MOKAN Goodwill

1817 Campbell Street, Kansas City, Missouri, 64108

Facility Assessment

January 12, 2024

CLARK & ENERSEN

Goodwill
Western Missouri & Eastern Kansas

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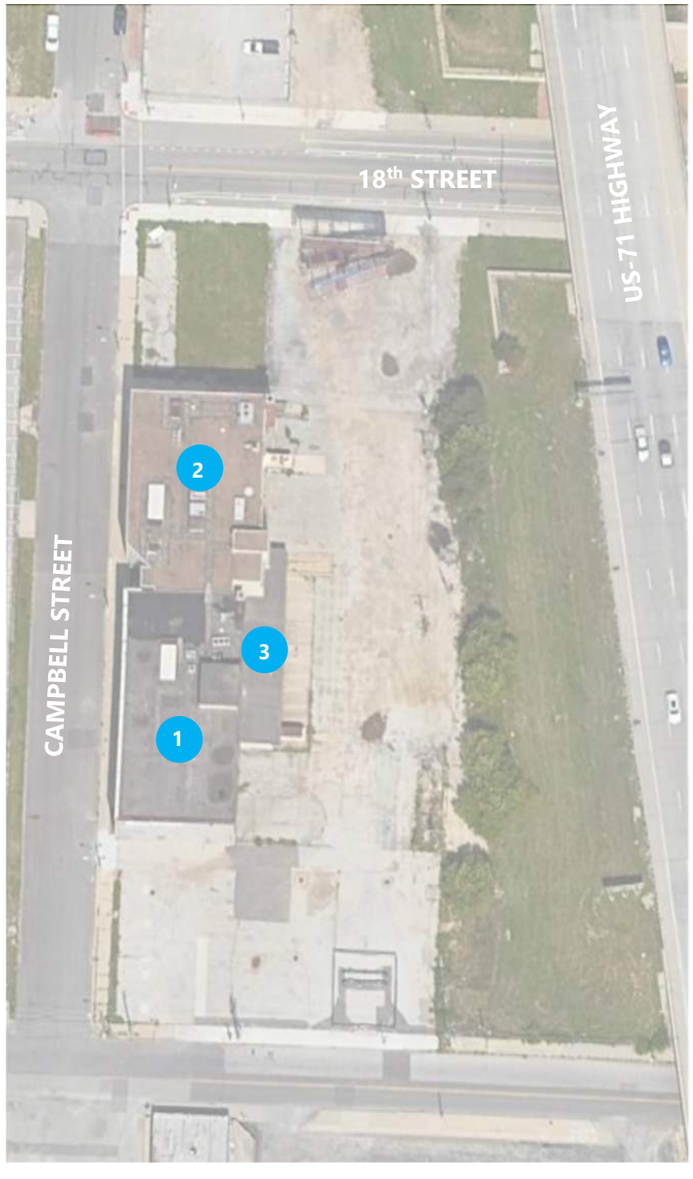
LOCATION



BACKGROUND

In December 2023, MOKAN Goodwill requested that Clark & Enersen provide assistance in developing a Facility Assessment of the structures at 1817 Campbell Street to help determine the extent of repairs or replacements that would be required to re-use the existing building(s) in a future renovation. The structures are connected and are shown in the image to the left, referred to as:

1. Original 1920's Structure (South Building)
2. 1971 Addition (North Building)
3. 1971 Single-Story Loading Dock

The following report identifies existing conditions, deficiencies, and recommendations for each system, as a whole, including its major components. Note that some of the deficiencies/recommendations are not possible to correct without major renovations and downtime to the building. The observations and assumptions included in the assessment are based on an in-depth facility analysis walk-through on January 3, 2024, various discussions with personnel, and available existing design documentation. It should be recognized that small components of the existing systems may vary slightly from the explanations in this assessment. Also, it is possible that additional system deficiencies will be discovered during project construction that were not observed during the walkthrough due to unforeseen conditions, components being inaccessible, or other limiting variables.

EXECUTIVE SUMMARY

FINDINGS & RECOMMENDATIONS

The complex is comprised of the original 1920's building on the south end and a 1971 addition on the north end. The north addition includes a single-story loading dock on the east side of the original building. While the fire-rating of the wall separating the two buildings is unknown, fire doors were observed in the separation wall on the first three levels above grade. Both buildings are comprised of a basement and four stories above with an approximate height of 56 feet above grade. The original building contains around 36,125 square feet of floor area, including an original stairwell. The north addition contains around 38,500 square feet of floor area, including two stairwells, a passenger elevator, and a freight elevator that are no longer operable. The loading dock addition is approximately 1,500 square feet. The total complex is around 76,125 square feet.

The original south building construction is a traditional wooden post-and-beam framing system bearing on a stone wall foundation. Due to extensive water damage over time, degradation of structural components, and compromised load capacities, the cost of repairs and upgrades to bring the structure to a sound condition would likely outweigh the cost benefits of salvaging those same components.

The north building, constructed in 1971, is a multistory steel frame building with cast-in-place concrete basement walls. While active roof leaks and minimal wall leaks were observed, the structural system appears to be in good condition and suitable for renovation.

It is the review team's understanding that fundraising and conceptual designs for a renovation project have not been completed and therefore recommends the following immediate and temporary repairs and replacements if the north building is to be considered for re-use in a future renovation project. Please refer to individual system sections of the report for further detail.

1) Replace existing boiler. Two options are outlined in the Mechanical portion of this report.
    a. New steam boiler (one-for-one replacement)
        i. Requires installation of additional equipment at the time of future renovation
        ii. Least efficient option
    b. New condensing boilers
        i. Requires immediate installation of additional equipment along with the boiler installation
        ii. Most efficient option
2) Replace roofing system of any remaining structures to prevent further water damage to building interior.
3) Repair all known exterior wall leaks to prevent further water damage to building interior.
4) Patch all known plumbing and backflow preventer leaks in while building is unoccupied.
5) If South building is demolished immediately, additional immediate modifications are required:
    a. Cap fire sprinkler piping connection to south building.
    b. Remove feeders to distribution equipment located in south building back to source, conduit to be abandoned in place.
    c. Remove conductors serving electrical equipment/devices located in south building that are fed from branch panels north building back to source, conduit to be abandoned in place.
    d. Relocate main fire alarm control panel to north building.
    e. The one-story steel framed loading dock structure, which bears on the south building exterior wall, will also need to be removed at this time.
    f. Construct new water-tight exterior wall along south wall of north building. This includes excavation and potential shoring of the existing cast-in-place basement wall. The addition of a new basement wall capable of soil retention and preventing water infiltration to the basement would be required as well as a multistory exterior wall capable of extending from ground level to the roof to enclose the south side of the building.
    g. Construct new water-tight exterior walls along east side of north building where the existing loading dock was previously concealing interior walls.

MECHANICAL

Overview

The following information was obtained through an in-depth facility walkthrough on January 3rd, 2024. While the details indicated below were gathered directly from site observation, the descriptions are generic for the systems as a whole. Small components of the existing systems may vary slightly from the explanations in this assessment. Also- it is possible that additional system deficiencies will be discovered during project construction that were not observed during the walkthrough.

The overall organization of the mechanical portion of the assessment will be as follows:

- HVAC Systems
- Plumbing Systems
- Fire Suppression Systems

Finally, within each of these categories, the following information will be given for each system:

- Observed Deficiencies
- Recommendations for Future Larger Renovation Project
- Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged

It should be noted that the system recommendations and deficiencies listed in this assessment are contingent upon owner review and/or budget constraints. Also, any equipment capacities listed are approximate and preliminary. Exact capacities and scope will be determined during the subsequent design phases of this project.

MECHANICAL

HVAC Systems

Deficiencies:

1. The existing boiler installed in 1972 is no longer in operation leaving the north and south sides of the building without heat. A temporary boiler has been rented from the city of Kansas City to temporarily heat the building.
2. The majority of the mechanical systems with legible nameplate installation dates were found to be 1985. Per the ASHRAE 2019 HVAC Applications handbook page 38.3, the median service life of the following pieces of HVAC equipment are:
    a. Single Zone Rooftop air conditioner – 15 years
    b. Axial fan – 20 years
    c. Electric Motors – 18 years
    d. Motor Starers – 17 years
    e. DX Coils – 20 years
    f. Air-cooled Condensers – 20 years
    g. Steam Boilers – 25 years

    Based on this information the majority of the HVAC equipment in this building would be considered deficient.
3. Per ASHRAE 62.1 and the IMC, outside air requirements have increased significantly since 1985. The existing HVAC equipment is likely not capable of handling the increased load of updated ASHRAE 62.1 outside air requirements.
4. A centralized BMS or control system was not discovered on site.
5. Steam piping is likely to have corrosion due to the high purity of steam condensate. The piping is assumed to be similar in age to the steam boiler.

Recommendations for Future Larger Renovation Project:

1. A new boiler will be need to provide adequate heating to the future building. The specifics of this boiler will vary on owner preference and other parameters during a future design phase.
2. The majority of existing HVAC equipment is 39 years old and exceeds the median service life recommended by ASHRAE by a wide margin. It is recommended to replace the existing HVAC equipment entirely that serves the existing building.
3. It is recommended to replace the existing HVAC equipment in this building in order to provide adequate outside air per ASHRAE 62.1 and IMC requirements.
4. It is recommended for the new building to have a central BMS and all equipment to be furnished with controls in order to operate more efficiently and precisely.
5. Recommend replacing the steam piping with either a new steam system or heating water system depending on the choice of boiler.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. A new boiler would need to be installed in order to provide heat to the building. A one for one replacement of the existing steam boiler would be the simplest solution. However, it is not clear that this would be the best system when accounting for the future life of the new building. ASHRAE 90.1 appendix G the baseline HVAC system type for a 4 story building <150,000 square feet is a packaged VAV system with reheat. This would require the steam from the boiler to be converted to heating water in a tube and shell heat exchanger in order to serve the proper systems required for the future building.

    Another option would be providing new condensing boilers which are more efficient than steam boilers. This option would require immediate installation of new heating water piping, heating water pumps, and heating water coils to replace the steam equipment in the existing systems in order to temporarily heat the unoccupied building.
2. In order to temper the building while it is unoccupied the existing HVAC systems are likely sufficient for the time being as long as there is a boiler to provide heat to the heating coil.
3. While the building is not occupied, there would not be a requirement to bring outside air into the building. The existing systems may be re-used.
4. A centralized BMS would not be required to keep the existing building temporarily.
5. Recommend replacing the steam piping with either a new steam system or heating water system depending on the choice of boiler.

Plumbing Systems

Deficiencies:

1. Any domestic water piping that is made out of any material besides copper would be past its life expectancy.
2. Waste piping that is cast iron or clay below the slab would likely to be corroding due to the age of the piping systems.
3. Insulation of all piping systems seemed to be inconsistent and the quality is unknown.
4. Existing backflow preventer seems to be new but is leaking.

Recommendations for Future Larger Renovation Project:

1. Replace the domestic water piping in its entirety in order to serve the new building adequately.
2. Replace the waste system in its entirety back to the city main in order to ensure longevity of the system for the future building.
3. New insulation would be provided alongside the new plumbing systems.
4. Existing backflow preventer to be replaced and new water entrance would be sized for the load of the building.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. Domestic water systems to remain in place while the building is unoccupied. Have a contractor repair all known plumbing leaks within the building.
2. Existing waste system to remain in place while the building is unoccupied.
3. Insulation to remain in place while the building is unoccupied.
4. Existing backflow preventer leak to be patched temporarily while the building is unoccupied.

Fire Suppression System

Deficiencies:

1. Corrosion/rusting is seen on the fire sprinkler main valve/alarm/backflow preventer assembly.
2. Portions of existing fire sprinkler piping in the basement has been replaced and reconnected to existing system. This indicates there may have been a failure in the piping at these spots.
3. Some of the piping is likely to be 40-100 years old. Iron piping oxidization is accelerated in the presence of water. Based on the age of the piping it is assumed there may be potential corrosion throughout the fire sprinkler piping.

Recommendations for Future Larger Renovation Project:

1. It is recommended to replace the existing fire sprinkler service entrance in it's entirety and replace it. The new system will be sized for the updated square footage of the future building.
2. It is recommended to demolish all fire sprinkler piping due to unknown conditions within the piping.
3. It is recommended to demolish all fire sprinkler piping due to unknown conditions within the piping.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. The existing fire sprinkler entrance and assembly may remain while the building is unoccupied.
2. The existing fire sprinkler piping may remain while the building is unoccupied. The piping connection to the south portion of the building will be demolished and capped in the north half of the building as required to meet NFPA 13.

ELECTRICAL

Introduction

The following portion of the Existing Facility Assessment evaluates the main components of the electrical systems serving the Goodwill facility located on Campbell Street. The electrical report identifies existing conditions, deficiencies, and recommendations for each system, as a whole, including its major components. Note that some of the deficiencies/recommendations are not possible to correct without major renovations and downtime to the building. The observations and assumptions included in this portion of the assessment are based on an in-depth facility analysis walk-through on January 3rd, 2024, various discussions with personnel, and available existing design documentation. It should be recognized that small components of the existing systems may vary slightly from the explanations in this assessment. Also, it is possible that additional system deficiencies will be discovered during project construction that were not observed during the walkthrough due to unforeseen conditions, components being inaccessible, or other limiting variables.

The overall organization of the electrical portion of the assessment will be as follows:

- Site Electrical Systems/ Electrical Service Entrance
- Electrical Distribution System
- Lighting Systems
- Branch Circuits/ Devices
- Fire Alarm System

Finally, within each of these categories, the following information will be given for each system:

- Observed Deficiencies
- Recommendations for Future Larger Renovation Project
- Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged

It should be noted that the system recommendations and deficiencies listed in this assessment are contingent upon owner review and/or budget constraints. Also, any equipment capacities listed are approximate and preliminary. Exact capacities and scope will be determined during the subsequent design phases of this project.

Site Electrical Systems/ Electrical Service Entrance

Deficiencies:

1. Evergy Transformer enclosure is in ok condition, but some fading/rust was noticed. Interior components' condition were not observed. The exact manufacturer date of the transformer was not able to be obtained, but unit could be nearing the end of its serviceable life—this would need to be confirmed by Evergy.
2. The existing Main switchboard is 208Y/120V, 3Ph, 4W, 1600A. This voltage and amperage may not be adequate/most efficient for a new renovated/building addition project.
3. The Main Switchboard is lacking additional physical capacity to accommodate a renovation while maintaining future flexibility.
4. The existing Main Switchboard is original to the construction of the 1971 portion of the building. This puts the switchboard and its components at over 50 years old and is therefore, beyond its serviceable life.
5. NFPA 70, Article 110 dictates that the space directly above electrical distribution equipment, denoted as Dedicated Equipment Space, be free of foreign systems. It was observed that ductwork and piping were routed through this code required clearance zone above the existing Main Switchboard.
6. Multiple handles on the branch fusible switches were missing on the Main Switchboard.
7. Arc Flash Hazard labels are missing on the Main Switchboard.

Recommendations for Future Larger Renovation Project:

1. It is recommended to replace and upsize the transformer in accordance with Evergy's standards/requirements and so as to meet project voltage and amperage requirements.
2. It is recommended to relocate the transformer to a practical location based off of renovation scope. Physical screening would be recommended given the visibility from prominent 18th street.
3. It is recommended that due to age, condition of equipment, code violations, and lack of capacity that Main Switchboard be replaced as a part of a renovation project.
4. It is recommended that the service entrance feeders be replaced and sized to match project design parameters.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. The existing site electrical systems and electrical service may remain in place. No immediate modifications would be necessary.

Electrical Distribution System

Deficiencies:

1. Covers are missing on some of the distribution equipment, creating a possible hazardous environment when servicing the equipment.
2. Rusting and component degradation was noted on multiple electrical panelboards/distribution panels.
3. Distribution equipment is aged. The majority of it was installed with the 1971 addition/renovation and replacement parts would be hard, if not impossible, to find.
4. Labels and schedules are missing/not up to date.
5. Arc Flash Hazard labels per NFPA 70E are missing on many of the facility electrical panelboards/distribution panels.

Recommendations for Future Larger Renovation Project:

1. It is recommended that due to age, condition of equipment, code violations, that all of the electrical distribution equipment inside the facility be replaced.
2. An Arc Flash Hazard study shall be performed and labels installed for all newly installed electrical distribution equipment.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. Feeders to distribution equipment located in the southern part of the building will need to be removed back to source, conduit to be abandoned in place.
2. Electrical Distribution System in portion of building being salvaged may remain in place.

Lighting Systems

Deficiencies:

1. Light fixtures largely appeared to be original to the 1971 addition/renovation and utilize antiquated T12 and incandescent lamp sources. Fluorescent and incandescent technologies are inefficient and have high ongoing maintenance/lamp replacement costs.
2. Multiple light fixtures' lenses or housings are discolored from either water leaks or due to age.
3. Multiple light fixture lenses are broken.
4. Minimal site lighting fixtures were present (mostly flood light type and wall packs above doors). Site observation was not conducted at nighttime, but based on fixture type and spacing it is reasonable to assess that the existing lighting presents potential security issues due to low illumination levels and uniformity incongruities.
5. There are minimal energy saving automatic lighting controls and the controls that are present utilize fading technologies technology.

Recommendations for Future Larger Renovation Project:

1. Kansas City, Missouri has adopted the 2021 International Energy Conservation Code (IECC). In order to meet this updated code for a renovation, all of the lighting controls would be replaced for increased energy efficiency and for added user comfort.
2. Similar to the lighting control system, in order to meet the 2021 IECC, the existing interior lighting will need to be replaced with updated, energy efficient LED light fixtures.
3. It is recommended that all exterior lighting be replaced with updated, energy efficient LED light fixtures that prioritize uniformity and quality light levels in order to increase security.
4. Per NFPA 101 and the IBC, a portion of the new LED light fixtures along the path of egress will be provided with battery backup for emergency lighting.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. The existing Lighting Systems and emergency lighting may remain in place. No immediate modifications would be necessary.

Branch Circuits/ Devices

Deficiencies:

1. Conduit is not supported properly in several locations.
2. Multiple receptacles are aged and have cover plates that are cracked or broken. As receptacles age, the strength of the prongs decreases, thus increasing the likelihood of plugs partially coming unplugged. This situation can lead to electrical arcing and subsequent fires.
3. Not all devices meet current code requirements for ADA.
4. Multiple open junction boxes where devices were previously located were observed.
5. Some branch circuit conduit was rusted/physically degraded due to water damage. This can lead to inadvertent exposure to live wires.
6. In some locations required by code, GFCI receptacles are not installed.

Recommendations for Future Larger Renovation Project:

1. It is recommended to replace all branch circuits/devices with new devices as a part of a potential renovation project.
2. It recommended that all conduit and conductors be replaced and properly supported.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. Conductors serving electrical equipment/devices located in the southern part of the building that are fed from branch panels in the portion of the building that is remain shall be removed back to source and shall conduit to be abandoned in place.
2. Electrical equipment/devices and branch circuitry in portion of building being salvaged may remain in place.

ELECTRICAL

Fire Alarm System

Deficiencies:

1. The existing DMP Fire Alarm System and branch devices are 25+ years old and are nearing the end of their serviceable life.
2. Multiple fire alarm devices are not secured properly to the wall.
3. There were many locations where fire alarm notification coverage Per NFPA 72 and ADA was not sufficient.
4. Main fire alarm control panel and fire alarm supply panel do not have smoke detectors installed within the required distance for proper protection.

Recommendations for Future Larger Renovation Project:

1. It is recommended that the existing fire alarm system and components be replaced with a new digital, addressable horn-based fire alarm control system. The system shall be designed in accordance with all current codes and standards and shall also satisfy all current accessibility guidelines.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. The existing main fire alarm control panel currently located in the southern portion of the building will be required to be relocated to an accessible location within the salvaged portion of building.

STRUCTURAL

Original Structure (South Building)

The following information was obtained through a facility walkthrough on January 3rd, 2024. The details observed below were gathered from surface inspection only in areas that were readily accessible. Information available from existing drawings was not analyzed nor confirmed for structural capacity or condition.

Original construction is a traditional wooden post and beam framing system bearing on a stone wall foundation. No original structural drawings were provided.

Deficiencies:

1. Visible signs of water damage were found on multiple floors of the structure causing damage to wood subfloor, beams and columns.
2. Visible signs of warping and deflection were noted in wooden structural elements such as beams, joists, and wood subfloor throughout the building which would compromise the structural load capacity. Multiple wood girder beams had been reinforced with supplementary steel channels indicating earlier structural issues.
3. Indications of possible water damage in basement including to wood framing and stone wall foundation.
4. Mortar between stones in foundation wall was found to be chipped and inconsistent in locations.

Recommendations for Future Larger Renovation Project:

1. In its current condition and due to the age and degradation of the building components, the original wood structure is not suitable for inclusion in a future larger renovation.
2. Additional repairs or upgrades to bring the existing structure to a usable condition would be both difficult, costly, and unlikely to achieve a satisfactory result.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. No recommendations for stabilization as the original building structure is not recommended for future use.

1971 Addition (North Building)

The following information was obtained through a facility walkthrough on January 3rd, 2024. The details observed below were gathered from surface inspection only in areas that were readily accessible. Information available from existing drawings was not analyzed nor confirmed for structural capacity or condition.

The 1971 addition is a multistory steel frame building. Roof construction is steel deck over steel joists and wide flange steel beam girders. Floor construction is cast in place concrete over steel deck bearing on wide flange steel sections and the basement is reinforced cast in place concrete walls bearing on continuous shallow footings. Building columns are typically wide flange steel columns bearing on shallow pad footings. Concrete masonry units were used to provide continuous walls for both stair and elevator shafts.

Deficiencies:

1. In general, the structure of the 1971 addition appeared to be in good working condition with no major deficiencies noted.
2. In areas where the roof construction was visible from below there was no observable degradation to the building structure due to rust or deflection. There was indication of some water intrusion from the roof on the 4th floor but the structural beams, joists, and metal deck making up the roof framing appeared in good working order.
3. In areas where the framed floor construction was visible from below there was no observable degradation to the building structure due to rust or deflection. Areas with no floor coverings showed the cast in place concrete of the framed floor to have minimal cracking. Nothing observable in the floor structure was indicative of excess deflection or movement in the building structure.
4. Concrete masonry shaft walls at the stair wells and elevator shafts appeared to be in good condition with very minimal to no cracking or observable movement in the wall components.
5. The reinforced concrete walls in the basement showed no issues with cracking, moving or settlement. The concrete slab on grade at the basement level showed little to no settlement or cracking.

Recommendations for Future Larger Renovation Project:

1. Based on this limited walk-through the current condition of the existing structure seems that it would be suitable for use in a larger renovation project.
2. A further more intensive study would be required to verify the capacity of the existing structure and verify that its current structural load capacities meet existing codes and if those capacities will fit with the new building program.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. If the original wood structure is to be demolished, the one-story steel framed loading dock structure will need to be removed as it bears directly on the original building exterior wall.
2. Once the original wood structure is removed the south face of the 1971 addition will need to be enclosed with a new exterior wall. This includes excavation and potential shoring of the existing cast-in-place basement wall. The addition of a new basement wall capable of soil retention and preventing water infiltration to the basement would be required as well as a multistory exterior wall capable of extending from ground level to the roof to enclose the south side of the building.
3. The building would be required to be temperature controlled during the time of design and construction of a larger renovation to ensure that large temperature swings do not cause harm to the existing building structure.
4. During the time of design and construction of a larger renovation the existing structure would need to be periodically monitored to ensure that any unforeseen issues that may affect the existing structure are dealt with in a timely manner as to not degrade the existing structural capacity.

Original Structure (South Building)

The following information was obtained through an in-depth facility walk-through on January 3, 2024, as well as conversations with building owners and maintainers, and review of available existing building drawings. Small components of the existing systems may vary slightly from the explanations in this assessment. Also, it is possible that additional system deficiencies will be discovered during project construction that were not observed during the walkthrough due to unforeseen conditions, components being inaccessible, or other limiting variables.

Deficiencies:

1. Based on the known year of construction and type of materials observed within the spaces, it is likely the building contains ACM's (Asbestos-Containing Materials).
2. The existing built-up roofing system is beyond its useable life. Building maintenance staff report the age of the systems to be over 20-30 years old. Ponding, plant growth, and deterioration of the roof membrane and flashing components are visible from the exterior. Extensive active leaks and water damage to interior materials are visible from the interior, throughout the third and fourth floors.
3. Deteriorating drywall was observed in multiple locations installed as part of a furred wall assembly on the inside of exterior walls.
4. Peeling paint was observed on multiple surfaces throughout the building.
5. Water-stained and molding ceiling tiles were observed throughout the building.
6. While many of the windows appear to be double-glazed, they likely do not meet current performance criteria required by ASHRAE and the International Energy Conservation Code (IECC 2021), based on the assumed year of construction.
7. Original exterior walls appear to be brick masonry and were clad with 2-inch insulated metal panels at the time the 1971 addition was constructed. The thermal resistance (R-value) of this wall system likely does not meet current values required by ASHRAE and the International Energy Conservation Code (IECC 2021). These wall systems may remain but will produce higher energy bills over the life-cycle of the building if replacements or upgrades to the wall systems are not made.
8. The south stairwell construction and railings do not comply with adopted building code (IBC 2018).
9. Restrooms are not ADA compliant.
10. The existing column bays are approximately 17 feet wide by 30 feet deep. A new build would likely have a 30-foot by 30-foot minimum bay. The existing column bay is potentially a limiting factor for the new program. While it could be worked around, it may produce a less efficient plan layout, requiring a greater overall square footage. Further study of how the new program could fit into the existing footprint would be required.
11. The current program for the new facility is approximately 50,000 square feet (approximately 40,000 SF without the adult education component). Either building on its own (the original south building at 36,125 sf or the 1971 addition at 38,500 sf) would likely not be sufficient to house the entire facility as currently planned without cutting the program or creating a small addition to the existing building.

Recommendations for Future Larger Renovation Project:

1. Obtain a full lead and asbestos survey prior to any further renovation activities.
2. Due to the extent of water intrusion visible on exposed surfaces in this building, it is recommended that all furred walls be removed and any visible mold be tested and abated as a part of a larger renovation project.
3. Seal interior side of exposed exterior masonry walls and apply insulation and furring to inside of walls.
4. Replace all windows with thermally-broken systems and insulated low-e glazing units.
5. A renovation of this building would require a full removal of all interior finishes and systems, including full replacement of restroom facilities and stairwells that meet current building codes.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. Obtain a full lead and asbestos survey prior to any further renovation activities.
2. Replace roofing system on any area that is to be salvaged to prevent further deterioration of building structure and interior.
3. Have a contractor repair all known wall leaks while the building is unoccupied to prevent further water infiltration.
4. If the original south structure and east loading dock are removed, the construction of a new basement wall capable of soil retention and preventing water infiltration to the basement would be required as well as a multistory exterior wall capable of extending from ground level to the roof, in order to enclose the south side of the north building. This will require excavation and potential shoring of the existing cast-in-place basement wall. New water-tight exterior walls would also need to be constructed along the east side of the north building where the existing loading dock was previously concealing interior walls.

1971 Addition (North Building)

The following information was obtained through an in-depth facility walk-through on January 3, 2024, as well as conversations with building owners and maintainers, and review of available existing building drawings. Small components of the existing systems may vary slightly from the explanations in this assessment. Also, it is possible that additional system deficiencies will be discovered during project construction that were not observed during the walkthrough due to unforeseen conditions, components being inaccessible, or other limiting variables.

Deficiencies:

1. Based on the known year of construction and type of materials observed within the spaces, it is likely the building contains ACM's (Asbestos-Containing Materials).
2. The existing built-up roofing system is beyond its useable life. Building maintenance staff report the age of the systems to be over 20-30 years old. Deterioration of the roof membrane is visible from the exterior. Metal coping and flashings are rusty. Active leaks and water damage are visible from the interior fourth floor.
3. Peeling paint was observed on multiple surfaces throughout the building.
4. Water-stained and molding ceiling tiles were observed throughout the building.
5. While many of the windows appear to be double-glazed, they likely do not meet current performance criteria required by ASHRAE and the International Energy Conservation Code (IECC 2021).
6. The exterior walls are comprised of 3.5-inch metal panels with 2-inches of insulation over metal framing or 8-inch concrete masonry block (at stairwells). Where exposed on the interior, the existing metal panel appears to be in adequate condition. Minimal dents and rust spots were observed. Where concrete masonry block is exposed on the interior at stairwells, some water infiltration is evident but the block is in good condition. The thermal resistance (R-value) of these wall systems does not meet current values required by ASHRAE and the International Energy Conservation Code (IECC 2021). These wall systems may remain but will produce higher energy bills over the life-cycle of the building if replacements or upgrades to the wall systems are not made.
7. The exterior entry soffit/canopy at the existing west building entrance is deteriorating.
8. The north and east stairwell railings do not comply with adopted building code (IBC 2018).
9. Restrooms are not ADA compliant.
10. The passenger and freight elevators are currently inoperable.
11. The existing column bays are approximately 20 feet wide by 30 feet deep. A new build would likely have a 30-foot by 30-foot minimum bay. The existing column bay is potentially a limiting factor for the new program. While it could be worked around, it may produce a less efficient plan layout, requiring a greater overall square footage. Further study of how the new program could fit into the existing footprint would be required.
12. The current program for the new facility is approximately 50,000 square feet (approximately 40,000 SF without the adult education component). Either building on its own (the original south building at 36,125 sf or the 1971 addition at 38,500 sf) would likely not be sufficient to house the entire facility as currently planned without cutting the program or creating a small addition to the existing building

Recommendations for Future Larger Renovation Project:

1. Obtain a full lead and asbestos survey prior to any further renovation activities.
2. Due to the extent of water intrusion visible on exposed surfaces in this building, it is recommended that all furred walls be removed and any visible mold be tested and abated as a part of a larger renovation project.
3. Consider re-cladding entire building or adding additional insulation on interior side of exterior walls.
4. Replace all windows with thermally-broken systems and insulated low-e glazing units.
5. Replace elevators in their entirety. Due to the age of the existing elevators, new shafts and elevator pits may be required to adequately meet the size requirements of a modern elevator hoistway. Further study is required.
6. A renovation of this building would require a full removal of all interior finishes and systems, including full replacement of restroom facilities and stairwells that meet current building codes.
7. Replace entire entry soffit and canopy with new construction.

Immediate Recommendations to Stabilize Building if Building or Portion of Building is Salvaged:

1. Obtain a full lead and asbestos survey prior to any further renovation activities.
2. Replace roofing system on any area that is to be salvaged to prevent further deterioration of building structure and interior.
3. Have a contractor repair all known wall leaks while the building is unoccupied to prevent further water infiltration.
4. If the original south structure and east loading dock are removed, the construction of a new basement wall capable of soil retention and preventing water infiltration to the basement would be required as well as a multistory exterior wall capable of extending from ground level to the roof, in order to enclose the south side of the north building. This will require excavation and potential shoring of the existing cast-in-place basement wall. New water-tight exterior walls would also need to be constructed along the east side of the north building where the existing loading dock was previously concealing interior walls.