Existing Conditions

Building Developmental History

1981
1939
1977
1978
1955
1966
1966

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Existing Conditions

Exterior – Roof:

Description
• Most of existing roof has multi-ply built up roofing. Some areas have gravel ballast, others have cap sheets.
• Central section of 1939 building has slate roof.

Existing Conditions
• Roof is generally near end of anticipated life span.
• FCPS has made temporary repairs in selected locations.
• Stone coping at roof perimeter is in fair condition.
• Slate roof on 1939 building is in fair condition.
Existing Conditions

Exterior – Envelope:

Description

- 1939 building is solid brick masonry.
- Later additions are masonry veneer on concrete block backup.
- Masonry has precast concrete trim in several locations.
- Older walls are not insulated.

Existing Conditions

- Previous masonry failures likely due to water infiltration.
- Precast concrete trim discolored and in fair condition.
- Masonry pointing (mortar) in fair condition – will require large scale replacement within ten years.
Existing Conditions

Exterior – Windows:

Description
- A handful of original wood windows exist in 1939 building and 1960s additions.
- Balance of windows in 1939 building appear new within last 10-15 years.
- Windows in the 1970s/80s additions are fixed, single-pane aluminum framed units.

Existing Conditions
- Wood windows will require reconditioning.
- Newer windows in 1939 building are in good condition.
- Windows in the 1970s/80s additions are in fair to poor condition due to failing glazing sealants.
Existing Conditions

Exterior – Doors:

Description
• Some wood doors exist at 1939 building.
• Most exterior doors are hollow metal.
• Aluminum “storefront” type doors are present at original main entry.

Existing Conditions
• Doors generally in fair condition due to rotted wood, deteriorated metal, or damage.
• Doors and hardware typically have not been upgraded to meet accessibility requirements.
• Poor thermal performance due to lack of insulation and high performance glazing.
Existing Conditions

Interior – Layout:

Description
• Mixture of traditional rooms along corridors arrangement and “open space” concept.

Existing Conditions
• Lack of clear spatial organization.
• Narrow corridors and stairways compared to FCPS prototype high school.
• Lack of acoustical and visual isolation between classrooms.
• Occupants must pass through some rooms/spaces to access others – especially problematic in cafeteria and media center.
• Many rooms do not have access to windows/daylighting.
Existing Conditions

Interior – Ceilings:

Description
• Mixture of 2x2 and 2x4 acoustical panel ceilings.
• Plaster and gypsum board ceilings in stairwells, toilet rooms, and other special spaces.

Existing Conditions
• Ceilings in good to poor condition, depending on space.
• Complete replacement would be recommended under any renovation due to age of existing ceilings and also to facilitate work on above-ceiling utilities.
Existing Conditions

Interior – Flooring:

Description
• Carpet, vinyl composition tile (VCT), Fritz tile (quartz), ceramic tile, terrazzo, wood, sealed concrete, and painted concrete all exist as flooring materials.

Existing Conditions
• Carpet generally in fair to poor condition due to tearing, staining.
• VCT and Fritz tile are in fair condition due to wear.
• Terrazzo is mostly in good condition.
• Gym and stage wood floors in good condition but require refinishing due to wear.
Existing Conditions

Interior – Partitions:

Description
• Partition materials include concrete masonry unit (CMU), plaster on masonry, gypsum board stud walls, modular metal walls, modular folding partitions, and accordion partitions.

Existing Conditions
• CMU cracking issues in some locations.
• The modular metal walls, folding partitions, and accordion partitions are in fair to poor condition.
• Acoustical/visual separation issues.
Existing Conditions

Interior – Doors:

Description
• Solid core wood and hollow metal doors throughout facility.
• Most interior doors date to 1970s/80s renovations.
• Some doors have integral lites and/or louvers.

Existing Conditions
• Door hardware does not meet accessibility requirements.
• Some doors have excessive amounts of glazing where a rated door with reduced glazed area would be required under current code.
• Some doors worn, scratched, or dented.
Existing Conditions

Interior – Toilet Rooms:

Description
- Toilet rooms generally date to original construction of area of building some replaced components.
- Terrazzo or ceramic tile floors, ceramic tile wainscot on walls.

Existing Conditions
- Plumbing fixtures all appear to be dated and beyond their useful life.
- Plumbing fixtures do not meet ADA requirements.
- Plumbing fixtures do not meet current code requirements for water usage.
Existing Conditions

Interior – Casework:

Description
• Casework generally dates to 1970s/80s renovations.
• Science classroom casework replaced 1999.

Existing Conditions
• Casework is mostly in good condition.
• Older casework has ADA compliance issues and may not be adequate or appropriate to meet current ed spec requirements.
Existing Conditions

Interior –
Code & Accessibility:

Description
• Building is grandfathered based on codes in place at time of construction however does not meet current code.
• Building largely not in compliance with ADA requirements.

Existing Conditions
• Narrow stairways not code compliant.
• Stairway discharge locations not code compliant.
• Floor level changes not ADA compliant.
• Building signage not ADA compliant.
Food Service:

Description
• Full-service prep/production facility serving 1,200-1,400 students and staff.
• Lunch participation 50%
• Majority of equipment dates to 1980 renovation.

Existing Conditions
• Equipment is inefficient and not in compliance with current codes.
• Cannot easily repair or obtain parts for some equipment.
• Electrical service inadequate.
• Poor lighting levels.
• Porous ceiling in violation of health regulations.
• Food/trash loading conflicts with student/staff circulation.
• No raised loading dock.

Existing Conditions - cont’d.
• Inadequate dry storage space.
• Broken/rusted shelving.
• No high temp alarms or monitoring on walk-in cooler & freezer as required for health compliance.
• Poor ventilation.
• Kitchen has some obsolete, unneeded, or unused equipment and lacks some equipment needed to properly prepare current menu items.
• Serving equipment hot food wells inoperable.
• Additional hand washing sinks required.
• Current design is uncomfortable and labor intensive for staff.
Existing Conditions

Structural:

1939 Original Building

- Classroom floor construction steel joists spanning 23 feet and spaced at 2 feet on center supporting 2-1/2” concrete slab on wire lath.
- Corridor floor construction 6-1/2” concrete slab spanning 10 to 11 feet across corridor.

Typical Classroom Floor Construction

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Structural:

1939 Original Building

- At 3rd floor ceiling steel framed beams spanning in longitudinal direction of direction of wings supporting plaster ceiling.
- Roof, steel beams spanning in longitudinal direction of the building wings.
- The roof is high at the center and slopes down to the exterior walls.
- There is small attic space between ceiling and roof structure over classrooms
Existing Conditions

Structural:

1939 Original Building

- The auditorium and gymnasium are two story spaces are clear spaced by steel trusses spanning 60 feet and supporting infill steel framing supporting gypsum decking.
- The high center hipped roof is creating by steel trusses and infill steel beam framing.
- Only one existing structural drawing available for review S-6 the foundation and framing plan at the center section of the building.
Existing Conditions

Structural:
1939 Original Building Evaluation

Wet Areas the appear to need re-pointed

Area that has been re-pointed

• Many of the Exterior corners of building have been re-pointed. Along with some of the parapet walls

East Wall at High Roof of 1939 Building

• Exterior corner at west elevation of high roof with wet brick and what appears to be deteriorating mortar joints. Occurs on both sides of high roof.

North West Corner of 1939 Building
Existing Conditions

**Structural:**

1939 Original Building Evaluation

- **Existing lintels** that need rust removed and repainted before the corrosion of the angle causes cracking in the brick mortar joints.

**West Wall of 1939 Building at 3rd Floor**
Existing Conditions

Structural:

1939 Original Building Evaluation

- Steps have many rust stains from what probably are nosing bars. The rusting bars will eventually cause spalling of the concrete edge.

East Elevation Entrance of 1939 Building
Existing Conditions

Structural:

1977 Building Addition Evaluation

- New Steel Column for 1977 Addition
- Blocked Filled Existing Window Of 1939 Building

• Based on our review of the existing structure from our walk thru and structural drawings the 1977 addition did not appear to have any structural issues.

Penthouse in 1977 Addition
Existing Conditions

Structural:

1981 Building Addition Evaluation

- Precast Concrete Double Tees
- Existing CMU bearing walls
- Existing Patched Floor Cracks
- Existing Spalls and Pocks

- Pool structure (roof and walls) appears to be in acceptable structural condition.
- Concrete pool deck has cracks, some of which have been patched and others not. Deck also has numerous spalls and pock marks. Would recommend replacing and finishing concrete with appropriate concrete finish and sealer.
Existing Conditions

Mechanical – Building Envelope:

**Description**
- Brick/block construction
- 7 different ages
- Multiple building connections
- Various building construction materials and methods

**Existing Conditions**
- Good thermal mass
- Moisture migration concerns
- Unknown inside exterior wall conditions
Existing Conditions

Mechanical – Central Heating and Cooling Plant:

Description
• 4 pipe central heating and cooling plant
• Single small chiller
• 2 main cast iron boilers
• Remote boiler room with 2 boilers

Existing Conditions
• Heating system is inefficient
• Multiple ages of pumps
• Chiller is undersized
• Boilers and chiller in same equipment room

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Mechanical – Air Distribution Equipment:

Description
- 30 indoor air handling units
- Various ages and conditions of equipment and ductwork

Existing Conditions
- Not indoor air quality type air handling units
- Air handling units on metal grating open to ceiling space
- Lack of accessibility
- Many units are very old
Existing Conditions

Electrical – General:

Description
• Electrical distribution equipment
• Natural gas generator
• T8 Fluorescent lighting systems
• Fire alarm system

Existing Conditions
• Majority is 30+ years old
• Main SWBD component failure
• Generator is 30+ years old, sized for life safety loads
• Fixtures vary in condition
• Manual lighting controls for interior lighting
• New voice evacuation system