# 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 School 03-2
Evergreen Middle School 03-7
J. W. Poynter Middle School 03-11
South Meadows Middle School 03-15

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
  - possible safety issue

#### SERVICE SYSTEMS

- :: 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 subdistribution 208Y/120 volt panel is 600 amps, and is at capacity.
  - Obsolete light fixtures replaced; 2006











- Interior non-tempered glass doors are a

### Existing

- 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, twofour 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

0' 10' 20'

OVERALL FLOOR PLAN (A1)

03-8

# 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 precast 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



OVERALL FLOOR PLAN (A1)

# 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 submain 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 School	. 04-2
Glencoe High School	. 04-6
Hillsboro High School	04-11
Liberty High School	04-16
Miller Education Center East	04-21
Miller Education Center West	04-24

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

![](_page_21_Picture_57.jpeg)

![](_page_21_Picture_58.jpeg)

![](_page_21_Picture_59.jpeg)

![](_page_21_Picture_60.jpeg)

# :: 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

![](_page_22_Picture_39.jpeg)

![](_page_22_Picture_40.jpeg)

![](_page_22_Picture_41.jpeg)

Glencoe High | Aerial/Site Plan

# GLENCOE HIGH SCHOOL

![](_page_23_Picture_3.jpeg)

#### 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

![](_page_23_Picture_12.jpeg)

Glencoe High | Floor Plans

![](_page_24_Figure_2.jpeg)

### 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 nonstructural 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

![](_page_25_Picture_56.jpeg)

![](_page_25_Picture_57.jpeg)

![](_page_25_Picture_58.jpeg)

![](_page_25_Picture_59.jpeg)

![](_page_25_Picture_60.jpeg)

- 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

![](_page_26_Picture_53.jpeg)

![](_page_26_Picture_54.jpeg)

![](_page_26_Picture_55.jpeg)

![](_page_26_Picture_56.jpeg)

![](_page_26_Picture_57.jpeg)

- 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

![](_page_28_Picture_3.jpeg)

#### 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

![](_page_28_Picture_14.jpeg)

Hillsboro High | Floor Plans

![](_page_29_Figure_2.jpeg)

# 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

![](_page_30_Picture_47.jpeg)

![](_page_30_Picture_48.jpeg)

![](_page_30_Picture_49.jpeg)

![](_page_30_Picture_50.jpeg)

- 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

![](_page_31_Picture_57.jpeg)

![](_page_31_Picture_58.jpeg)

![](_page_31_Picture_59.jpeg)

- :: 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

![](_page_32_Picture_54.jpeg)

![](_page_32_Picture_55.jpeg)

![](_page_32_Picture_56.jpeg)

Liberty High | Aerial/Site Plan

# LIBERTY HIGH SCHOOL

![](_page_33_Picture_3.jpeg)

#### 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

![](_page_33_Picture_12.jpeg)

Liberty High | First Floor Plan

![](_page_34_Figure_2.jpeg)

Liberty High | Second Floor Plan

0\_\_\_\_50 SCALE

![](_page_35_Figure_2.jpeg)

# 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

![](_page_36_Picture_49.jpeg)

![](_page_36_Picture_50.jpeg)

![](_page_36_Picture_51.jpeg)

![](_page_36_Picture_52.jpeg)

- Cooling-water flow level in chilled water barely adequate to keep chillers online; 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

![](_page_38_Picture_15.jpeg)

![](_page_39_Figure_0.jpeg)

### 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

![](_page_41_Picture_15.jpeg)

Miller Education Center West | Floor Plan

![](_page_42_Figure_2.jpeg)

#### 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 Center05	5-2
Facilities & Support Services	5-6
Hare Field Stadium05	5-9
Boscow Center 05-	12
Transportation Services 05-	15

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

![](_page_46_Picture_9.jpeg)

Administration Center | Floor Plan

![](_page_47_Figure_2.jpeg)

N

Administration Center | Floor Plan

![](_page_48_Figure_2.jpeg)

![](_page_48_Figure_3.jpeg)

### 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

![](_page_50_Picture_10.jpeg)

Facility | Floor Plan

![](_page_51_Figure_2.jpeg)

### 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

![](_page_53_Picture_27.jpeg)

Hare Field | Floor Plan

![](_page_54_Figure_2.jpeg)

### 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

![](_page_56_Picture_16.jpeg)

Peter Boscow Center | Floor Plan

![](_page_57_Figure_2.jpeg)

### 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 shutoff 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

![](_page_59_Picture_12.jpeg)

Transporation | Floor Plan

![](_page_60_Figure_2.jpeg)

# 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 lowflow

# 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