

HOH Project # 5438:

2021-F687-SIT CIP-Juvenile Det. Center Building Upgrades

Project Address: 3900 S California Ave Chicago, Illinois

BACKGROUND: Per proposed scope of work below observe existing conditions and recommend repair action.

AIS Project Summary:

Various Upgrades were identified in the 2021 Capital Project Spreadsheet: MEP (Remove and replace all mechanical systems (RTU's, AHU's, BAS System installation). Items were reviewed with site and conditions/findings/recommended actions summarized below:

CONTRACTOR SCOPE OF SERVICES:

MEP-HVAC: The site has a single gas fired RTU installed. This original RTU had a DX coil installed that was replaced with a water-cooled coil. Site indicated that although the RTU gas-firing capability, it has not worked reliably, and the BAS has no/limited communication with the AHU. Site would like new AHU with upgraded BAS at least for improved interface with AHU. Consider bringing back to GBMS system. Existing hot water boilers are adequate; and will need to be modified.

MEP-Plumbing: Site indicated no plumbing issues at site, but would like to see bathroom plumbing fixtures replaced. Although not plumbing "proper" site indicated nuisance foundation leaks. Recommend Investigate costs associated with repairs.

MEP-Electrical: Existing lighting installed is fluorescents. Should consider LED bulb replacement and/or fixture replacement. Site also indicated frequent resets for the elevator on site. Concern is safety and reliability. Site believes problem is likely elevator controls, and recommended Anderson Elevator (term vendor) be engaged for solution. Recommend assessment and repair upgrade recommendations for supplier.

SOLUTIONS TO CONSIDER (Not in Base Scope): Site indicated issues with roof leaks/puddling. Roof not inspected due to snow/ Recommend roof assessment; and repair/replace. Also consider ladder for roof access. Site noted that south entry door has been problematic with temperature changes. It was also noted north OH garage door. Recommend repair/replacement.

OBSERVATIONS:

Following the AIS project summary the following observations were made:

MEP-HVAC: Please see MEPFPT assessment.

MEP-Plumbing: Please see MEPFPT assessment.

All restrooms were observed, and they show wear and tear damage.

All plumbing fixtures need to be removed and replaced.

All wall-hung toilets show the same damage, and they need to be removed and replaced. The connection to the wall seems to be failing. The joint between the wall and the wall hung toilet is enlarging at all locations. This condition needs to be repaired with a detail that will ensure wall hung toilet to be appropriately fastened to wall to ensure no deflection.

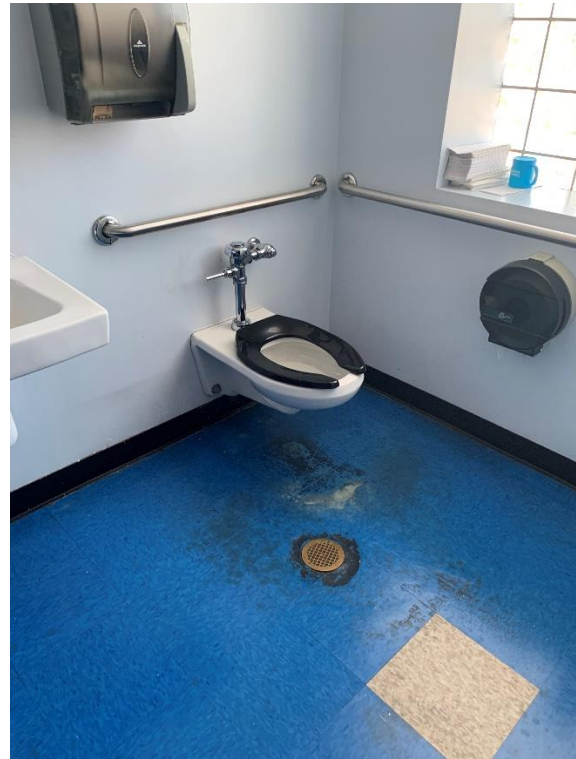
Lavatories are also reaching the end of their lives and need to be removed and replaced.

The toilet partitions need to be removed and replaced.

All interior finishes in restrooms need to be removed and replaced.



Photos 1 & 2: Damaged toilets and lavatories to be removed and replaced.

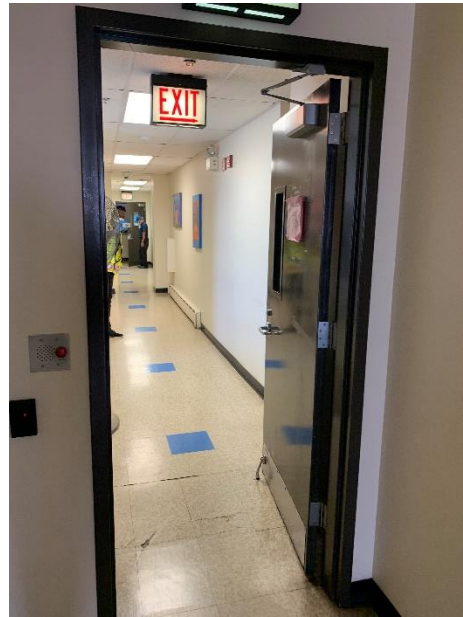


Photos 3, 4, 5 & 6: Damaged urinals, base board heaters and finishes to be removed and replaced.

MEP-Electrical: Please see MEPFPT assessment.

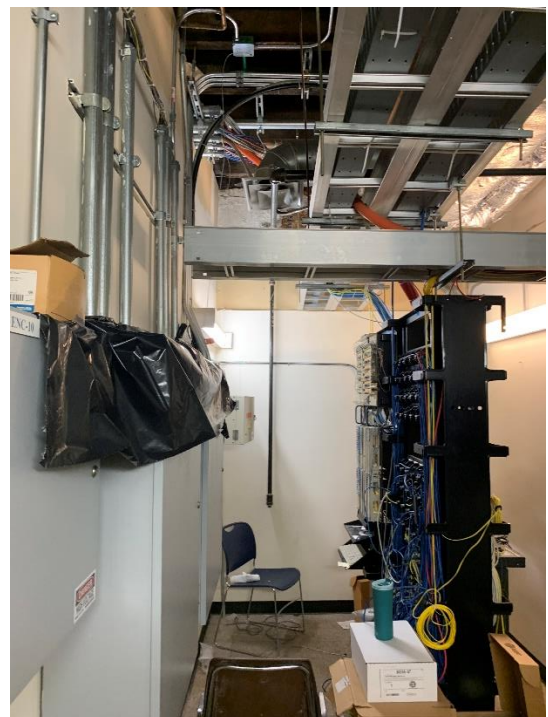
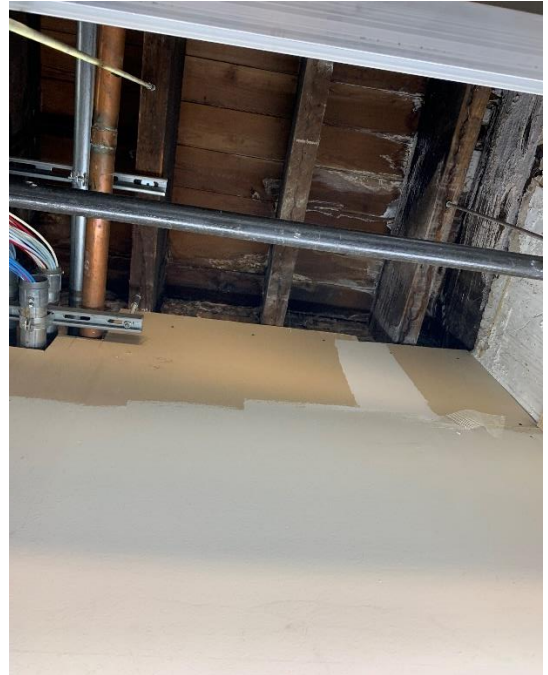
During the site visit John Dawson Building Engineer explained that the elevator has been maintained and it has no problems now.

After site visits AOR recommends removing and replacing all fluorescent lighting fixtures with LED lighting and LED lighting fixtures all throughout.



Photos 7, 8, 9 & 10: Fluorescent lighting and fixtures to be removed and replaced with LED.

Server Room shows exposed structure above with a lot of roof leak damage falling directly above and to the side walls.



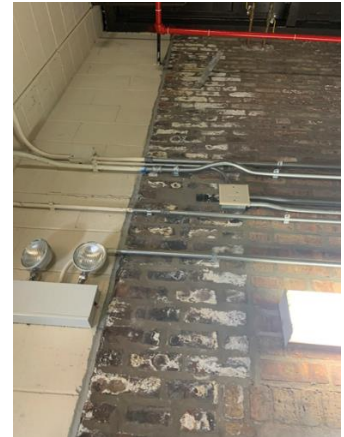
Photos 11, 12, 13 & 14: Roof leak damage on brick walls showing efflorescence getting into wood structure. Need to repair roof. Then provide 2 layers of 5/8" gyp board for 2-hour enclosure of server room.

SOLUTIONS TO CONSIDER (Not in Base Scope): Site indicated issues with roof leaks/puddling. Roof not inspected due to snow/ Recommend roof assessment; and repair/replace. Also consider ladder for roof access.





Photos 15, 16, 17, 18 & 19: The roof was reported to have been leaking from snow melt and is not properly pitched to drain. The modified bit roof is showing evidence of ponding. Remove existing membrane, investigate condition of roof components, and provide new tapered insulation and roof membrane.



Photos 20, 21 & 22: The roof leak damage has caused acoustical ceiling tiles and drywall damage.

Recommendation: Remove existing roofing system and replace with new system. Provide proper slopes and roof drainage. Roof leak damage to be repaired in exterior envelope: parapet walls, upper floor lintels and miscellaneous roof system accessories. Repair of interior damage caused by roof leaks shall be executed: remove and replace some acoustical ceiling tiles, gypsum board walls and ceilings and patch, prepare and paint accordingly. Once the AOR and roofing consultant visit the site and perform core samples and provide lab results to verify and confirm visual observations the assessment is to remove existing roofing system and replace with new system to be determined by owner. TPO is the recommended system to be used. The access to roof needs to be improved with a new ship ladder and new roof hatch as well as a more appropriate location to be determined with project design team.

Overhead Garage Door: North exterior door showing signs of wear and tear that are going beyond repair.



Photos 23, 24, 25 & 26: Garage door and frame show signs of wear and tear above repair.

Recommendation: Remove and replace frame, door and hardware.

South Entry Door: It has been problematic with temperature changes.



Photos 27, 28 & 29: South exterior door showing signs of wear and tear that are going beyond repair.

Recommendation: Remove and replace frame, door and hardware.

Corridors Finish Flooring: It was observed that the vinyl finish flooring at corridors is worn out and needs replacement at different areas.



Photos 30, 31 & 32: Vinyl flooring at all corridors needs removal and replacement.

Recommendation: Remove and replace in kind with new vinyl flooring all corridors in first, second and third floors. Provide new substrate at areas where repair is needed: 10% of total corridor area.

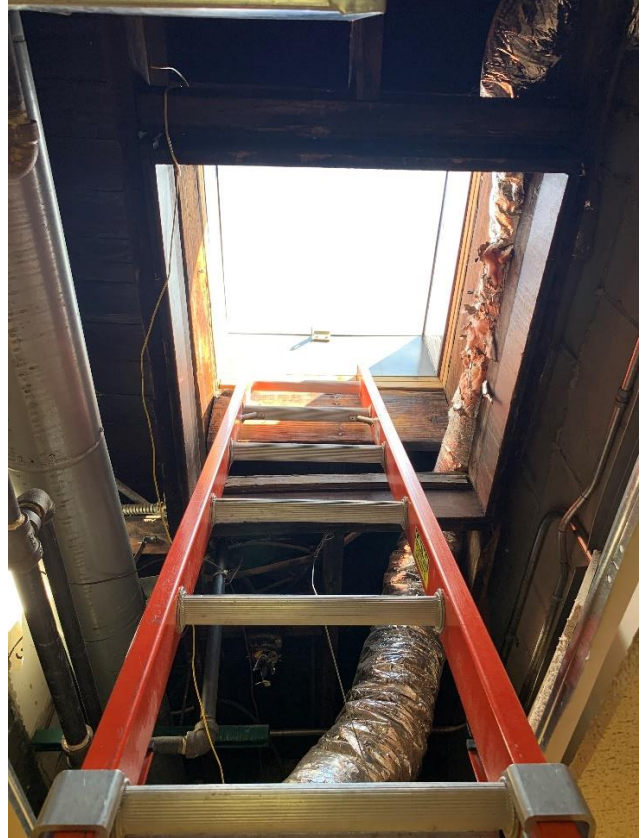
Basement Roof Leaks and Moisture Damage: The building engineer has reported roof leak damage and potential plumbing leaks and sump pump issues.



Photos 33, 34, 35, 36, 37 & 38: Roof Leak and moisture damage at basement level is deteriorating the building materials. Sump pump may have issues as reported by building engineer.

Recommendation: Remove and clean off thoroughly efflorescence from brick, mortar and masonry and dispose off properly. Identify plumbing damage, remove, and replace in kind. Sump pump damaged parts to be repaired. If damaged beyond repair, then remove and replace with new.

Roof Hatch and Ladder: The roof needs proper access and away from public corridor. The existing roof hatch is located at the corridor in front of the elevator.



Photos 39 & 40: Roof access with movable ladder in corridor.

Recommendation: Remove and replace roof hatch and provide new structural system to cover opening and ceiling finish to match existing. Provide new roof hatch and new metal ladder at stair enclosure landing

Mechanical roof equipment on steel structure safety rail: Roof mechanical units are to be serviced and they lack a safety rail next to west end of the building.



Photos 41, 42 & 43: Roof mechanical equipment shows no safety rails nor maintenance traffic pads.

Recommendation: Provide safety rails at the west end as well as traffics pads around mechanical equipment for maintenance.

Respectfully submitted.

A handwritten signature in black ink, which appears to read "Johnny Bueno-Abdala".

Johnny Bueno-Abdala, Architect NCARB