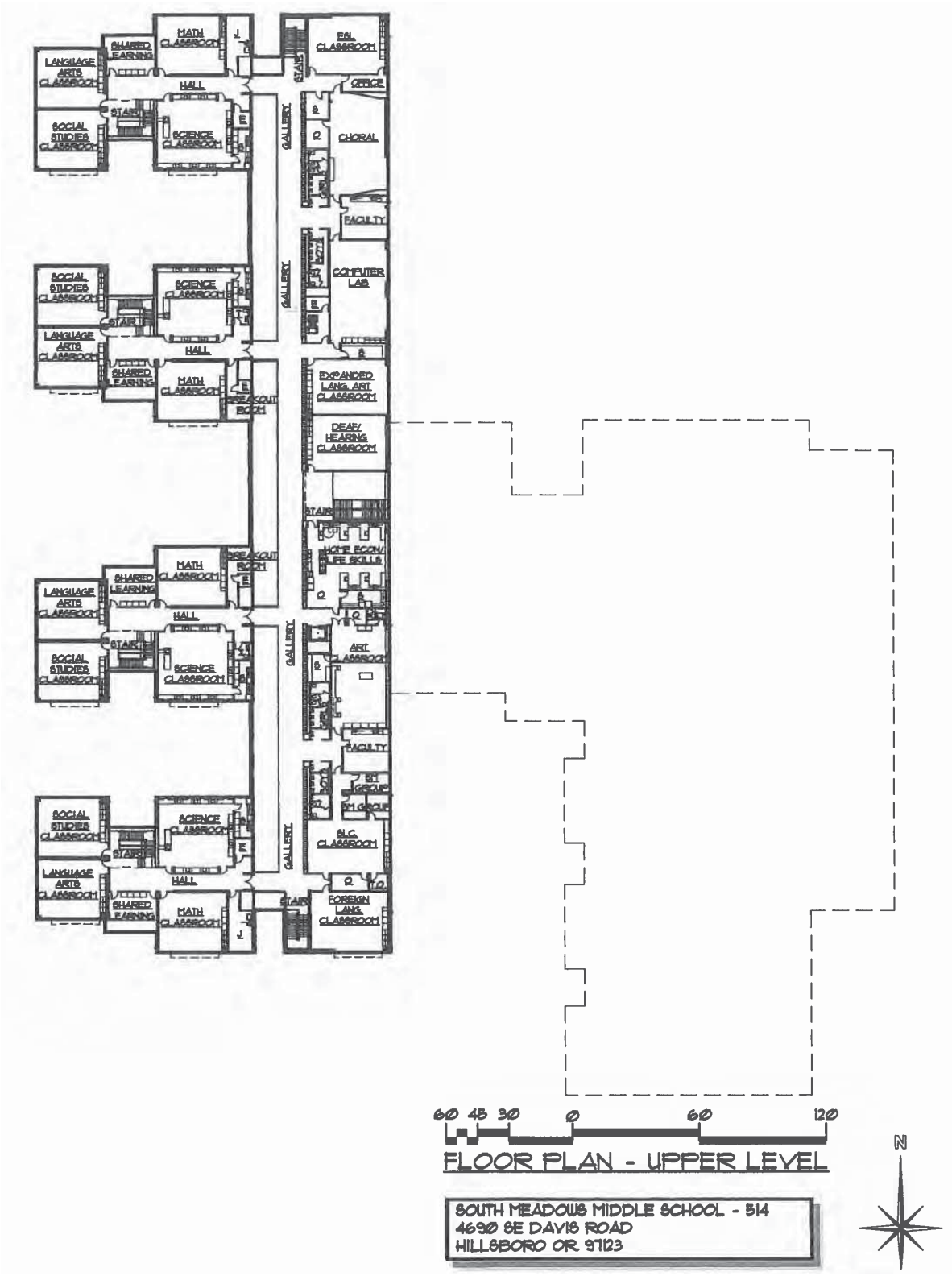
:: Population: 746 students

:: Capacity: 1000 students

South Meadows Middle | Floor Plan



South Meadows Middle | Floor Plan



SOUTH MEADOWS MIDDLE SCHOOL

ARCHITECTURAL

PRIMARY STRUCTURE

Existing Conditions

:: This school was constructed after the 2001 FEMA report. It was built to meet the seismic requirements of the 2007 Oregon Structural Specialty Code.

:: Slab on grade at first floor, Steel structure with CMU veneer and metal panels. Concrete Tilt walls with CMU veneer at the gym

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
– The school has primarily lay-in ceiling tiles, exposed structure at the gym and commons.

:: Walls
- Interior partitions are metal studs with drywall

:: Windows / Doors
- Windows are aluminum insulated with fixed glass and operable units
- Exterior doors are aluminum and steel. Interior doors are wood.

:: Roofing
- Built up Roof (Tremco)

:: Mechanical
- Radiant Slab heat at the Commons and south corridor
- Roof top Air Handling units
- High Efficiency boiler (gas)
- VAV distribution w/fan power terminal units
- Building is air conditioned with chiller located between Witch Hazel Elem and SMMS (with supplemental smaller condenser units located throughout the building and on the roof)
- Operable windows in classrooms and offices with sensors connected to ventilation system for AHUs and controls

:: Electrical
- Lighting: Occupancy sensor at Classrooms with master on/off switch and 3-way switch.
- 277/480V, anticipated load: 600A

Deficiencies

:: Miscellaneous
- The building does not meet current energy code

ASSESSMENT SUMMARIES: HIGH SCHOOLS

INTRODUCTION

The Hillsboro School District has four comprehensive high schools and two locations for the Miller Education Center. The schools range in age and condition. The two older facilities, Hillsboro High and Glencoe, were built in 1968 and 1980 respectively. Century and Liberty are both relatively new facilities, built in 1997 and 2003 respectively. Miller Education Center East was formerly Miller Education Center West, and Miller Education Center West was formerly David Hill Elementary School.

The following assessment summaries provide a narrative of building conditions for each facility, as well as site and plan information, and photographs highlighting key conditions. Detailed assessment forms can be found in the appendices.

HIGH SCHOOLS

Century High | Aerial/Site Plan

CENTURY HIGH SCHOOL

ASSESSMENT SCORE 93:
MINOR MODERNIZATION

GENERAL INFORMATION

:: Address: 2000 SE Century Boulevard, Hillsboro, OR 97123

:: Construction date:
- Original school constructed in 1997

:: Site area: 37.50 acres

:: Building area: 265,000 square feet

:: Population: 1,800 students

CENTURY HIGH SCHOOL

Century High | Floor Plans

PRIMARY STRUCTURE

Existing Conditions

:: The school is not included in the 2001 FEMA report; it is assumed it needs minimal, if any, seismic upgrades since it was constructed to 1996 seismic codes

:: Floor system
- Carpet is fine except for in high traffic areas and entrances to rooms
- Cannot match stair tread, material; replace treads at first floor level change near gymnasium
- Main stair is subject to vandalism

Deficiencies

:: Lacrosse balls are creating holes in the exterior stucco wall at weight room and music rooms

:: Building needs an exterior paint job

:: Clean and seal masonry veneer

:: Floor system
- VCT tile is cracking at the seams

:: Roof system
- Leak in hallway between upper and main gymnasium, due to failure in mechanical unit caulking
- Leaks in choir room/drama and shop roof
- Roof restoration (2015-2017)

SECONDARY STRUCTURE

Existing conditions

:: Ceilings
- Ceilings are a combination of lay-in grid and exposed structure

:: Walls
- Interior walls and partitions are steel stud with drywall
- Ceramic tile has been "tagged" with markers in restrooms

:: Windows / Doors
- Windowsare double-glazed aluminum with fixed glass and operable units
- Doors are aluminum and wood
- School re-keyed 2003

Deficiences

:: Ceilings
- Main gymnasium has poor acoustics

:: Walls
- Main entry, last precast bench needs correct caulking
- Folding panel partitions in classrooms have minor damage from students; mechanisms need adjustments

:: Windows / Doors
- Windows need additional handles to allow teacher to operate windows.
- Door in commons court sticks, needs to be adjusted frequently
- Possibly refurbish doors at locker room
- Possibly change hardware type at weight room, it is easy to break into this room
- South entry door closer is broken

SERVICE SYSTEMS

Existing conditions

:: Cooling system
- School has air conditioning; reciprocating water chillers are air cooled type

:: Heating system
- Natural gas, forced draft hot water boilers
- Air handlers are VAV
- Temperature control system is DDC

:: Plumbing system
- Natural gas fired water heater with two storage tanks.

:: Electrical system
- Dual electrical services; 2500 amp, 480Y/277 volt and 2500 amp, 208Y/120 volt
- School has a 60 Kva emergency generator for life safety loads
- HID gymnasium lighting upgraded to T5HO fluorescent fixtures; 2010

Deficiencies

:: Cooling system
- Second gym too hot
- Chillers does not function properly and need to be replaced; chillers have been rebuilt several times
- Provide new chillers

:: Heating system
- Heating is inconsistent
- Heating water system is grooved pipe with gasketed fittings; prone to leaking from expansion and contraction when boilers is shut-off
- Replace one boiler burner
- Replace all circuit setters in school

:: Plumbing system
- Pressure low at auditorium drinking fountain
- Area between N & C N of gym has poor drainage
- Replace all dielectric union fittings and circuit setters building-wide

SITE CONDITIONS

Deficiencies

:: New drainage system at varsity baseball field

SAFETY STANDARDS

Existing Conditions

:: School has Sonitrol motion sensor type security system

:: School has full fire alarm system

:: School has full fire sprinkler system

FUNCTIONAL STANDARDS

Deficiencies

:: Unable to clean behind bleachers

:: Circulation congested at main entry into commons

:: Field access needed for grounds

PRINCIPAL REQUESTS

Deficiencies

:: Minimal facility requirements
- Second gym basket locations, moved to provide room between baskets
- Synthetic turf
- Exterior patio at commons
- Repair building signage
- Better drainage in field
- Ventilation for science class
- Additional storage

:: Minimal facility needs
- Exterior basketball court

Glencoe High | Aerial/Site Plan

GLENCOE HIGH SCHOOL

ASSESSMENT SCORE 80:
MINOR MODERNIZATION

GENERAL INFORMATION

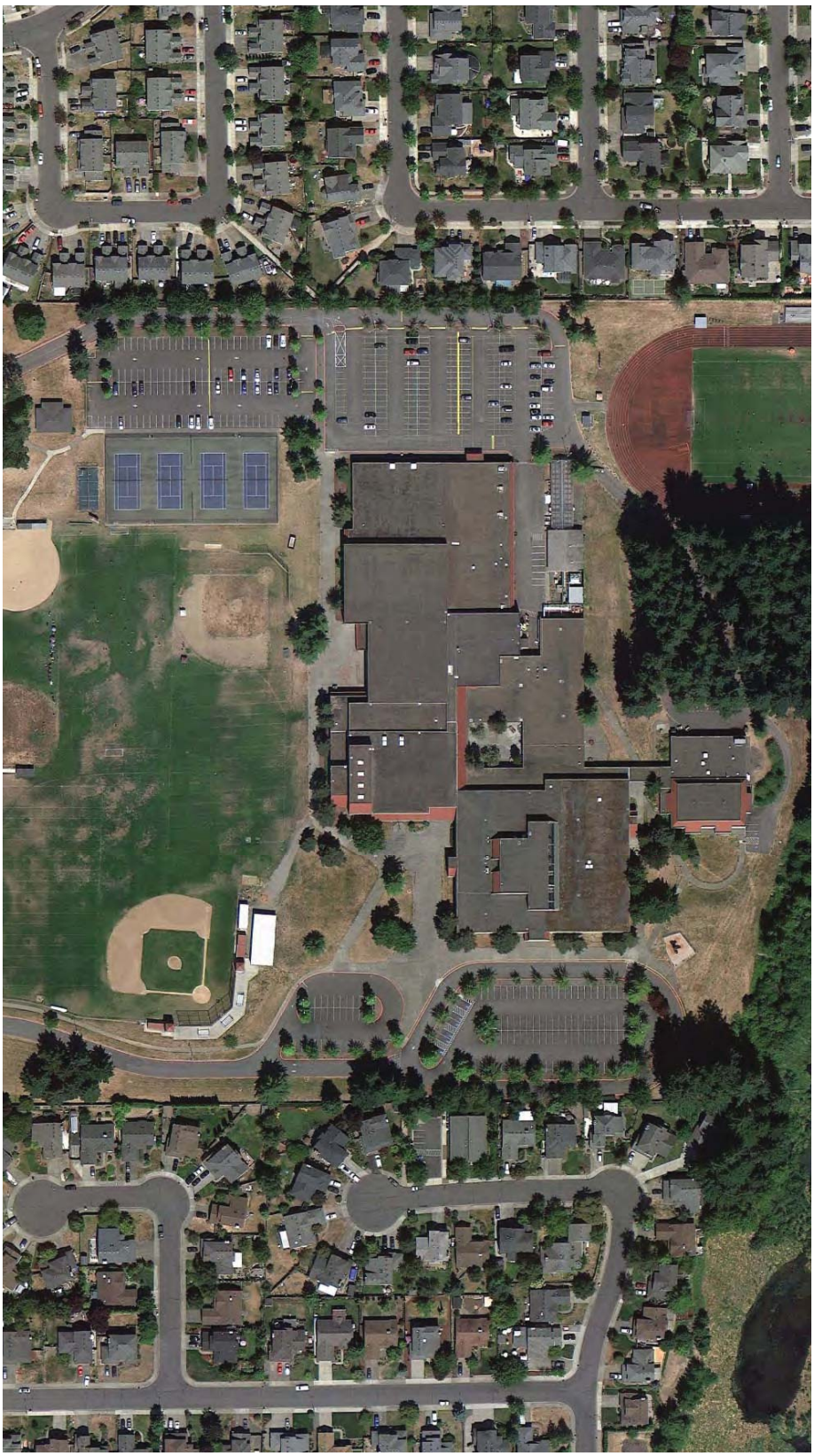
:: Address: 2700 NW Glencoe Road, Hillsboro, OR 97124-1518

:: Construction date:
- Original school constructed in 1980

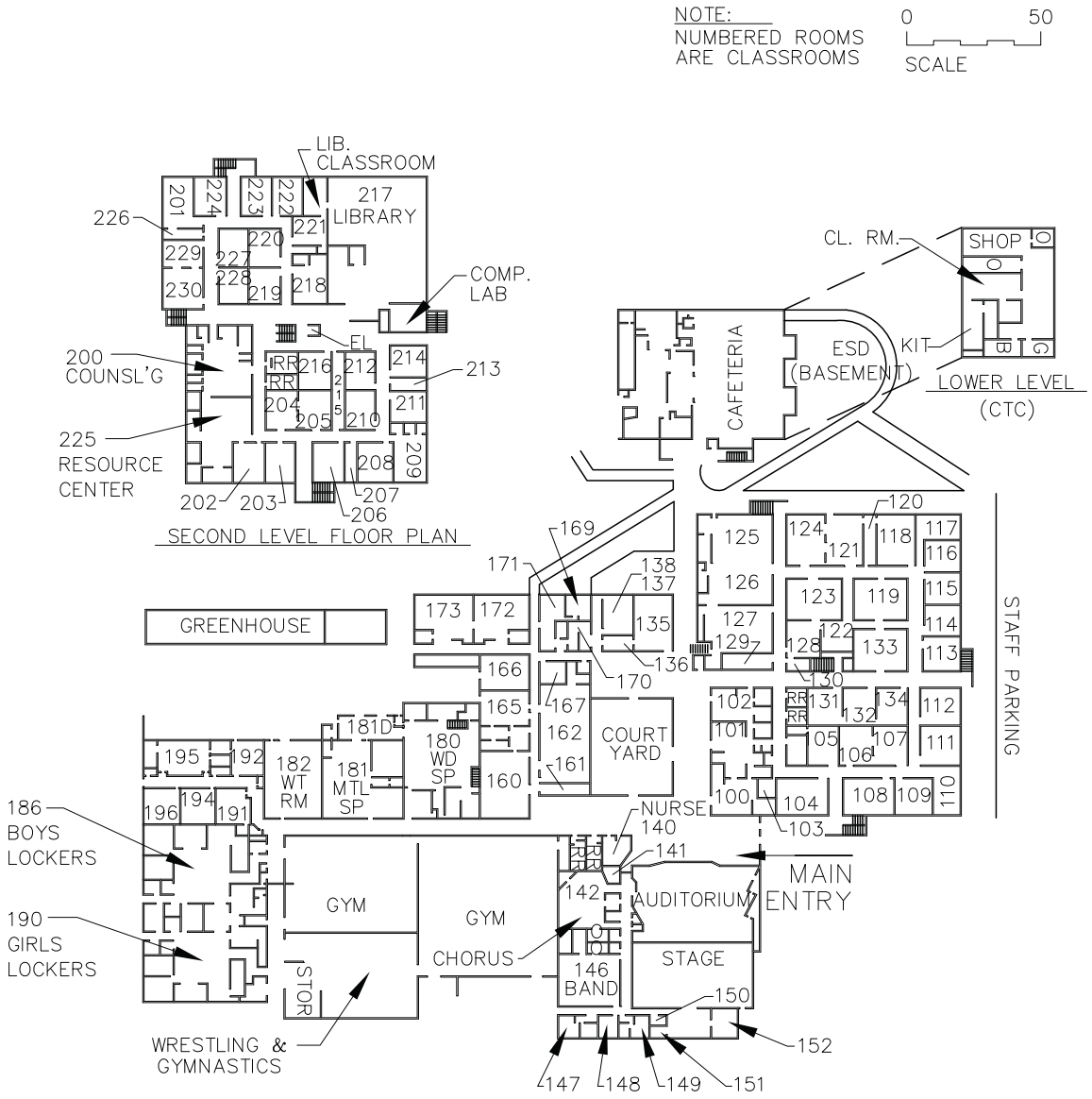
:: Site area: 39.00 acres

:: Building area: 240,000 square feet

:: Population: 1,601 students



Glencoe High | Floor Plans



GLENCOE HIGH SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The 2001 FEMA report states that the main building does not have structural deficiencies

:: Column and exterior wall system consists of concrete precast wall panels
- Assume building meets 2001 codes, :: Floor system is a concrete slab

:: Roof system is a concrete topping slab

Deficiencies

:: Repainted within six years, could use a touch-up

:: Library carpet old and musty. High traffic areas are carpeted

:: Carpet in offices and Counseling Center is old

:: Overflow roof drain on fly loft leaks

:: Skylight bank leaks at east side of flashing

:: Roof over Counseling Center leaks

:: Miscellaneous roof restoration in three phases (2010-2017)

SECONDARY STRUCTURE

Existing Condtions

:: The 2001 FEMA report recommends non-structural seismic upgrades

:: Ceiling
- The ceiling is attached to structure or lay-in metal grid

:: Walls
- Interior walls are metal stud with plaster and drywall. The school has movable walls
- Interior walls and partitions are repainted every summer on a revolving basis
- Three movable walls are in satisfactory condition

:: Windows / Doors
- Windows are double glazed, aluminum fixed and awning
- Doors are steel and wood

:: Miscellaneous

Insulation
- Blown on Insulation at gyms, wrestling, locker room commons, halls, remaining first floor is not any insulation
- There is not any insulation at the second floor
- R-19 Foil Faced at cafeteria lounge, kitchen work room, greenhouse classroom
- There is not any insulation at the basement

Deficiencies

:: Ceiling
- The ceiling system needs to be braced against lateral forces
- Tiles are broken, grid damage typical in hallways
- Ten percent of ceiling tiles need to be replaced

:: Walls
- Stair at southeast leaks

:: Windows / Doors
- Fifty to sixty percent of window gaskets have failed
- All seals in cafeteria windows have failed
- No ADA hardware other than plastic retrofit
- Twenty-five percent of exterior doors are sprung, problem most notable at PE and band hallway
- Exterior doors need paint throughout

SERVICE SYSTEMS

Existing Condtions

:: Cooling system
- The school has air conditioning
- Chiller plant replaced; 2008 with new chiller, cooling tower, pumps.
- RTU's repaired; 2010
- HVAC - retro commission

:: Heating system
- Heating plant replaced; 2008 with high efficiency hot water gas fired boilers

- Obsolete heat recovery system demolished and heating water system decoupled from condenser water cooling system
- Pneumatic temperature control system replaced with DDC; 2008 thru 2010
- VAV diffuser system replaced with VAV reheat terminal units; 2008 thru 2010
- Ventilation system upgraded to current code.
- Green house heating, ventilation system upgraded to DDC; 2009

:: Electrical system
- Gymnasiums, cafeteria and corridor HID lighting upgraded to T5HO; 2008
- Gymnasium emergency lighting upgraded with battery backed ballasts
- Occupancy sensors installed in gymnasiums and cafeteria
- Classrooms, corridors, library, and administration area lighting upgrade to electronic ballasts, T8 lamps; 2010
- Occupancy sensors installed in remaining areas of school
- Corridor emergency lighting upgraded with battery backed ballasted fixtures; 2010
- Boiler room MCC replaced with distribution panel.
- Auditorium/stage area lighting controller upgraded; 2010

Deficiencies

:: Heating system
- A number of circulation pumps have been replaced, a number are still in need to be replaced
- Kitchen Make-up air unit gas train is not operational, cannot be repaired. Unit needs to be replaced.

:: Plumbing system
- Slow drain area in cooking, science labs and art room due to sagging pipes hallway
- Cracked urinals, porcelain starting to be difficult to clean, valves are old

:: Electrical system
- Cafeteria egress lighting does not meet egress code requirements.
- Multi-purpose choral room and the band room egress lighting systems do not meet egress code requirements.
- Auditorium isle lighting is not on emergency power.
- School needs a generator
- Mechanical room MCC's need to be replaced.
- Electrical system main distribution panels and branch panels are obsolete, replacement parts difficult to get, costly.

SAFETY STANDARDS

Existing Conditions

:: Sprinklers are located only at auditorium and stage

:: Kitchen has a fire suppression system

:: School has Sonitrol motion sensor type security system

Deficiencies

:: Egress from courtyard is a concern

:: Safety concerns at student parking lot

:: Parent drop-off and bus circulation creates bottle neck at main entry

SITE CONDITIONS

Deficiencies

:: Grounds have poor drainage

:: Replace broken concrete curbs

FUNCTIONAL STANDARDS

Existing Conditions

:: Adaptability
- Stage rigging recently upgraded

Deficiencies

:: Adaptability
- Bleachers are unsafe, difficult to use as they are not motorized
- Chemical lab tops are starting to come loose
- Art and lab sinks need to be replaced
- Clocks do not keep consistent time, need a new system

:: Intercom needs to be updated

- Greenhouse, music, hall and stage do not receive the intercom signal, this is a safety concern

:: Suitability
- No cameras in stairwells, unable to supervise
- Computer lab generates excessive heat
- Kitchen needs additional ventilation

PRINCIPAL REQUESTS

Existing Conditions

:: Minimal facility needs
- Exterior restrooms at west elevation to serve fields after hours
- Carpets in media center have been replaced

Deficiencies

:: Minimal facility requirements
- Computer lab needs adequate HVAC
- New bleachers
- Upgrade clock and intercom

:: Minimal facility needs
- New second gym
- Covered bus waiting

Hillsboro High | Aerial/Site Plan

HILLSBORO HIGH SCHOOL

ASSESSMENT SCORE 65: MODERNIZATION

GENERAL INFORMATION

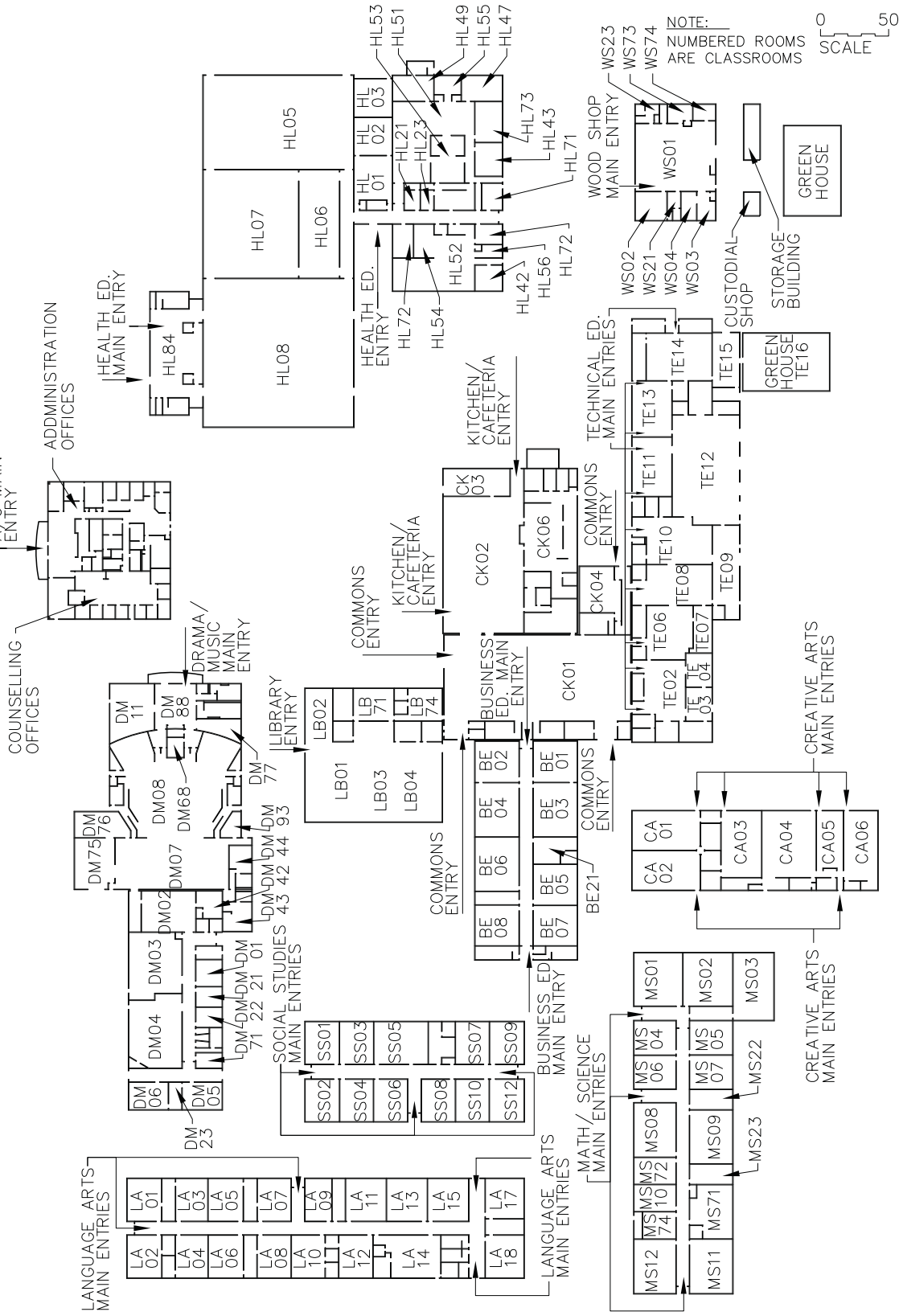
:: Address: 3285 SE Rood Bridge Road, Hillsboro, OR 97123-8654

:: Construction dates:
- Original school was constructed in 1968
- Fill-in classrooms, between locker rooms and gymnasium, math/science building and wood shop constructed in 1975
- Lecture and performing arts building added to music/drama building and administration and cafeteria expanded in 1998/99

:: Site area: 48.00 acres

:: Building area: 253,652 square feet

:: Population: 1,452 students


NOTE:
NUMBERED ROOMS ARE CLASSROOMS
SCALE 0 50
ADMINISTRATION OFFICES
A/C MAIN ENTRY
COUNSELLING OFFICES
HEALTH ED. MAIN ENTRY
HEALTH ED. ENTRY
KITCHEN/ CAFETERIA ENTRY
COMMONS ENTRY
LIBRARY ENTRY
DRAMA/ MUSIC MAIN ENTRY
BUSINESS ED. MAIN ENTRY
SOCIAL STUDIES MAIN ENTRIES
LANGUAGE ARTS MAIN ENTRIES
MATH/ SCIENCE MAIN ENTRIES
TECHNICAL ED. MAIN ENTRIES
WOOD SHOP MAIN ENTRY
CUSTODIAL SHOP
STORAGE BUILDING
GREEN HOUSE
CREATIVE ARTS MAIN ENTRIES

HILLSBORO HIGH SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: The 2001 FEMA report includes a detailed description of the school and construction type used for each building

:: Exterior walls are primarily tilt-up construction, most are exterior steel stud with marblecrete walls
- Administration, DM, CK, and TE (Buildings 1,2,4 and 12) were expanded and/or upgraded in 1998-99 and brought up to current code; FEMA report does not include Administration and Cafeteria (Buildings 1 and 4)
- The back side of the school experiences vandalism and graffiti

:: The floor system is concrete slab-on-grade

Deficiencies

:: Water problems in T-1 (Building 12); the slab is at grade

:: Water came in at a window in CA (Building 11)

:: DM, LB, HL, LA, SS, MS, BE, CA TE and wood shop (Buildings 2, 3, 5, 6, 7, 8, 9,10, 11 and wood shop) are in need of seismic upgrades per the FEMA report

:: Paint is peeling off pillars at the entrance

:: Leak in wall in CA (Building 11)

:: Marblecrete was damaged by equipment in a few areas of the school
- TE (Building 12) has a leak in classroom floor

:: Flat roofs are problematic in this climate; persistent problem with roof drainage on buildings with flat roofs
- Leaks occur at some downspouts
- Older portions of the campus have frequent leaks; Facilities is not able to determine if it is from the mechanical systems or the roof leaks
- CA (Building 11), LA (Building 7), and SS (Building 8) roofs are in the worst shape
- Roof restoration in three phases (2010-2017)
- Improve roof drainage at Technology Building and Library to create positive drainage

SECONDARY STRUCTURE

Existing Conditions

:: Ceilng
- Ceiling system is primarily lay-in ceilings

:: Walls
- Interior walls are steel or wood studs with drywall or wood paneling; the school has moveable walls
- Masonite wainscoting throughout school is in fair to poor condition

:: Windows / Doors
- The school has a variety of window types
- Safety glass in cafeteria installed in 2004
- Doors are steel, wood, and glass

:: Miscellaneous

Insulation
- Administration Building, minimum amount of foil faced, majority of the building – none
- No insulation at LA Building, SS Building, MS Building, CA Building, BE Building, TE Building, Commons, Cafeteria, Library, Small Gym, Weight Room, Wrestling Room, Locker Room Gym Lobby, Storage shed.
- Blown on insulation at the main gym and wood shop

Deficiencies

:: Ceilings
- Ceilings in older building are not standard size; tiles need to be cut to fit grid
- Spray-on soundproofing in big gymnasium does not work well
- Small gymnasium has no spray-on soundproofing and it is loud
- Numerous stains on ceiling tiles due to frequency of ceiling leaks

:: Walls
- Students carve into bathroom walls above the tile; tile needs to extend to ceiling

- Acoustics are poor in SS (Building 8) between choir and band; partitions stop at the ceiling between rooms

:: Windows / Doors
- Windows in older buildings are in poor condition
- Caulking on most windows is in poor condition
- Doors are generally in very poor condition
- Cannot access the entire facility with a key
- Need new exterior and interior doors
- Door frames in gymnasium are rusting

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- The school is air conditioned

:: Heating system
- Gym HV system controls updated to DDC, 2010
- Language Arts building; packaged HVAC unit replaced, 2010
- Drama/Music building; packaged HVAC unit replaced, 2010

:: Electrical system
- Multiple electrical services to campus buildings; most are at capacity
- Lack of emergency lighting upgraded, battery backed systems.
- Emergency generator is located at kitchen/cafeteria building; emergency power feeds to only seven of twelve buildings; portions of the building have no emergency lighting
- Tech Ed auto shops; lighting upgraded to T5HO fluorescent fixtures, 2010
- Gymnasium lighting upgraded to T5HO fluorescent fixtures, 2007

Deficiencies

:: Cooling system
- Humidity so high in café, pipes drip during dances
- System is difficult to control and varies throughout the facility
- Need a lift to turn off HVAC in gym
- Filters have thirty different sizes
- Cooling unit at gym building has caught on fire twice

:: Heating system
- needs to be an integral system, each building has two or three units of different kinds and sizes
- Similar problems as the cooling system
- Electrical rooms are overheating, add exhaust ventilation
- Teachers have space heaters in offices which are safety concerns

:: Plumbing system
- SS (bldg 8) has no hot water
- The school needs additional staff bathrooms
- Some classroom buildings have no bathrooms
- Partitions need to be upgraded in older classroom building restrooms
- Shut off valve in science not up to code
- Science room drain lines are improperly trapped. Replace drain lines, including proper traps and vents.

:: Electrical system
- Steps at front entry are poorly lit
- Older buildings need additional power
- Art rooms do not have adequate electricity

SITE CONDITIONS

Existing Conditions

:: The site has only one entry/exit

Deficiencies

:: Drainage at bus loading, pipe clogged down stream

:: Drainage problems in the pit, an exterior gathering area. Does not drain well

:: Poor drainage by basketball courts

:: Some sidewalks are sinking, especially off bus ramp

SAFETY STANDARDS

Existing Conditions

:: Only new buildings are sprinklered

:: Conflicts or problems may occur in outlaying buildings that administration staff is not aware of

:: Need additional security staff

Deficiencies

:: Exit lighting may not work in all locations, it has failed in the past

:: Layout of school is problematic, an intruder could be on campus without security knowing

:: School has Sonitrol motion sensor type security system

FUNCTIONAL STANDARDS

Existing Conditions

:: Distance between classrooms increases travel time between classes

:: Adaptability
- SS/LA (buildings 7 and 8) arts building classrooms crowded when class size exceeds thirty-five students
- Foods program has been discontinued, rooms could be reconfigured for new usage

Deficiencies

:: Security and supervision are a concern

:: Adaptability
- Cabinet doors were recently replaced, but many problems still exist
- Minimal back splashes in art rooms, drawers not repaired, etc.
- MS (building 9) classrooms wing too small
- Accordion walls are not used; they do not block sound and need to be replaced with full height walls
- Walls in SS (building 8) are poor for acoustics; the wall does not extend above the ceiling
- H1, H2, and H3 do not have a corridor (building 5). Students need to go through H1 to get to H2 and H3
- Gym (building 6) is inadequate for the size of the school
- Wall between band and choir are not sound proof, cannot schedule classes in rooms at the same time
- Locker rooms need complete upgrade
- Need additional equipment storage for band room
- Cabinetry upgrade needed in art (building 11)
- Shelving in library (building 3) needs to meet seismic codes
- Restrooms need ADA upgrades

• Suitability
- No area where entire school can have an assembly
- Classrooms are too small
- Staff offices crowded, some have over seven occupants
- Inadequate staff restrooms, only one HC
- The school is not ADA complaint
- Courtyard between MS, LA, and SS (buildings 7, 8 & 9) is a problem area for altercations, it needs additional supervision
- Basketball court area behind gym (building 6) needs additional supervision
- The servery is congested, layout allows stealing of food, food has had to be packaged, this requires additional storage
- Welding area has safety concerns

PRINCIPAL REQUESTS

Existing Conditions
- Gym with a capacity of 1200

Deficiencies

:: Minimal facility requirements
- Additional entry to campus, one entry increases loading, parking lot is not cleared until 3:30 or 4:00
- Larger weight room
- Renovate gym building (building 6)
- Orchestra pit in theater
- Additional storage in kitchen

:: Minimal facility additions
- Drama classroom, black box
- New wrestling room, current combined use with dance room is problematic
- Two large staff offices

Liberty High | Aerial/Site Plan

LIBERTY HIGH SCHOOL

ASSESSMENT SCORE 96: SATISFACTORY

GENERAL INFORMATION

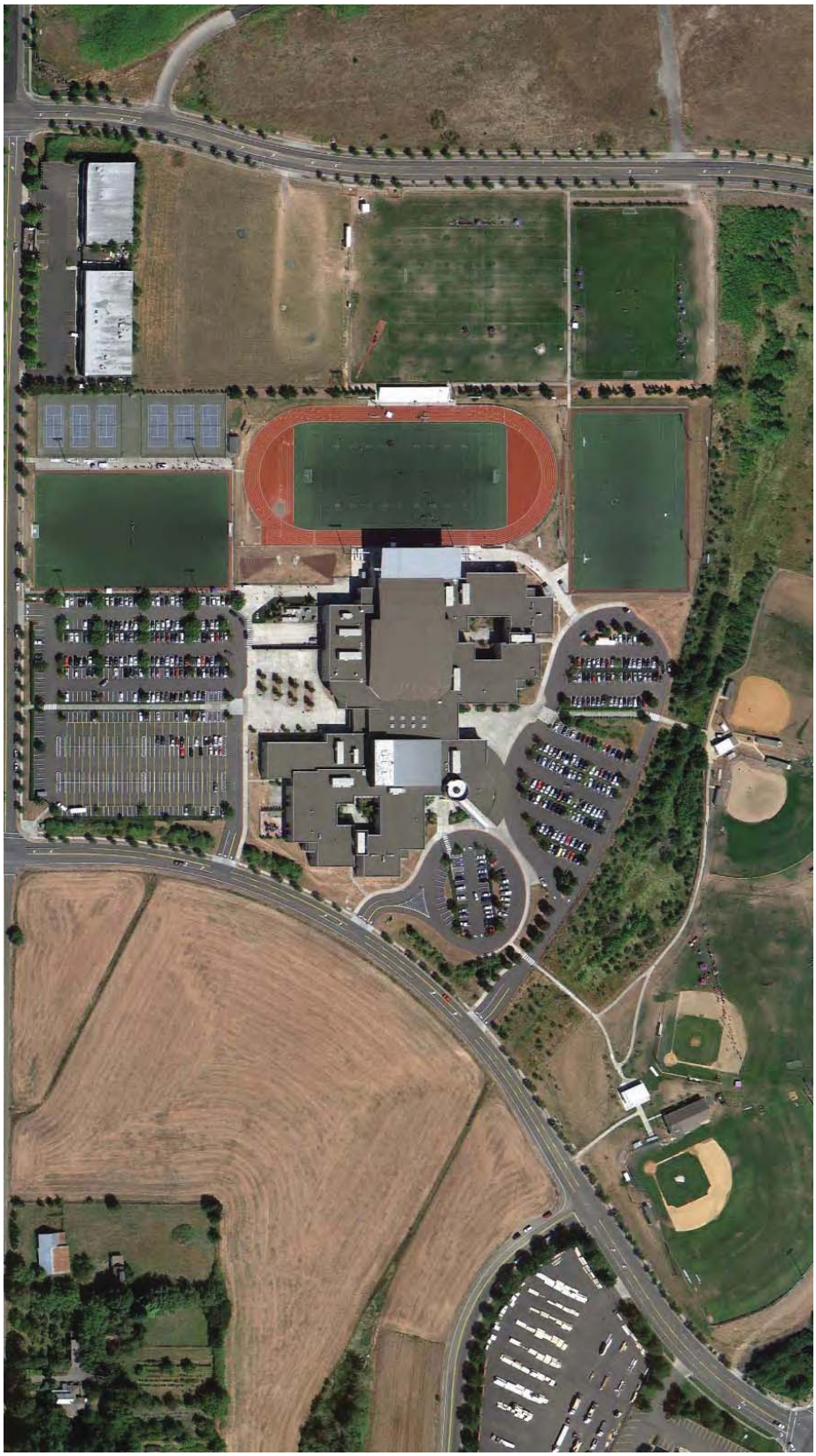
:: Address: 21945 NW Wagon Way, Hillsboro, OR 97124

:: Construction date:
- Original school constructed in 2003

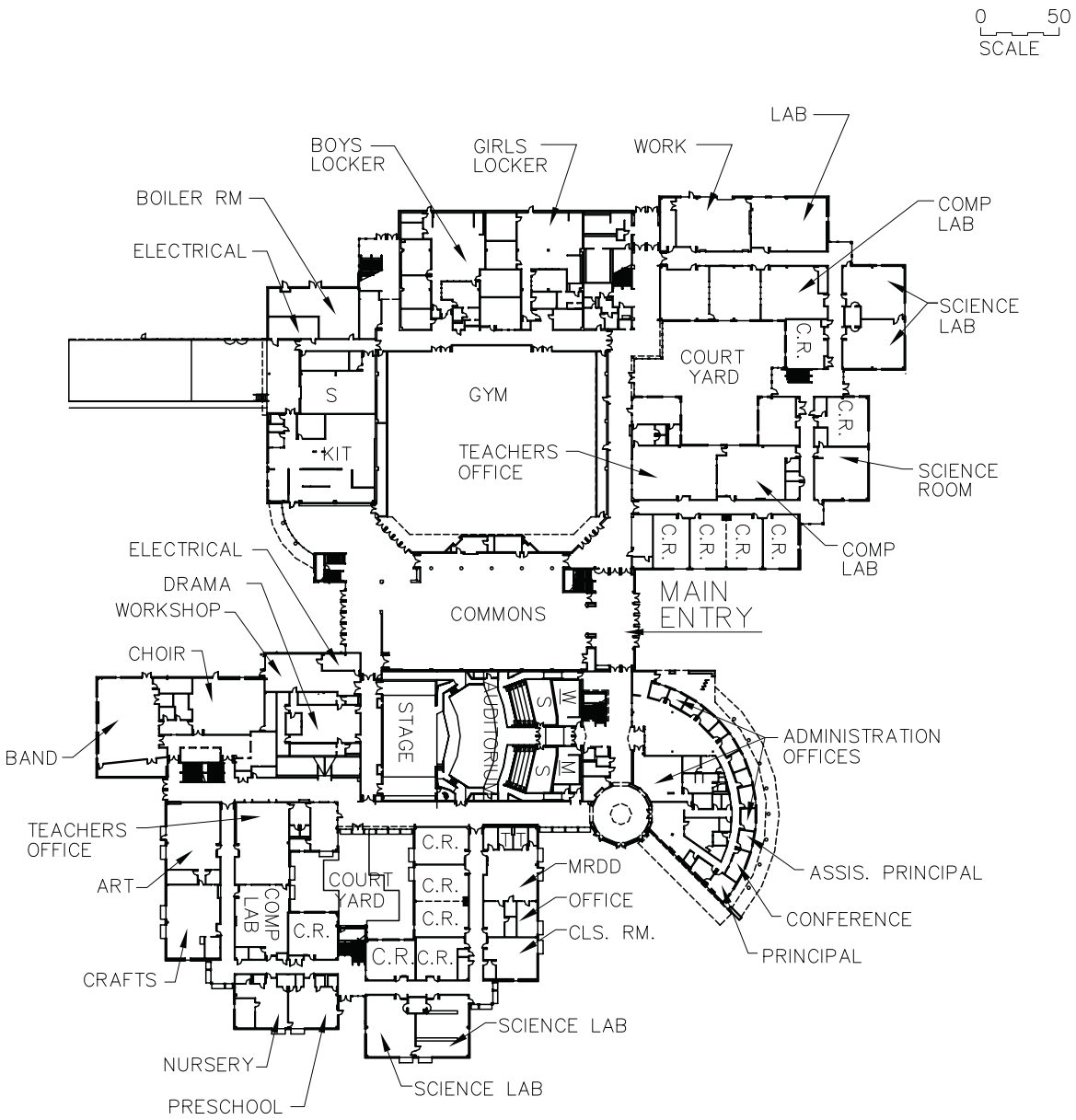
:: Site area: 44.00 acres

:: Building area: 288,900 square feet

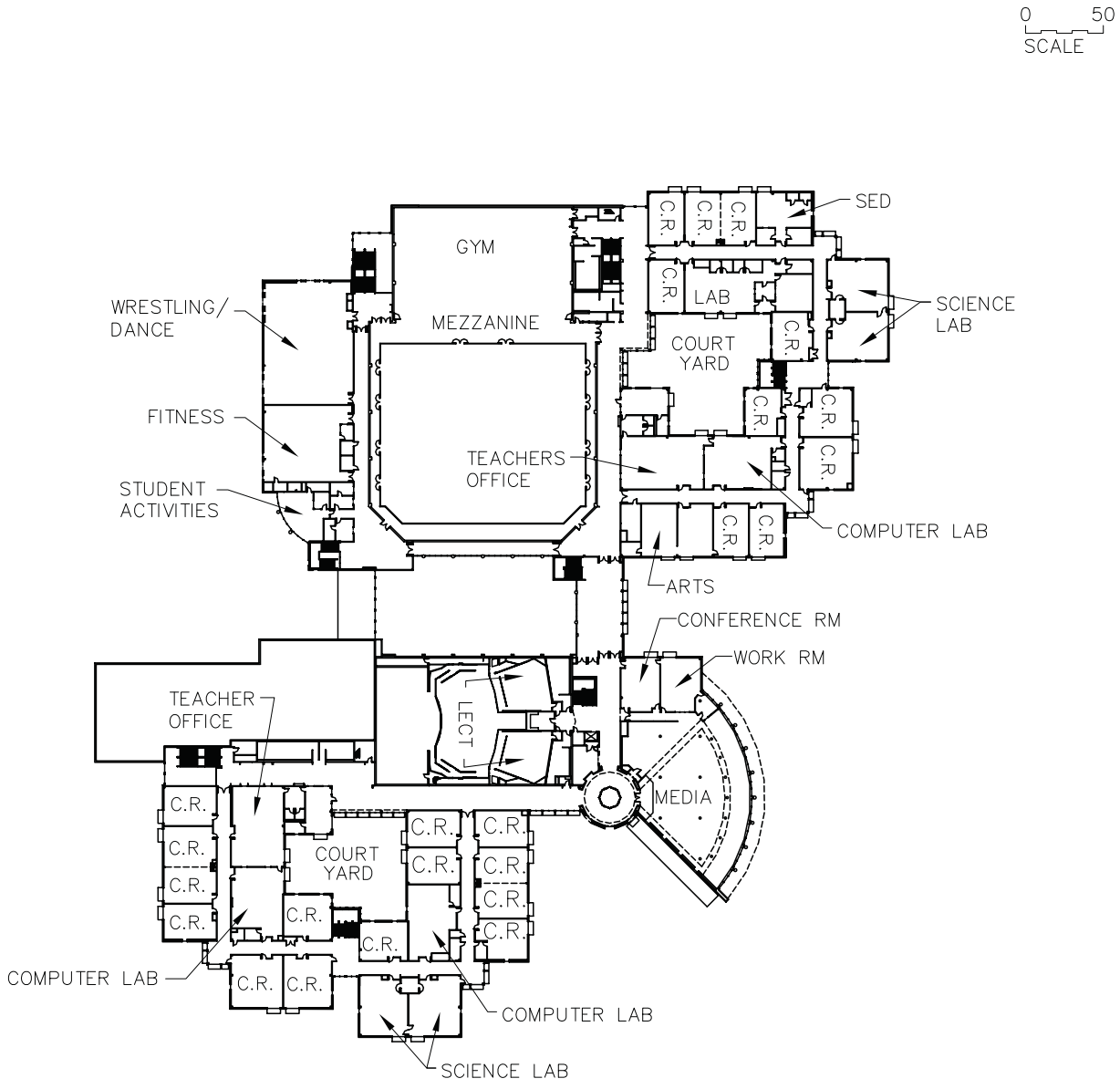
:: Capacity 1,800 students



Liberty High | First Floor Plan



Liberty High | Second Floor Plan



LIBERTY HIGH SCHOOL

PRIMARY STRUCTURE

Existing Conditions

:: Steel frame building

:: The school was constructed to current seismic codes in 2003

:: Auditorium roof had leaks in 2005 - roof has been repaired

SECONDARY STRUCTURE

Existing Conditions

:: Celiling
- Ceiling finishes are attached to structure or a lay-in metal grid

:: Walls
- Interior walls are steel stud with drywall; the school has movable partitions

:: Windows / Doors
- Windows are double-glazed, aluminum with fixed glass
- Four or five windows have been replaced because gaskets have failed
- Doors are aluminum and wood

Deficiencies

:: Celiling
- Ceiling tiles are stained from pipe leaks and condensation

:: Walls
- Rubber base wall corners in hallways are popping
- Movable wall panels mechanical parts have failed; floor seals will not pop up
- Movable wall panel bearings in theater are showing wear

:: Windows / Doors
- Door at east commons sticks; may be from the foundation settling

SERVICE SYSTEMS

Existing Conditions

:: Cooling system
- Ventilation system is roof top, built-up HVAC units
- Cooling system is air cooling water chillers

:: Heating system
- Gas fired, forced air with VAV boxes
- Hydronic heating water system is variable volume
- Heating system is five high efficiency natural gas fired hydronic boilers

:: Plumbing system
- Domestic water heaters are natural gas fired high efficiency with separate storage tanks
- Grease trap should be cleaned every two years
- Fixtures are ADA compliant

:: Electrical system
- Dual electrical services; 1600 amp, 480Y/277 volt and 1200 amp, 208Y/120 volt
- Classroom lighting is suspended direct/ indirect fluorescent with T8 lamps
- Classroom wing corridor and administration office area lighting is recessed indirect fluorescent with T8 lamps
- Main corridor and lobby lighting is recessed down light fluorescent with PL lamps
- The school has a programmable lighting control system; classrooms have occupancy sensors for control of lighting

Deficiencies

:: Cooling system
- Ninety-five percent of actuators in fan box units have failed; it is a manufacturer defect; school has extended warranties on parts, not service; all actuators are scheduled for replacement summer 2006
- Chillers do not fire properly; 'Fault 23' computer code

- Cooling-water flow level in chilled water barely adequate to keep chillers on-line; deficient pump capacity assumed; chilled water system is variable volume

:: Heating system
- One boiler was not operable at the time of the survey; however it is under warranty

SITE CONDITIONS

Deficiencies

:: Light levels in some public spaces are inadequate for evening use

:: Improve drainage system for softball and baseball fields

:: Replace artificial turf; two soccer fields and one football field

SAFETY STANDARDS

Existing Condtions

:: Initial programming for lights was wiped out by power surge

Deficiencies

:: Need lock key system at stadium elevator

FUNCTIONAL STANDARDS

Deficiencies

:: Adaptability
- Commons lack restrooms

:: Suitability
- Students remove signage
- Intercoms in conference rooms need the ability to adjust volume
- Lights obstruct hanging TV's
- Baseball fields can not be accessed via a large truck

MILLER EDUCATION CENTER EAST

ASSESSMENT SCORE 79:
MINOR MODERNIZATION

GENERAL INFORMATION

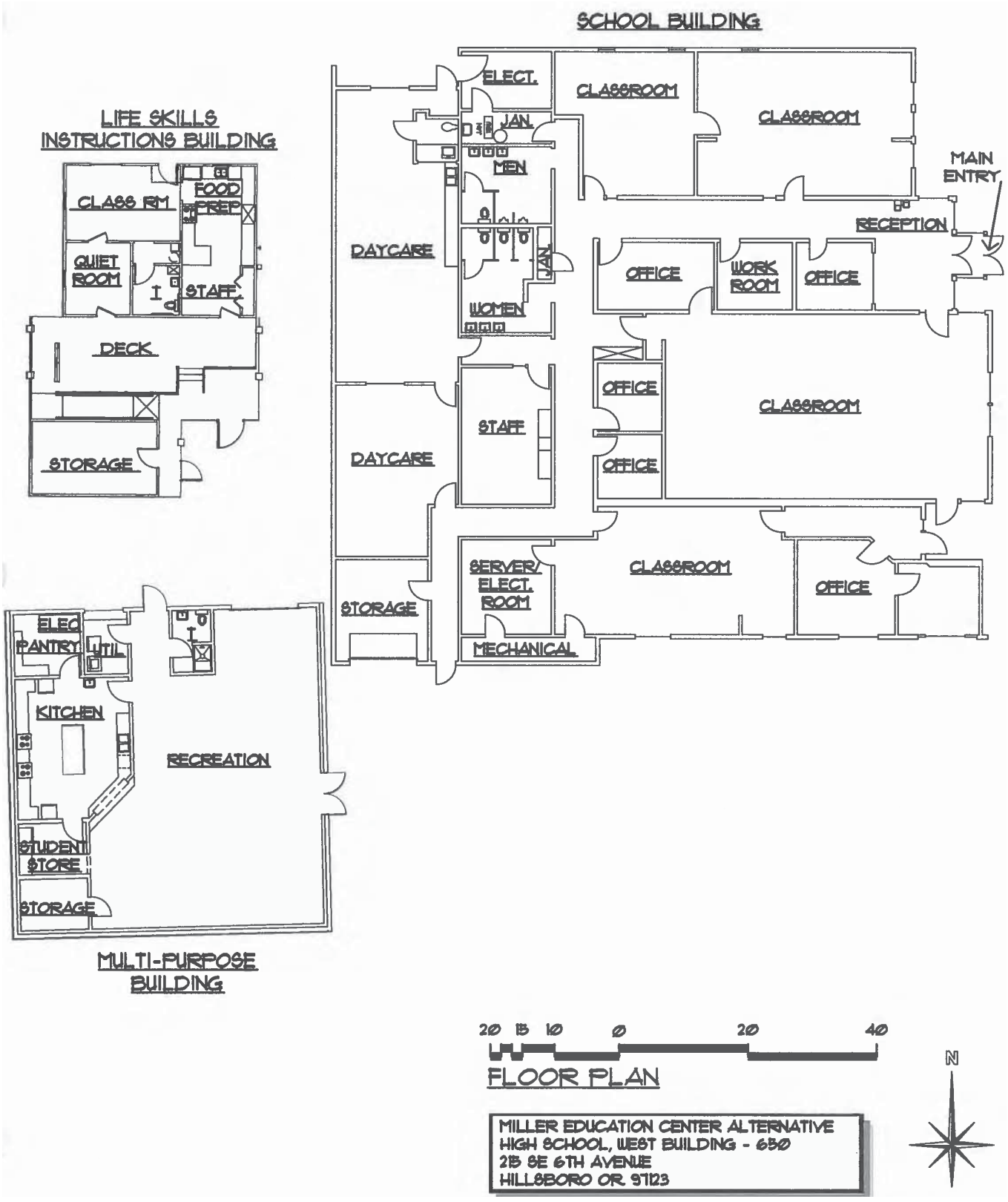
:: Address: 215 SE 6th Ave, Hillsboro OR 97123

:: Construction dates: 1958 (Occupied by MEC in 2001)
- Remodel 1991
- Remodel 2001

:: Site Area: 3.3 Acres

:: Building Area:
- 85,92 SF (Main School Building
- 2,367 SF (Multi-Purpose Building)
- 1,400 SF (Life Skills Instructions Building
- 240 SF (Storage Building)

:: Population: 70 student capacity


SCHOOL BUILDING
ELECT.
CLASSROOM
CLASSROOM
JAN.
MEN
MAIN ENTRY
RECEPTION
DAYCARE
JAN.
OFFICE
WORK ROOM
OFFICE
WOMEN
LIFE SKILLS INSTRUCTIONS BUILDING
CLASS RM
FOOD PREP
QUIET ROOM
STAFF
DECK
OFFICE
CLASSROOM
STAFF
DAYCARE
OFFICE
STORAGE
SERVER/ ELECT. ROOM
CLASSROOM
OFFICE
STORAGE
MECHANICAL
ELEC
PANTRY
UTIL
KITCHEN
RECREATION
STUDENT STORE
STORAGE
MULTI-PURPOSE BUILDING
20 15 10 0 20 40
FLOOR PLAN
N
MILLER EDUCATION CENTER ALTERNATIVE
HIGH SCHOOL, WEST BUILDING - 650
215 SE 6TH AVENUE
HILLSBORO OR 97123

MILLER EDUCATION CENTER EAST

PRIMARY STRUCTURE

Existing Conditions

:: CMU and wood stud w/ brick or wood veneer

:: Life Skills Building: Wood studs w/ wood siding

:: Multi-Purpose Building: CMU and wood studs w/ wood siding

:: Roof
- Main Building: Built up roof system over wood rafters
- Life Skill Building: Composition shingles over plywood sheathing on wood framed structure
- Multi-Purpose Building: Built up roof system over wood rafters

Deficiencies

:: Roof
- Watch Roof Area for Replacement/ Restoration 2011-2015
- Structures dont meet current sciesmic codes
- Structures dont meet current energy codes

SECONDARY STRUCTURE

Existing Conditions

:: Ceiling
– Acoustical tiles and gyp board

:: Interior – Wood studs with lath and plaster and gypsum board.

:: Insulation – R-19 Kraft face at room 117, 112, 113

:: Mechanical

:: Electrical

:: Site

SERVICE SYSTEMS

Exisiting Conditions

:: Cooling System
- Building is air conditioned, DX packaged roof top HVAC units

:: Heating system
- Roof top HVAC units have natural gas fired furnaces
- East building has high efficiency natural gas fired furnace with split system DX condensing unit on roof

:: Plumbing
- Plumbing fixtures are ADA compliant, low flow type

:: Electrical
- Main electric service is 120/240 volt, single phase, has three meters
  - 200 A sub-meter to Hall panel feeds majority of building
  - 200 A sub-meter to panel in electrical room feeds corridor and nursery
  - 200 A sub-meter to three disconnect switchses for HVAC equipment
- Hall panel is full and has no additional breaker space
- Panel in electrical room is lightly loaded, has serval spare breakers
- Lighting is parabolic and lensed fluorescent
- Lighting upgraded to electronic ballasts and T8 lamps; 2010
- Corridor lighting has emergency battery backed ballasted fixtures

Deficiencies

:: Cooling System
- Additional Air circulation needed for interior rooms
- Main room tends to be cold

:: Plumbing
- Recreation center drinking fountain does not always function

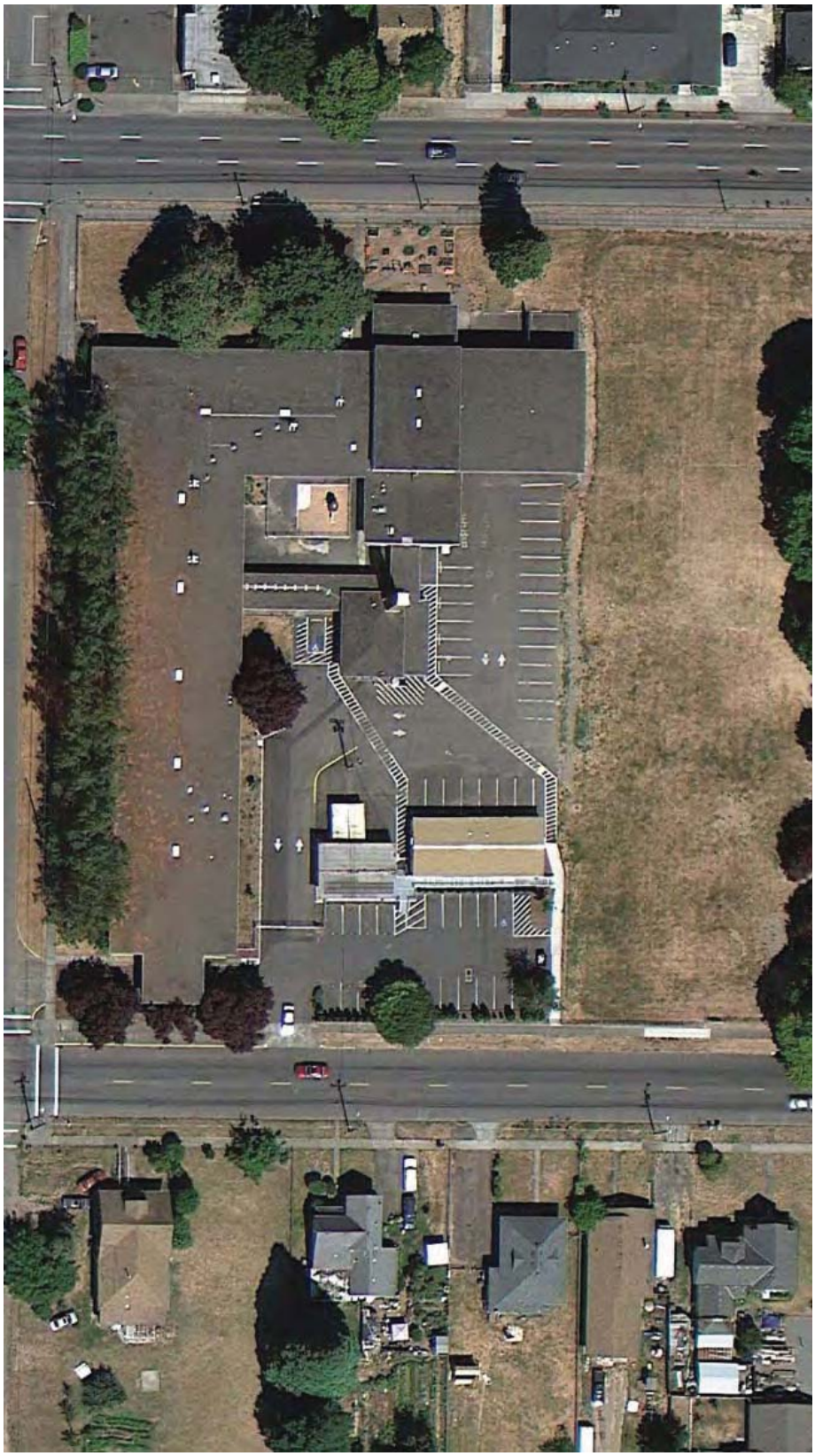
:: Electrical
- Exit landing lighting does not meet egress code requirements
- Exit landing lighting not on emergency power

SAFETY STANDARDS

:: School has Sonitorol motion sensor type security system

:: School has full fire alarm system

MILLER EDUCATION CENTER WEST



ASSESSMENT SCORE 55: MODERNIZATION

GENERAL INFORMATION

:: Address: 440 SE Oak St., Hillsboro, OR 97123-4156

:: Construction Date:
- Original school, 1943
- Gym/Cafeteria, 1944
- Corner play/Restrooms, 1963
- Remodel, 2001
- Remodel, 2010

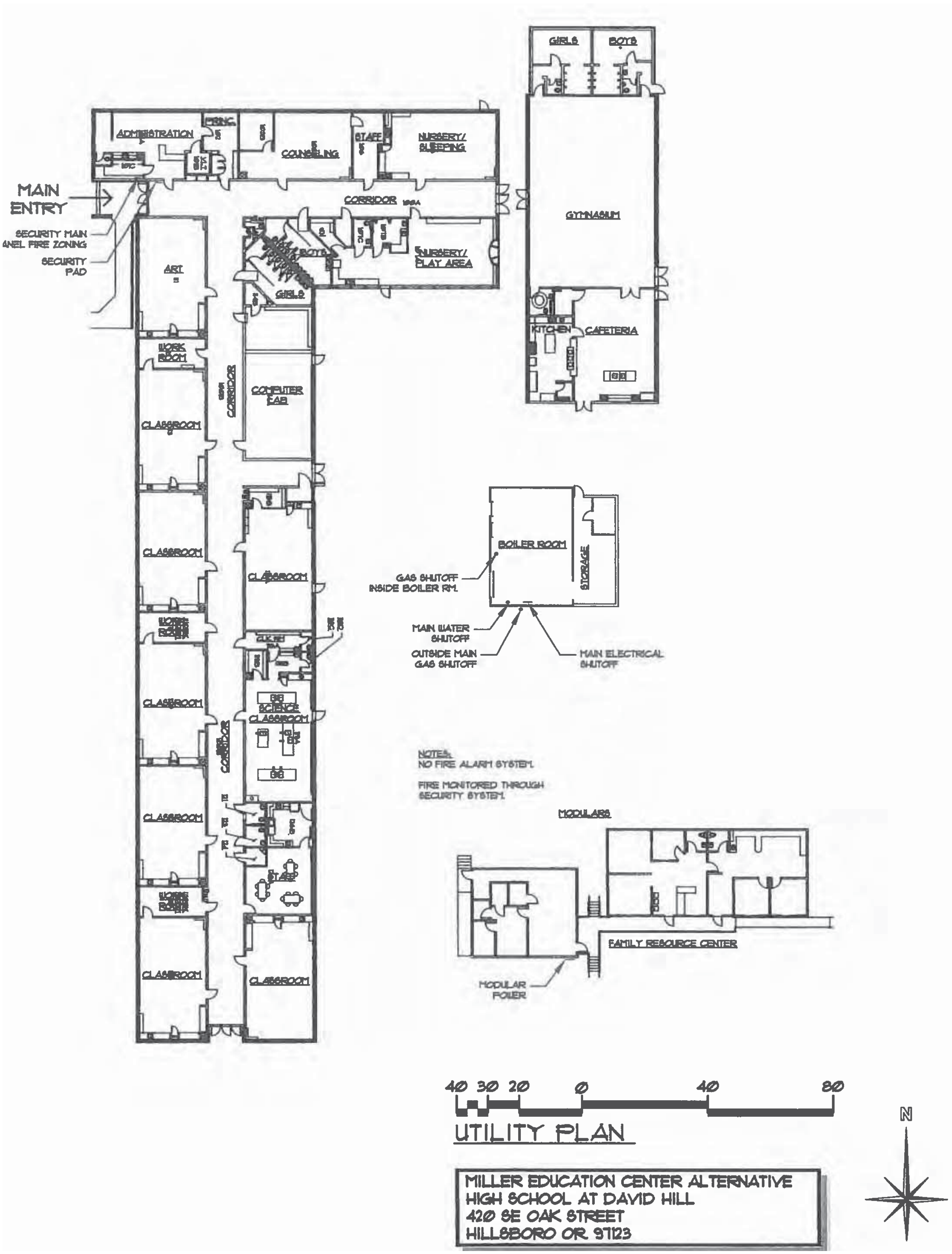
:: Building was renovated and changed from an elementary school to a high school in 2010

:: Site Area: 3 acres

:: Building Area: 43,000 SF

:: Capacity: 70

Miller Education Center West | Floor Plan



MILLER EDUCATION CENTER WEST

MAJOR MODERNIZATION

:: 1949, covered play structure east of gymnasium and girls' and boys' restrooms to north of

:: Gymnasium built in 1963. Boiler building constructed prior to 1943. Building was reroofed in 1980.

:: Building area: 27,828 sq. ft.

PRIMARY STRUCTURE

Existing Conditions

:: Primary structure a combination of structural wood on continuous footings and piers with a rafter or glu-lam roof system

:: The 2001 FEMA report recommends seismic upgrades to the structure

Deficiencies

:: Exterior wood needs repainting

:: Moisture issues as concrete floor and walls in restroom

:: Gutter system leaks into wall

:: Covered walk with gutters that drain into support columns are rusting out

SECONDARY STRUCTURE

Existing Conditions

:: New VCT over VAT* on gym floor

:: Ceiling is attached to structure and plaster in offices

:: New carpet in some places

:: Interior walls are wood stud with plaster
- Wood wainscot in corridor covered by tack board in some areas

:: Windows were replaced in 2010

:: Doors are steel and wood
- New ADA hardware levers at doors

:: Security sensors in main building

Deficiencies

:: Exterior soffits need to be repaired

:: Exterior doors need to be replaced

:: Security system is not throughout entire school

SERVICE SYSTEM

Existing conditions

:: Cooling system
- The school does not have air conditioning
- Electric, window units in some rooms
- Ceiling fans in all but one classroom

:: Heating system
- Hot water, multi-zoned and radiant floor slab, gas energy source with electric controls
- Boiler was repaired in 2005, retubed and mudlegs added, no changes were made to the burner or controls
- Pneumatic controls

:: Plumbing system
- Booster in kitchen for dishwasher
- Two HC restrooms

:: Electrical System
- Each classroom has only four computers
- Mobile rechargeable computer lab has 24 computers
- School is on two power grids

Deficiencies

:: Heating system
- Heating is old with frequent problems
- Difficult to control
- Valves occasionally stick

:: Plumbing system
- Staff restroom with new low flow toilet has problems

:: Electrical System
- Lighting needs upgrading
- Electric panels have no additional capacity

SITE CONDITIONS

Deficiencies

:: Parking lot drains are slow

:: Field needs renovation
- No irrigation: hard in summer and fall

:: ADA access to building for teachers long and difficult for a single person

:: Covered play area exposed to wind-driven rain

SAFETY STANDARDS

Existing Conditions

:: Building has sprinklers and portable extinguishers

:: School has audible fire detectors

:: Exit signs are in place

:: Ramp in boiler room needs textured surface

Deficiencies

:: Concrete at breezeway is not textured and it is slick when wet

:: South door not on security system so it is unusable

:: Security system can not be used for portables

:: Interior glass doors of untempered glass create a safety concern

FUNCTIONAL STANDARDS

Deficiencies

:: Poor connection to portable from main building
- Distance too great from restroom

PRINCIPAL REQUESTS

Deficiencies

:: Need walk-in space in kitchen

ASSESSMENT SUMMARIES: OTHER FACILITIES

INTRODUCTION

The Hillsboro School District has several buildings that are used for support functions. These include the Administration Center, the Boscow Center, Facilities, Transportation and Hare Field Stadium.

The following assessment summaries provide a narrative of building conditions for each facility, as well as site and plan information, and photographs highlighting key conditions. Detailed assessment forms can be found in the appendices.

HIGH SCHOOLS

Administration Center | Aerial/Site Plan

ADMINISTRATION CENTER

ASSESSMENT SCORE 95: SATISFACTORY

ARCHITECTURAL

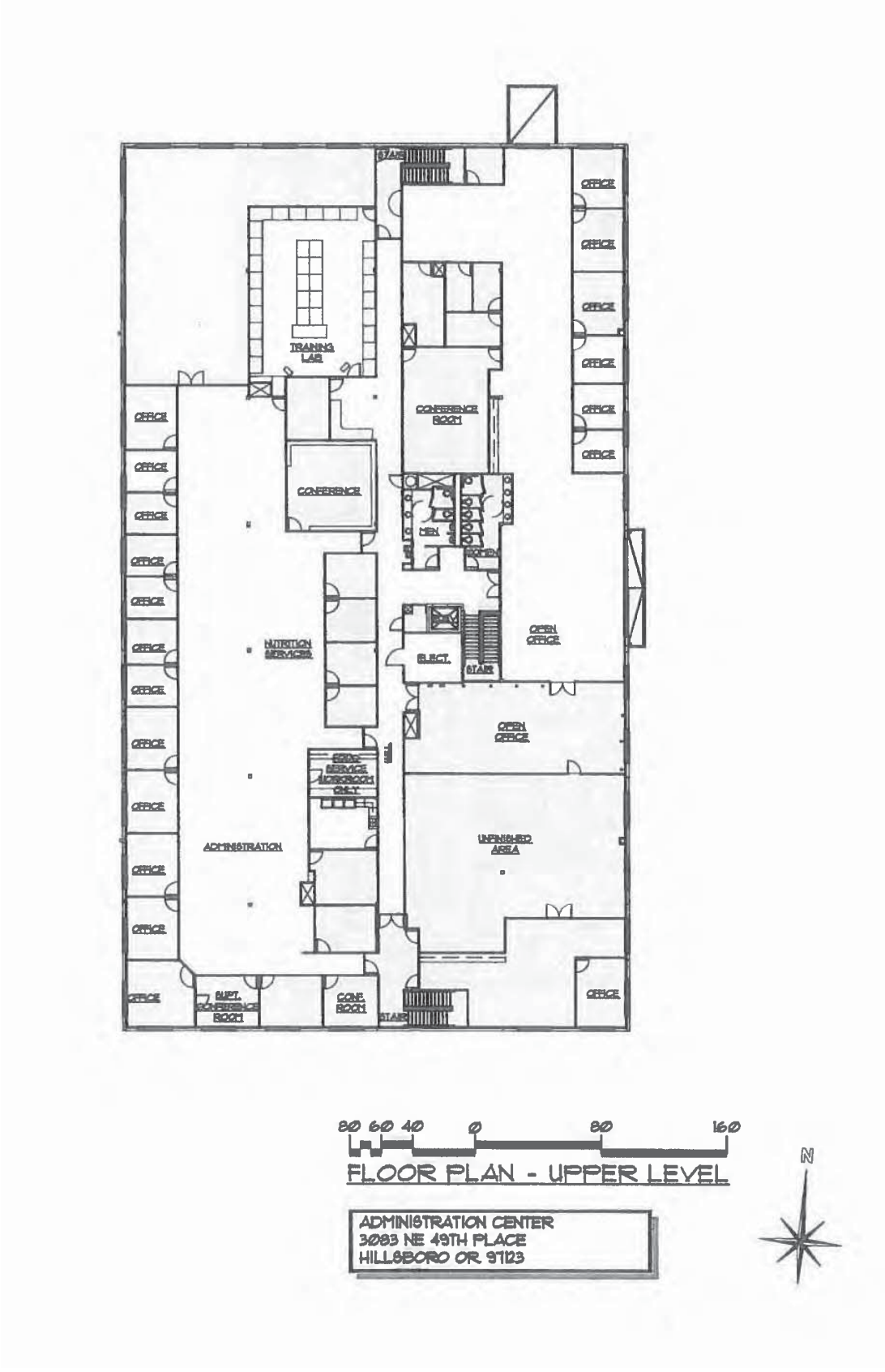
:: Address: 3083 NE 49th Place, Hillsboro, OR 97123

:: Construction date: 2001

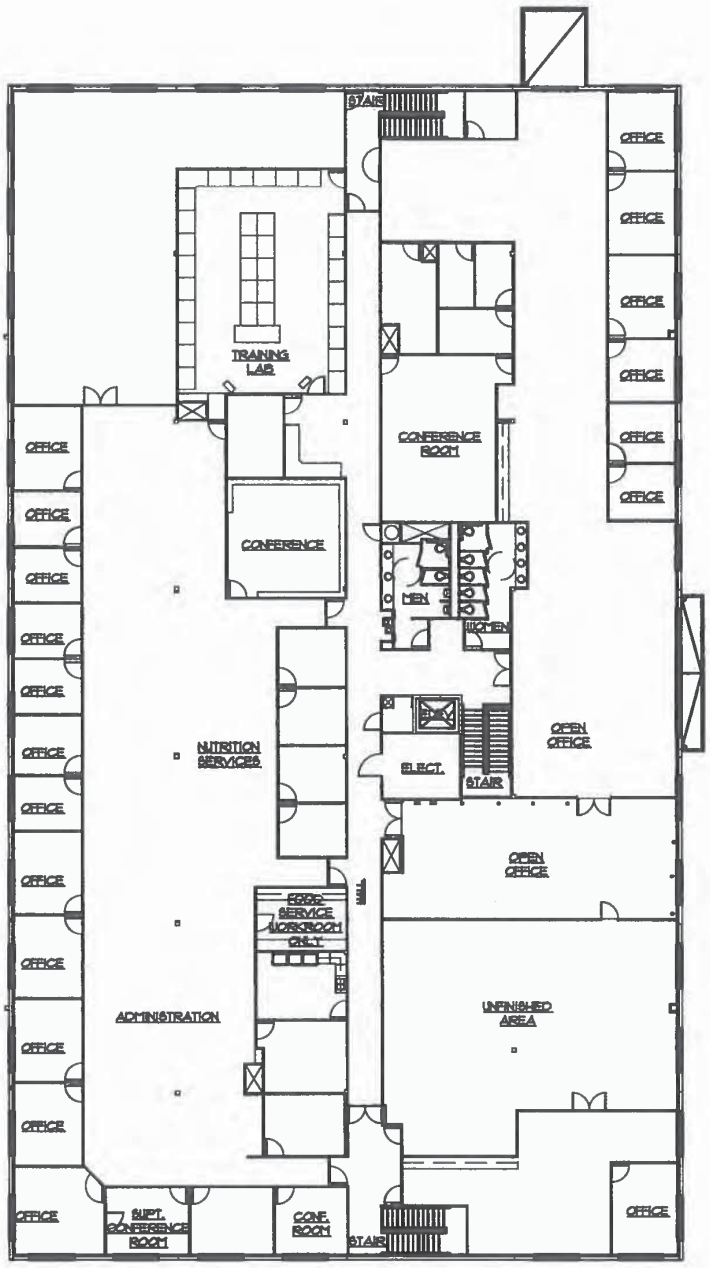
:: Site Area: 4.2 acres

:: Building Area: 40,000 SF

Administration Center | Floor Plan



Administration Center | Floor Plan



80 60 40 0 80 160

FLOOR PLAN - UPPER LEVEL

ADMINISTRATION CENTER
3083 NE 49TH PLACE
HILLSBORO OR 97123

N

ADMINISTRATION CENTER

PRIMARY STRUCTURE

Exsiting Conditions

:: Concrete tilt panels metal frame, concrete floors

SECONDARY STRUCTURE

Existing Conditions

:: Interior Walls: Metal studs with gypsum board

:: Ceiling: Acoustical tiles and gypsum board

:: Roof: Built up roof with insulation boards

:: Roof under warranty until 2015

Deficiencies

:: Watch for replacement/Restoration 2015-2025

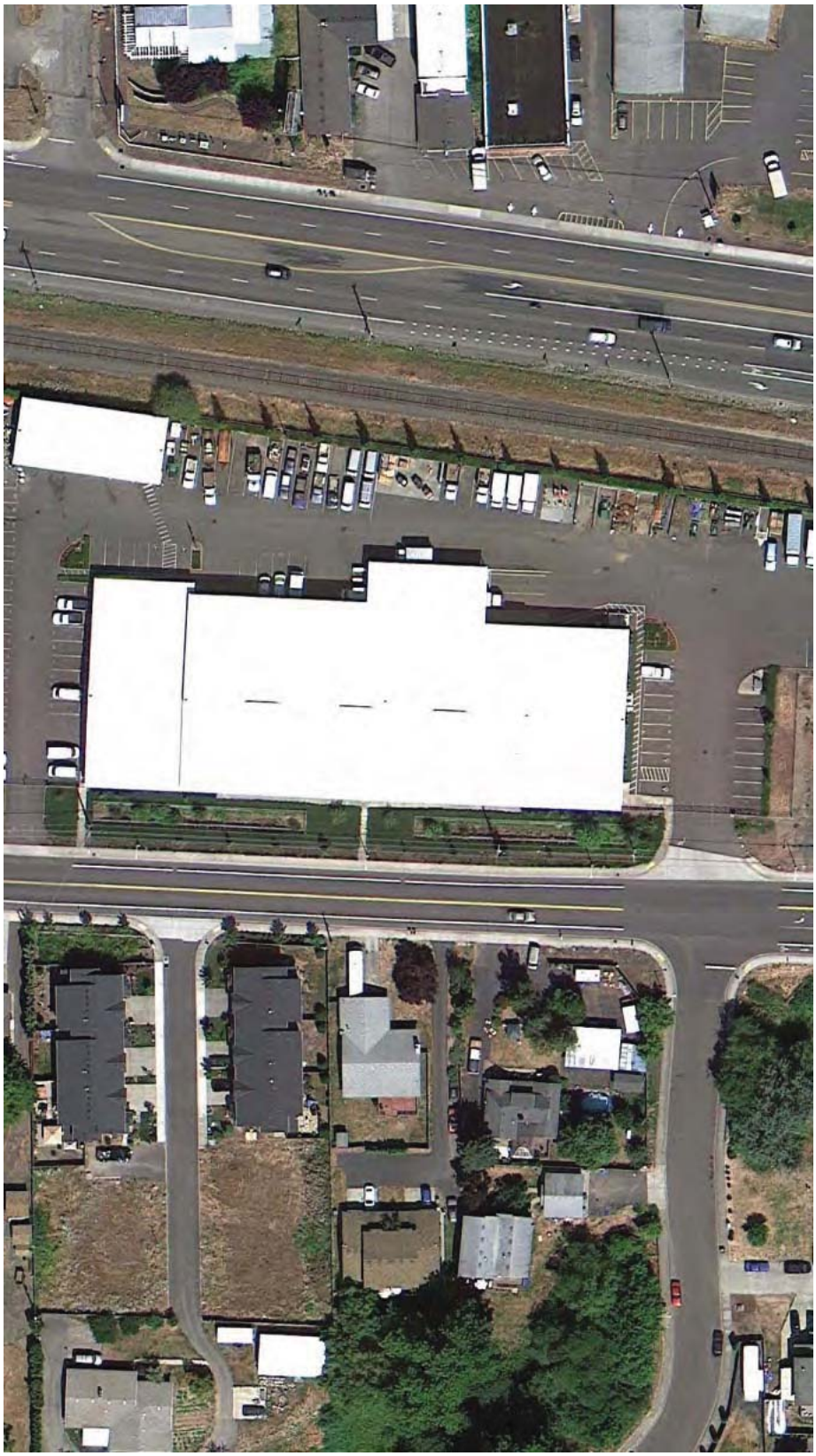
:: Mechanical
- Replace HVAC control system

:: Electrical
No deficiencies

:: Site
No deficiencies

Facility | Aerial/Site Plan

FACILITIES AND SUPPORT SERVICES



ASSESSMENT SCORE 95: SATISFACTORY

(HOUSES: CONSTRUCTION MANAGEMENT, FACILITIES MAINTENANCE WAREHOUSE, MAINTENANCE FACILITIES BUILDING, MAINTENANCE FACILITIES YARD, AND NUTRITION SERVICES WAREHOUSE)

ARCHITECTURAL

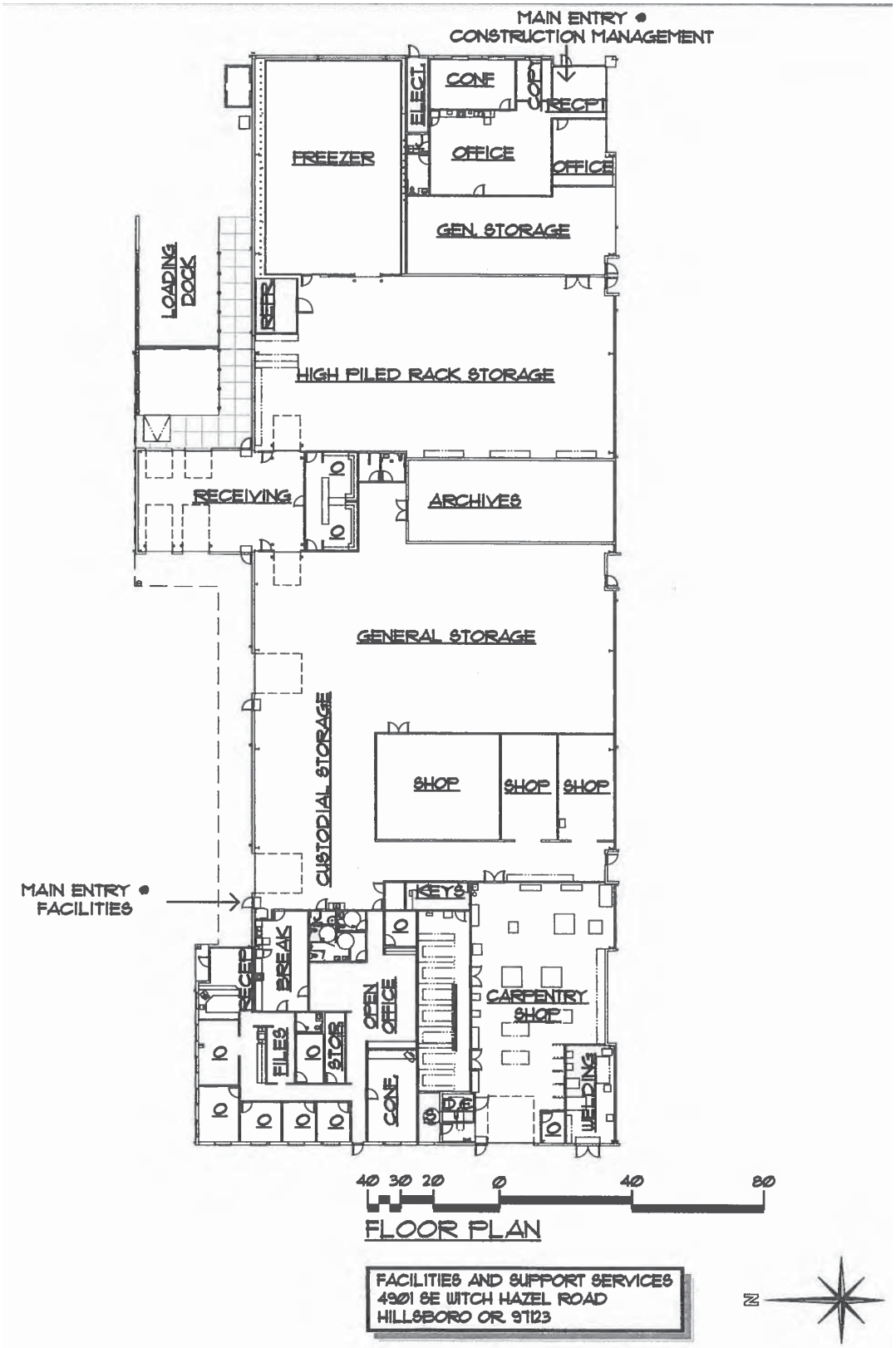
:: 4901 SE Witch Hazel Road, Hillsboro, OR 97123

:: Construction Date: 2004

:: Site Area: 3 acres

:: Building Area: 43,000 SF

Facility | Floor Plan



FACILITY AND SUPPORT SERVICES

PRIMARY STRUCTURE:

Exsiting Conditions

:: Butler Building with an exterior skin of CMU (painted) and Metal wall panels

:: Floors: Concrete slab at grade, finished concrete with carpet and VCT floor finishes at offices areas.

:: Roof: Standing seam metal roof

SECONDARY STRUCTURE

:: Walls: Interior Metal studs with gypsum board

:: Ceilings: Acoustical tiles and gypsum. Exposed insulation at warehouse space

:: Mechanical
No deficiencies

:: Electrical
No deficiencies

:: Site
No deficiencies

Hare Field | Aerial/Site Plan

HARE FIELD STADIUM

ASSESSMENT SCORE 68: MODERNIZATION

:: 1147 NE Grant Street, Hillsboro, OR 97124

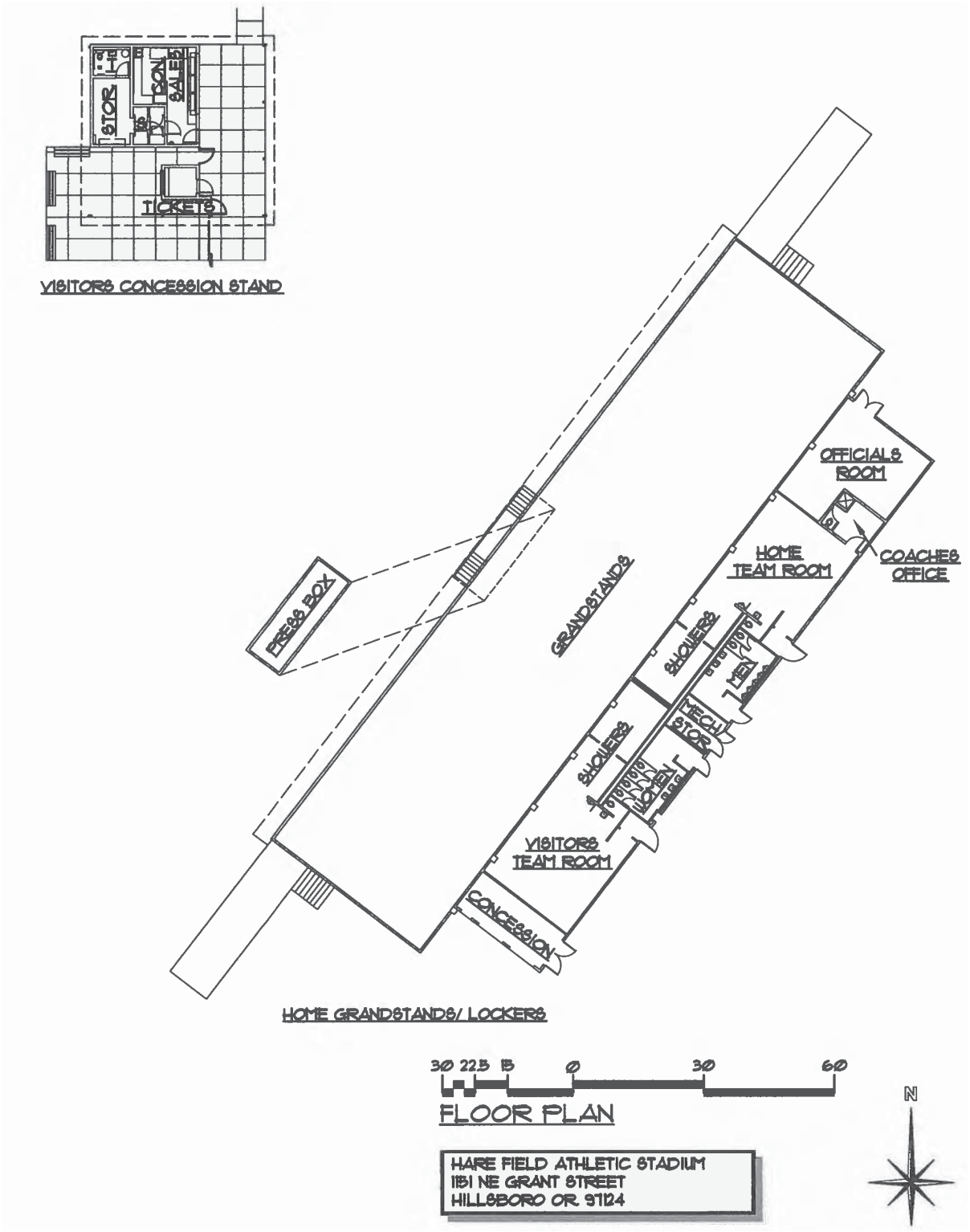
:: Construction Date: 1967

:: Additions:
- 1983 – Track Storage
- 1989 – Addition to Track Storage
- 2000 – Batting Cages
- 2004 – Visitors Concession Stand
- 2004 – Ticket Booth
- 2009 – Visitors Bleachers
- 2009 – Grandstands Dry Rod Repair and Re-Roof
- 2009 – Resurface track

:: Site Area: 19 acres

:: Building Area:
- 3,716 SF – Lockers under Grandstand
- 600 SF – Visitors Concession Stand
- 1,867 – Shed
- Seating Capacity:
- 1,500 (Home Grandstands, Covered)
- 1,263 (Visitors Bleachers, Uncovered.
- Other Structures on Site:
- Batting Cage/Baseball Storage
- Baseball Dugouts
- Ticket Booth

Hare Field | Floor Plan



HARE FIELD STADIUM

PRIMARY STRUCTURE

Existing Conditions

:: Home Grandstands/Lockers: Wood studs with wood siding

:: Concession Stand: CMU painted

:: Roof
- Home Grandstands/Lockers: Plywood Sheathing over wood beam and purlins
- Concession Stand: Locking seam metal roof over manufactured wood trusses.

SECONDARY STRUCTURE

Existing Conditions

:: Walls
- Home Grandstands/Lockers: Wood studs with gypsum board
- Concession Stand: CMU painted, metal studs with gypsum board

:: Roof
- Built up roof at Home Grandstands/ Lockers
- Under warranty until 2019
- Metal Roof at Concession Stand

:: Ceilings: Gypsum Board

:: Insulation
- Closet in W-Concession: insulation, no face
- Press Box: R-13
- Sheds: none

:: Replace home grandstand bleachers

SERVICE SYSTEM

Existing Conditions

:: Electrical
- Electric service panel is 1000 amp, 208Y/120 volt, 3-phase. No spare breaker capacity

Deficiencies

:: Plumbing
- Replace hot water heaters
- Piping leaking at valves a nd fitting above hot water heaters
- Piping leaking at hot water mixing valve
- No ADA plumbing fixtures in toilet rooms

:: Electrical
- Pad mounted 112 Kva utility transformer feeds concession buildings and grand stands
- Pad mounted 150 Kva utility transformer feeds track/football field lighting
- Hot water heater is located in electrical room. Relocate to mechanical space
- Panels A, B and C are full. No spare capacity
- Panel A bus is rated at 125 amp, service panel feeder cicuit breaker is 150 amp. The feeder circuit breaker needs to be replaced with proper rated circuit breaker to meet NEC requirements.
- Lighting needs to be upgraded to T8 lamps.

SAFETY SYSTEMS

Existing Conditions

:: Building has Sonitrol motion sensor type security system

Deficiencies

:: Site
- Replace baseball field light poles

Peter Boscow Center | Aerial/Site Plan

PETER BOSCOW CENTER

ASSESSMENT SCORE 55: MODERNIZATION

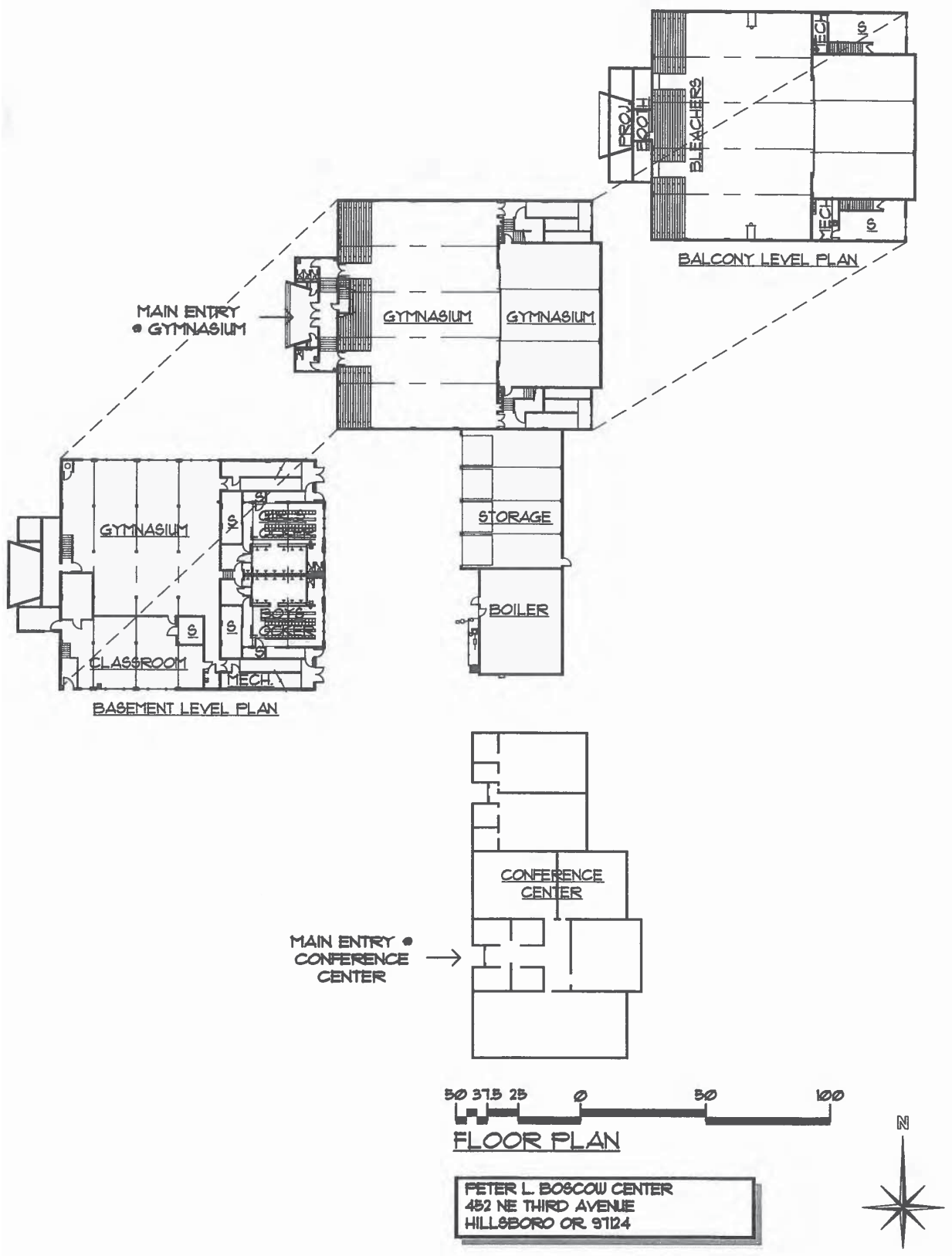
:: Address: 452 NE Third Avenue, Hillsboro, OR 97124

:: Construction Date:
- 1947 – Gymnasium Building
- 1985 – Modular Building Added
- 2008 – Baseball Field Improvements
- 2008 – Main School Building Demolished
- 2009 – Conference Center Remodel
- 2009 Gymnasium Building Remodel

:: Site Area: 4.5 Acres

:: Floor Area:
- 7,470 SF – Conference Center
- 13,418 SF – Gymnasium Building

Peter Boscow Center | Floor Plan



PETER BOSCOW CENTER

PRIMARY STRUCTURE:

Existing Conditions

:: Conference Center: Wood frame with stucco finish

:: Gymnasium Building: Concrete painted

:: Roof: Wood framed members

:: Floors:
- Conference Center: Plywood over wood framed floor
- Gymnasium Building: Concrete slab on grade at basement. Upper floors, wood beams and wood floor framing members

SECONDARY STRUCTURE:

Existing Condtions

:: Wood studs with gypsum board

:: Floor: Carpet and VCT at Conference Center, wood floors at gymnasiums.

:: Roof: Built up roof: Watch roof for replacement/restoration 2005 – 2010 (update from Tremco?)

:: Insulations

:: Blown-In Insulation at gym

:: None at mechanical rooms

:: Fiber Black, no label at Training Center

:: Site
N/A

SERICE SYSTEM

Existing Conditions

:: Cooling system
- No cooling system

:: Heating System
- Natural gas fired steam boiler

:: Plumbing
- Toilets are tank type
- No secondary water valves, main shut-off in street
- Hot water heater replaced in 2005

:: Electrical system
- New LED exit signs
- Newer branch panels in Sports Center
- Gym and stage lighting upgraded to T5HO fluorescent fixtures; 2010
- Main power updated in 1950's

Deficiencies

:: Heating System
- Replace steam with electricit, current mechanical system is inadequate
- Heating and Bentilating units are old, have exposed motor pulleys and belts, repalce.

:: Plumbing
- Toilet rooms in Sports Center have old fixutres
- Faucets worn and finish dull

:: Electrical system
- Electrical service is outdated
- No additional capacity in power circuits

SAFETY SYSTEMS

N/A

Transporation | Aerial/Site Plan

TRANSPORTATION SERVICES

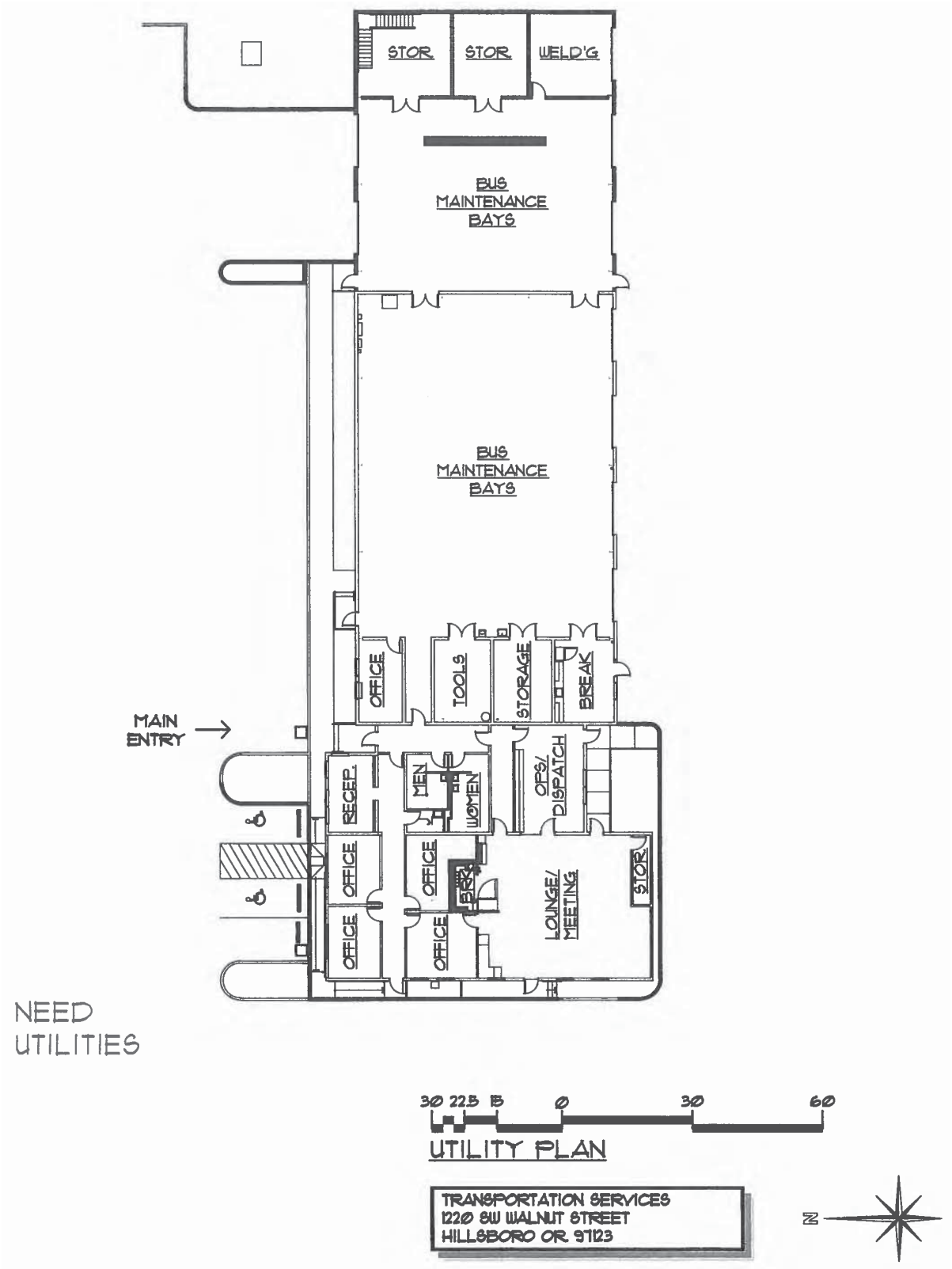
ASSESSMENT SCORE 91:
MINOR MODERNIZATION

:: Construction Date: 1990

:: Additions/Modifications:
- 1997: (2) additional bus bays/office/ storage addition
- 1999: Parking Lot Expansion
- 2006: Kitchen Remodel
- 2007: Bus Parking Lot Expansion
- Modular Building

:: 15 Acres

Transporation | Floor Plan



TRANSPORTATION SERVICES

PRIMARY STRUCTURE

Existing Conditions

:: CMU with wood framed walls

:: Roof: Wood framed members

SECONDARY STRUCTURE

Existing Conditions

:: Wood studs with gypsum board

:: Floors: Concrete, carpet and VCT at office areas

:: Ceilings: Acoustical tiles and gypsum board

:: Roof: Built up roof system on rigid insulation boards
- 2011 – 20018 – Roof is in good shape, maintain

:: Insulation
-Break Room R-19 at exterior wall (above section of the room there isn't any insulation)
-None above bays
-Office, Hall – F.S. 25 (R-19) between rafters and at walls
-Dispatch office R-19 paper face

Deficiencies

:: Site
- Futher expand bus parking lot

FUNCTIONAL STANDARDS

Deficiencies

:: Lack of adequate space

:: Expand Building (second floor?)

SERVICE SYSTEM

Existing Conditions

:: Cooling system
- Office and support area has two rooftop packaged AC units

:: Heating system
- Repair and service bays have natural gas fired unit heaters

:: Electrical system
- Repair and service bays have low-bay enclosed fixtures with metal halide lamps
- Office and support area has recessed 2x4 fixtures with fluorescent lamps
- There are dedicated circuits for fire alarm system and emergency lighting in panel B
- Main electric service is 208Y/120 volt, 3-pahse, with single meter point
  - Each branch panel is 200 amps, with fused disconnect switch off the service enclosure
  - Two panels feed circuits in the repair bays
  - Two panels fed circuits for the administration offices and support areas
  - One panel feeds circuits at the bus wash support building

Deficiencies

:: Heating system
- Replace HVAC system and controls

SAFETY STANDARDS

:: Buildign has Sonitrol motion sensor type security system

:: Plumbing system
- Upgrade toilets
  - Toilets are standard type, not low-flow

APPENDIX

2006 FACILITIES ASSESSMENT

The following were the participants for the original assessment done in 2006.

This document is the result of a collaborative effort of principals and maintenance personnel in the Hillsboro School District to discuss the needs and vision for their school. Members of the group gave generously of their time, sharing their experience and thoughts to develop a comprehensive facility survey.

HILLSBORO SCHOOL DISTRICT

FACILITIES

:: Loren Rogers, *Executive Director of Facilities, Planning, and Property*

SCHOOL PRINCIPALS

:: Dottie Bertelli, *Principal, Hillsboro HS*

:: Linda Bishop, *Principal, West Union ES*

:: Tim Bishop, *Principal*, *Orenco ES*

:: Lu Fontaine Biado, *Principal, Brown MS*

:: Bruce Bourget, *Principal, Groner ES*

:: Steve Callaway, Principal, Indian Hills ES

:: Scott Choate, *Principal, Minter Bridge ES*

:: David Cox, *Principal, Ladd Acres ES*

:: Stan Esselstrom*, Principal, Miller Education Center (7/8 Grade Alternative), Miller Education Center East Campus and Miller Education Center West Campus*

:: Paul Goodhind*, Principal, Mooberry ES*

:: Ethel Graham*, Principal, Reedville ES*

:: Janis Hill, *Principal, Jackson ES*

:: Nancy Kingston-Beall*, Principal, Witch Hazel ES*

:: Bill Klug, *Principal, Lenox ES*

:: Carol Laughner, *Principal, Glencoe HS*

:: Lauri Lewis, *Principal, Paul L. Patterson ES*

:: John Matsu, *Principal, North Plains ES*

:: Monique Monahan, *Principal, Eastwood ES*

:: Tom Noesen, Principal, L.C. Tobias ES

:: Gregg O'Mara, *Principal, Liberty HS*

:: Dave Parker, Principal, Evergreen MS

:: Crystal Schmidt-Dipaola, Principle, Imlay ES

:: Enedelia Scholfield, Principal, W.L. Henry ES

:: Molly Siebert, *Principal, Brookwood ES*

:: Greg Timmons, *Principal, J. W. Poynter MS*

:: William Tracy*, Principal, Farmington View ES*

:: Patti Wiemer, *Principal, W. Verne McKinney ES*

:: Kari Woyak, *Principal, Butternut Creek ES*

:: Ted Zehr, *Principal, Century HS*

SCHOOL CUSTODIANS

:: Jeff Anderson, *Minter Bridge ES*

:: Chris Benitez, *Farmington View ES*

:: Chuck Bledsoe, *Liberty HS*

:: Billy Castellano, *Butternut Creek ES*

:: Chris Collings, *Century HS*

:: Rachel Cresien, *North Plains ES*

:: Dave Dreirling, *Paul L. Patterson ES*

:: Keith Eastwood, *Ladd Acres ES*

:: Shelly Grimsud, *Imlay ES*

:: Gary Hall, *Eastwood ES*

:: Tom Korepta, *Glencoe HS*

:: Wallly Lira, *R. A. Brown MS*

:: Gilbert Loredo, *W.L. Henry ES*

:: John Marvin, *West Union ES*

SCHOOL CUSTODIANS CONTINUED

:: Brad Monroe, *Indian Hills ES*

:: Dan Patrick, *Brookwood ES*

:: Laurie Rutto, *Jackson ES*

:: Frank Schuh, *Reedville ES*

:: Jerry Spalding, *J. W. Poynter MS*

:: Stephen Spor, *Groner ES*

:: Jim Waters, *Hillsboro HS*

:: Bob Wilson, *Mooberry ES*

:: Mark Wolf, *Orenco ES*

MAHLUM ARCHITECTS

:: Gregg Stewart, *Principal in Charge*

:: Kurt Zenner, *Project Architect*

:: Lynn Lindgren-Schreuder, *Project Architect*