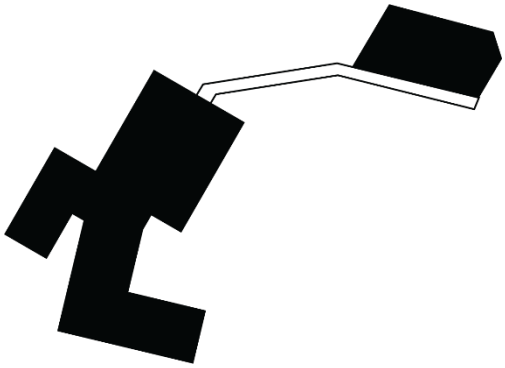
ROWE ARCHITECTS



**The City of Clearwater**

# North Ward School

Building Assessment
August 13, 2024

Final Issuance

# DESIGN TEAM

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# Contents

# Introduction

## Study Summary

The focus of this report is to assess the condition of buildings at the historic North Ward Elementary School property. This assessment includes a review of the architectural features of the buildings, with a special emphasis on their historic components. Also included are assessments of the building and site infrastructure, addressing structural, mechanical, electrical, plumbing, fire protection and civil conditions.

There are five buildings on site, some are partially connected, and there is a covered play court. Refer to the included site plan for more information (Appendix A).

The City of Clearwater purchased the property from Pinellas County Schools in 2019, and is looking to redevelop the property in a manner that adheres to the National Park Service's Secretary of the Interior's Standards for Rehabilitation.

This report finds that the buildings are generally in fair condition but are in need of significant repair to arrest further deterioration while a development plan is put in place. The historic character of the buildings remains strong – modifications have been performed over the years, but the buildings' character-defining features are largely intact or can be reinstated without great difficulty.

The mechanical, electrical, and plumbing (MEP) systems are entirely defunct at this time. They will need to be completely replaced when the time is appropriate, and the future use of the site has been designed. The fire sprinkler system appears intact. Other than basic fire protection and lighting coverage for safety, no other MEP systems are required to be maintained, pending the site's redevelopment.

This report addresses work that the City can perform immediately in order to achieve two goals: 1) stabilize the buildings, render them safe to occupy, and minimize further deterioration until development occurs in the near future and 2) make moderate but high-impact investments in the property now to facilitate opportunities for potential development partners. These immediate modifications should not jeopardize the ability of the future development to procure historic tax credits and grants.

## Project Data

| | |
|---|---|
| Name: | North Ward School |
| Location: | 900 North Fort Harrison Avenue<br>Clearwater, Florida 33756 |
| Owner(s): | City of Clearwater (current)<br>Pinellas County School District (previous) |
| Landmark Status: | National Register of Historic Places<br>North Ward School; 8PI08347<br>Added September 2021 - #100007057<br><br>City of Clearwater Local Historic Register<br>Added April 2022 – ordinance no. 9528-22 |
| Site: | 1.99 acres |
| Buildings: | Building 1 – Original Classroom Building, 1915 (Contributing)<br>9,882 GSF<br>Two stories<br><br>Building 2 – Classroom Addition, 1926 (Contributing)<br>10,026 GSF<br>Two stories with partial basement<br><br>Building 3 – Former Auto Dealership,1926 (Non-Contributing)<br>4,186 GSF<br>One story<br><br>Building 4 – Cafeteria / Kitchen Addition, 1945-51 (Contributing)<br>2,843 GSF<br>One story<br><br>Building 5 – Mechanical Building, 1995 (Non-Contributing)<br>236 GSF<br>One story<br><br>Building 6 – Restroom / Storage Building, 1995<br>(Non-Contributing)<br>530 GSF<br>One story |
| Other Structures: | Domed Structure, 1965 (Non-Contributing)<br><br>Covered Play Court, 1995 (Non-Contributing) |

# Part 1 – Developmental History

## Historical Background and Context

A comprehensive summary of the property's history and contextual background can be found in the National Register of Historic Places (NRHP) application, as well as the City's staff report recommending the property for local historic designation. These documents are included with this report as appendices.

## Chronology of Development and Use

Building 1 was originally built in 1915 by Pinellas County School as an elementary classroom building (*Figure 1*). This educational use was continued and expanded with the addition of Building 2 in 1926 (*Figure 2*). Both buildings are brick masonry construction with load-bearing exterior walls and wood-framed roof structure. The interior finishes were simple but high quality – typical of educational design and construction in this area during that period. Relatively minor modifications have been made over the years, including replacement of the roof, doors and windows, but the buildings have maintained a high degree of historical integrity. This can partially be attributed to the continued educational use of the spaces.

When Building 2 was originally built, it connected to Building 1 with a one-story wing that housed the original kitchen and cafeteria. Building 4 (*Figure 3*) was added between 1945 and 1951, replacing the original kitchen and cafeteria with newer, larger ones. The design and construction of Building 4 differs from Buildings 1 and 2 – low slope, built-up roofs, concrete block walls and exterior cement plaster (stucco) finish. Adjacent to Building 4 is a small metal dome used for storage.

Building 3, on the northeast corner of the block, was built in 1926 as an automotive dealership (*Figure 4*). This property was purchased by Pinellas County Schools in 1956 and renovated to house classrooms and a library. The exterior walls are load-bearing clay tile with a rustic cement plaster finish. The roof framing is wood, low-slope, one-story, with built-up roofing and a small parapet. During the renovation in 1956, apparent structure modifications were made as evidenced by the presence of concrete block columns.

Building 5 is a small mechanical building at the northwest corner of the property, built in 1995. It is painted concrete block with an asphalt shingle roof.

Building 6 is a small utilitarian painted concrete block building with a built-up roof adjacent to Building 3. Its construction date is unknown but assumed to be later than when Building 3 was purchased by the School District in 1956.

Pinellas County Schools operated North Ward School until 2009, when it shut down the school due to budgetary constraints. The City of Clearwater bought the unoccupied property in 2019. Since then, the property has remained vacant while City explores ways to redevelop the property as an adaptive reuse project.

*Figure 1 – Building 1*

*Figure 2 – Building 2*

*Figure 3 – Building 4*

*Figure 4 – Building 3*

# Part 2 – Physical Description and Conditions Assessment

## Civil and Site Analysis

### Site

The existing site is located at 900 N. Fort Harrison Avenue with a Parcel No. of 09-29-15-32184-001-0010. The property is in the Downtown Zoning District with a Land Use of Central Business District. Prior to it being purchased by the City the facility was operated as an elementary school for the Pinellas County School District until 2009. The site is made up of an older plat J.A. Gorra's Subdivision along with adjacent parcels within the surrounding rights of way.

The property is bordered by N Fort Harrison Avenue to the east, Cedar Street to the north, Nicholson Street to the south, and Osceola Avenue to the west.

The site consists of four (4) structures, an outbuilding, sidewalks, covered walkways, parking and other open areas for outdoor recreation. The facility includes approximately 800 linear feet of chain link fence around the property with several pedestrian and vehicular gates.

Parking areas consisted of both concrete and asphalt. The condition of each parking area would be considered poor with several cracking segments on the concrete and some slabs with significant holes. The asphalt parking areas need to be milled and resurfaced with consideration for full pavement section replacement.

Driveway connections to the right of way are all made of concrete and apron style in approach. Some of the sidewalk in the right of way ties directly into these aprons however they do not appear to accommodate current ADA requirements. Any areas to be modified should be brought up to current standard and broken or cracking slabs replaced.

### Topography

The site has a substantial grade differential generally falling from a high point near the northeast corner of the property to the southwest corner of the property. The northern parking area of the property grades to Cedar Street. The remainder of the property grades to the south to Nicholson Street with steps to achieve the difference on pedestrian pathways. The western portion of the property grades to the south and west with a low point at the intersection of Nicholson Street and Osceola Avenue. Several retaining walls help achieve the grade changes west of the structures.

Future development considerations will be required to contend with the topography and accessibility challenges to access the facilities and utilize any existing parking that may remain.

### Stormwater Management

The existing property lacks identifiable drainage infrastructure on site. There is a single inlet in the north parking area adjacent to the Cedar Street right of way but a connection elsewhere is unclear. A smaller inlet exists near the sidewalk in the center of the property that may connect elsewhere but was not able to be verified. Stormwater detention or retention areas are not apparent on the existing property. The site appears to pitch into

the adjacent right of way for stormwater capture purposes. Roof drains discharge onto the nearby pavement or open space which also find their way offsite. A cistern was discovered on the property that may have been converted to a fuel storage facility.

Offsite stormwater collects at the low points near the intersection of Osceola Avenue and Nicholson Street and discharges into a ditch that continues south away from the property.

Any improvements to the property should incorporate retention or detention considerations to achieve water quality and applicable attenuation criteria prior to any discharge and bolster the existing drainage infrastructure to capture runoff that is largely uncontrolled in its current condition. Exfiltration should be a consideration due to a low water table and high permeability of the existing soils. Depending on its condition, the cistern may be reused or, if environmentally impacted, should be appropriately removed.

## FEMA Flood Zone

The existing property lies entirely within Zone X per the Flood Insurance Rate Map Community Panel Number 12103C0106J dated August 24th, 2021.

Improvements to the property are not anticipated to impact that existing flood plain designation and should remain in a Zone X designation.

It should be noted that historic buildings are exempt from FEMA requirements.

## Water

Potable water does serve the existing property from the City of Clearwater Public Utilities. Meter boxes and backflows connect from both Fort Harrison Avenue and Osceola Avenue to the property. A water main appears to exist under the eastern sidewalk along Osceola Avenue as evidenced by the pavement markings. However, the size was not able to be verified. New meters should be sized for any proposed modification or new use on the site.

## Fire

A double detector check valve feeds the property in the northwest corner of the site from Osceola Avenue. It is unclear which structure that fire line serves on the property or if it covers each structure individually. This should be further investigated.

An existing fire hydrant exists at the southwest corner of the property at the intersection of Osceola Avenue and Nicholson Street. A second nearby fire hydrant is across from the site at the northeast corner of Fort Harrison Avenue and Cedar Street. There are no apparent hydrants on the property.

Fire service and appropriate hydrant coverage will need to be considered for any improvements to the property.

## Wastewater

Public gravity sewer facilities are apparent in Osceola Street along the western property line in the center of the street. It is assumed these mains are 8” in size or greater and can

continue to serve the property in a future condition. New connections may be required if modifications are proposed.

## Gas

A gas meter appears to serve the existing southern building off of Nicholson Street. It was not clear if any other structures were also served by gas.

## Power

Duke Energy provides the power supply in this area. Existing meters for light poles and adjacent infrastructure are immediately adjacent and can disconnect if no longer in service to the existing buildings.

## Civil Permits

Existing civil permits were not readily available for review. It's likely that civil permits were not required when this site was originally developed and the later improvements to the site did not trip the lesser permitting thresholds of the time.

The City of Clearwater Public Works and Utilities Department will review the proposed improvements for compliance with code criteria and current standards.

If utility main modifications or extensions are required, the Florida Department of Environmental Protection or their designee will review the water or sanitary sewer improvements. Due to the presence and proximity of existing mains it does not appear to be necessary however.

The Southwest Florida Water Management District will review for improved areas with over 2 acres of impervious or larger infrastructure changes. It may be possible to perform only a 10-2 FDEP Self-Certification if the improvement areas are limited in scope.

The City of Clearwater Fire and Rescue will review the improvements for compliance with fire connectivity requirements and hydrant coverage.

# Architectural Analysis

## Building 1

*Roof*

The existing roofing type is fiberglass asphalt shingle, likely installed in 1998 based on review of documentation provided by the City. An asphalt shingle of this age has typically surpassed its useful life.

Aerial images of the roof indicate where roof repairs have occurred, based on the mismatched color shingles (*Figure 5*). Several rooms inside the building show evidence of active roof leaks (*Figure 6*). Given the amount of apparent water intrusion, it is likely that significant portions of the sheathing will need to be replaced, and perhaps some structural framing members as well. The extent of required repair cannot be assessed until the roofing has been removed.

The gutters and downspouts are a mix of non-historic aluminum components (*Figure 7*). Some of the gutters have partially detached from the roof fascia. There are still some historic (though non-original) cast iron downspouts at or near grade.

The roof overhang includes exposed 2x6 rafter tails spaced at 24 inches on center. The eave soffit material is tongue & groove wood beadboard. It is evident that repairs have been made over the years with dissimilar components *(Figure 8)* indicating that the original beadboard has suffered from water and/or termite damage. Similarly, repairs have been made to a few of the rafter tails, new members sistered to an existing member for structural support (*Figure 8*). The fascia and frieze boards sag and have partially detached in areas.


*Figure 5 – Aerial of Building 1*

*Figure 6 – Building 1 water damage*

*Figure 7 – Building 1 gutters and downspouts*

*Figure 8 – Building 1 roof eave repairs*

*Masonry*

The exterior wall construction of the building is multi-wythe brick masonry approximately 14 inches thick. The brick has been laid in a common bond pattern (full headers every sixth course) and has a naturally textured face with a deep red color, varying in shade from medium red to purple to dark gray. The mortar is rose, or red-colored (*Figure 9*). The mortar joint is almost flush with the surface of the brick. The building's brick features include projecting soldier course window headers and rowlock sills, as well as a two-tier string course immediately below the second-floor windowsills, consisting of a soldier and rowlock course. There are two recessed brick niches that mimic the size of the adjacent windows (*Figure 10*). These features appear to be original and are meant to animate this façade while protecting the exterior egress stair from the theater.

The condition of the brick is fair to good; other than structural work needed to repair step cracking (*Figure 11*), which is addressed elsewhere in this report, the brick itself shows little sign of deterioration. The mortar is also in fair to good condition, and requires only minor, targeted repointing.

The front and side entry landings have been painted – both the brick wall construction as well as the cast stone coping caps (*Figure 12*). There is spray paint graffiti in some areas around the building, which has been partially cleaned and/or painted over.

On the west side of the building, in what appears to be an historic masonry opening into the basement, there is non-original masonry infill, as evidenced by the non-matching color of the brick and mortar (*Figure 13*). Similarly, there are miscellaneous masonry repairs that have been carried out previously (*Figure 11*).

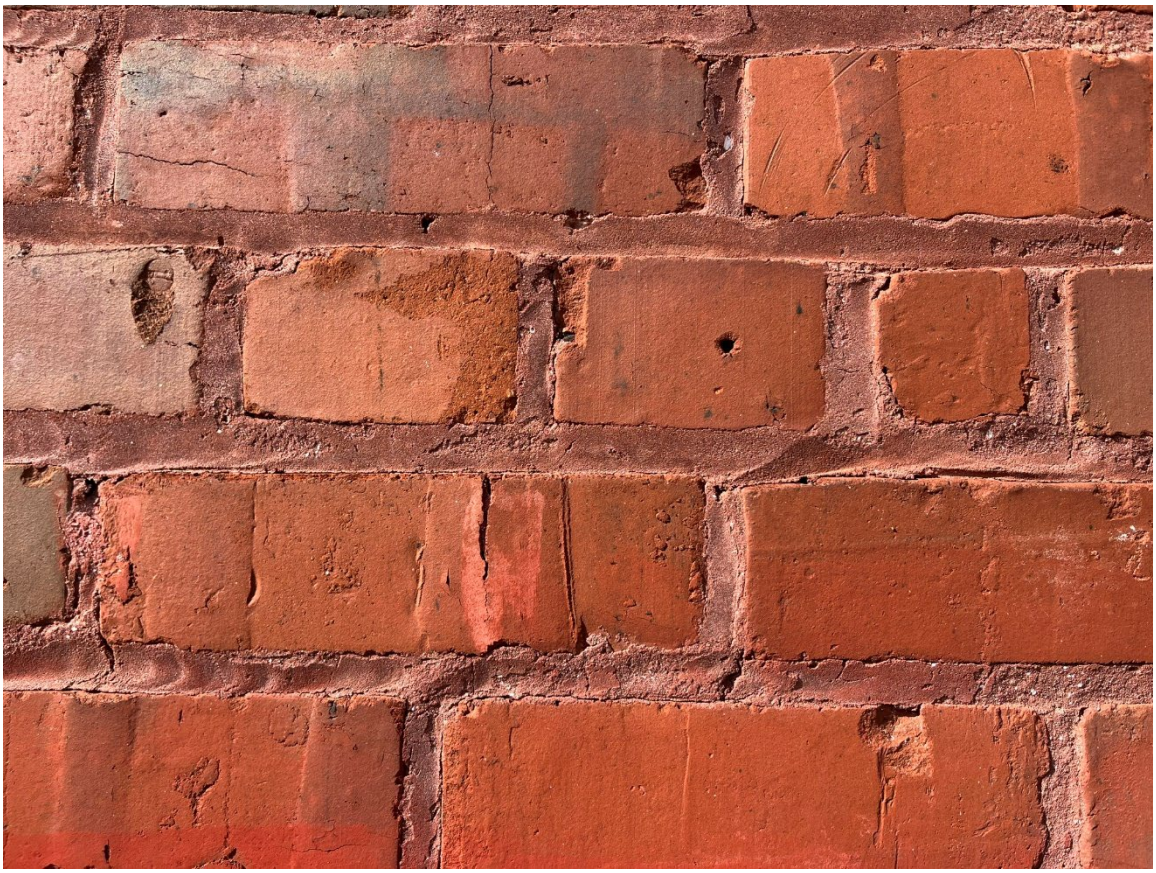

*Figure 9 – Building 1 brick*

*Figure 10 – Building 1 north façade*

*Figure 11 – Building 1 step cracking*


*Figure 12 – Building 1 entry stairs*

*Figure 13 – Building 1 basement entry*

*Windows & Doors*

The majority of the existing windows are non-historic, single-hung aluminum windows with applied, simulated nine-over-nine muntin grid (*Figure 1*). The glazing is non-insulated and appears to be tempered. The windows are designed to be operable but the few that were tested could not be opened, likely because of warping or racking. There is no visible indication that the windows are leaking now or have ever leaked.

Several windows on the north façade, adjacent to the exterior egress stair, are hollow metal with wired glass, intended to provide fire protection when they were installed (*Figure 14*). Other windows are blanked off with solid panels to accommodate exterior mounted mechanical units (*Figure 15*) – refer to the mechanical analysis elsewhere in this report for more information. The exterior doors are non-historic hollow metal doors, with aluminum transom windows. The wood sidelights at the front entry doors remain intact, except the glazing has been replaced with tempered glass (*Figure 16*).

Based on historic photographs, the original windows appear to be wood, double-hung and operable. It is interesting to note historic photographs show that the sashes and frames are finished with contrasting colors (Appendix I). The front entry had a canopy over the landing supported by hangers off the building face and flashed in the brick. All three exterior doors were wood, with a half-glass light and two panels below. There was a wood divided lite fixed glazed transom above each door.

The masonry above each window opening is supported by back-to-back steel angle lintels. The paint on the lintels is peeling and the steel exhibits rust. More concerning is the uneven and wide gap between the lintels above some of the windows (*Figure 17*). This gap suggests that the masonry wall has settled, and this shift has pulled apart the lintels.

This movement also results in step cracking at the corner of the masonry opening (*Figure 11*). This type of settlement is common in buildings of this age but needs to be addressed. Refer to the structural assessment in this report.

The windows sills are sloped with a mortar wash. Most of the sloped washes are intact but display cracking (*Figure 18*).

The building originally had two exterior metal egress stairs – the one on the north side exited directly from the theater, the one on the south side provided egress from the second floor corridor. The stair on the north side has been replaced, likely in order to provide a stair with an intermediate landing and less steep descent. The south stair was eliminated with the addition of Building 2.

*Figure 14 – Building 1 windows at egress stair*

*Figure 15 – Building 1 window air conditioner*


*Figure 16 – Building 1 main entry door*

*Figure 17 – Building 1 window lintels*

*Figure 18 – Building 1 window sills*

*Ceilings*

The existing ceilings are a non-historic, lay-in acoustical ceiling tile system (*Figure 19),* which is suspended approximately 18 inches below the historic gypsum plaster ceiling. The historic ceiling was gypsum plaster on wood lathe, attached directly to the underside of the second floor and roof structure (*Figure 20*). The extent to which the historic plaster ceiling is still intact is unknown and cannot be fully evaluated until the dropped ceiling has been fully removed.

The existing ceiling components (light fixtures, ceiling fans, speakers, smoke detectors, etc.) are all non-historic and many are non-functioning (*Figure 19*) – refer to the electrical analysis elsewhere in this report for more information. The existing plenum space created by the contemporary dropped ceiling contains non-historic utilities, including fire sprinkler piping and loose low-voltage wiring.

As noted previously, water intrusion from the roof has damaged ceiling tiles in several locations.

Above the second-floor ceiling, fiberglass batt insulation has been laid in between the roof trusses and supported by metal mesh, or “chicken wire” (*Figure 21*).

*Figure 19 – Building 1 lay-in ceiling*

*Figure 20 – Building 1 first floor plenum*

*Figure 21 – Building 1 attic*

*Interior Walls and Openings*

The interior finish of the existing walls is primarily the original gypsum plaster on wood lathe supported by wood framing. The plaster has many layers of paint, as well as miscellaneous penetrations, dents and scratches indicative of heavy institutional use. Most, if not all, of the original wall layout remains.

The original bead board wainscoting, baseboard and shoe molding are largely intact throughout the classrooms and corridors (*Figure 22*). The bead board has areas of minor warping where the bead board has loosened its attachment to the substate behind. The original wainscot cap has been replaced in many instances with non-historic trim that appears to be a crown molding profile (*Figure 23*). Surface-mounted conduit for electrical and low voltage is pervasive.

Many of the original wood doors and operable transom windows are still intact. The classroom doors have two-over-two glass lights above two inset panels (*Figure 24*). Other doors are a five-panel design. The brass knobs and hinges remain but all other hardware is non-historic. The original glazing has been replaced with clear glass at the classrooms and textured privacy glass at some of the offices. The double doors at the theater have been replaced with narrow light hollow metal doors and exit hardware.

The historic window trim is in good condition (*Figure 25*). The windows at the stage have expanded wire mesh installed over the bottom half as fall protection.

*Figure 22 – Building 1 corridor*

*Figure 23 – Building 1 wainscot*

*Figure 24 – Building 1 classroom door*

*Figure 25 – Building 1 interior window trim*

*Flooring*

The original 3 ¼" plank pine flooring is still intact in many rooms. In one classroom on the first floor, there is significant discoloration, apparently due to misapplication of a finish or clear topcoat (*Figure 26*). In another classroom, the flooring has been sanded down, in an apparent attempt to refinish it (*Figure 27*). In general, the wood flooring appears to be in fair condition. There is some sponginess and creaking when walked upon but no areas of significant disrepair.

The raised stage in the auditorium remains and is in fair condition (*Figure 28*). The stage flooring has a recessed trough for stage lighting (*Figure 29*).

Carpet over plywood sheathing has been added to several rooms (*Figure 30*). Quarry tile has been added to the restrooms (*Figure 31*). Vinyl tile has been added to one office (*Figure 32*). It's not clear if the original wood flooring is still intact under these non-historic floorings.

*Figure 26 – Building 1 wood flooring*

*Figure 27 – Building 1 wood flooring*

*Figure 28 – Building 1 auditorium*

*Figure 29 – Building 1 stage light trough*

*Figure 30 – Building 1 carpet*

*Figure 31 – Building 1 Restroom*

*Figure 32 – Building 1 Office*

*Stair*

A central, grand stair connects the first and second floors (*Figure 33*). Much of the wood ornamental detailing is still intact (*Figure 34*) but the treads and risers have been covered with rubber. On the bottom run of stairs, the balustrade and newel posts have not been modified except a pipe rail has been installed above them to act as a handrail. At the landing and top runs, the balustrade appears to have been removed on one side.

Most significantly, a partition and two sets of double doors have been added on the second floor (*Figure 35, Figure 36*), presumed as a means to provide fire separation between the two floors. The doors have hold-open devices on the floor.

The treads and risers generally appear to be code compliant. The balustrade is too low to act as a guard required by code. The added partition and doors at the top of the stairs are a gross modification to one of the building's character-defining features. Whether or not the current building code requires such a separation depends on the use of the building. A full analysis of the existing building, its proposed use, and the relevant codes will need to be conducted.

*Figure 33 – Building 1 stair*

*Figure 34 – Building 1 stair detail*

*Figure 35 – Building 1 stair top landing*

*Figure 36 – Building 1 stair top landing*

## Building 2

*Roof*

Like Building 1, the existing roofing type is fiberglass asphalt shingle, likely installed at the same time in 1998 based on review of documentation provided by the City. An asphalt shingle of this age has typically surpassed its useful life.

The gutters and downspouts are a mix of non-historic aluminum components (*Figure 37*). There are still some historic cast iron downspouts at or near grade.

The roof overhang includes exposed 4x6 rafter tails spaced at approximately 30 inches on center. The eave soffit material is some type of tongue & groove wood board (*Figure 38*). The rafter tails and soffit appear to be in better shape than at Building 1, perhaps because of the thicker member sizing.

The western-most classroom on the first floor was originally the kindergarten classroom. As such, this classroom had dedicated restrooms attached to it in the form of a one-story space (*Figure 39*). This roof is low-slope with built-up roofing. The original construction drawings show a cornice with decorative rafter tails exposed. A much simpler construction detail exists today – it's unknown if the original detail was ever executed.

*Figure 37 – Building 2 downspout*

*Figure 38 – Building 2 roof eave and window*

*Figure 39 – Building 2 north façade*

*Masonry*

The exterior wall construction of the building is multi-wythe brick masonry approximately 16 inches thick. Very similar to Building 1, the brick is a deep red color, varying in shade from medium red to purple to dark gray. It has been laid in a common bond pattern (Flemish every sixth course). Unlike Building 1, the brick has a smooth face and the mortar is a lighter shade of rose, providing more visual contrast (*Figure 40*, *Figure 41*). The mortar joint is almost flush with the surface of the brick. The building's brick features include flush soldier course window headers and rowlock sills, as well as a two-tier string course immediately below the second-floor windowsills, consisting of a soldier and rowlock course.

The arched windows have ornamental brick banding above them (*Figure 41*). Above the southern exterior door, there is a decorative basketweave panel (*Figure 42*). As grade falls away on the south and west face of the building, a projecting water table course and concrete basement wall become visible. A prominent chimney anchors the southwest corner of the building (*Figure 43*).

The condition of the brick is fair to good and shows little sign of deterioration. The mortar is also in fair to good condition, and requires only minor, targeted repointing.

The south entry landing has been painted – both the brick wall construction as well as the cast stone coping caps. There is spray paint graffiti in some areas around the building, which has been partially cleaned and/or painted over.

*Figure 40 – Building 2 brick*

*Figure 41 – Building 2 window detail*

*Figure 42 – Building 2 brick detail*

*Figure 43 – Building 2 chimney*

*Windows and Doors*

All the existing windows are non-historic, aluminum windows with applied, simulated muntin grid. The light configuration varies significantly. The glazing is non-insulated and appears to be tempered. Some of the windows are designed to be operable as single-hung or casement types.

The second-floor corridor windows above the exterior egress stair have wire glass (*Figure 44*), presumably to provide fire protection to the adjacent egress stair. Similarly, four of the arched windows on the first floor have been removed and infilled, presumably for the same reason.

Like at Building 1, some windows are blanked off with solid panels to accommodate exterior mounted mechanical units (*Figure 45*). At least one of the windows has broken glass from vandalization. The exterior doors and side lights are non-historic hollow metal.

Based on the original construction drawings, most of the original wood windows had either a three-over-three-over-three light configuration or were a pair of two-over-two-over-two windows ganged together. The arched openings had a fan light above a pair of windows that resembled half-glass doors.

The second-floor windows have a wood panel above them (*Figure 38*), extending to the roof framing, negating the need for a masonry lintel. Non-arched windows elsewhere on the first floor have steel lintels but, unlike Building 1, step cracking is not apparent.

At an unknown date, a connecting corridor was added on the second floor from Building 1 to Building 2 (*Figure 46*). Its steel structure hovers above the roof below, and the walls are finished with smooth plastic panels. Its roof flashes into the brick walls they abut.

*Figure 44 – Building 2 exterior egress stair*

*Figure 45 – Building 2 south façade*

*Figure 46 – Second floor connector between Buildings 1 and 2*

*Ceilings*

As in Building 1, the existing ceilings are a non-historic, lay-in acoustical ceiling tile system (*Figure 47*), which is suspended below the historic ceiling. The historic ceiling was gypsum plaster on wood lathe, attached directly to the underside of the second floor and roof structure. The extent to which the historic plaster ceiling is still intact is unknown and cannot be fully evaluated until the dropped ceiling has been fully removed.

It is assumed, but not confirmed, that the attic is insulated in a manner similar to Building 1 with acoustical batt supported by chicken wire.

*Interior Walls and Openings*

The interior finish of the existing walls is primarily the original gypsum plaster on wood lathe supported by wood framing. The plaster has many layers of paint, as well as miscellaneous penetrations, dents and scratches indicative of heavy institutional use. Most, if not all, of the original wall layout remains.

Unlike Building 1, the classroom walls do not have bead board wainscoting, although the original wood baseboard and shoe molding are largely intact (*Figure 48*). The classrooms retain much of their original built-in cabinetry (*Figure 49*), including brass hooks and pivoting hardware that allows the cabinet doors to recess (*Figure 50*). The closets have stained bead board and wood backing and shelving.

Many of the original wood doors and operable transom windows are still intact. Similar to the exterior windows, their design differs from Building 1 (*Figure 51*). The doors to the back-of-house spaces do not have lights. The historic window trim is in good condition.

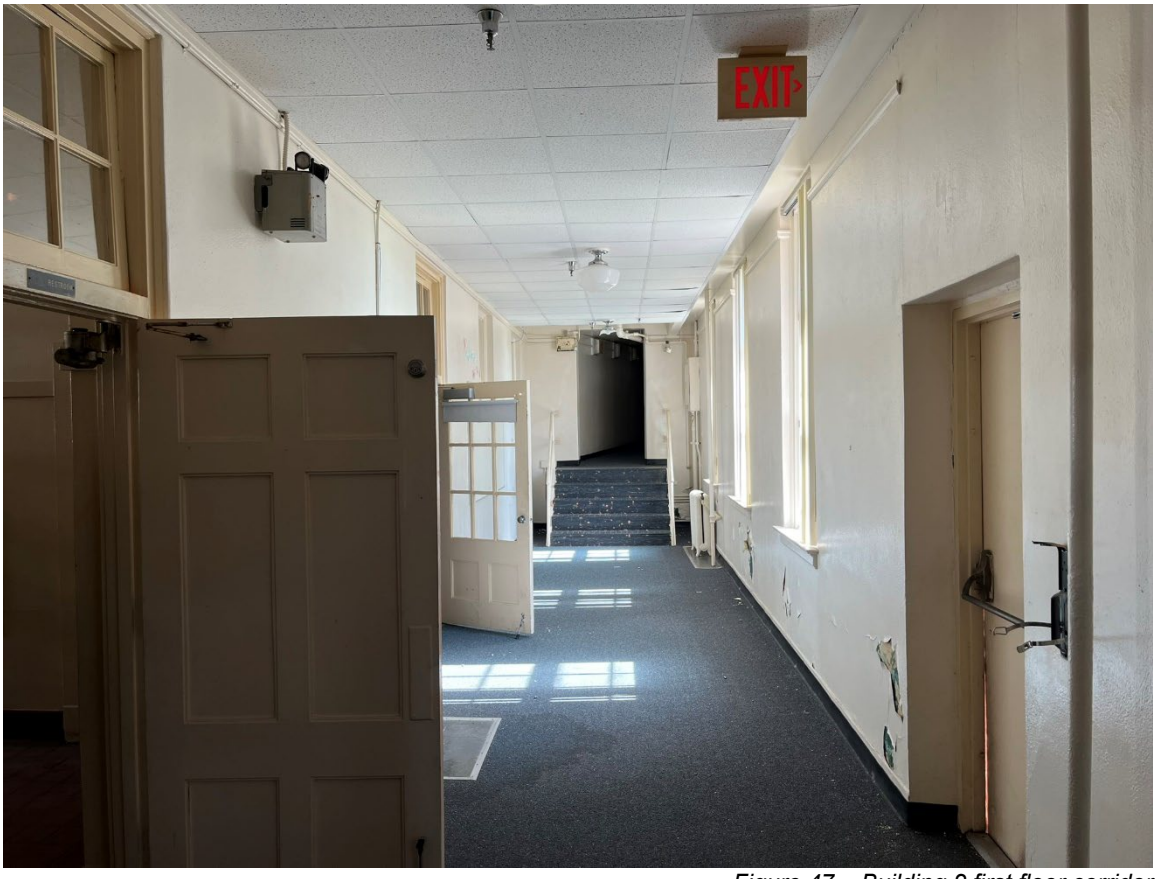


*Figure 47 – Building 2 first floor corridor*

*Figure 48 – Building 2 classroom*

*Figure 49 – Building 2 built-in cabinetry*

*Figure 50 – Building 2 cabinetry hardware*

*Figure 51 – Building 2 second floor corridor*

*Figure 52 – Building 2 corridor base*

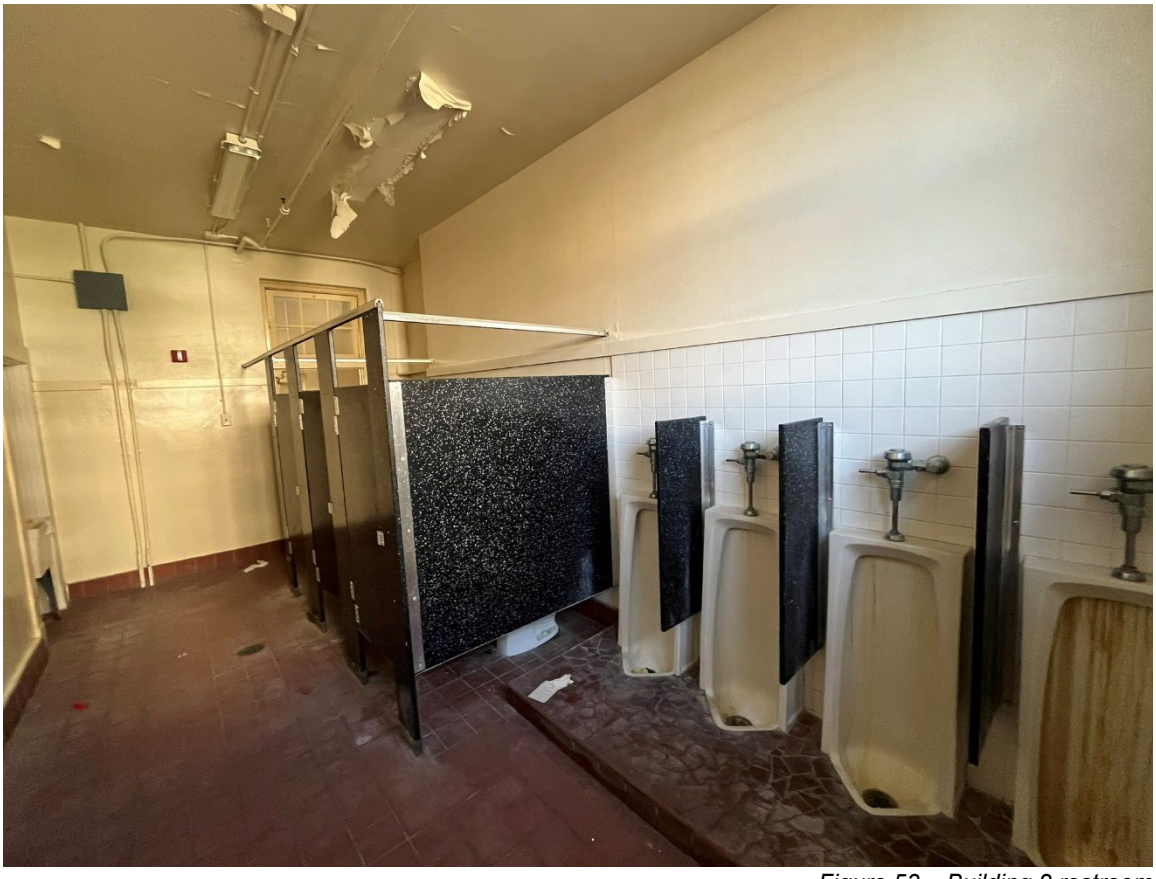

*Figure 53 – Building 2 restroom*

*Flooring*

The original 3 ¼" plank pine flooring is still intact in the classrooms. In general, the wood flooring appears to be in fair condition. There is some sponginess and creaking when walked upon but no areas of significant disrepair. The corridors originally had a 'cement' finish according to the original construction drawings with a curved cove base (*Figure 52*). Carpet has since been installed in the corridors (*Figure 47*). The restrooms have quarry tile (*Figure 53*).

*Stair*

The only internal stair in Building 2 (*Figure 54*) is simpler than the Building 1 stair, lacking any ornamental detailing and designed with a conventional switchback layout. The half-height side wall is smooth plaster without a handrail. The treads and risers have been covered with rubber.

For reasons similar to Building 1, a partition and door have been added on the second floor, closing off the stairs from the corridor. No corresponding partition was added on the first floor. Relatedly, the second-floor classroom at the top of the stairs has a high window that opens into the stair enclosure. Whether or not the current building code requires a fire-rated separation depends on the use of the building. A full analysis of the existing building, its proposed use, and the relevant codes will need to be conducted. If a fire-rated enclosure is required, the classroom window will need to be eliminated. Even though the treads and risers generally appear to be code compliant, there are several code violations, including handrail configuration and an overhead obstruction on the lowest run of stairs (*Figure 55*).


*Figure 54 – Building 2 stair*

*Figure 55 – Building 2 stair*

## Building 3

As previously noted, Building 3 (*Figure 56*) is the one-story building on the northeast corner of the lot that was originally an automotive dealership before the District bought the building and converted it into classrooms and a library.

The exterior finish is cement plaster (stucco) with a rusticated textured finish. Metal coping has been added on top of the parapet. There are simple plaster details on the exterior, like an arched parapet, and brick accent pilasters. One of the most notable design features of the building is the chamfered corner of its parallelogram-like footprint. What is presumed to have been large storefront openings has been infilled along North Fort Harrison Avenue. The windows are aluminum replacements, partially infilled with mechanical units.

However the interior was originally laid out, those partitions are now gone, and the space is subdivided into instructional rooms. The 1950's era finishes are consistent with the type and quality seen in the other buildings on property (*Figure 57*), including dropped ceiling tile, carpet, vinyl tile flooring and rubber base. Few, in any, historic features remain that are noteworthy.

There is significant cracking in the exterior walls, visible from the inside, indicating settlement issues. Additionally, the interior paint coating is delaminating throughout the building, likely because of moisture intrusion. One area of particular concern is at the northeast corner of building where serious degradation is evident (*Figure 58*).

*Figure 56 – Building 3*


*Figure 57 – Building 3 interior*

*Figure 58 – Building 3 moisture damage*

## Building 4

Building 4 is the mid-century replacement of the kitchen and cafeteria. This building is very different from the earlier construction onsite – exterior plaster on concrete block, low-slope roofs, use of wood columns instead of load-bearing walls, and more modest interior finishes and detailing (*Figure 59*). The ceiling is a non-original dropped tile and grid system; the windows are replacement aluminum; the flooring is vinyl tile in the cafeteria and quarry tile in the kitchen. The doors are hollow metal – there is no documentation on the original design. Glass block niches are in the partition separating the cafeteria from the kitchen.

The roofing is a rolled, bituminous product – there is no evidence of active leaking. Given the significant grade change on that side of the site, the building is elevated above a crawlspace. On the backside of the kitchen, there is an exterior stair (*Figure 60)*.

After moving through a corridor and by adjacent office space, the cafeteria slab is set down approximately six inches (*Figure 61*). The kitchen slab is further recessed, approximately three feet (*Figure 62*).

There are several significant cracks in the exterior wall, suggestive of major settlement issues. Unlike Buildings 1 and 2, there is evidence of extensive termite activity in the cafeteria (*Figure 63*). Additionally, the interior paint has delaminated from the walls in some areas, likely because of moisture intrusion.

*Figure 59 – Building 4 Cafeteria*

*Figure 60 – Building 4 exterior*


*Figure 61 – Building 4 Cafeteria*

*Figure 62 – Building 4 Kitchen*

*Figure 63 – Building 4 termite activity*

## Building 5

Building 5 is a small mechanical building at the northwest corner of the property (*Figure 64*). It is painted concrete block construction with a simple gable asphalt shingle roof. Given its age and utilitarian use, the building appears to be in fair shape.

When the building is removed for future development, the utilities and systems infrastructure within it will need to be housed elsewhere.

## Building 6

Building 6 is a low, concrete block building immediately to the south of Building 3 and connected via an open walkway and aluminum canopy (*Figure 65*). The building houses restrooms and a storage room. The building construction is rudimentary, and given its deteriorated condition, not a candidate for restoration.

*Figure 64 – Building 5*

*Figure 65 – Building 6*

## Covered Play Court

A covered play court (*Figure 66*) sits on the north side of the property. Its design and construction are conventional for District standards: pre-engineered metal frames, metal roof deck, aluminum gutters and downspouts, and concrete slab underneath with painted striping.

The metal structure is significantly deteriorated with rust due to failure of the coating system and lack of maintenance. The concrete slab has major cracking.

## Domed Structure

There is a domed, igloo-like structure on the northwest corner of Building 4 (*Figure 67*). It is approximately eight feet across and ten feet tall with a faceted metal skin. It sits on a concrete pad. It is presumed to have served as a prefabricated storage unit for the kitchen.

*Figure 66 – Covered Play Court*

*Figure 67 – Domed Structure*

## Structural Analysis

### Buildings 1 and 2

The existing 1915 and 1926 Buildings structure consists of load bearing wood studs on both sides of the corridor. Exterior walls consist of load bearing brick masonry (*Figure 68, Figure 69*). Settlement cracks were found in the brick bearing walls. It may be necessary to selectively underpin the foundations in these areas. Additional geotechnical studies will be necessary to determine the cause of the settlement. The corridor walls consist of wood studs that are 2x6 nominal @ 16" on center (*Figure 74*). The second-floor framing is 2x14 @ 16" on center. They span from the exterior load bearing walls to the corridor walls. First floor framing consists of 2x8 @ 16" on center. The framing is supported by wood girders in the crawl space spanning 12 feet supported by brick piers that were in good condition. The wood floor framing has the capacity to support a 40psf loading for classrooms. There is a concrete floor on the first floor of the 1926 building that can be seen in the boiler room (*Figure 73*). There is a metal pan stair providing egress from an assembly room on the second floor of the 1915 building (*Figure 70*). The stairs are corroded and should be replaced.

The roof framing of the 1915 and 1926 buildings consists of 2x framing supporting a tongue and groove board roof deck. There were no hurricane straps connecting the roof framing to the supporting walls. Straps should be added. The roof sheathing should be re-nailed when the building is re-roofed.

### Building 3

The one-story building on the north side of the site consists of 8" thick masonry walls supporting 2x8 wood framing spaced 24" on center supporting 1" thick tongue and groove wood framing. There did not appear to be any hurricane strapping to tie the roof framing to the bearing walls (*Figure 72*).

### Building 4

There is a kitchen addition that is one story with a crawl space below. The floor framing consists of a one-way cast in place concrete slab supported by steel beams that appeared to be in good condition. There were wide cracks in the masonry bearing walls of this building indicating that there is an ongoing problem with movement due to settlement and overstress due to overloading.

### Building Code Analysis

Building codes were in their infancy in the 1900's. Typically only major metropolitan areas followed written building codes. For instance, the 1922 New York City Code required wind design only for buildings over 150 tall. This requirement stems from the fact that masonry was the chief construction material and was inherently stiff. By comparison, the Southern Standard Building Code (SSBC), the predecessor to the Florida Building Code was first adopted in 1945.

The 1948 Edition of SSBC specifies a wind pressure of 45 psf for southern coastal regions as the case with Tampa Florida for building 24 feet to 99 feet in height. Today, the Florida Building Code 8th Edition (2023) sets forth the requirements for wind loads used to design buildings. The building is a Risk Category II building and it is located in a 146 mile per hour wind zone within Clearwater, Florida. Risk Category II would be typical if the building is for office/classroom purposes. The Florida Building Code adopted wind speeds based on ultimate conditions. The 146-mph wind speed (assuming Risk Category II) is the ultimate wind speed which is equivalent to a service load wind speed of 113.1 miles per hour. For this site location the component and cladding service load pressures assuming a supported area of 10 square feet. The pressures should be used to analyze the hurricane connection requirements, and the nailing requirements for the roof sheathing. The pressures are as follows:

| **2023 Florida Building Code** | | |
|---|---|---|
| Zone | Location | ASD Pressure PSF |
| 1 | Roof Center | -56.4 |
| 2 | Roof Edge | -73.5 |
| 3 | Roof Corner | -45.0 |
| 4 | Wall Center | -36.5 |
| 5 | Wall Corner | -45.0 |


*Figure 68 – View of Building 1 from the north*

*Figure 69 – View of Building 1 from the west*

*Figure 70 – View of corroded metal pan stair*

*Figure 71 – View of crawl space below first floor of Building 1*

*Figure 72 – View of attic space at Building 3, north side*

*Figure 73 – View of concrete first floor in Building 2*

*Figure 74 – View of bearing at corridor wall*

## Plumbing Systems Analysis

### Overall Description

There are two gang restrooms in building 1 and two gang restrooms in building 2. There are three individual toilet rooms in building 1.

There are no ADA accessible fixtures in the building.

The existing toilets have flush valves. The age of these valves would appear to be the old 3.5 GPM per flush.

The existing urinals have flush valves. The existing urinals do not meet current code.

Existing domestic water pipe appears to be mostly copper, and the sanitary sewer piping appears to be mostly cast iron soil pipe.

All equipment and piping appear to be beyond its useful life.

*Figure 75 – Existing bank of urinals*

*Figure 76 – Existing Lavatories with self-closing faucets*

## Fire Protection Systems Analysis

### Overall Description

There is an existing wet pipe sprinkler system in Building 1, 2 and 4.

There is no wet pipe sprinkler system in Building 3.

There is a backflow preventer on the northwest corner of the site. There does not appear to be a FDC location on site.

This system does not appear to be maintained. Wet pipe sprinkler systems should be tested bi-annually if not more. If not regularly tested the water will turn into a slime / slug that will not flow as intended to extinguish fires.

*Figure 77 – Sprinkler riser in Building 1*

*Figure 78 – Main sprinkler riser in Building 2 basement*

*Figure 79 – Existing exposed fire protection pipe*

## Mechanical Systems Analysis

### Overall Description

As-built drawings were not available for our site investigation.

An asbestos report was not available.

There are 25 packaged direct expansion wall hung Packaged Terminal Air Conditioners (PTAC) and 7 window air conditioners.

Each restroom has a sidewall exhaust fan. The kitchen has a grease exhaust hood with an exhaust fan on the roof.

Steam is generated from a gas-fired cast iron boiler in the basement and distributed to cast iron steam radiators in the classrooms, corridors, offices, cafeteria, etc.

There is an existing Underground Storage Tank (UST) on the south side of the building outside of the mechanical room. It was presumed to hold fuel oil for an older boiler. It is our understanding that the owner is aware of the UST and is working to have it removed.

Energy Management System - Controls: There is no Energy Management System on site. The controls are individual programable thermostats for each AHU.

All equipment appears to be beyond its useful life.

*Figure 80 – Existing condensate return pump*

*Figure 81 – Existing packaged direct expansion wall-hung air handling unit*

*Figure 82 – Existing gas-fired steam boiler*

*Figure 83 – Existing cast iron steam radiator*

*Figure 84 – Existing bathroom exhaust fan*


*Figure 85 – Existing thermostat, 24/7 programmable*

# Electrical Low Voltage Systems Analysis

## Service and Power Distribution

The main electrical service is supplied to the building via Duke Energy from pole mounted transformers located on the west side of the site.

The overhead service is 120/240 volt, 3 phase, 4 wire, hi-leg delta, with a capacity of approximately 1,600 amps. The service terminates in a 600 amp main circuit breaker Panelboard MDP and a wire gutter, all located in the basement of the building.

The wire gutter is tapped, and feeds one 400 amp disconnect (for Panel AP1), one 400 amp disconnect (for Panel AP2), and a 200 amp disconnect (for Panel AP3). It also feeds a small 100-amp loadcenter, Panel F.

Panel MDP feeds seven other panels throughout the facility, including a kitchen panel.

Most of the panelboards are manufactured by Square D, including Panel MDP, but there are a few General Electric panels, and some ITE panelboards.

The main service disconnects are ITE brand.

The wire gutter disconnects and Panel MDP have a larger water pipe running over top of them.

There are very few original receptacles recessed in walls. There were a lot of receptacles added in the classroom areas and office type areas using a surface mounted raceway system to provide power to the wall mounted receptacles.

There is a small, diesel engine driven generator located outside the electrical room on the west side. The generator nameplate was not accessible at the time of the visit, but it appears to be a 5 KW/6.25 KVA, 120/240 volt, 1 phase, 3 wire rated. The generator feeds an automatic transfer switch (ATS) that is located inside the basement electrical room. The Kohler ATS is rated for 30 amp, 120/240 volt, 1 phase, 3 wire. The generator and ATS were not tested, but they are both very old and in poor to fair condition. There were no readily accessible test or inspection records on site.

In general, Panel MDP could potentially be reused, and some of the existing Square D panels could potentially be reused, but the remaining power distribution equipment is obsolete and no longer manufactured or supported with replacement parts.

*Figure 86 – Duke Energy pole-mounted transformers*

*Figure 87 – Electrical Service Drop on West Wall of Building 1*

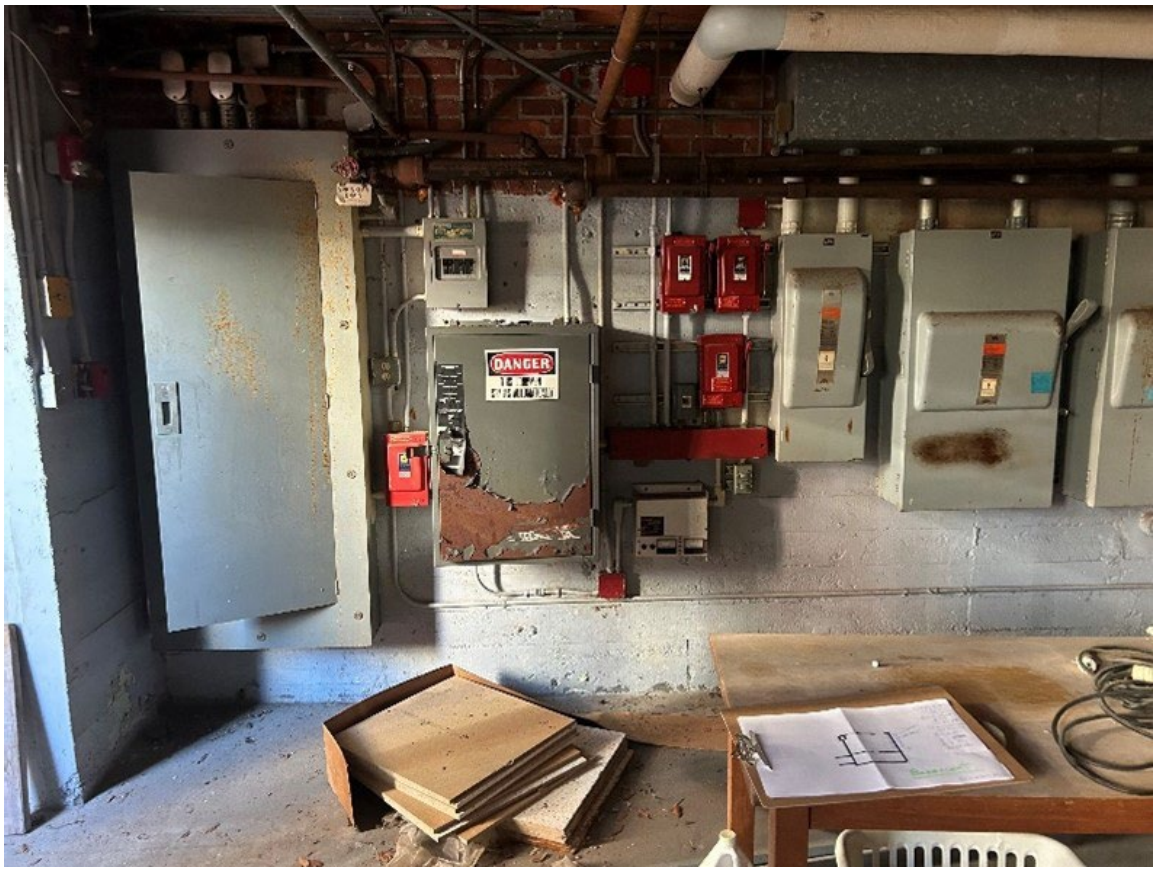


*Figure 88 – Service entrance disconnect and power distribution*

## Interior Lighting

The interior lighting consists of fluorescent lamp type and some incandescent lighting.

The level 1 and level 2 former classrooms use pendant mounted, linear fluorescent luminaires in two separate continuous rows. The second-floor former classrooms use 2' x 4' recessed fluorescent luminaires in an ACT grid. The corridors use a "school house" style incandescent pendant mounted luminaire. The dining/cafeteria area uses 2' x 4' recessed fluorescent luminaires in an ACT grid.

The kitchen and the boiler/electrical room basement area uses surface mounted fluorescent vapor tight type luminaires.

The stage includes some minimal "track" style heads for spot-light type lighting with incandescent lamps. The auditorium seating areas uses pendant mounted, linear fluorescent luminaires in two separate continuous rows.

Lighting controls are simple on/off toggle switches. There are no dimmers, except for the stage spot lights that utilize a basic rotary style incandescent lamp dimmer switch.

There are no occupancy sensors controls.

Even though the building has a generator, the building is using wall mounted unit equipment type emergency egress lighting with integral battery back-up (i.e. bug-eyes). These "bug-eyes" are in poor condition.

In general, all the interior lighting is old and obsolete fluorescent lamp type. Some fluorescent lamps are very old, obsolete T12 type.

*Figure 89 – Incandescent Schoolhouse Luminaire (broken)*

*Figure 90 – Incandescent Schoolhouse Luminaires in Corridor*

*Figure 91 – Stage Spotlights and Fluorescent Pendant Lighting*

## Exterior Lighting

The exterior lighting consists of the following:

1. Metal halide wall pack luminaires mounted on the building. These are in poor condition with severely yellowed lenses.
2. A few incandescent lamp holder style luminaires. These are old and obsolete.
3. Decorative streetlamp, pedestrian walkway style pole mounted luminaires. There are total of four of these poles. Two poles have a single head luminaire, and two poles have a triple-head luminaire. These appear to be in fair to good condition.
4. Walkway canopy lighting with small fluorescent lamp type luminaires surface mounted to the underside of the canopy. The lenses are yellowed and in poor condition.
5. Parking lot lighting in the northwest parking area using metal halide type luminaires mounted to steel poles on a concrete pole base. The luminaire heads are in poor condition.
6. Exterior light controls appear to be photocell on/off with no timeclock or other time of day-controlled device.

*Figure 92 – Metal Halide Wall Packs - Yellowed*

*Figure 93 – Decorative Street Lamp Style Pole Lighting*

*Figure 94 – Metal Halide Parking Lot Lighting*

## Fire Alarm System

The building is equipped with a fire alarm system. The fire alarm control panel is located in the former main reception area on level 1. The system utilizes an old, zoned type ADT Uni-mode control panel (not addressable).

The devices consist of wall mounted horns, strobes, and combination horn/strobes, plus some manual pull stations and heat/smoke detectors. The building is fully sprinkled so there are only a minimal amount of heat/smoke detectors.

The main panel was powered on but has multiple trouble signals and the alarm silenced lamp is on. The system does not appear to be fully functional at this time.

## Voice/Data Network Infrastructure

The facility has very limited voice/data network infrastructure. The telecommunications demark appears to be located in the former main reception area on level 1.

What's left of any rack/cabinet or wall mounted telecommunications equipment, such as a PBX, VoIP servers, switches, routers, etc., have been removed.

There is very little telecom cabling (Cat 5E or Cat 6) remaining. Each former classroom typically only has one two port data outlet and no wireless access.

This system, generally very limited by today's standards, is in poor condition.

## Security Systems

The facility does have a limited security system consisting of motion sensor coverage for intrusion detection. This system was operational and the keypad for arm and disarm was functioning.

## Building 3

This building has a 120/240 volt, 1 phase, 3 wire, 225-amp feeder that is routed underground from Panel MDP to the electrical room in building 2. The feeder terminates in a 225-amp main lug only panel, with no main breaker. This is a code violation that will need to be corrected.

The interior lighting consists of 2' x 4' recessed fluorescent luminaires in an ACT grid. Emergency egress lighting uses the unit equipment type luminaires (bug-eyes). Lighting controls consist of on/off toggle switches and no occupancy sensor controls.

Exterior lighting uses metal halide wall pack luminaires mounted on the building. These are in poor condition with severely yellowed lenses. Control appears to be via photocell on/off.

Fire alarm is provided via the building 1 control panel. Devices consist of horns, strobes, combination horn/strobes, manual pull stations, and heat/smoke detectors. The building is not sprinkled.

The voice/data network is in the same condition as Building 1. The building has an active intrusion detection security system.


*Figure 95 – Existing fire alarm control panel*

*Figure 96 – Old data cabinet in Building 3*

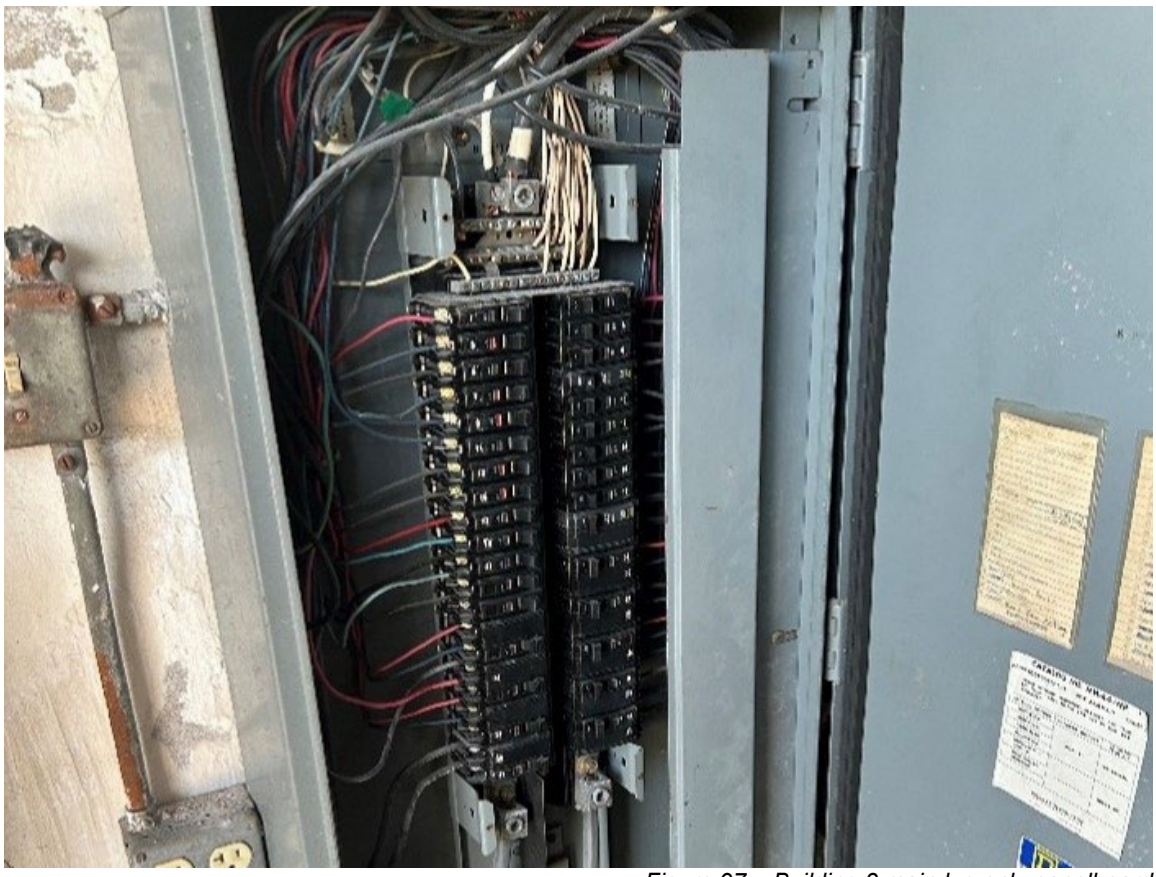

*Figure 97 – Building 3 main lug only panelboard*


*Figure 98 – Security system keypad*

*Figure 99 – Yellowed Wall Pack Lighting*

# Part 3 - Treatment and Work Recommendations

## Historic Preservation Objective

The City of Clearwater is seeking to redevelop the North Ward School property as an adaptive reuse project that would provide amenity and community use for the surrounding neighborhood and city at large. The exact program and use of the redevelopment will be determined in conjunction with future development partners, but potential uses include multi-family housing, event space, art exhibition, recreation and retail. The exploration of the programmatic goals and priorities of the redevelopment of the site are not included in this report.

However the property is redeveloped, the City of Clearwater will require that the design adhere to the National Park Service's Secretary of the Interior's Standards for Rehabilitation. The City purchased the North Ward School specifically because of its historic importance and cultural value to Clearwater. The rehabilitation and adaptive reuse of the property in a manner that preserves its character-defining features and celebrates its history will be of the highest priority for any future work.

The objective of this report is to identify and assess the existing buildings, and then recommend work that the City can perform immediately that will promote preservation, without jeopardizing a future development partner's ability to pursue local, state or federal tax incentives due to a lack of compliance with federal historic preservation standards.

## Requirements For Work

Any work recommended in this report should comply with the following building codes:

- Florida Building Code: Accessibility, 8th Edition (2023)
- Florida Building Code: Mechanical, 8th Edition (2023)
- Florida Building Code: Plumbing, 8th Edition (2023)
- Florida Building Code: Existing Building, 8th Edition (2023)
- National Electrical Code (2017)
- Florida Fire Prevention Code

Site and stormwater requirements should be determined in accordance with local and state regulations. Any hazardous materials that require removal should be abated in accordance with state and federal requirements.

The Secretary of the Interior's Standards for Rehabilitation is the basis for the following work recommendations in this report.

## Architectural Work Recommendations and Alternatives

### Building 1

*Roof*

The roofing should be replaced to prevent further water intrusion. Based on review of historic photographs, the original roofing type of the building was clay tile *(Appendix I*). At an unknown date, the clay tile roof was replaced with asphalt shingle. This use of a substitute material is not typically acceptable:

*"Not Recommended: Using a substitute material for the replacement that does not convey the same appearance of the roof covering or the surviving components of the roof feature or that is physically or chemically incompatible."*

- The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings

It is strongly recommended here that the new replacement roof be clay tile. The Secretary of the Interior's Standards for Rehabilitation advises that a primary material like roofing should be replaced in-kind when the original material is known. This approach is considered best practice unless there are technical reasons it cannot be accomplished. Practical advantages include a substantial increase in durability, with clay tile providing an approximate life span of 100 years versus 20 years for asphalt shingle.

Replacing the asphalt shingle with a clay tile would further enhance the property's ability to procure historic preservation grants. That being said, replacing the asphalt shingle roof in-kind at this time would not disqualify the property from pursuing historic preservation grants. This is because the building already had the asphalt shingle roof when the City bought the property.

Historic photographs show that the building did not originally have gutters and downspouts. The generous roof overhang, typical of its time, is designed to help keep rainwater off the building. The installation of gutters and downspouts as a non-historic component is acceptable, even encouraged, because they do a better job of diverting rainwater away from the historic features and foundation of the building.

The gutters and downspouts should be replaced entirely due to their deteriorated condition. Acceptable materials could be copper or aluminum. Profile should be thoughtfully considered to avoid an overly ornate expression, which is not in keeping with the restrained detailing of the building, as well as to avoid a shape that would signal conventional commercial construction. Size should be appropriate for the amount of anticipated rainwater but no larger – these non-historic components should not become a design feature themselves or distract from the original, historic features of the building.

The existing rafter tails and soffit should be scraped, cleaned and repainted. It is difficult to tell the extent of the damage, as observed from the ground, but it is likely that a significant amount (estimated 25-50%) of both the rafter tails and soffit will need to be replaced due to water and/or termite damage. The fascia and frieze boards should be replaced where damaged, and areas where the roof edge is sagging should be supported to be made level. Any replacement should be in-kind, or with a suitable substitute material.

*Masonry*

The brick should be cleaned to remove all graffiti and paint. This should be done in a non-abrasive manner, utilizing the gentlest method possible both chemically and mechanically.

The pervasive step cracking (addressed elsewhere in this report) should be repaired. These areas and the previously repaired areas noted earlier should be repointed with mortar that not only matches in color but also in strength/type with the historic mortar. No sealing of the brick is required or recommended.

The non-original masonry infill on the west side at the basement level can remain because it is not highly visible to the public nor is it a character-defining feature.

*Windows and Doors*

Windows and doors are a critically important consideration when trying to maintain the integrity of the historic character of a building. They are typically a prominent feature of the building – highly visible, proportionally significant, and character-defining – and thus historic preservation standards are more stringent in their treatment and replacement.

As noted previously, the existing windows are in fair condition, and do not appear to be leaking. Even though the existing windows are not consistent with the building's historical design, their presence does not disqualify the property from pursuing historic preservation grants. In other words, the City is not compelled to replace the existing windows in order to qualify for grants but the overall integrity of the historic character of the property can be a factor when grant applications are evaluated.

In particular, the existing exterior doors detract from the historic character of the building – they depart dramatically from the original design, and thus the building's appearance suffers significantly. The window mechanical units also detract significantly from the building's historic character. Regardless of their functionality, it is highly recommended that they be removed entirely.

That being said, if the City decides to replace the windows and doors, there are a several considerations to keep in mind:

- The new openings will need to be protected, which typically means that the windows will need to be impact-rated with laminated glazing. This is a requirement of the Florida Building Code (FBC), given the building's location and proximity to the coast. If the historic windows and doors were still intact, there are provisions in the FBC that would allow for their repair without triggering the protection requirement (FBC, Existing Building, 402.3). Unfortunately, this option is not viable because the historic windows have been replaced. Perhaps the front entry door, with its intact sidelights, may be considered under the repair exception – this would need to be discussed with the Authority Having Jurisdiction (AHJ).

  Even still, it is always recommended to protect historic openings whenever possible, even if not technically required by the FBC. This can be achieved in several different ways, and will be discussed in more detail below.

- In order to comply with the Secretary of the Interior's Standards for Rehabilitation, any replacement windows will need to match the historic window as closely as possible, in particular as it relates to lite configuration and depth of window construction.

  As noted earlier, the historic windows had a one-over-one, double-hung design. Replacement windows would need to match the one-over-one lite configuration, as

opposed to the nine-over-nine design of the existing windows. The nine-over-nine design may look more 'historic' to the untrained eye but it is important that the integrity of the historic character is maintained with a rigorous adherence to the original design.

The original operable double-hung design meant that the two sashes were offset so they could pass by each other. While the replacement windows are not required to be operable, they do need to recreate that same offset condition as much as possible. This window 'depth' creates strong shadow lines across the building's façades and has a significant impact on the building's appearance. Unfortunately, most modern windows are constructed with much shallower profiles because they are made with contemporary materials and operate differently than historic windows.

- The original windows were wood, likely heart pine or cypress, which was a very common and durable material of the time. Generally speaking, the Secretary of the Interior's Standards for Rehabilitation strongly recommend for the replacement windows and doors to be done in-kind, as wood. Historically accurate wood windows can be fabricated by specialty contractors, often using acetylated wood, which is specially treated to significantly increase its lifespan. Otherwise, heart pine or cypress can be used with satisfactory results. Both options are relatively expensive and require basic maintenance but they represent best practice in historic preservation.

But, as previously mentioned, even historically accurate wood windows need to meet FBC window protection requirements because, in this case, they are replacements, not repairs. Custom-fabricated wood windows can be designed to accommodate laminated glazing. Designing the windows to withstand wind loads requires added engineering costs. Demountable exterior panels or fixed outboard secondary, sacrificial windows are alternate strategies to comply with code. The former option is less expensive but requires the City to have extra space to store the panels when not in use, and the operational capacity to have staff onsite to install the panels prior to a storm event.

The Secretary of the Interior's Standards for Rehabilitation allow for substitute materials in certain situations. In this case, it is common for the State Office of Historic Preservation to allow aluminum and wood-clad windows (but not vinyl) as a substitute for historic wood windows, primarily in acknowledgement of the window protection requirements of the FBC noted above. In areas of Florida and the country that do not have window protection code requirements, the Standards may be enforced more stringently.

As previously mentioned, window material is one of several factors that need to be considered when selecting windows and doors that comply both with the Secretary of the Interior's Standards for Rehabilitation as well as the Florida Building Code. While there are several appropriate strategies, special care needs to be taken in the design and specification of the replacement of historic windows.

*Ceilings*

It is strongly recommended that the non-historic lay-in ceiling be removed entirely. It is assumed that a significant amount or majority of the historic plaster ceiling has already been removed. The Secretary of the Interior's Standards for Rehabilitation allow for standard gypsum board as a substitute for historic gypsum plaster, in particular at a smooth, non-decorative ceiling application where the two materials are indistinguishable from each other overhead.

The removal of the dropped ceiling and associated plenum space will represent a design and construction challenge. Utilities that were previously hidden in the plenum space will

need to be rerouted, creatively hidden or left exposed in an aesthetically pleasing manner. The Secretary of the Interior's Standards for Rehabilitation prioritize the adherence to the original ceiling heights to maintain the overall volume of the historic spaces, even if select modern building systems are rendered exposed.

Overhead conduit, ductwork and piping can be hidden in the attic space above the second floor. The first floor presents more of a challenge because of the lack of a plenum space. It's possible that the replacement ceiling could be furred down slightly from the second floor structure in order to hide conduit but such a modification has the potential to disrupt other historic features, such as crown molding or window trim.

Instead, it is recommended that the design team work closely together to devise a comprehensive strategy that provides small chases and soffits to route those utilities that are typically hidden (sanitary lines, junction boxes, dampers, etc) while other utilities that can be installed in a clean and efficient manner (fire sprinkler branches, spiral duct, etc) are left exposed. Generally, the best practice approach is to minimize exposed building systems, avoid surface-mounted components, and provide added chases with a light and thoughtful touch so as to not detract from the historic quality of the building.

The exact solution will be determined when the mechanical system has been selected and the space use of the building determined. Refer to the mechanical analysis elsewhere in this report for more information.

The existing loose fiberglass batt insulation above the second-floor ceiling is a crude but somewhat effective way to insulate the building. This insulating method creates a non-conditioned attic space, which needs to be properly vented. The paper backing of the loose fiberglass batt insulation should be oriented towards the unconditioned air, in this case the attic, to avoid condensation.

Because the Florida Building Code exempts historic structures from complying with the energy code, leaving this insulation system in place would be code compliant. But it is recommended that the ceiling batt insulation is replaced with a closed-cell spray foam insulation installed on the underside of the roof sheathing. The benefits of closed-cell spray foam insulation is that it is more efficient than batt insulation, provides better coverage, will not be displaced by work in the future, and provides a semi-conditioned attic space. Whichever method is employed, the new mechanical system would need to be engineered appropriately.

*Interior Walls and Openings*

The entire interior of the building should be tested for the presence of lead paint. Depending on the findings, an appropriate method of remediation or encapsulation will be determined in consultation with the City.

Non-historic wall-mounted components like the dry erase boards, bulletin boards, window treatments, artwork, etc. should be removed to allow for a complete assessment of the walls and trim. It is likely that wood bead board and trim will have termite and wall damage. Like the plaster wall finish, it is recommended that the City wait at this time to repair any such damage until a design for the full redevelopment is complete.

*Flooring*

The existing vinyl flooring should be tested for asbestos.

All non-historic flooring can be removed. The wood flooring should remain until future use is determined.

*Stair*

No action should be taken until the future use is determined. Modifications will be required regardless of future use, but the stair can remain as is until the building becomes occupied.

*Termite Treatment*

It is strongly recommended that the building be tented for termite fumigation. This should be done after all of the new work is performed.

## Building 2

*Roof*

The roofing should be replaced to prevent further water intrusion. Based on review of historic construction drawings, the original roofing type of the building was likely clay tile. At an unknown date, the clay tile roof was replaced with asphalt shingle. Refer to the recommendations for Building 1 for a more detailed guidance on the replacement roofing type.

The original construction drawings show that the building had copper gutters and downspouts. The existing gutters and downspouts should be replaced entirely due to their deteriorated condition. Refer to the recommendations for Building 1 for more detailed guidance on the replacement gutters and downspouts.

The existing rafter tails and soffit should be scraped, cleaned and repainted. It is difficult to tell the extent of any damage but it is likely that a significant amount (estimated 25-50%) of both the rafter tails and soffit will need to be replaced due to water and/or termite damage. The fascia and frieze boards should be replaced where damaged, and areas where the roof edge is sagging should be supported to be made level. Any replacement should be in-kind, or with a suitable substitute material.

*Windows and Doors*

As noted previously, the existing windows are in fair condition, and do not appear to be leaking. Refer to the recommendations for Building 1 for more detailed guidance on the replacement of windows and doors.

When the windows are replaced, a thorough code analysis should be performed to determine if the window and door openings that have been infilled could be restored. This analysis would likely be affected by the future use and occupant load of the building. Unlike Building 1, the exterior egress stair at Building 2 was not originally provided as a means of egress. If an exterior stair is determined to be necessary for second floor egress, it may be provided in a manner or location that does not require the historic windows to be affected.

The windows that have been broken should be protected and made weathertight.

Once future use of Buildings 1 and 2 has been determined, every effort should be made to eliminate the non-historic second floor corridor connector. Not only does its presence detract from the historic architectural language of the North Ward School, it presents operational challenges to the City in the maintenance of the roof below. Even if a circulation connection is required for egress or programmatic goals, the connector can be designed in a more appropriate manner.

*Interior Walls and Openings*

Refer to the recommendations for Building 1 for more detailed guidance on the treatment of the interior walls and openings.

Special care should be taken at this stage to protect the historic built-in cabinetry until a future use is determined. Regardless of future use, the City will not be required to restore these features but their presence is an asset with historical value.

*Flooring*

Refer to the recommendations for Building 1 for more detailed guidance on the treatment of the flooring.

*Stair*

No action should be taken until the future use is determined. Modifications will be required regardless of future use but the stair can remain as is until the building becomes occupied.

*Termite Treatment*

It is strongly recommended that the building be tented for termite fumigation. This should be done after all of the new work is performed.

## Building 3

Because Building 3 was excluded from the National Register of Historic Places application and the property's period of significance, the City is not obligated to save the building in terms of historic preservation standards. The overall quality of the original design and construction is not as pronounced as Buildings 1 and 2 but the building's condition is generally fair. Restoration and upgrades consistent with Buildings 1 and 2 would be required if the City decides to save Building 3.

This report generally agrees with the assessment of the National Register of Historic Places application that Building 3 does not represent as much historical value as the original school building. The historic material and detailing that remain would not be considered character-defining. The building's change in use from the original use as an auto dealership to educational use detracts from its historical significance according to preservation standards. Furthermore, the building's location at the northeast corner of the site, distant and unconnected from the rest of the school complex, may inhibit future development of the site.

That being said, as an approximately 100-year-old structure, Building 3 represents a relatively limited resource for the City. Building 3 has been part of the North Ward School for nearly 75 years, and therefore contributes to the historical memory of the surrounding community. The City will need to weigh this cultural value with any potential challenge its preservation presents.

If the City decides to demolish Building 3, measures should be taken to render the building weathertight and safe until full site development occurs.

## Building 4

Until the building's future use is determined, it is recommended that the building be rendered weathertight in a short-term manner. Given the building's deteriorated condition, diminished historical value, and inflexible layout, it is likely that this building will be recommended for demolition once the rest of the site is developed. Toward that end, the building should be made safe but no immediate upgrades and demolition are required.

The period of significance defined by the National Register of Historic Places application includes Building 4. In order to demolish Building 4 without compromising the ability to pursue historic preservation funding, the period of significance will need to be redefine to exclude this building, or it would need to be demonstrated that it would be a financial burden to rehabilitate the building given its condition. The NPS and SHPO will need to be engaged to determine the acceptability of these options.

If the City pursues restoration of Building 4, significant structural remediation will be required. Furthermore, adaptive reuse of these spaces will be a challenge given the columns and varying slab elevations.

## Building 5

Because this structure is not historically significant, it can be removed without compromising the historical integrity of the North Wards School. Furthermore, removal of the structure should not jeopardize the ability of future development to pursue historic preservation funding, as evaluated by the Secretary of the Interior's Standards for Rehabilitation.

When the structure is removed, care should be taken to cap any utilities in a safe manner until future development occurs.

## Building 6

Because this structure is not historically significant, it can be removed without compromising the historical integrity of the North Wards School. Furthermore, removal of the structure should not jeopardize the ability of future development to pursue historic preservation funding, as evaluated by the Secretary of the Interior's Standards for Rehabilitation.

When the structure is removed, care should be taken to cap any utilities in a safe manner until future development occurs.

The decision as to when and if to remove Building 6 may directly relate to the same decision for Building 3.

## Covered Play Court

Because this structure is not historically significant, it can be removed without compromising the historical integrity of the North Wards School. Furthermore, removal of the structure should not jeopardize the ability of future development to pursue historic preservation funding, as evaluated by the Secretary of the Interior's Standards for Rehabilitation.

When the structure is removed, care should be taken to cap any utilities in a safe manner until future development occurs.

## Domed Structure

Because this structure is not historically significant, it can be removed without compromising the historical integrity of the North Wards School. Furthermore, removal of the structure should not jeopardize the ability of future development to pursue historic preservation funding, as evaluated by the Secretary of the Interior's Standards for Rehabilitation.

When the structure is removed, care should be taken to cap any utilities in a safe manner until future development occurs.

## Structural Work Recommendations and Alternatives

The wood framing in the 1915 and 1926 buildings was in good condition. The wood framing in the classrooms has the capacity to support a live load of 40psf which is adequate for typical classrooms according to the Florida Building Code 2023. Office loading according to the Code is 50 psf. It may be necessary to conduct testing to demonstrate compliance with FBC for loads greater than 40 psf. The exterior brick walls are in fair condition. There are numerous cracks in the walls and it may be necessary to selectively underpin localized areas. Supplemental geotechnical explorations may be necessary to determine the cause of the cracking. The cracks should be pointed to prevent moisture penetration. The chimney in the southwest corner of the 1926 building has numerous cracks that should be pointed with new mortar. Existing roof framing should be reinforced with straps designed to resist uplift forces indicated in the table above.

Remove the existing roofing and re-nail roof sheathing as required, add hurricane straps to existing framing.

Determine where soil borings are required to review the existence of stair step cracks.

## Plumbing Work Recommendations and Alternatives

*High Priority for building stabilization*

None

*Low Priority*

Remove all existing plumbing fixtures and domestic water piping back to main riser at floor. Remove all accessible sanitary sewer piping and cap.

## Fire Protection Work Recommendations and Alternatives

*High Priority for building stabilization*

Have a fire protection contractor test existing system to stabilize system for use if required.

## Mechanical Work Recommendations and Alternatives

*High Priority for building Stabilization*

Remove all existing mechanical air handling units, window air conditioners, and exhaust fans. Existing fans, window units, air handling units should remain until the windows are replaced to protect the building.

Provide temporary air conditioning to control humidity.

*Low Priority*

Existing gas meter can remain, however it should be shut off at the meter, capped and existing interior gas piping removed. Remove existing gas-fired boiler, condensate pump, steam and condensate piping.

## Electrical / Low Voltage Work Recommendations and Alternatives

### Service and Power Distribution

The electrical service should be replaced with a new electrical service and a new electrical room that does not contain water piping above the electrical equipment. Panel MDP could be considered for reuse and possibly some of the other Square D panels, depending on the future use of the facility. The capacity of the electrical service and power distribution equipment would need to be evaluated based upon the proposed occupancy and use type.

Replacement of the service and relocation or replacement of Panel MDP can be a lower priority. While it is a code violation, it does not present an immediate hazard.

### Interior Lighting

The interior lighting and lighting controls will be required to be replaced with new, LED lighting and new low voltage control with occupancy sensors and potentially daylight sensors in order to comply with the 8th Edition (2023) Florida Energy Code.

Replacement of the lighting can be a lower priority. While the lighting is old, obsolete, and will not meet current energy code, the lighting is functional and can remain until the building is renovated.

### Exterior Lighting

The wall mounted exterior lighting should be replaced with new LED lighting and new lighting controls that comply with the 2023 Florida Energy Code. The existing decorative street lamp style pole lighting could be considered for reuse.

Replacement of the exterior lighting can be a lower priority. While the lighting is old, obsolete, and will not meet current energy code, the lighting is functional and can remain until the building is renovated.

### Fire Alarm System

The fire alarm system should be replaced with a new, state-of-the-art addressable type system. We would recommend a non-proprietary system such as Edwards EST, Notifier, Fire Lite, or Silent Knight.

Since the building is un-occupied, it is possible to leave the fire alarm system as is. However, if the building is expected to remain un-occupied for a long period, we would recommend at least monitoring the fire protection system (sprinkler) riser for water flow. If or when the sprinkler system is serviced, we would recommend installing a monitoring panel to monitor the riser flow switch and tamper switches and transmit an alarm to a remote monitoring system.

## Voice/Data Network Infrastructure

A new voice/data network infrastructure system will be required, including a new telecommunications utility service and new demarcation. The extent of the new infrastructure will depend on the future use and occupancy type of the facility.

Improvements to this system can wait until the building is renovated.

## Security Systems

A security system is expected to be required. The existing intrusion system head end may be reusable, but the extent of the security infrastructure will depend on the future use and occupancy type of the facility, and City input and standards.

We recommend maintaining this system while the building is un-occupied. There is current evidence of break-ins, broken windows, etc.

## Building 3

The main service will need to be re-worked to include a new main service disconnect. The existing panelboard could possibly be reused, but the rest of the building infrastructure and systems, including the interior and exterior lighting, voice/data network infrastructure, and fire alarm, are not useful and should be considered for replacement.

Improvements to this building can wait until the campus is renovated.

## General Recommendation

Once the building occupancy and use type are developed, we recommend testing for a first responder radio signal boost (DAS – Distributed Antenna System) and budget included for this system in the case it is required.

# Part 4 – Appendices