

Public Building Commission
North Park Village – Gymnasium Building B
Chicago, IL

Preliminary Property Condition Assessment
October 21, 2021



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1 EXECUTIVE SUMMARY

1.1 GENERAL DESCRIPTION

This Property Assessment of the North Park Village Gymnasium Building B was prepared by KOO LLC at the request of the Public Building Commission of Chicago for the purpose of informing decisions on the potential renovation or restoration of the building. The building is located at 5801 N. Pulaski Road B. Completed around 1915, and originally part of the Municipal Tuberculosis Sanitorium (M.T.S.), the building now houses a Gymnasium and support spaces.



The original M.T.S. building is an Orange Building as identified by the Chicago Historic Resources Survey (CHRS) and is subject to the City of Chicago's Demolition Delay Ordinance. Given the structural integrity and architectural and historical significance of the building, our recommendations do not include demolition.

The assessment assumes the intent for the Gymnasium Building is to remain a Gymnasium building; targeted structural, system and aesthetic upgrades will maintain the buildings' function and use, while extending its life. For the purposes of this assessment, KOO has not developed alternate uses for the Gymnasium.

At minimum, selective updates of the mechanical, electrical and plumbing systems are recommended, especially to address the damage caused by active leaking in the Basement Mechanical/Electrical Room. Although a Roof Investigation has not been completed by the time of this assessment, roof repair replacement at the low slope and pitched clay tile roofs is anticipated.

1.2 GENERAL PHYSICAL CONDITIONS

1.2.1 Site Elements

Per the RFP a limited review of site elements was performed by KOO and our consultants. In general site elements included concrete walks, parking areas and landscape areas. These elements are in various states of degradation. At minimum, the front entry walk should be replaced to maintain accessibility for the building.

1.2.2 Building Structure

The existing below grade structure consists of a cast-in-place concrete foundation and basement structure including concrete walls, slabs and columns. The first floor framing above mechanical room in the basement is composed of a concrete slab on concrete beams. Multiple beams show signs of deficiencies, including concrete spalling, cracking, and corroded reinforcement bars. The concrete slab has deficiencies of concrete spalling and corroded reinforcement bars. The exterior walls of the building consist of multi-wythe masonry. The perimeter masonry walls appear to be load bearing.

The primary roof structure are trusses framing a gable roof. It appears upon its original construction the main interior space of the building was double height, with clear view to the roof structure from the Ground Level. Since the original construction of the building, a new second floor slab has been installed including a new transfer stair. There is also metal deck infill on steel structure at the west end of the building, visible from inside the west BOH areas.

KOO recommends that PBC, with assistance from KOO procure a contractor to perform Destructive Testing in order to expose structural elements concealed from view, prior to the completion of the Construction Document phase.

1.2.3 Exterior Masonry Walls

The exterior walls which were inspected from the ground, appear to be in fair condition. In addition to the masonry noted above, the walls have numerous limestone and terracotta decorative building elements that are in fair condition. Also, each façade has a series of masonry coves and decorative banding that act to break up visually the façade.

Where damaged masonry or limestone elements are visible, it is most likely from moisture infiltration and general wear. The decorative elements are intricate and subject to breakage.

At the main entrances, the limestone decorative columns and pediments are in fair condition. There is visible openings in the mortar joints that allow water penetration but the limestone itself does not appear significantly degraded. The limestone requires surface cleaning.

The existing soffit at the roof overhangs is in poor condition, as evidenced by peeling paint, debris build up and organic material growth. This appears due to improperly installed or damaged roofing and gutters installed at the sloped tile roof above.

1.2.4 Roofing

The existing roof consists of two types of roof systems. The gable portion above the main gymnasium space is a membrane roof assembly. The roof above the vestibule is a clay tile hip roof. Multi-wythe masonry parapets separate the roofs. Based on what could be observed the roof and parapets are in fair to poor condition. At the masonry parapets, sealant joints at the stone coping are separated, and there is

evidence of moisture damage on the masonry. Although not available at the time of this Preliminary Report, KOO's roofing consultant will be providing a full roof report including moisture survey and visual inspection of the clay tile roof.

1.2.5 Exterior Doors and Windows

The exterior doors are in fair condition. On the East Façade the main entry doors are surrounded by decorative limestone, decorative metal and terracotta portals. The limestone elements appear in fair condition. Due to the width of existing doors, only the north main entry door is Accessible.

The exterior windows on the north and south facade, viewed from the ground due to their height and size, appear to be new in relation to the age of the building and in good condition. There is evidence of moisture penetration at the window sills but does not appear excessive.

1.2.6 Building Interior

The building interior is generally in fair condition, with the exception of the Basement. At the Basement Mechanical and Electrical Rooms there is significant moisture damage to concrete structure and equipment. The Electrical Room shows signs of active ongoing leaks, with damage to major electrical equipment.

As mentioned previously the facility is two floors, both serve as a Gymnastics Area with some additional office space, restroom and storage spaces. The interior of Gymnasium is carpeted with painted and decorative tile walls. The tile appears in good condition. The Restroom and storage spaces are in fair condition. At minimum, the interior surfaces should be cleaned, with surface repairs in plaster and gypsum board finishes.

1.2.7 Water

The building water service is located in the basement mechanical room. The building is served by a single gas fired 50 gallon water heater rated for 60 MBH which appears to have been installed in 2014. The water heater appears in reasonable working condition.

Plumbing fixtures in existing bathrooms appear relatively new and appear in reasonable working condition although a lavatory faucet was observed to be leaking in the first floor boys bathroom which should be repaired.

A sewage ejector is located in the basement and is piped for duplex pumps however only one pump is installed and piped. The building engineer noted the pump was recently replaced and is operating properly. A second sewage ejector pump should be installed and proper duplex pumping controls installed for system redundancy.

It is understood that the basement does not currently have a drain tile system but that flooding occurs during heavy rain. A geotechnical or foundations engineer should be consulted on remediation but a perimeter drain tile system with duplex style sump pump may be necessary to manage this flooding. If provided, a perimeter drain tile should be installed under slab around the perimeter of the basement with duplex sump pump located in the basement mechanical room, discharging to the building storm sewer system.

The building is heated via a three-burner hydronic boiler located in the basement. The unit is past its useful life and is in the process of being replaced with a new boiler which the building engineer noted is to be installed prior to this winter.

1.2.8 Natural Gas

Natural Gas supply and systems were not observed during assessment.

1.2.9 Cooling, Ventilation and Heating

The building uses a primary/secondary pumping scheme for system pumping. System pumps appear to be in reasonable working condition and system piping was observed to be insulated throughout. System balancing should be checked upon replacement of the boilers for both the new boilers and terminal heating coils throughout the building. The system includes a glycol fill station which appears past its useful life and should be replaced with new as part of the boiler replacement.

Hydronic radiators/cabinet heaters are located throughout perimeter spaces for zone level heating. Heaters appear to be in reasonable working condition.

Duct mounted hydronic heating coils were observed on the two air handler systems. There are two heating coils per system, each serving a dedicated façade. Drip pans are located below each heating coil and mold was observed downstream of each heating coil on exposed ductwork/grilles. Reheat coils should be inspected for mold with mold remediated and coils thoroughly cleaned.

Two McQuay modular air handlers located in a mechanical penthouse provide air conditioning and ventilation for the entire building. One unit serves the first floor gymnasium, bathrooms, and office. One unit serves the second floor gymnasium and bathrooms. Each unit includes a mixing section with motorized dampers for return air/outdoor air control, filter section, heating water preheat coil, DX cooling coil with no reheat section, and supply fan. A duct mounted inline return fan is paired with each air handler. Each air handler has a roof gooseneck fitting for relief. Each air handler pulls outdoor air from a combined duct/louver located above the mechanical penthouse. The units appear to be constant volume with no means of dehumidification control.

Roof mounted condensers on the penthouse roof serve each air handler. The condensers are all McQuay model ALP012D and appear to have been manufactured in 1997. There are two condensers per air handler for a total of four condensers. A roof mounted exhaust fan is located adjacent to the roof mounted condensers and appears to serve all building bathrooms. The common boiler exhaust flue terminates adjacent to the exhaust fan, serving the basement boiler and water heater.

When onsite, the building was noticeably negatively pressurized as entry doors were difficult to open with air rushing in upon entry. This likely is due to the outdoor air dampers being maintained shut while the building exhaust fan operates, presumably as a means to manage humidity/moisture/mold buildup in the two air handler systems.

The air handling systems warrant significant upgrades. All existing exposed ductwork shall be inspected for mold. If possible, mold shall be remediated with ductwork/grilles to remain or ductwork shall be replaced in its entirety.

Each air handling unit supply and return fans shall be upgraded with new inverter duty motors controlled by variable frequency drives. Air handling unit DX systems shall be replaced with new roof mounted condensers and DX coils designed for R410a refrigerant. DX systems shall be modulating type with digital scroll compressors or variable speed compressors for part load control. Air handling units shall receive new DDC type controls that enable single zone variable volume type control. Air handling unit reheat coils shall receive new DDC type control valves that enable reheat control functionality for managing space humidity

levels when the system is in cooling and cannot manage space humidity even at low airflow. New space temperature and humidity sensors shall be provided. The new boiler and boiler pumps shall also receive DDC type controls such that the entire system is integrated into a single control loop. The entire building hydronic and airside systems should be rebalanced and commissioned for proper control. Each air handler shall be thoroughly cleaned including all unit coils and duct system reheat coils.

1.2.10 Electrical

The incoming utility service is provided by an exterior pad mounted transformer located off the North side of the building. Secondary service feeders from the utility transformer extend into the building and feed three 480V, 3-phase, 4-wire services into the building:

1. Fire pump
2. Normal Electrical Service
3. Emergency Electrical Service

Metering for the three services listed above is located adjacent to each service distribution panel or disconnect within the main electrical room on the lower level.

A separate 30A utility service is provided for the lighting within the building for emergency lighting. The service disconnect is located within the main electrical room and feeds a Zenith automatic transfer switch located adjacent to the service disconnect. The output of this automatic transfer switch provide power to a 45kVA transformer (T-2) which supports the emergency lighting, along with the supervisory loads associated with the fire pump. No generator or central inverter exists for the building; however, one is not required to comply with a System-II emergency system as recognized by the Chicago Electrical Code. Therefore, there are no recommendation to upgrade the building emergency distribution at this time.

A fused 125A, 208/120-volt panelboard is located in the breakroom area on the main level to provide power to all of the light fixtures and exit signs requiring emergency circuiting.

The 480 volt 3-phase, 4-wire main service entrance distribution panel is located within the main electrical room and provided with a 600A main breaker. The main distribution panel provides power to the roof mounted mechanical condensers, jockey pump, and branch panelboards and transformers located within the main electrical room. This panel also feeds a mechanical distribution panel located on the penthouse to support additional condensing units, air handling units, and roof top units.

The majority of the branch circuit loads throughout the building are fed from the 208 volt, 3-phase, 4-wire distribution panel B-LD-1. This distribution panel supports all of the standard branch panelboards located throughout the building and if fed via a 112.5kVA transformer (T-1).

The two distribution panels located within the main electrical room are not mounted on concrete housekeeping pads and rust was observed at the equipment's floor support brackets and on the lower portion of the equipment. These distribution panels are currently in good working condition; however, replacement should be considered in the near future due to the rust.

All branch distribution, disconnecting means, meters, and transformers equipment located within the main electrical room was observed to be in good working condition and no issues were presented by the building engineer while on site.

Interior luminaires for general illumination in back of house areas consists of both incandescent and fluorescent luminaires. These fixtures were currently observed to be fully functional and in good working condition. Even if these areas are not part of the scope of work it is recommended a replacement to new LED type fixtures is considered.

General lighting for the gymnastics area is provided via HID up-lights located in a grid pattern throughout the space. Each of these fixtures is provided with a remote mounted ballast located in the penthouse. These fixtures although operational are nearing their end of life and are currently producing light at different color temperatures due to limited availability of replacement parts and are recommended for replacement with LED luminaires.

Lighting controls throughout the building consist of single-pole, three-way switches and timeclocks placed locally in each room. No occupancy sensor controls or means of vacancy control were observed in any of the spaces.

All lighting controls are fully functional and are in good working condition. Areas where light fixtures are recommended or planned to be replaced will require control upgrades to meet the current energy code requirements of the City of Chicago. Code required controls include but are not limited to occupancy/vacancy, daylight harvesting, time of day controls, and manual on/off, etc...

Emergency egress lighting throughout the building is served by the emergency service for the building. The functionality and location of fixtures on emergency was not able to be observed while on site. Although compliant with the Chicago Electrical Code, 90-minute emergency battery backup is still required in horizontal/vertical egress paths and exit signs. It is recommended the building be upgraded with new battery-backup luminaires as a part of the lighting replacement to comply with the emergency illumination requirements of Article 700 of the Chicago Electrical Code.

Exit signs located throughout the building are in good working condition; however, they are recommended for replacement with integral battery-backup exit signs for compliance with Article 700 of the Chicago Electrical Code.

1.2.11 Other Systems

The main Simplex 4005 series fire alarm panel is located within the entry vestibule to the building.

Pull stations are located at each egress doorway.

Standalone smoke detectors were observed in the mechanical spaces of the building and are recommended to be replaced with smoke detectors which will properly integrate into the fire alarm system. This recommendation applies to any standalone fire alarm devices, including duct smoke detectors for mechanical equipment where required by the Chicago Building Code.

Visual notification coverage throughout the building appeared to be insufficient and additional devices are recommended for installation to ensure proper coverage is met per ADA/MOPD.

1.3 RECOMMENDATIONS

Summarized below are recommendations for the North Park Village Gymnasium Building B prioritized as Critical, and Non-Critical, See Section 6 for itemized breakdown of remediations.

1.3.1 Critical

Critical recommendations are those items that should be addressed as soon as possible to maintain building functionality and prevent further degradation.

- Conduct environmental remediation to mitigate hazardous materials when affected by areas of work.
- Repair/Replace damaged roofing
- Provide new Mechanical, Plumbing and Electrical Systems to replace non-functioning equipment including new boilers, lighting, occupancy controls and the like
- Provide deep grinding and repointing of all of exterior masonry facade
- Provide deep grinding and repointing of damaged exterior limestone elements
- Replace Main Entry Doors
- Provide drainage, sump and waterproofing upgrades in the basement to address water penetration issues
- Address Landscape and Site Access Issue including repair of parking lots and concrete walk at the front of the building

Non-Critical recommendations are those items where remediation is suggested to achieve the desired occupant experience or will be required in the next 5- 20 years.

- Provide Survey to confirm whether grading at parking areas is ADA Compliant
- Provide Trash Enclosure
- Provide new Landscaping
- Add second sewage ejector pump

2 PURPOSE AND SCOPE

The assessment of North Park Village Gymnasium Building will aid the PBC in the development of a scope for renovation of the property. It includes an analysis of the current interior and exterior conditions, level of compliance with current applicable Building Codes, level of compliance with Accessibility Requirements and level of compliance with Energy Codes.

Information included in this report was gathered over three site visits by KOO LLC and two site visits by their consultants. Existing conditions of the site, exterior walls, roof, interior rooms, and MEP Systems were observed and documented. The existing conditions were then evaluated for quality, functionality, appearance and code compliance. Based on this analysis, recommendations were provided.

3 SYSTEM DESCRIPTION AND OBSERVATIONS

This section contains the documentation of conditions and deficiencies observed during site visits conducted by KOO LLC and their consultants. Please note that information regarding the condition of furniture is not included in this portion of the Assessment.

3.1 SITE

3.1.1 Storm Water Drainage



3.1.1. Although overall review of site and storm drainage was not part of the scope of this report. There are several locations where downspouts are damaged or not draining properly, causing stormwater to back flow onto the masonry façade.

3.1.2 Earthwork and Grading



3.1.2.1 Southwestern frontage landscape area has settled and eroded.



3.1.2.1 Several ~2' dia. ~8" deep holes exist in the southern and northern frontage.

3.1.3 Paving, Curbing, & Parking



3.1.3.1 Curb Ramps from accessible parking stalls is non-conforming



3.1.3.2 Accessible stalls are non-confirming for signage, striping, and potentially grading (a survey would be required).



3.1.3.3 Parking Lot pavement indicates need to crack seal, sealcoat after replacing potholed areas with full-depth pavement



3.1.3.4 Catch basis have settled in parking areas

3.1.4 Flatwork



3.1.4.1 The southeastern landscape area has settled, exposing the side of the sidewalk



3.1.4.2 Eastern, concrete entrance plaza is deteriorated. Associated curb ramp is non-conforming in the vehicular drop-off area



3.1.4.3 Settlement of earth and washout are compromising the sidewalk at the southern entrance.

3.1.5 Landscaping & Appurtenances



3.1.5.1 Remove dead trees and overgrowth in center island



3.1.5.1 Trash Enclosure missing from Trash Area



3.1.5.2 Two trees are missing from center parking lot island

3.1.6 Electricity

Site Electricity systems including but not limited to site lighting were not part of scope of this assessment.

3.1.7 Natural Gas

Site Natural Gas systems were not part of the scope of this assessment.

3.1.8 Sanitary / Storm Water

Site Sanitary / Storm Sewer systems were not part of the scope of this assessment.

3.1.9 Site Security

Site Security systems were not part of the scope of this assessment.

3.2 STRUCTURAL FRAME AND BUILDING ENVELOPE

3.2.1 Foundation and Building Structure



3.2.1.1 Observed interior slab-on-grade in basement mechanical room appears sound with some minor cracking.

3.2.2 Building Structure



3.2.2.1. Concrete beam with spalling



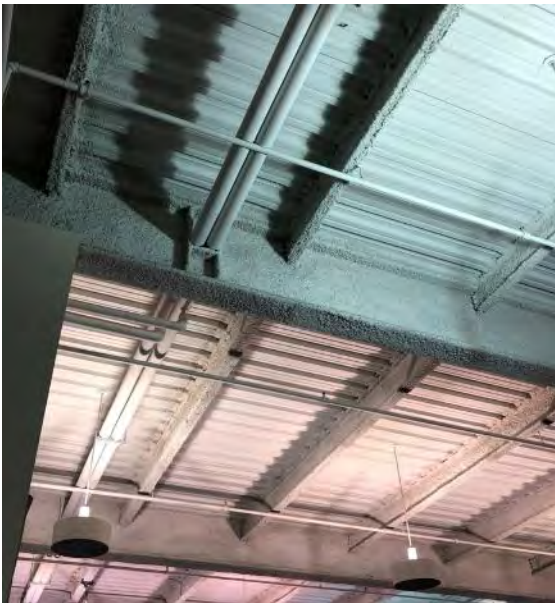
3.2.2.2 Concrete beam with large crack



3.2.2.3. Concrete beam with spalling



3.2.2.4. Concrete slab with concrete spalling



3.2.2.5. Concrete slab with concrete spalling

3.2.2.6 Second floor framing consists of concrete on steel deck, supported on steel beams. System showed no visible signs of deterioration.



3.2.2.7. Roof framing over open gym area consists of steel trusses. System showed no visible signs of deterioration.



3.2.2.9 Penthouse framing consists of concrete slab and concrete beams. System showed no visible signs of deterioration.

3.2.3 Exterior Wall System



3.2.3.1 Masonry is in state of disrepair and improper tuckpointing has occurred in the past.



3.2.3.2 Moisture damage to masonry and lime stone décor detail.



3.2.3.3 Dirt, and Debris build up at perimeter of building.



3.2.3.4 Brick shows aging and cracking. Brick's joints are wearing out because of weather condition on site.



3.2.3.5 Insect nest is building up on brick façade



3.2.3.6 Rust/Moisture damage visible at masonry base wall



3.2.3.7 Water / Moisture damages masonry's exterior



3.2.3.8 Lime stone base got rusted by moisture/
water



3.2.3.9 Lime stone décor feature got damage by
moisture/ water

3.2.4 Fenestration System



3.2.4.1 Windows at North and South Façade. Windows are

3.2.5 Exterior Metal Fabrications



3.2.5 Exterior Metal decorative elements at the east façade.

3.2.6 Exterior Doors & Entry Systems



3.2.6.1 Exterior Non-Accessible Doors



3.2.6.2 Door Hardware at Vestibule Interior Doors



3.2.6.3 Exterior Doors uneven leaves



3.2.6.4 Exterior Egress Doors in fair condition

3.2.7 Roofs and Parapets



3.2.7.1 Clay tile roof above entry Vestibule



3.2.7.2 Masonry parapet at membrane roof



3.2.7.3 Clay tile Roof and Gutter



3.2.7.4 Masonry cracking at Masonry Parapet



3.2.7.5 Access Door at Roof, door and frame in poor condition



3.2.7.6 Damage to roof membrane at Roof Drain



3.2.7.7 Damage to sealant and flashing



3.2.7.8 Sealant at Limestone coping

3.3 MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS

3.3.1 Plumbing



3.3.1.1 Water heater in basement.



3.3.1.2 Existing bathroom fixtures



3.3.1.3 Existing basement sewage ejector

3.3.2 Heating



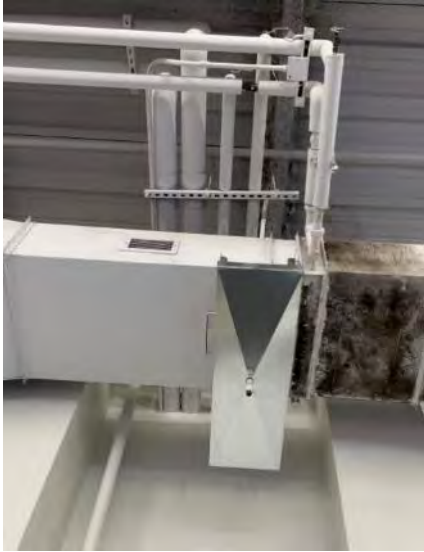
3.3.2.1 Existing basement boiler



3.3.2.2 Existing basement heating pump and glycol fill station.



3.3.2.3 Existing terminal cabinet unit heater



3.3.2.4 Existing duct reheater coils with pans and duct mold.

3.3.3 Air Conditioning and Ventilation



3.3.3.1 Existing penthouse air handler and return fan



3.3.3.2 Existing roof mounted condensing units and relief gooseneck

3.3.4 Electrical

3.3.4.1 Utility Service

As mentioned in the executive summary, the incoming utility service is provided by an exterior pad mounted transformer located off the North side of the building. Secondary service feeders from the utility transformer extend into the building and feed three 480V, 3-phase, 4-wire services into the building:

1. Fire pump
2. Normal Electrical Service
3. Emergency Electrical Service

Metering for the three services listed above is located adjacent to each service distribution panel or disconnect within the main electrical room on the lower level.

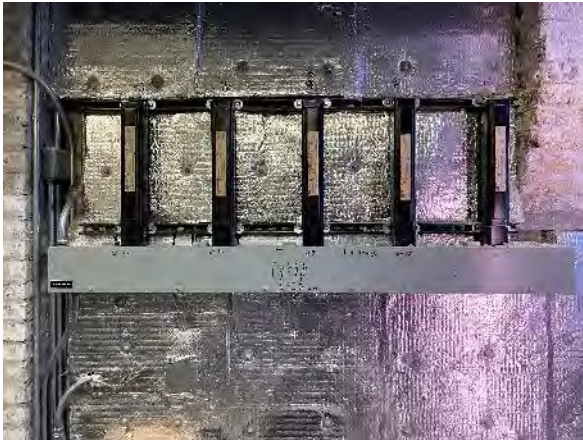


3.3.4.2 Electrical Distribution



3.3.4.2.1 Emergency Distribution in Basement

3.3.4.3 Lighting



3.3.4.3.1 Lighting controls and lighting in the Gymnasium

3.3.4.4 Fire Alarm



3.3.4.4.1 Simplex Panel at Vestibule



3.3.4.4.2 Visual notification devices

3.4 INTERIOR ELEMENTS

3.4.1.1 BASEMENT, LEVEL 1 AND LEVEL 2



3.4.1.1.1 Dry wall is missing from water damage in the basement. Basement is damp from water penetration.



3.4.1.1.2 Floor is damaged by water. Rain water came in through foundation wall and trap in the mechanical room

3.4.1.1.3 Water / Moisture damage mechanical equipment stands.



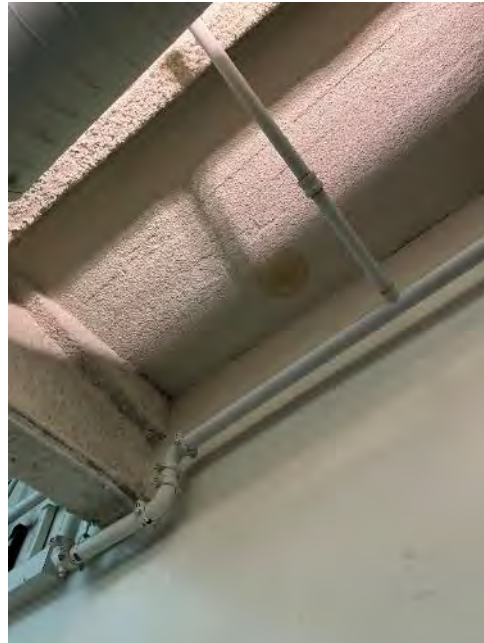
3.4.1.1.4 Foundation wall is damaged by water Leaking through from outside

3.4.1.1.5 Concrete Structure damages and looks damp. Wall shows sign of water leaking.



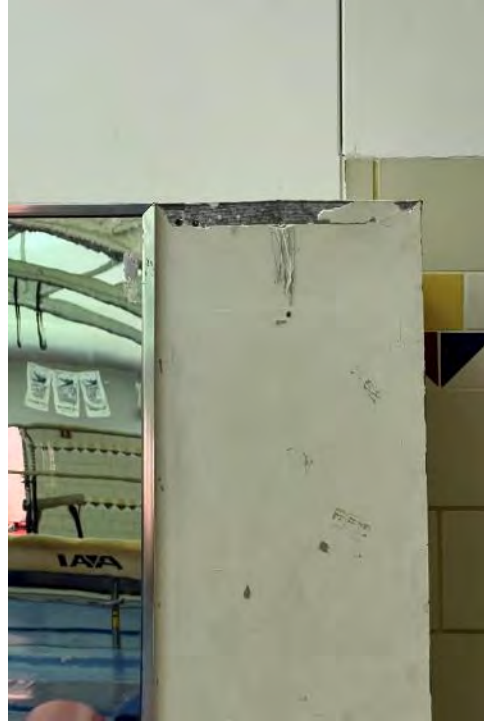
3.4.1.1.6 Level 1 and Level 2 Doors appear to typically painted hollow metal with ADA compliant hardware

3.4.1.1.7 Similar Wall tiles layout and carpet is used throughout all the wall on second floor and first floor.



3.4.1.1.8 Dry wall and wall base matching color are used throughout back of house space on level 1 and 2 with the exception of restroom.

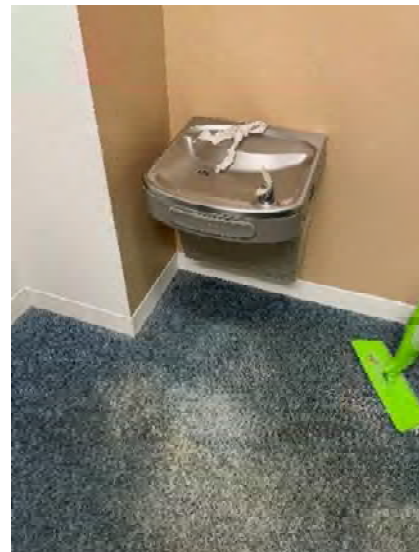
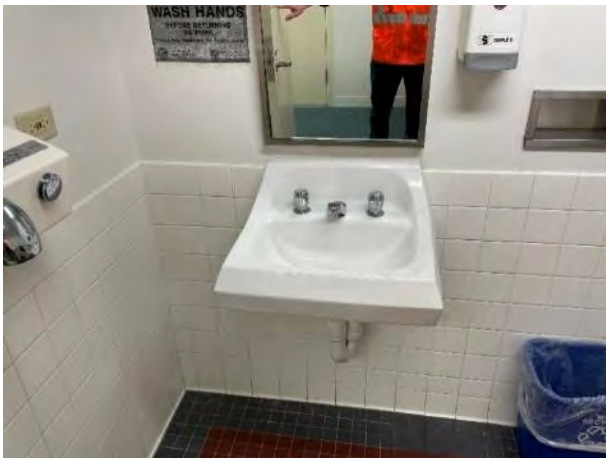
3.4.1.1.9 Exposed ceiling in both level 1 and 2 with fire Protection spray on structure beams.



3.4.1.1.10 In the second floor, hall way/ vestibule and locker space now become a storage and extend are for gymnasium equipment.

3.4.1.1.11 Practicing mirror on second floor show damage around the perimeter on dry wall.

3.4.1.2 PLUMING FIXTURES



3.4.1.2.1 Unisex restroom sink is in a good condition, and restroom accessories are in a fair condition as well.

3.4.1.2.2 Water foundation is in a good condition.



3.4.1.2.3 Toilet and grab bars are in good condition, and need to adjust to meet new ADA code from the city.

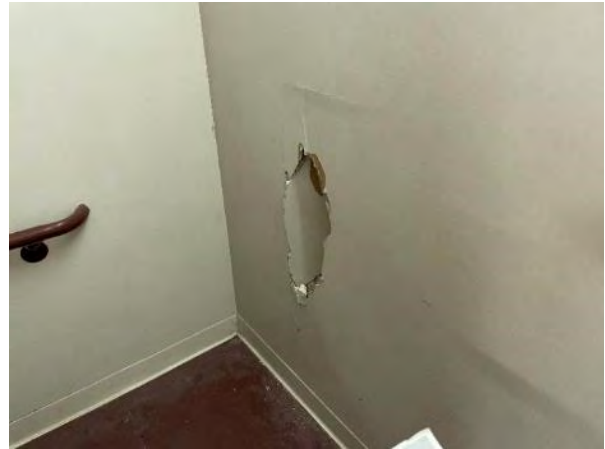
3.4.1.2.4 Unisex Restroom is not intended for Children's use

3.4.1.3 STAIRS



3.4.1.3.1 Stairs is in a good condition, and function well.

3.4.1.3.2 Stairs shows some scratches in the high traffic area from daily usage.



3.4.1.3.3 Hand rail is in a good condition

3.4.1.3.4 Back of house stairs / exist stairs wall show damage.

3.5 CODE COMPLIANCE/ADA COMPLIANCE

Summary of codes governing renovations.

3.5.1 General Code Compliance Notes

Applicable Codes:

- Chicago Building Code (2019-Current Edition)
- Chicago Rehabilitation Code (2019-Current Edition)
- Illinois Accessibility Code (with amendments)

General Code Information:

- Construction Type appears to be Type IIIA - Type III Construction is that type of construction in which the exterior walls are of non-combustible materials and the interior building elements are of any material permitted by this code.
- The size of exterior exits and egress distances appear to be in compliance with current code requirements.
- The renovation of the Gymnasium Building should be considered a "Repair" in conformance with Chapter 4 of the Chicago Rehabilitation Code

3.5.2 General Accessibility Notes

The Gymnasium Building appears to be somewhat Accessible as there is an elevator, and appropriate door and corridor widths. Given the scope of renovation and repairs, full scale ADA upgrades should not be required. KOO recommends the following to ensure that an Accessible Route is maintained and the building addresses the needs of future users.

- Automated Entrances/Exits are provided at the Main Entrance on the West side of the building
- Door thresholds are revised to be a maximum height of 1/2"
- Accessible Hardware (lever type hardware) is installed on all doors
- Toilet Accessories at the First and Second Floor are upgraded to meet current Accessibility standards to the greatest extent feasible.

4. ADDITIONAL CONSIDERATIONS

The following additional considerations were not included in the Assessment or Recommendations, but should be considered in future phases of the project.

4.1 FURNITURE

Although not included in the recommendations or assessment of the existing conditions, the current furniture and appliances are in fair condition but should be considered for replacement by the PBC.

4.2 EXPLORATION OF EXTERIOR WALL CONSTRUCTION

KOO LLC or its consultants have not conducted an in-depth exploration of the exterior wall construction, such as destructive testing or masonry removal. KOO recommends that PBC, with assistance of KOO procure a contractor to perform Destructive Testing in order to expose structural elements concealed from view, prior to the completion of the Construction Document phase.

4.3 EXITING REQUIREMENTS

Within its current function as Gymnasium Building, the building has a maximum capacity (calculated in conformance with Chicago Building Code) of approx. 750 occupants. Per the Chicago Building Code, the locations and sizes of the operational exits appear to be in compliance. This initial analysis is not exhaustive and additional review would be required during the Construction Document Phase.

4.4 ENVIRONMENTAL ASSESSMENT

KOO LLC or its consultants have not conducted an Environmental Assessment of the Existing Building. KOO recommends that Environmental Investigation and Testing is conducted in order to assess full scope of remediation required.

5. DOCUMENT REVIEW

5.1 DOCUMENTS REVIEWED

Legacy Drawings were not available for this report.

6. RECOMMENDATIONS AND OPINION OF PROBABLE COSTS

The matrix on the following pages and comments below enumerate and expand on the proposed recommendations to remedy the deficient building components.

6.1 PRICING MATRIX

In the matrix, Recommendations are separated within each Systems category as Critical and Non-Critical, Items in the critical category, are those items that are currently not functional, not code compliant, heavily worn or damaged, or are approaching the end of their effective life and will require replacement in the next 5 years. Non-Critical Items are those items considered still effective, but will most likely replacement, observation and maintenance in the next 20 years.

- General Notes:
1. All types of recommendations do not necessarily appear in all work items.
 2. Critical and Non-Critical are shown for each category, a blank box indicates there are not applicable actions for that category.

Work Item	Description of Recommended Work	Opinion of Probable Costs to be provided by PBC	
		Traditional Construction	
		Critical	Non-Critical
3.1.1 Storm Water Drainage			
Critical		\$0.00	
	See Roof Section for information on Gutter and Downspout replacement		
Non-Critical			\$0.00
3.1.2 Earthwork and Grading			
Critical		\$0.00	
	Selective regrading at building corners and sidewalks to address drainage erosion issues. Assume 500 SF of re-grading and landscape restoration		
	Infill holes and provide restorative landscaping at existing "holes". Assume 10 holes, 2' in dia. X 8" deep		
Non-Critical			\$0.00
3.1.3 Paving, Curbing & Parking			
Critical		\$0.00	
	Re-stripe existing ADA Parking Stalls		
	Provide ADA Parking Signage		
	Crack Seal areas of cracking at Asphalt Paving in parking lot, assume 300 LF of crack repair		
	Replace pothole areas with full-depth pavement replacement, assume 5000 SF of pothole replacement		
	Seal Coat Parking Area once full depth replacement is completed, assume 20,000 SF Parking Area		
Non-Critical			\$0.00
3.1.4 Flatwork			
Critical		\$0.00	
	Selective Landscape restoration where landscaping has settled adjacent to sidewalks, assume 300 SF of restoration		
	Replace front entry concrete walk, including gravel base and reinforcing with new concrete walk. Assume 1500 SF of replacement		
Non-Critical			\$0.00
3.1.5 Landscaping & Appurtenances			
Critical		\$0.00	
	See Storm Water Drainage, include selective landscaping (turf planting and splash blocks) where downspouts meet grade		
Non-Critical			\$0.00
	Provide Masonry and Decorative Metal Fence Trash Enclosure, include stone coping and cast-in-place concrete foundations		
	Provide two new trees at Center Parking island		
	Remove dead trees and overgrowth at parking islands		\$0.00
3.1.6 Electricity			
	Site electricity systems included but not limited to site lighting were not part of the scope of this assessment.		
3.1.7 Natural Gas			
	Site natural gas systems were not part of the scope of this assessment.		
3.1.8 Sanitary/Storm Sewer			
	Site sanitary/storm sewer systems were not part of the scope of this assessment.		
3.1.9 Site Security Systems			
	Site security systems were not part of the scope of this assessment.		
3.2.1 Foundation and Building Structure			
Critical		\$0.00	
	At Basement Provide 100 LF of epoxy injection at concrete foundation wall cracking		
	At Basement Provide 100 LF of epoxy injection at concrete slab cracking		
	At Basement provide 100 LF of interior trench drain, sump, slab trenching and slab infill		
	At Basement/1st Floor slab provide 300 SF of cementitious patching and repair on damaged concrete		
	Concrete beams and slab with exposed reinforcement bars and spalled concrete should be repaired. Repair will consist of abrasive blast cleaning to remove rust, and possibly addition of new reinforcement. Concrete patch repair mix will be used to replace lost section.		
	KOO recommends that PBC, with assistance of KOO procure a contractor to perform Destructive Testing in order to expose structural elements concealed from view, prior to the completion of the Construction Document phase.		
	PBC/AIS to procure Geotech Investigative Services to determine complete extent of scope for waterproofing, trench drain, and related items		
Non-Critical			\$0.00
			\$0.00
3.2.3 Exterior Walls			
Critical		\$0.00	
	Grind Masonry Joints to a minimum depth of 1" and repoint. Assume 100% Grinding and Tuck-pointing on all exterior facades.		
	At all exterior lintels, remove four courses of outer wythe masonry to expose steel lintel. Scrape, Prime and Paint Lintel with Structural Steel Primer. Provide new masonry laid flush to match existing adjacent masonry. Please note masonry is different decorative coursing at each window. Assume 200 LF of Lintels.		
	At exterior Masonry Sills, remove and salvage bottom 8 courses of masonry, assume 2 wythes thick. Remove excess grout and existing flashing. Provide new flashing and waterproofing and replace with new masonry to match existing. Assume 750 SF of Masonry		
	At exterior brick masonry, replace existing damaged masonry with new masonry toothed in and laid flush to match adjacent existing masonry. Please note masonry includes decorative courses. Include 500 SF of masonry replacement.		
	Clean, repair patch damaged decorated exterior limestone, assume 1250 SF of patching. Assume 100% of cleaning.		
	At decorative limestone entrances, grind masonry joints to minimum dept 1" and repoint. Assume 100% grind and tuck-point at all limestone decorative entrances.		
	Replace damaged light fixture adjacent to main entrance		
	Remove insect nest		
Non-Critical			\$0.00
			\$0.00
3.2.4. Fenestration System			
Critical		\$0.00	
	Replace sealant for all the windows, assume 100% replacement.		
Non-Critical			\$0.00
3.2.5 Exterior Metal Fabrications			
Critical		\$0.00	
Non-Critical			\$0.00
	Scrape, Prime and Paint existing decorative metal fabrications at east main entry		

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Work Item	Description of Recommended Work	Opinion of Probable Costs to be provided by PBC	
3.2.6 Exterior Doors & Entry Systems			
Critical		\$0.00	
	See Door & Hardware and ADA Section for Exterior Doors & Entry Recommendations		
Non-Critical			\$0.00
3.2.7 Roof and Parapets			
Critical		\$0.00	
	Provide 100% Replacement of existing clay tile roof with new clay tile roof, assume salvage and reinstallation of 25% of existing clay tile, other 75% should be new. Assume replacement of 100% of underlayment and roof deck.		
	Provide 100% replacement of existing gutters and downspouts with copper gutters and downspouts, assume 500 LF of replacement		
	Provide 100% replacement of existing soffits and decorative framing at roof overhang		
	Assume removal and replacement of 25% of limestone coping stones, include full replacement with stainless steel through wall flashing and stainless steel setting pins		
	Assume repair replacement of 50% of membrane roof area		
	Assume 100% tuckpointing of exposed masonry parapets		
	Assume multi-wythe masonry replacement at parapets. Assume 50 SF of replacement		
	Assume 100% of sealant replacement at limestone parapet stones		
	Replace all existing gutters and downspouts with new copper downspouts and gutters.		
	Assume 100% replacement of roof termination bars. When replace grind masonry grout to fully embed termination bar and flashing. Provide sealant.		
Non-Critical			\$0.00
	Replace low slope membrane with with IECC compliant (R-30) floor insulation and modified bitumen roof system, including extending vent stacks, mechanical equipment curbs, masonry parapet and the like to accommodate thicker roof structure		
3.3.1 Plumbing			
Critical		\$0.00	
	See ADA Section for Recommendations on interior Plumbing Fixtures		
Non-Critical			
	Replace leaky lavatory faucets, assume replacement of 50% of faucets		
	Add second pump to sewage ejector for redundancy		
3.3.2 Heating			
Critical		\$0.00	
	Provide new boiler system; prefer prior to Winter 2021		
	Clean and Inspect drip pan for mold or ductwork should be replace entirely.		
Non-Critical			\$0.00
3.3.3 Air Conditioning and Ventilation			
Critical		\$0.00	
	Upgrade existing AHUs with new single zone VAV controls and upgrade existing condensers to new.		
	Remediate mold from HVAC system and replace ductwork if necessary.		
Non-Critical			\$0.00
3.3.4 Electrical			
Critical		\$0.00	
	Replace 100% of Gymnastics Area Lighting		
	Replace 100% of Emergency Batteries for egress lighting		
	Upgrade lighting controls for Gymnastics area to meet the requirements of IECC 2018		
	Increase Fire Alarm Visual Notification Coverage		
	Replace all lighting with energy efficient luminaires		
	Provide cast-in-place concrete housekeeping pads at new and existing MEP Equipment in basement		
Non-Critical			\$0.00
	Replace controls in accordance with IECC 2018		
	Tie in stand alone systems for smoke detection and mechanical equipment to fire alarm system.		
3.4.1 Doors & Hardware			
Critical		\$0.00	
	Replace all doors, frames and hardware in the basement, assume 100% replacement.		
	Replace Roof Access Door with insulated hollow metal door and hardware, assume 20 SF of masonry repair around door frame		
	Replace Aluminum and Glass Doors at Main Entry with ADA Accessible Doors and Hardware		
	See ADA Section for Hardware Recommendations		
Non-Critical			\$0.00
	Replace all exterior exit doors with new insulated hollow metal doors and ADA accessible hardware		
3.4.2 Indoor Finishes and Elements (Walls, Floors, Ceilings & Soft Surfaces)			
Critical		\$0.00	
	Remove and replace existing gyp. bd. furring wall in basement with 1/2" moisture resistant gyp. bd, and metal furring, assume 500 SF of replacement		
	At Basement Electrical and Mechanical Rooms, remove and replace foundation wall insulation (coordinate with foundation wall work in other sections). Assume 6000 SF of replacement.		
	Replace 100% of acoustical ceiling panel with downward accessible acoustical ceiling panel at the Office 104. Assume 100% replacement.		
	Provide plaster repair and patching at mirror wall on 2nd Floor, assume 62 LF of repair.		
	Provide plaster repair and patching at South Exit Stairs between 1st floor and 2nd floor, assume 3 LF of repair.		
	Patch/Repair damaged spray applied fire proofing at 2nd Floor Ceiling, assume 10% of area		
	KOO recommends that Environmental Investigation and Testing is conducted in order to assess full scope of remediation required.		
Non-Critical			\$0.00
	Provide new grout for all wall-tile. Assume 100% replacement.		
	Provide interior painting of all gyp. bd. walls and ceilings		
	Replace 100% of Interior Carpet Tile at the Gymnasium (Level 1 and 2) and Office 104		
3.4.3 Fire Stopping and Protection Systems			
Critical		\$0.00	
	Provide 2 Hr. resistive Sealant around all rated wall, floor and ceiling penetrations requiring 2 Hour rating. Assume 200 SF of Sealant.		
Non-Critical			\$0.00
	Confirm that existing Fire Extinguishers and Cabinets are up to date and in working order		

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Work Item	Description of Recommended Work	Opinion of Probable Costs to be provided by PBC	
3.5 ADA/Code Compliance			
Critical		\$0.00	
	Provide Automated ADA Compliant Push Paddles at the Main Entrance		
	Replace all door thresholds to be maximum height of 1/2"		
	Replace all door hardware to be Accessible Type to match existing hardware.		
	Replace Toilet Accessories (grab bars, soap dispensers, etc.) at First and Second Floor Bathrooms		
	Provide piping wraps at the underside of sinks for ADA Compliance		
Non-Critical			\$0.00
	PBC/AIS to procure Survey to conform whether grading at parking areas are compliant with ADA requirements		
Base - Total Cost Estimate Critical Option		\$0.00	
Total Add for Non- Critical Items			\$0.00

7. OUT OF SCOPE CONSIDERATIONS

The items identified below were generally not included in the Assessment.

7.1 Geotechnical or subsurface exploration of existing soils and site elements were not conducted as part of this assessment, and thus not included in this report.

7.2 Structural or MEP Calculations were not conducted. Recommendations stated previously in this report are based solely on visual observation of the existing components and systems.

7.3 Confirmation or measurements of existing property lines, easements and setbacks.

7.4 Information or the observation of pests such as rodents or insects, and any recommendations that would result from such observation.

7.5 Assessment of furniture and equipment.

8. PROJECT TEAM

CLIENT (PBC)

Public Building Commission
50 W Washington St, #200
Chicago, IL, 60602
312.744.3090

ARCHITECT (KOO)

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312.235.0920

MEP & STRUCTURAL ENGINEER (IMEG)

IMEG Corp
225 W Washington St, Ste 2700
Chicago, IL 60606
312.294.0501

ROOFING CONSULTANT (IRCA)

Illinois Roof Consulting Associates
4302 W Crystal Lake Rd, Ste G
McHenry, IL 60050
815.385.6560

CIVIL ENGINEER (TERRA)

Terra Engineering
225 W Ohio St, 4th Floor
Chicago, IL 60654
312.467.0123

WATERPROOFING CONSULTANT (USWP)

U.S. Waterproofing
81 Remington Road
Schaumburg, IL 60173
888.733.7243

LASER SCANNING & MODELING (KDA)

Kevin Drake Architecture LLC
1026 Princeton Ave
Highland Park, IL 60035
312.998.9455

9. LIMITING CONDITIONS

The items identified below represent the limiting conditions of the assessment. These items generally prevented further understanding, review or observation of the existing conditions.

9.1 Site Access

Given the current program as an active gymnasium facility, all areas were not fully observed due to limited visibility. Recommendations were made on observations of interior conditions and systems that were visible and reasonably accessible without relocating stored items.

10. EXHIBITS

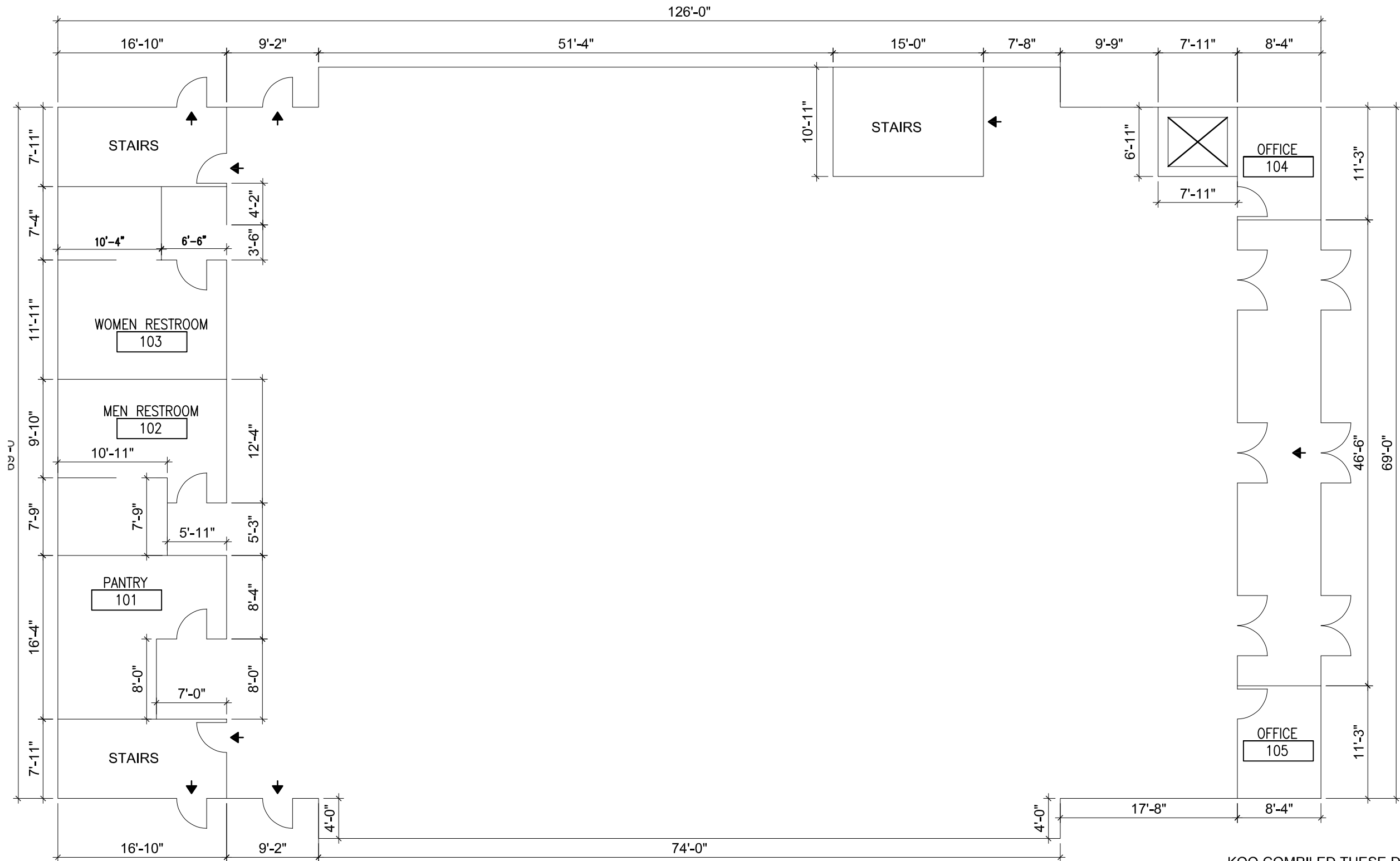
10.1 DIMENSION REFERENCE DRAWINGS

10.2 ROOF REPORT - NOT INCLUDED IN PRELIMINARY REPORT



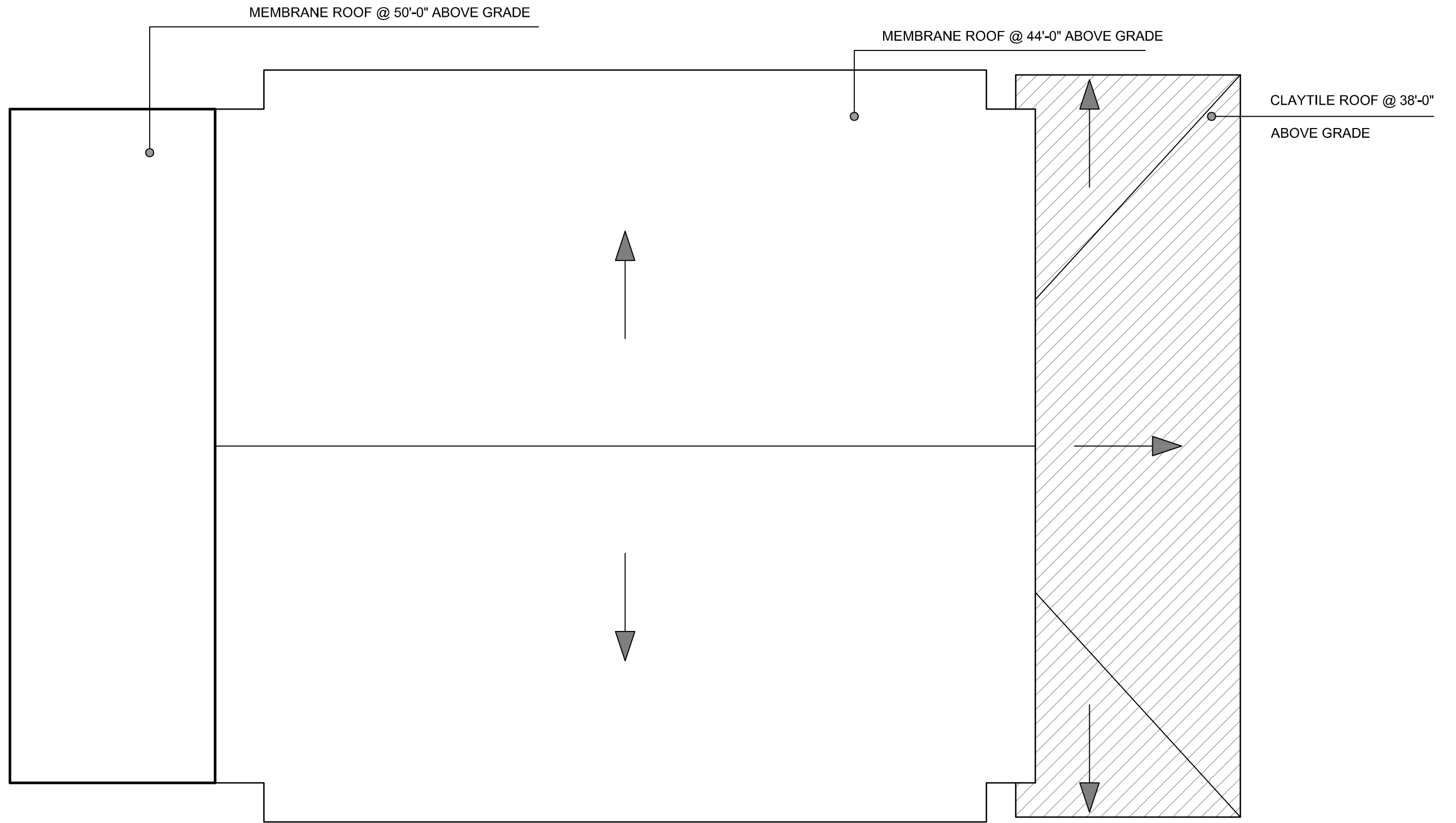
KOO COMPILED THESE DRAWINGS BASED ON AERIAL IMAGES AND APPROXIMATE FIELD'S DIMENSION. THESE DRAWINGS ARE FOR DIAGRAMMATIC PURPOSE ONLY.





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