



The Roger Williams University **Community Partnerships Center**

The Roger Williams University (RWU) Community Partnerships Center (CPC) provides projectbased assistance to non-profit organizations, government agencies and low- and moderate-income communities in Rhode Island and Southeastern Massachusetts. Our mission is to undertake and complete projects that will benefit the local community while providing RWU students with experience in real-world projects that deepen their academic experiences.

CPC projects draw upon the skills and experience of students and faculty from RWU programs in areas such as:

- American Studies
- Architecture and Urban Design
- Business
- Community Development
- Education
- Engineering and Construction Management
- Environmental Science and Sustainability
- Finance

- Graphic Design
- Historic Preservation
- History
- Iustice Studies
- Law
- Marketing and Communications
- Political Science
- Psychology
- Public Administration
- Public Relations
- Sustainable Studies
- Visual Arts and Digital Media
- Writing Studies

Community partnerships broaden and deepen the academic experiences of RWU students by allowing them to work on real-world projects, through curriculum-based and service-learning opportunities collaborating with non-profit and community leaders as they seek to achieve their missions. The services provided by the CPC would normally not be available to these organizations due to their cost and/or diverse needs.

CPC Project Disclaimer: The reader shall understand the following in regards to this project report:

- 1. The Project is being undertaken in the public
- 2. The deliverables generated hereunder are intended to provide conceptual information only to assist design and planning and such are not intended, nor should they be used, for construction or other project implementation. Furthermore, professional and/or other services may be needed to ultimately implement the desired goals of the public in ownership of the project served.
- 3. The parties understand, agree and acknowledge that the deliverables being provided hereunder are being performed by students who are not licensed and/or otherwise certified as professionals. Neither RWU nor the CPC makes any warranties or guarantees ex-

pressed or implied, regarding the deliverables provided pursuant to this Agreement and the quality thereof, and Sponsor should not rely on the assistance as constituting professional advice. RWU, the CPC, the faculty mentor, and the students involved are not covered by professional liability insurance.

Neither RWU, the CPC, the faculty mentor, nor the students involved assume responsibility or liability for the deliverables provided hereunder or for any subsequent use by sponsor or other party and Sponsor agrees to indemnify and hold harmless RWU, the Center, the Faculty Mentor, and the Center's student against any and all claims arising out of Sponsor's utilization, sale, or transfer of deliverables provided under this Agreement.

> Community Partnerships Center Roger Williams University One Old Ferry Road Bristol, RI 02809 cpc@rwu.edu http://cpc.rwu.edu





Table of Contents

Introduction4
Methodology5
History and Significance6
Existing Conditions8
Rehabilitation Plan21
Conclusion33

December 17, 2012 Team Members: Catherine Varnas | Jonathan Hopkins | Dylan Peacock | Joshua Lentz HP 681 - Historic Rehabilitation | Professor Robinson



Introduction

The Mathewson Street United Methodist Church, located at 134 Mathewson Street in downtown Providence, Rhode Island, is an urban ecclesiastical building that is still used for its original purpose as a worship space with a multiple-tenancy model. The building maintains a high degree of historical integrity, especially on the exterior, and is a contributing resource to the Downtown Providence Historic District created in 1984.



The Mathewson Street United Methodist Church Student Team, **RWU 681L Historic** Preservation Workshop, Fall 2012



Methodology

Under the guidance of course instructor Arnold Robinson, the Mathewson Street United Methodist Church student team of Jonathan Hopkins, Joshua Lentz, Dylan Peacock and Catherine Varnas completed the full assessment and rehabilitation plan. The team's work on the Mathewson Street United Methodist Church was organized around a sequence of course assignments that approximated the standard approach used by design and preservation professionals planning for the rehabilitation of an historic structure. Specific steps included:

Site Investigation and Existing Conditions **Documentation:** Members of the team visited the site on several occasions to sketch and measure the floor plans and elevations and to thoroughly document the interior and exterior conditions in digital photographs and notes. Beyond the archival research conducted to gain a sufficient understanding of the history and significance of the building, two site inspections were conducted. The first inspection was on September 17, 2012 and the second inspection was on October 17, 2012. During the site visits, the team photographed any observed deficiencies on the interior or exterior and marked where each photograph was taken on the floor plan. A template was used to physically examine and assess the existing conditions of the building, and conditions were graded as excellent, good, fair or poor. This research and documentation informs the Existing Conditions Report and the Rehabilitation Plan.

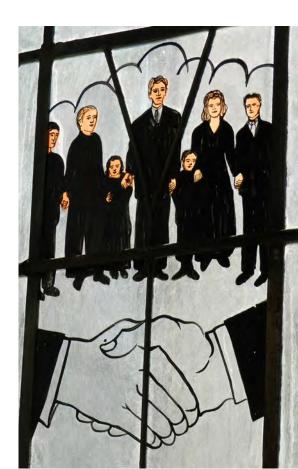
Historical Research: The team documented the building through archival research, site visits and consultation with the client. Before the building was physically documented, cursory research was conducted into the history of the building and its evolution. This included consulting the Downtown Providence National Register Nomination, the 1981 Rhode Island Historical Preservation and Heritage Commission State Survey of Downtown Providence, the Providence Preservation Society's 1987 Libby Report, the Providence Public Library's Rhode Island Images Collection and other sources. The Mathewson Street United Methodist Church's collection of historic floor plans and photographs were reviewed as well. A statement of significance and an architectural description were then completed.

Program Development: The team consulted with the project contacts at Mathewson Street United Methodist Church—Karen Gager and Audie Jennings—during the site visits to determine known issues with the building, how it functions and the organization's vision for the future of the building.

Rehabilitation Plan: Based on observed conditions and the results of the historical research, the team identified the character-defining features of the building and applicable regulations such as the RI Historical Preservation and Heritage Commission and building/fire codes. Then the team created a prioritized list of the rehabilitation work items and formulated the overall scope of work that would result in a rehabilitated Mathewson Street United Methodist Church. The project included the entire exterior and surrounding parking areas as well as the first, second, third and fourth floors of the interior of the building. The final version of the plan was edited by CPC Director Arnold Robinson.

Key elements of the Rehabilitation Plan include:

- Written description of all rehabilitation work items, organized using the Construction Specifications Institute's (CSI) MasterFormat
- Final rehabilitation drawings with annotations for rehabilitation work items;
- Specifications for the most important rehabilitation work items, formatted in accordance with the CSI MasterFormat protocols;
- Draft application for Federal Historic Preservation Tax Credit;
- Final Rehabilitation Plan document.



Stained glass window in the main church office.



History and Significance

History

Constructed on the present site, the first Mathewson Street United Methodist Church was completed in 1851 and served the congregation for several decades until it became structurally unsound. The original church was subsequently demolished. Cutting, Carleton & Cutting Architects were hired to design the present building, which was completed in 1896 on the same site as the original church. By this time the area was a bustling commercial district and the church was correspondingly designed to blend into its late 19th century commercial setting. Using a multiple-tenancy model that allows multiple uses within the building, the architects designed the church like an office building to integrate it into the surrounding context. The construction of the present church was part of the larger late 19th century and early 20th century construction of Downtown Providence.

In 1951, a century after the completion of the original church, architect Arland A. Dirlam was hired to renovate the current structure. Along with some updates throughout the building, he made major changes to the façade and the first floor. The front façade was radically altered on the ground story to appear more Gothic and ecclesiastical. The result was the application of an aggregate stone façade with lancet arch windows and other Gothic details over the original, classically detailed façade.

The entry was moved one bay to the left from its original position at the far right of the building, and the first-story floor plan was considerably altered. The grand staircase and the original elevator were both removed and replaced, and the vertical circulation was enclosed. A central lobby was created at the new entry and decorated with Neo-Gothic wainscoting. Where the original entry was located, a small new office was created. On the opposite side of the entry vestibule, two other offices were created. The kitchen was moved from the basement to the first floor off the fellowship hall where a stage was added. A new means of egress was added in the southeast corner of the building. This enclosed staircase reaches all floors of the structure and interrupts the curved wall of the sanctuary. The cinderblock partition walls in the basement were probably also constructed at this time.

Further alterations to the structure took place in the 1980s with the hiring of the architectural firm Beckman Blydenburgh & Associates. One of the most significant changes was closing off the sanctuary from the adjacent choir room off the balcony on the third floor and creating a storage room in part of the choir room. Below the choir room, on the second floor, a kitchenette and bathrooms were constructed in the part of the space adjacent to the sanctuary. The current prayer railing around the chancel was also installed during these renovations.



Mathewson Street United Methodist Church (middle building) before its 1951 renovation.



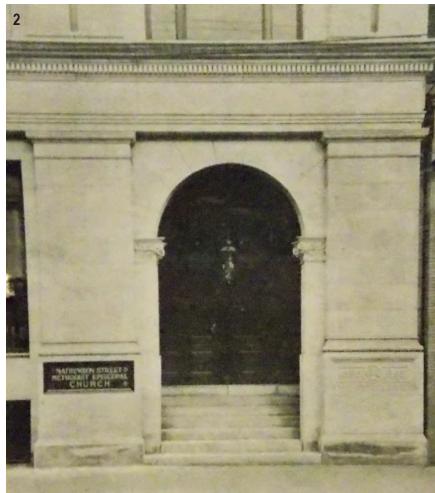
Other alterations to the building that occurred after the 1951 renovations—probably in tandem with the changes made in the 1980s—include the filling in of the first-story windows on the rear (east) façade and the filling in of the basement windows on the front (west) façade. Most recently, the adjacent three-story commercial structure was torn down some time after the 1981 Rhode Island Historical Preservation and Heritage Commission State Survey of Downtown Providence was published. This has left the northern parti-wall of the Mathewson Street United Methodist Church exposed.

Significance

In 1984 the Mathewson Street United Methodist Church was added to the National Register of Historic Places as a contributing resource to the Downtown Providence Historic District, which consists largely of late 19th century to early 20th century commercial development. The Mathewson Street United Methodist Church was first organized in 1848 and built its original structure on the site of the present church in 1851. The present structure replaced the original one in 1896 and originally served

the large residential neighborhood west of Dorrance Street. It is one of the only churches in Providence that does not rely upon traditional ecclesiastical types for its form. By the time this structure was erected, Mathewson Street was rapidly developing as a commercial area, and surrounding land use militated against a traditional church form; consequently the church is well integrated into its commercial, early 20th-century setting. The large sanctuary space with an interior dome is laid out in concentric arcs radiating from the altar—a strong deviation from the traditional New England church form followed in the earlier structure. The church was also one of the earliest in the nation to feature an elevator.





- 1. The church is located on Mathewson Street in Downtown Providence in a largely commercial neighborhood.
- 2. The original main entry configuration prior to the 1951 renovations.



Existing Conditions

Current Physical Appearance

This four-story, four-bay, stone-sheathed, steelframe structure was constructed in 1896 to look like an office building and blend into its commercial setting. The existing first-story Mathewson Street elevation is a Neo-Gothic aggregate stone façade applied in 1951 with leaded-glass casement windows set in lancet arches. There is a stringcourse above the first story separating the applied 1951 facade from the original 1896 facade of the upper floors, which are constructed of limestone with classical detailing. There are colossal Corinthian pilasters on the upper stories separating two-story, round-head windows, above which are short segmental-arch windows in the attic story. The building is topped with a large dentilled cornice.

The first-story floor plan was altered significantly during the 1951 renovations, and the entry vestibule is adorned with Neo-Gothic panelling. The chapel on the first floor is handsomely finished. The two-story sanctuary space has a semi-circular configuration with pews radiating from the altar, a balcony and substantial crown moulding.

Site Conditions and Constraints

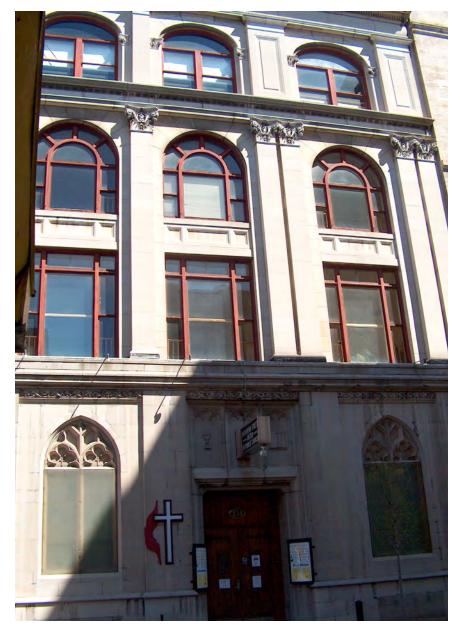
The Mathewson Street United Methodist Church building occupies the entire site, which is bounded by a public sidewalk on the west, a privately owned parking lot on the north, a public alley on the east and a privately owned building on the south. The building to the south of the Mathewson Street United Methodist Church directly abuts it with a parti-wall.

Applicable Regulations

Local Regulations: The Church falls under the local design regulation of Zoning Ordinance D-1 of Downtown Zone. The church is part of the Downtown Providence Historic District. The building is a part of the historic fabric, and any work or alterations done to the church needs to carefully maintain the aesthetic quality the church has from the street.

State Regulations: The church will have to comply with the State of Rhode Island Historic Preservation and Heritage commission: http:// www.preservation.ri.gov/review/regulations.php. "The State Register is an authoritative guide to be used by state and local governments, private groups, and citizens to identify the state's historical, architectural, and cultural resources which are significant and worthy of being preserved."

The building also must follow the local fire codes, SRC-1 - Rhode Island State Rehabilitation Building and Fire Code for Existing Buildings and Structures: http://sos.ri.gov/documents/archives/ regdocs/released/pdf/3b493e49b0a2a162589891 f1e4b0f9c3/4721.pdf.



West elevation of Mathewson Street United Methodist Church

This code allows for variances to historic structures to encourage reuse. "The purpose of this code is to encourage the continued use or reuse of existing buildings and structures. This code is intended to permit repairs, renovations, alterations, reconstructions, additions, and/or changes of occupancy that maintain or improve the health, safety and welfare in existing buildings, without requiring full compliance with the construction requirements of the Building Code, Mechanical Code, Plumbing Code, Rhode Island Fire Safety Code, Rhode Island Fire Prevention Code, Electrical Code, Boiler Safety Code, Energy Code, Elevator Code, or Accessibility Code, except for proportional additional work as specified in this code."

Federal Regulations: The building does not currently meet the federal ADA Accessibility: http://www.ada.gov/pubs/adastatute08.pdf. This states that every building has to allow for people with disabilities to enter the building and have access to the entirety of the building.

The church is also on the National Register of Historic Places, and the rehabilitation of the church will also follow the Secretary of the Interior's Standards for Rehabilitation.



Division 04: Masonry

First Story Façade - West Elevation: FAIR CONDITION

The first story façade on the west elevation is made of aggregate stone and is in fair condition. It was applied in 1951, and it appears that the former 1896 façade was hacked away to apply the new façade. It appears that water is wearing away at the binder over time. The façade exhibits a build-up of grime, which is unattractive and detracts from its appearance.

Upper Story Façade - West Elevation: GOOD CONDITION

The second, third and forth stories are made of limestone. The masonry is in good condition. The façade exhibits grime build-up, which detracts from its appearance.

Brickwork - North Elevation:

GOOD CONDITION

The parti-wall on the north façade was exposed after the adjacent building was demolished. The wall is currently in good condition, but needs proper protection from exposure to the elements. Current treatment consists of painting the exposed bricks.

Brickwork - East Elevation:

FAIR CONDITION

Select locations on the brick rear (east) façade have deteriorated mortar joints. Bricks are in good

condition. Mortar is in fair condition. Dark areas show signs of water flow down wall. (Photo 1)

Chimneys: Poor Condition

The two chimneys on the roof of the building are failing. There is severe mortar degradation, and the bricks are dangerously loose. Chicken wire currently secures bricks from falling and causing injury. The west chimney is filled with debris. It is suspected that the east chimney (Photo 2) contains the venting for the building's boiler system.





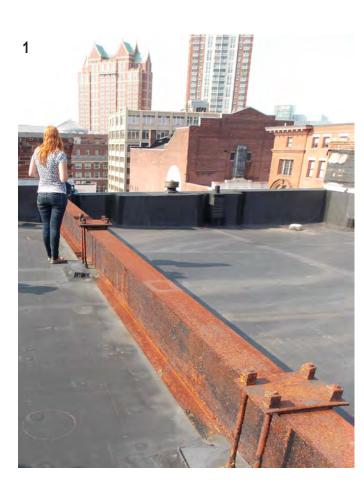
- 1. Brick wall on the east facade needs cleaning and repointing.
- 2. Deteriorating east chimney is wrapped with chicken wire to hold loose bricks in place.



Division 05: Metals

Steel Wide-Flange Beam: FAIR CONDITION

The steel wide-flange beam on the roof is in fair condition, but it exhibits significant oxidization and rust. The beam is open to the elements and



this exposure is causing corrosion. (Photo 1) Continued deterioration could have an adverse effect on the structural integrity of the building.

Division 06: Wood, Plastics and Composites

Woodwork - Basement: Fair Condition

Wood baseboards and architraves are in fair condition; however, they are rotted in select areas due to significant moisture damage. (Photo 3)

Cinderblock Walls - Basement:

Fair Condition

Cinderblock partition walls in basement (not original) exhibit vertical cracking, especially underneath beams and on both sides of the walls. (Photo 2)

Prayer Railing - Sanctuary:

GOOD CONDITION

A prayer railing around the chancel was installed in the 1980s. It is in good condition.

Division 07: Thermal and Moisture Protection

Roof: Excellent Condition

The building has a built-up roof, covered in a rubber membrane. The roof has been recently replaced and is in excellent condition.

Storm Windows: Excellent Condition, Non-Existent

New storm windows have been applied to the first story windows on the west façade and are in excellent condition. There are no storm windows present on the upper levels.

Interior Roof Drainage System:

GOOD CONDITION

The interior roof drainage system previously leaked, damaging plaster ceiling and wall finishes on the fourth floor. The moisture penetration has subsequently been fixed and now appears to be in good condition.



- 1. Corroded beam on roof could affect structural integrity of the building
- 2. Vertical cracking along cinderblock walls in basement.
- 3. Basement trim is rotting





Basement Floor Moisture Protection: Poor Condition

Water seeps up through the basement floor, which is causing damage to the material of the floor. The protective layer between the floor covering and the ground below may be inadequate or deteriorated due to age. (Photo 2)

Division 08: Openings

Basement Windows - West Façade:

Poor Condition

Basement windows on the Mathewson Street side of the building have been in-filled with masonry. The reason for sealing the windows is not certain but might have been due to moisture penetration or to prevent entry into the structure. The windows must be reopened to allow more light into the basement.

Leaded Casement Windows - West Façade: **EXCELLENT CONDITION**

The leaded casement windows on the first story of the west façade are in excellent condition.

Existing Wood Windows - Upper Stories: Fair to Poor Condition

The original wood windows on the top three floors of the building are in fair to poor condition. Several window sashes exhibit various degrees of deterioration: rotted wooden mullions, significant loss of putty, glass in need of re-glazing and pervasive peeling paint. (Photo 1) Storm windows are no longer in place due to fire code concerns. The windows are also not energy efficient due to a lack of insulation in the winter and solar gain in the summer. Windows are a character-defining feature in the structure.

First Story Windows - East Façade:

Poor Condition

The windows on the east façade of the structure have been filled in with cinderblocks. This detracts from the character of the building.



- 1. Windows exhibit deterioration in rotting wooden mullions, loss of putty and pervasive peeling of paint.
- 2. Floor moisture and asbestos tile deterioration in the basement.





Sanctuary Wall Opening:

Poor Condition

The historical opening in the sanctuary wall is currently closed, cutting off the connection between the sanctuary and the adjacent room off of the balcony. It appears that these changes were made in the 1980s, and metal studs and sheetrock were used to close the opening. A restored wall opening without a partition would not meet current building code requirements. While drawings and photographs of the historic opening exist, adequate documentation for the historic opening is lacking.



Division 09: Finishes

Asbestos Tile Floors - Basement: Poor Condition

Asbestos tile floors in basement are in poor condition with some broken or missing. They are neither historic nor character-defining features.

Basement Plaster: Poor Condition

There is severe plaster failure and rot in the basement beneath the blocked-off windows to Mathewson Street. The damage appears to be due to water penetration.

Neo-Gothic Wainscoting:

GOOD CONDITION

The Neo-Gothic wainscoting in the entry vestibule on the first floor is in good condition.

Ceiling Surfaces: Poor Condition

Ceiling surfaces consist of a lath and plaster system covered in various layers of paint. There is pervasive paint failure throughout the building especially on the ceilings of the ground floor offices and the chapel. Newer latex paint layers may be incompatible with older calcimine paint

Sanctuary Ceiling: Poor Condition

The plaster on the ceiling of the sanctuary has failed. The plaster keys between the laths have

given way in one spot, and the rest of the ceiling may be in danger of failing as well. The problem appears to be a saturation failure, which could point to water issues and potential issues with the sink of the black box theatre above the worship space.

Plaster Walls and Ceilings: FAIR CONDITION

Throughout the building, the plaster walls and ceilings, apart from the sanctuary, are in fair condition. There are hairline cracks throughout the building, including on the sanctuary ceiling and on the curved walls outside of the sanctuary.

Window Sash Paint: Poor Condition

Window sash paint is peeling and in poor condition. Most windows exhibit significant peeling, which is leading to the deterioration of the wooden sashes.



- 1. Current sanctuary space has a wall that closes off the adjacent room.
- 2. Sanctuary space, pre-1951 renovation, with open connection to adjacent room.

Apartment Finishes: Poor Condition

Interior finishes are in poor condition in the apartment area. The asbestos floor tiles are in poor condition. The walls and ceilings are in fair condition, with select areas of crumbling plaster.

Division 13: Special Construction

Dome: Good Condition

The dome above the sanctuary is in good condition.



Division 14: Conveying Equipment

Elevator: Good Condition

The elevator is in good condition, but it does not reach street level.

Division 21: Fire Suppression

Sprinkler System: Good Condition

While there are sprinkler systems in place, the system may not be up to code on the fourth floor.

Division 22: Plumbing

Basement Plumbing: Poor Condition

During strong rainfalls, sewage backs up in the basement. The water comes up through the bathroom pipes and flows from the toilets. It floods the bathrooms and the room across from the bathrooms.

Division 23: Heating Ventilating and Air Conditioning

Basement Ventilation: Poor Condition

Some basement rooms have no ventilation, which is necessary for occupancy.

Sanctuary Air Vents: Poor Condition

Air vents in the sanctuary have stained the ceiling.

Division 26: Electrical

Electrical System: Good Condition

The electrical system appears to be in good condi-

Division 28: Electronic Safety and Security

Security and Notification System:

Poor Condition

The existing doorbell at the main entrance is an inadequate security and notification system. The current doorbell disrupts occupants throughout the building. There is not an adequate security system in place.

Division 31: Exterior Improvements

Adjacent Surface Parking Lot:

Poor Condition

The adjacent lot at 122-4 Mathewson Street is a non-conforming surface parking lot that directly abuts not only the sidewalk but the northwest facing exterior wall of the Mathewson Street United Methodist Church building. The lot may be exacerbating existing moisture penetration problems in the basement.

Code Issues

Entry Vestibule: While the building has two means of egress and an elevator, the ground floor is not handicapped accessible from the street and therefore does not conform to Americans with Disabilities Act (ADA) requirements.

First Floor Egress: On the first floor, the second means of egress requires inhabitants to travel through the kitchen.

Balcony Railing: The handrail on the sanctuary balcony does not meet minimum height requirements of 42 inches for public buildings.

Fourth Floor Bathrooms: The black box theatre on the fourth floor does not have handicapped accessible bathrooms due to a small set of stairs. This does not meet ADA or occupancy requirements.



- 1. Original entry vestibule c.1900.
- 2. Current entry vestibule configuration, which is not compliant with ADA regulations.





Character-Defining Features

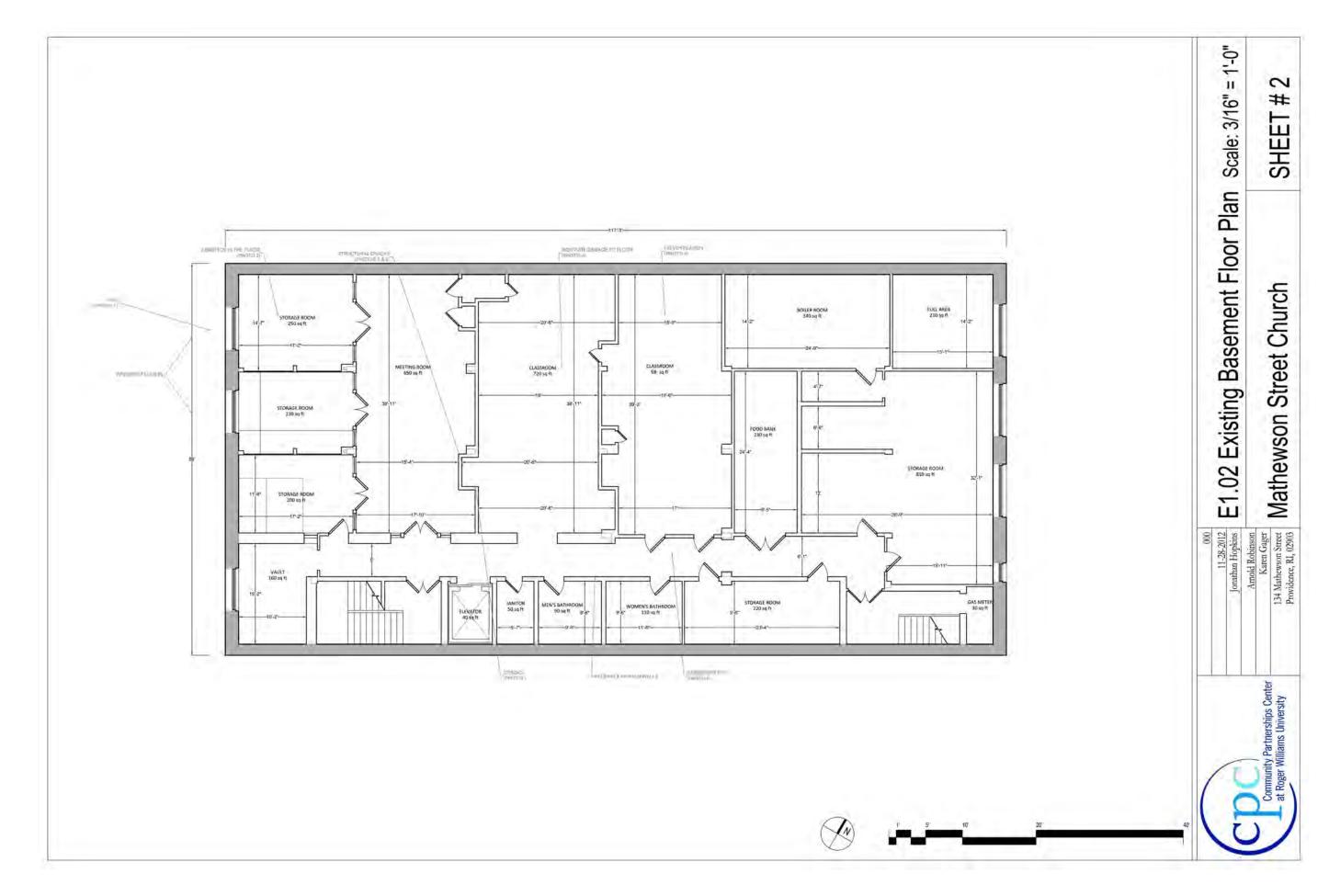
The Mathewson Street United Methodist Church is distinguished by numerous character-defining features. The classically detailed limestone façade of the top three stories on the front (west) façade, featuring colossal Corinthian pilasters and a large dentilled cornice, is an important element that dates back to the original construction of the building in 1896.

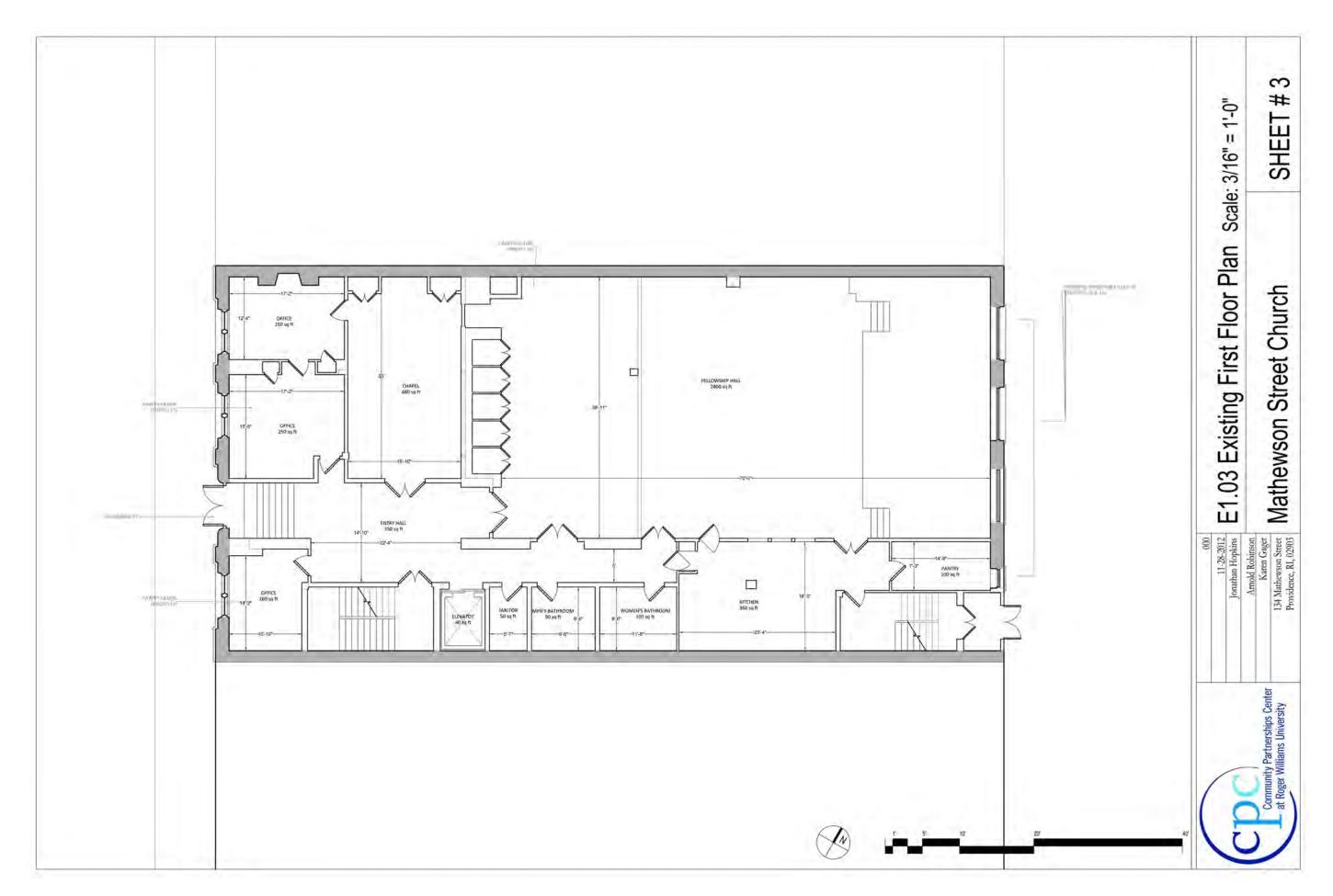
Likewise, the Neo-Gothic aggregate stone façade that was applied to the ground story of the front (west) façade in 1951 has acquired significance. The two-story, round-head windows on the second and third stories and the short segmental arch windows above them on the fourth story are original to the structure and are important characterdefining features for the building. The unique leaded casement windows set in lancet arches on the ground floor are part of the 1951 renovations and have acquired significance along with the 1951 façade.

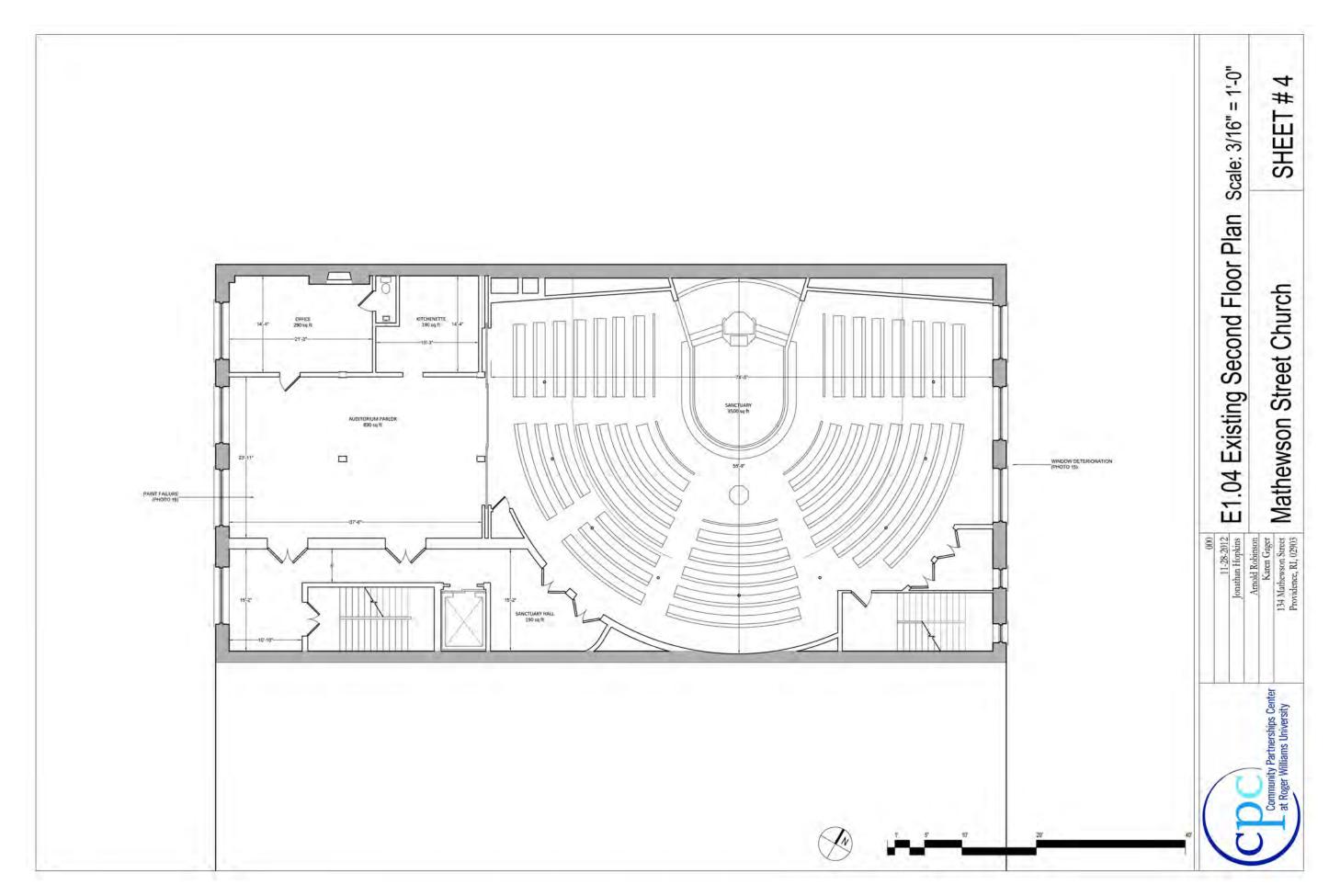
On the interior, the entry vestibule features Neo-Gothic paneling from the 1951 renovations, which has acquired significance as the primary decorative element in the ground floor entry. The most significant space in the building, the sanctuary, maintains its 1896 configuration, dome, pews and substantial crown moulding, which are all character-defining features of the space.

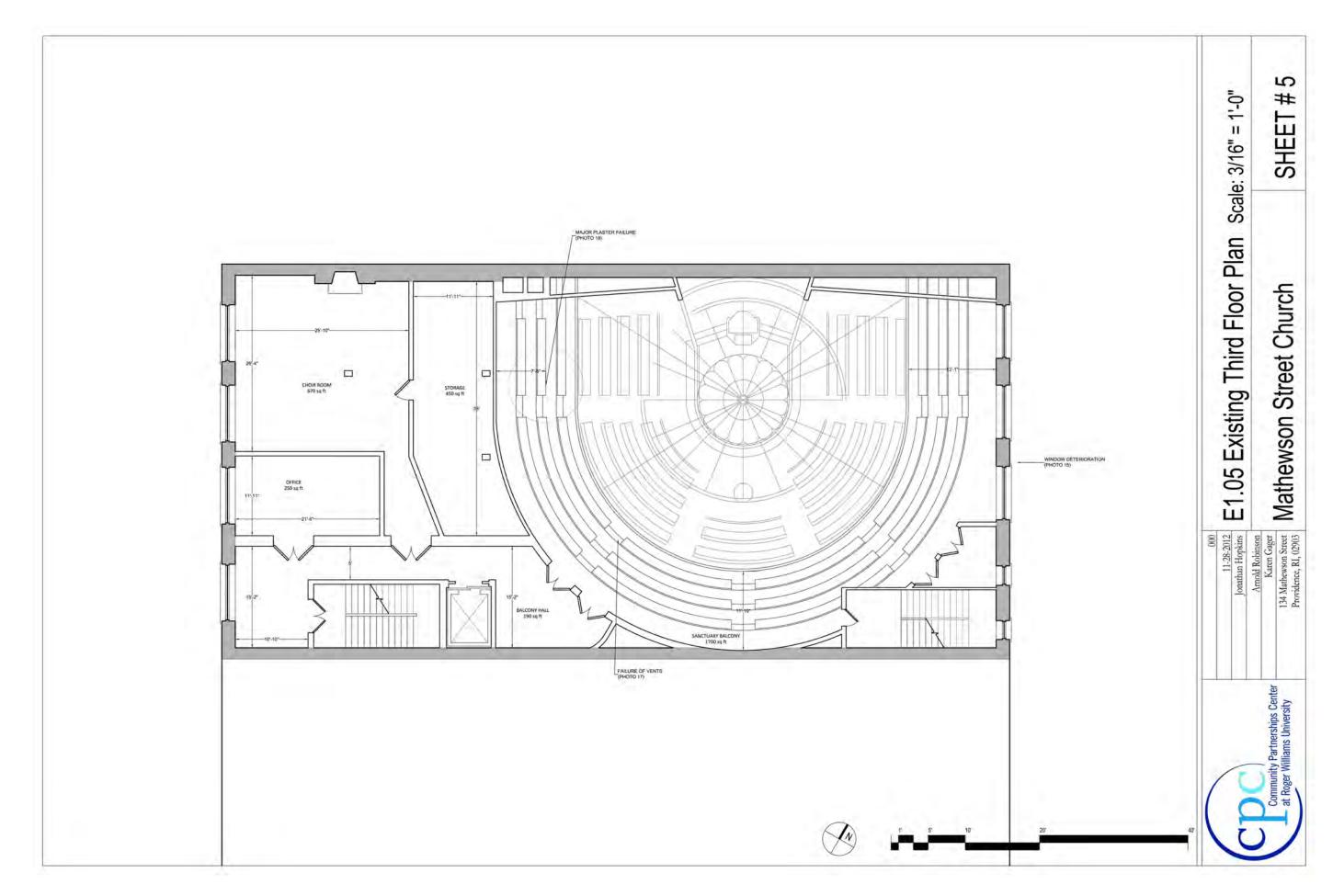


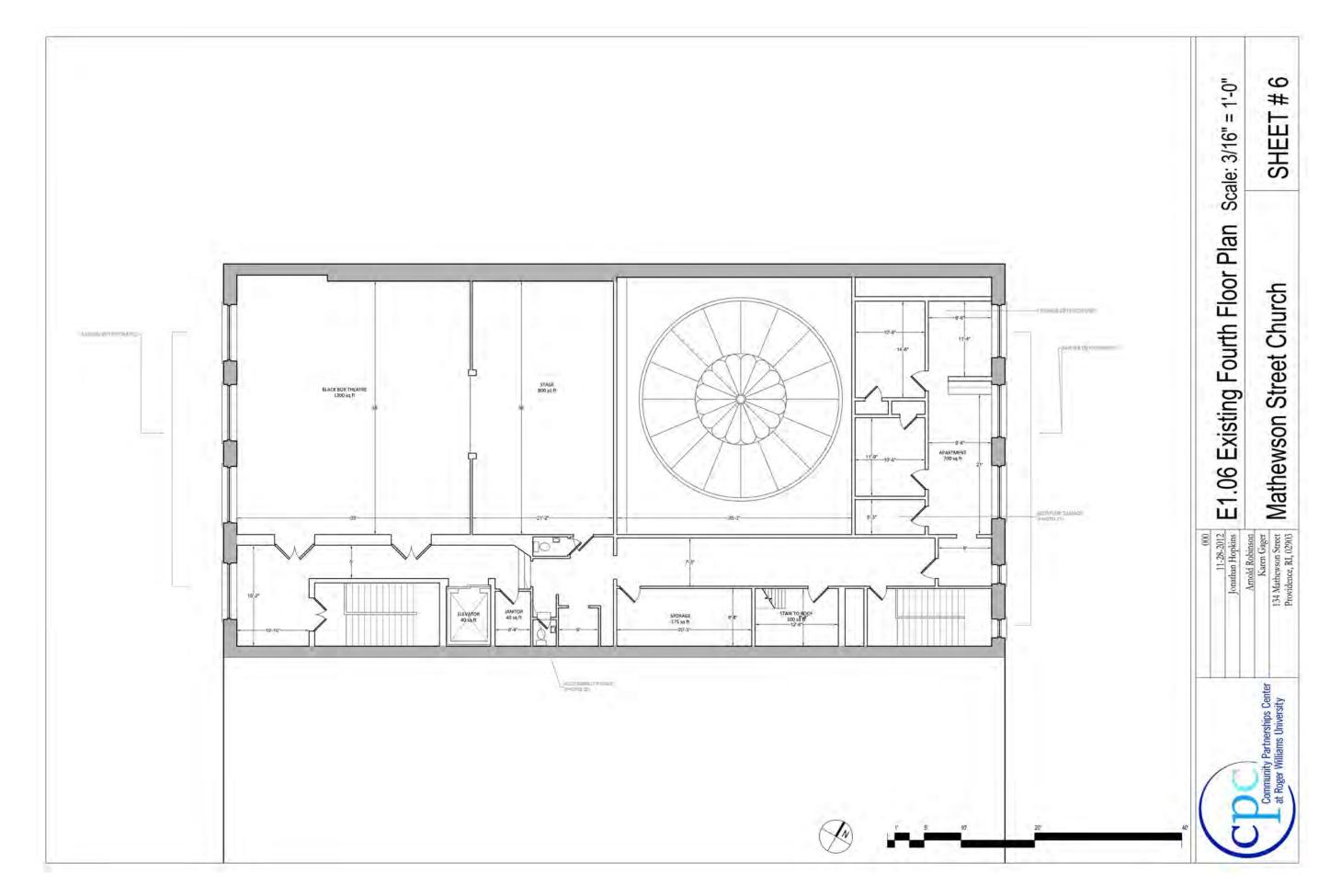
Original configuration of the sanctuary.

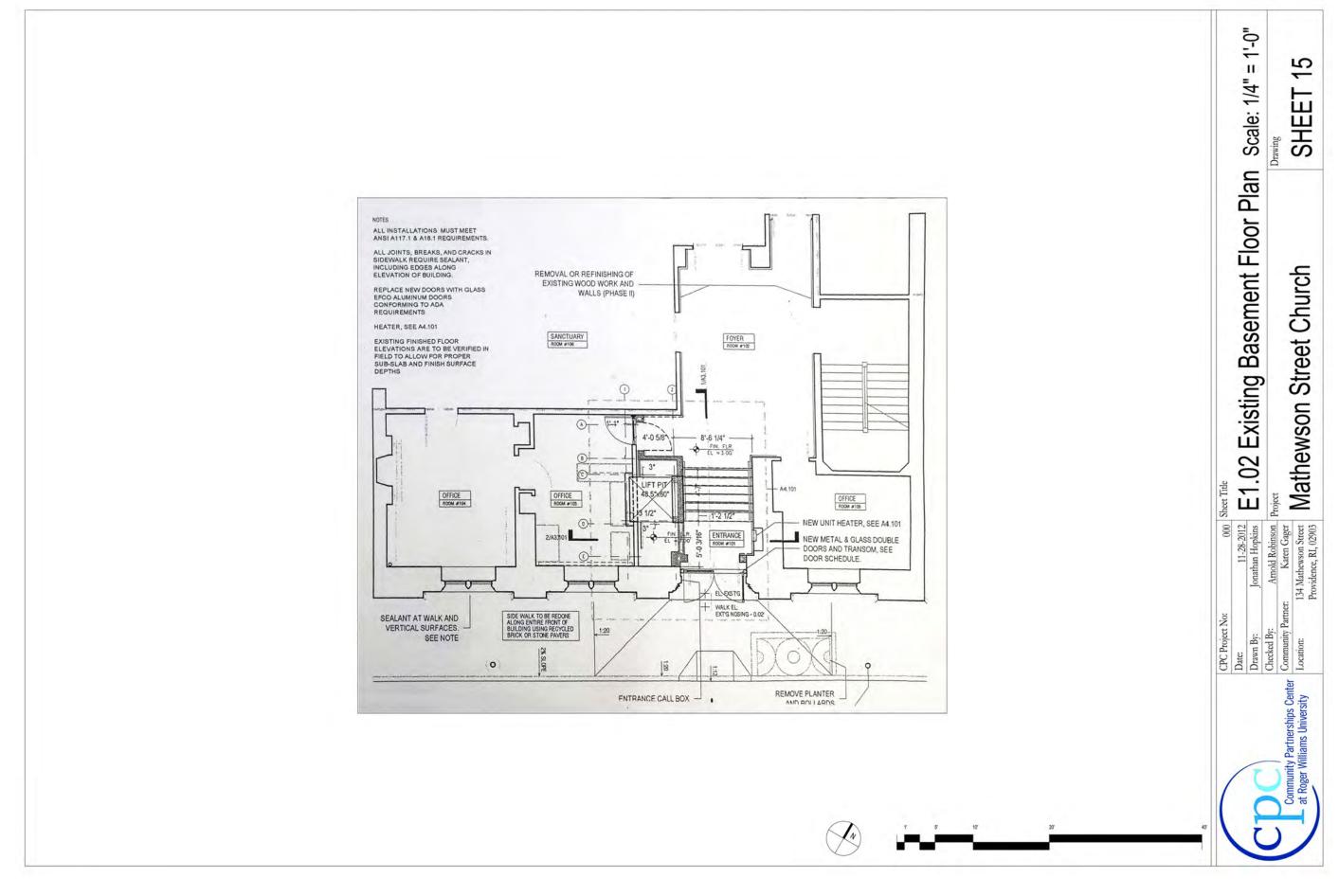














Rehabilitation Plan

Scope of Work

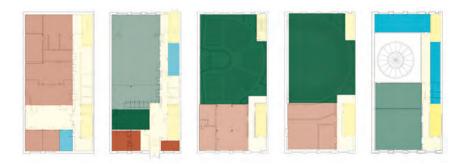
The objective of this report is to propose ways in which the building can be physically rehabilitated to accommodate full utilization while retaining its historical integrity and ensuring the building's long-term survival. Based on the building's historical significance, integrity and status as a contributing resource of the Downtown Providence National Register Historic District, treatment recommendations are informed by The Secretary of the Interior's Standards for Rehabilitation. The Mathewson Street United Methodist Church team has created an Existing Conditions Report, detailing observed deficiencies with the building, and has utilized these findings to propose rehabilitation treatments that will preserve the historical integrity of the building while allowing it to accommodate current and future needs.

Important issues to address in the scope of work for the rehabilitation of the Mathewson Street United Methodist Church are the failed finishes throughout (plaster and paint), the deteriorated chimneys, deteriorated windows, the exposed metal beam on the roof, the cracked cinderblock walls in the basement, ADA accessibility and the introduction of a security system at the main entry.

Proposed Use and Program

Proposed Use: The building will continue to follow its historical multiple tenancy use with the sanctuary space still being used for worship. The building will house multiple non-profits and have shared spaces, such as kitchen, storage, office and utilities. There will also be multiple-use gathering spaces on the first floor and the black box theatre. These new functions will cause an increase in the occupancy of the building, and the facilities will have to be increased accordingly.

Program: The multiple tenancy model will be based on a report prepared by Johnson & Wales University for the Mathewson Street United Methodist Church. The basement will be used as flexible office space. The program on the first level will contain the public spaces, with multiple use gathering space, the Emergency Winter Shelter, the soup kitchen, etc. It is recommended that the second floor be used for the functions of the church, with the church offices being relocated here, and the sanctuary be used for worship as well as per-



Proposed program diagram for Mathewson Street United Methodist Church. See large version on page 22.

formances. The third level outside of the sanctuary space will be used for flexible office space. The fourth floor will have a rentable black box theatre, which can be used for performance or gatherings. The fourth floor apartment will be designed to allow for an artist in residence as part of the program.

Treatment Recommendations

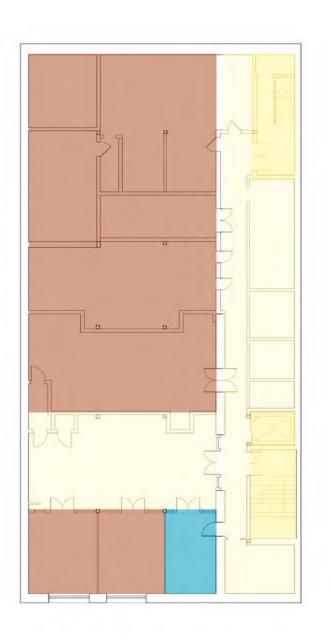
Division 04: Masonry

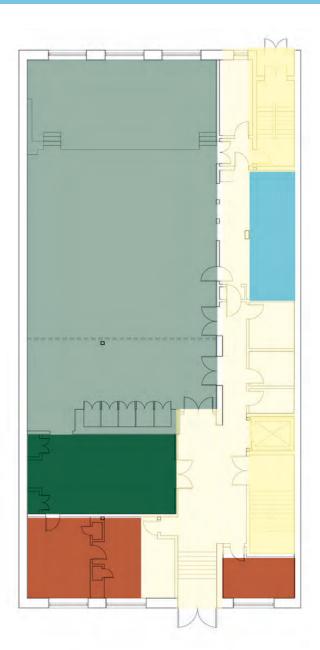
First Story Façade - West Elevation

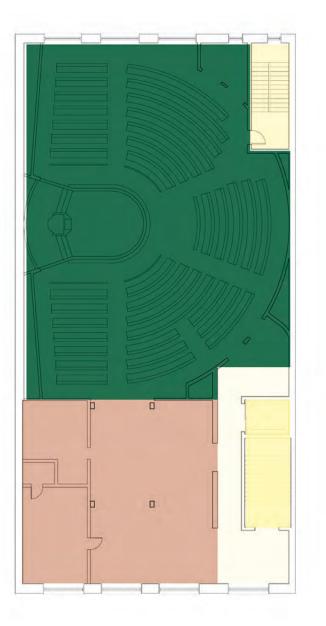
• Problem: The first-story aggregate stone façade from 1951 exhibits a build-up of grime, which is unattractive and detracts from the appearance of the façade.

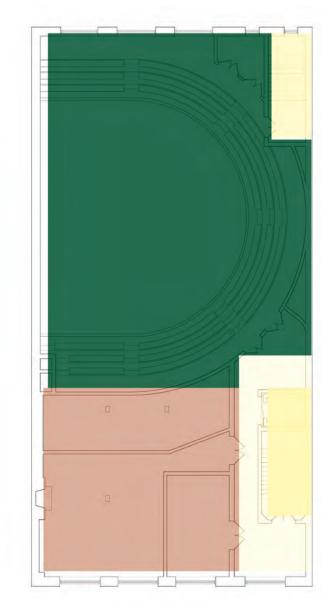
• **Solution:** The aggregate stone façade should be cleaned to remove surface dirt and areas of staining in accordance with Preservation Brief No. 1, "Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings." The gentlest cleaning methods, such as low pressure washing with a mild soap and water, should be employed first. If a more robust treatment is necessary, a mild non-acidic alkaline detergent should be employed and then rinsed off, such as such as Sure Klean® 766 Limestone & Masonry Prewash and Sure Klean® Limestone & Masonry Afterwash by Prosoco Inc. This will have the impact of improving the appearance of the entry-level façade of the building.











Proposed program diagram for Mathewson Street **United Methodist Church.**

vertical circulation circulation shared office space private office space storage space/ other gathering worship and gathering



Upper Story Façade - West Elevation

- Problem: The upper story limestone façades exhibit grime build-up, which detracts from the appearance of the façade.
- Solution: The limestone stone façade should be cleaned to remove surface dirt and areas of staining in accordance with Preservation Brief No. 1, "Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings." The gentlest cleaning methods, such as low pressure washing with a mild soap and water, should be employed first. If a more robust treatment is necessary, a mild non-acidic alkaline detergent should be employed and then rinsed off, such as Sure Klean® 766 Limestone & Masonry Prewash and Sure Klean® Limestone & Masonry Afterwash by Prosoco Inc. This will have the impact of improving the appearance of the entry-level façade of the building.

Brickwork - North Elevation

- Problem: Parti-wall was exposed after the adjacent building was demolished. The wall is currently in good condition, but needs proper protection from exposure to the elements.
- **Solution:** Check durability of the current layer of protective paint. Ensure that an alkaline-resistant primer is used because mortar joints tend to be basic. Maintain as necessary.

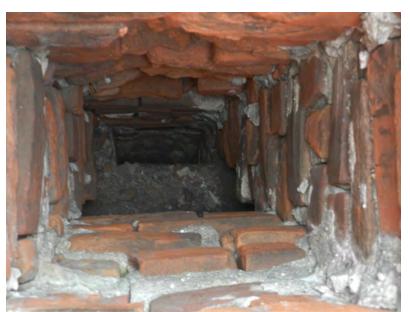
Brickwork - East Elevation

• Problem: Select locations on the brick rear (east) façade have deteriorated masonry joints. Mortar repointing is necessary on the rear façade in locations where there is deterioration.

• **Solution:** Deteriorated mortar joints to be raked out by hand and repointed to match original in color, texture, strength and joint tooling in accordance with National Park Service Preservation Brief No. 2, "Repointing Mortar Joints in Historic Brick Buildings." Impact will be the preservation and protection of the historic brick façade while maintaining visual cohesion.

West Chimney

• **Problem:** The westernmost chimney is a simple brick chimney that is not highly adorned apart from a four-course corbelled chimney cap. The chimney is not character-defining and is not a prominent feature of the structure. It is failing due to severe mortar degradation. As a result, the bricks are dangerously loose. Nothing secures the bricks from falling and causing injury.



• Solution: The chimney will be adequately documented and then removed and capped below the roof membrane, which will be extended to cover the area the chimney occupied to prevent moisture penetration. Impact will be the removal of a historic feature that is severely deteriorated, not character-defining and not prominent to the appearance of the building (nor particularly visible prior to the demolition of the adjacent building).

East Chimney

- **Problem:** The easternmost chimney is a simple brick chimney that is not highly adorned apart from a four-course corbelled chimney cap. The chimney is not character-defining and is not a prominent feature of the structure. It is failing due to severe mortar degradation. As a result, the bricks are dangerously loose. Chicken wire currently secures bricks from falling and causing injury. The chimney may contain the ventilation system for the building's boiler.
- **Solution:** The easternmost chimney will have the chicken wire and protective wrapping removed. It will be repointed above the roof line as an immediate treatment. Further investigation on its structural integrity below the roof line will take place. If it is determined that the chimney is failing throughout the rest of the building, a smaller inner flue will be constructed by inserting a rubber bladder into the chimney, inflating it to the desired size and pouring concrete around it to secure the chimney. Impact will be the retention and stabilization of the chimney.

Advanced deterioration of interior of east chimney.



Division 05: Metals

Steel Wide-Flange Beam

- Problem: A major structural element on the roof, a steel wideflange beam, is deteriorating due to exposure to the elements. This exposure is causing corrosion. The beam is currently in fair condition, but continued deterioration could have an adverse effect on the structural integrity of the building.
- **Solution:** The beam should be enclosed to prevent further exposure to the elements utilizing plans created for the structure in the 1980s by the architectural firm Beckman Blydenburgh & Associates, which indicated "I-Beam to be boxed" in plans for renovations to the building.

Division 06: Wood, Plastics and Composites

Woodwork - Basement

- Problem: Wood baseboards and architraves are rotted in select areas due to significant moisture damage.
- **Solution:** Once the moisture problem is resolved, the damaged baseboards and architraves should be repaired by documenting rotted areas and then removing the rotted wood while retaining intact areas. The removed portions should be replaced in-kind with wood, as well as matching moulding profiles and paint color.

Cinderblock Walls - Basement

• Problem: Cinderblock partition walls in basement (not original) exhibit vertical cracking, especially underneath beams and on both sides of the walls.

• **Solution:** Further investigation is required to determine whether the walls are structural. According to old plans, the basement was open and supported by columns, suggesting the walls are partitions. If the blocks are not structural and have just taken part of the load, the crack is cosmetic issue and can be painted over.

Note: The crack is essentially a way for the cinderblocks to relieve stress, and it can be guessed that no further damage will occur. It seems that they are taking a load from the column that they were not meant to take, and that is why the crack occurred. It can also be related to how the blocks were constructed around the column.

Prayer Railing - Sanctuary

- Problem: A prayer railing, constructed of light-colored wood and installed in the 1980s, extends around the altar. It is in good condition.
- **Solution:** The prayer railing will be removed. Impact will be the removal of a non-historic feature to facilitate easier access to the altar.

Division 07: Thermal and Moisture Protection

Basement Floor Moisture Protection

• Problem: Water seeps up through the basement floor, which is causing damage to the material of the floor. The protective layer between the floor covering and the ground below may be inadequate or deteriorated due to age.



Removal of the non-historic prayer railing will allow easier access to the altar. The balcony railing will be raised to meet code requirements.

• Solution: Further investigation, potentially through invasive analysis, is required to determine the exact cause of the moisture penetration. This should be determined prior to any renovations in the basement. The floor will probably require enhanced protection from moisture through the installation of a ThermalDry Basement Floor Matting system (or equivalent product).

Division 08: Openings

Basement Windows - West Façade

• Problem: Basement windows on the Mathewson Street side of the building have been in-filled with masonry. The reason for sealing the windows is not certain but might have been due to moisture penetration (note moisture damage beneath windows) or to prevent entry into the basement from the street. The windows must be reopened to allow more light into the basement.



• **Solution:** Remove the material covering the windows. The window requires a well with a drainage system to keep the window off of the street and prevent moisture penetration. The depth of the window well should extend below the bottom of the window. The sash will be restored according to Preservation Brief No. 9, "The Repair of Historic Wooden Windows." Storm windows will be applied to the window. A grate will be installed over the opening to protect the glass and prevent entry to the structure.

Existing Wood Windows - Upper Stories

- Problem: The original wood windows on the top three floors of the building are in fair to poor condition. Several window sashes exhibit various degrees of deterioration: rotted wooden mullions, significant loss of putty, glass in need of re-glazing and pervasive peeling paint. Storm windows are no longer in place due to fire code concerns. The windows are also not energy efficient due to a lack of insulation in the winter and solar gain in the summer.
- **Solution:** All existing windows to be retained. Repair deteriorated windows as needed in situ according to Preservation Brief No. 9, "The Repair of Historic Wooden Windows." Re-putty and re-glaze windows as needed. Wood elements that are deteriorated beyond the point of repair will be documented and

then replaced in-kind with wood and matching profiles. Deteriorated paint will be gently scraped and sanded to establish an even surface that new paint can adhere to before being repainted. Interior storm windows, such as the compression-fit interior storm window system offered by Innerglass Window Systems, with clear Low-E glass will be applied to enhance thermal performance. Storm windows will fit the window reveals.

Sanctuary Wall Opening

- **Problem:** The historical opening in the sanctuary wall is currently closed, cutting off the connection between the sanctuary and the adjacent room off of the balcony. It appears that these changes were made in the 1980s, and metal studs and sheetrock were used to close the opening. A restored wall opening without a partition would not meet current building code requirements. While drawings and photographs of the historic opening exist, adequate documentation for the historic opening is lacking.
- Solution: Rather than trying to interpret historic documentation of the opening, a new design for the opening is suggested that meets building code requirements and is sensitive to the historic building. The opening should be sealed with glass for fire prevention and noise control.

Division 09: Finishes

Asbestos Tile Floors - Basement

- Problem: Asbestos tile floors in basement are in poor condition and some tiles are broken or missing. They are neither historic nor character-defining features.
- Solution: Remove asbestos tiles. Address moisture penetration. Install a durable floor, such as an interlocking rubber tile system, in the basement. Impact is the removal of asbestos tiles and the ability to use the space for public purposes.

Plaster - Under Basement Windows

- Problem: There is severe plaster failure and rot in basement beneath the blocked off windows to Mathewson Street. The damage appears to be due to water leakage.
- **Solution:** Remove the damaged plaster, being careful not to damage the rest of the plaster in the room. Investigate the cause of the water leakage once the plaster is removed and stop the leakage, making the wall watertight. Install either new plaster or drywall on the wall. The current plaster is beyond repair, is not in a significant area and is not a characterdefining feature of the building.



Ceiling paint failure and staining from vents to be analyzed and addressed.

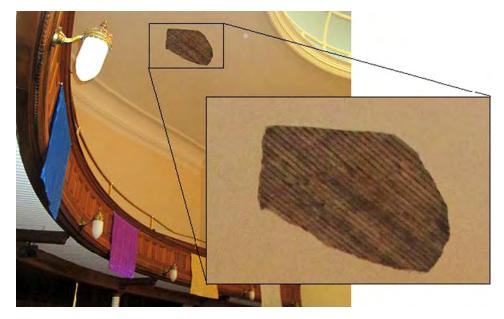
Ceiling Surfaces

- Problem: Ceiling surfaces consist of a lath and plaster system covered in various layers of paint. There is pervasive paint failure throughout the building, especially on the ceilings of the ground floor offices and the chapel. Newer latex paint layers may be incompatible with older calcimine paint layers.
- Solution: Paint analysis is necessary to determine the precise cause of the failure prior to any new treatments on the ceiling. If it is determined that older layers of paint are calcimine paint, the latex paint layers should be scraped as needed. A skim coat of gypsum plaster should then be applied and then painted.



Sanctuary Ceiling

- Problem: The plaster on the ceiling of the sanctuary has failed. The plaster keys between the laths have given way in one spot, and the rest of the ceiling may be in danger of failing as well. The problem appears to be a saturation failure, which could point to water issues and potential issues with the sink of the black box theatre above the worship space.
- **Solution:** Further investigation is required to determine the cause and extent of the failure, which can be done by inserting a flexible borescope to document the condition of the plaster keys. There should be no space between the plaster and the lath. Areas with space between the plaster and lath are loose and will require stabilization in accordance with Preservation Brief No. 21, "Repairing Historic Flat Plaster Walls and Ceilings." After any moisture issues are remedied, loose areas can be stabilized with plaster washers or fasteners, which are screwed into the lath. Mesh tape and a patching compound should then be applied over the washers and sanded to create a smooth surface. Areas with missing plaster should be patched by re-plastering the area in accordance with Preservation Brief No. 21. After all work is completed the ceiling should be primed and painted. The impact will be the preservation of the original plaster.



Plaster failure on sanctuary ceiling to be analyzed and addressed.

Window Sash Paint

- Problem: Window sash paint is peeling and in poor condition. Most windows exhibit significant peeling, which is leading to the deterioration of the wooden sashes.
- **Solution:** Wooden elements should be gently scraped, sanded and repainted where necessary as part of the overall window rehabilitation.

Apartment Finishes

- **Problem:** Interior finishes are in poor condition in the apartment area. The asbestos floor tiles are in poor condition. The walls and ceilings are in fair condition with select areas of crumbling plaster.
- **Solution:** The asbestos tile floors should be replaced. The plaster of the walls and ceilings should be patched, repainted and repaired where necessary. The facilities should be updated and the asbestos tile removed. The apartment will also be re-configured to allow for more space near the windows.

Division 21: Fire Suppression

Sprinkler System

- Problem: While there are sprinkler systems in place, the system may not be up to code on the fourth floor.
- Solution: Further investigation is required to determine whether the current sprinkler system meets code on the fourth floor using the Rhode Island State Rehabilitation Building and Fire Code for Existing Buildings and Structures. Install additional sprinklers in a way that is sympathetic to the historic fabric of the building, if necessary.

Division 22: Plumbing

Basement Plumbing

- Problem: During strong rainfalls, sewage backs up in the basement. The water comes up through the bathroom pipes and flows from the toilets. It floods the bathrooms and the room across from the bathrooms.
- Solution: Further investigation is required to determine the exact cause of the problem. Potential investigative methods include snaking a camera through the sewer line and conducting a utilities investigation. If investigation determines that the sewage connection combines rainwater and sewage, the plumbing system may require backwater valves, redundant systems and/or pumps. Other potential solutions for the problem include replacing the piping and installing a drainage system with a backstop (or two) around the foundation footings. This problem must be addressed prior to any other renovations in the basement, both to prevent further damage and to allow the space to be properly utilized.



Division 23: Heating Ventilating and Air Conditioning

Basement Ventilation

- Problem: Some basement rooms have no ventilation, which is necessary for occupancy.
- **Solution:** Installation of ventilation in a way that is visually least obtrusive to the room.

Sanctuary Air Vents

- **Problem:** Air vents in the sanctuary have stained the ceiling.
- **Solution:** Further investigation is required to determine the cause of the soot, but the system may need to be cleaned or replaced to prevent this problem from continuing.

Division 28: Electronic Safety and Security

Security and Notification System

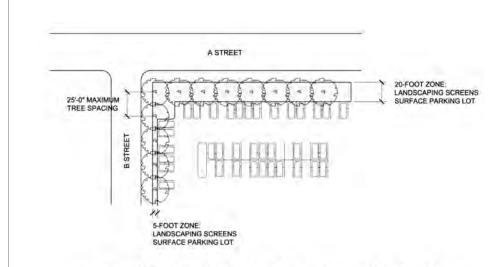
- **Problem:** The client has requested a new security and notification system at the main entrance to replace the existing doorbell.
- **Solution:** Installation of: (1) an exterior security camera wired to a video feed in the office of the building director, and (2) an intercom system/mobile application for smart phone.

Division 31: Exterior Improvements

Adjacent Surface Parking Lot

- **Problem:** The adjacent lot at 122-4 Mathewson Street is a non-conforming surface parking lot that directly abuts not only the sidewalk but the northwest-facing exterior wall of the Mathewson Street United Methodist Church building, which may be exacerbating existing moisture penetration problems in the basement.
- Solution: Monitor the northwest wall of the basement, particularly during and immediately following rainstorms to check for moisture penetration. If a problem is detected, notify the owner of the adjacent lot, and request enforcement from the City of Providence if necessary.

All improvements should be completed in conformance with the Department of Planning and Development. "City of Providence Zoning Ordinance" (City of Providence, 1994; last amended June 22, 2012)



- c. Along B Streets, surface parking shall be separated from the public right of way by a landscaped strip in accordance with Section 425.2 A). The DRC may require fences and/or walls to buffer the parking.
- d. The DRC may impose a time limit on the waiver that permits surface parking.
- e. The parking surface shall utilize low-impact-development practices appropriate to an urban environment consistent with city ordinance and state laws to treat and discharge stormwater.
- f. Light poles may not exceed 18' in height, and their design shall conform to Section 429.
- g. The DRC may impose further conditions to ensure that surface parking areas do not have a negative impact on the surroundings.

District-1 Zone: Parking (p. 78). 2. Article IV - Supplemen tary Regulations: Section 425 - Trees and Land scaping (p. 56).

1. Article V - Special Zones:

Section 502 - Downcity

Section 425 - Trees and Landscaping: Open space within lots and outdoor parking areas shall be landscaped with trees, groundcover and shrubs to enhance the environmental and aesthetic quality of the City and to reduce the visual impact of parking areas from the public right-of-way and from adjoining properties. This Section regulates the quantity and location of landscaping on all lots in all Zoning Districts. All development activity shall require either retention or installation of landscaping and trees, in accordance with the provisions of this Section. See Section 425.5 to determine if and when this Section applies. [Ord. 2012-25]

2



Code Issues

Entry Vestibule

- Problem: While the building has two means of egress and an elevator, the ground floor is not handicapped accessible from the street, and therefore does not conform to ADA requirements.
- Solution: Implement the plan for an exterior ramp or an interior lift, or redesign the entry vestibule, staircase and elevator. Implementation of the interior lift plan already developed seems to be the most practical solution. The configuration of the entry should be altered according to the proposed plan. A small opening will be made in the entry vestibule to the adjacent office. An interior chair lift will be placed in the opening to accommodate wheelchairs. Impact will be the removal of a small portion of wainscoting and the slight alteration of the office adjacent to the entry to accommodate ADA code requirements.

First Floor Egress

- Problem: On the first floor, the second means of egress requires inhabitants to travel through the kitchen.
- **Solution:** The kitchen should be sealed from the path of travel to the second means of egress using materials that have F90 rating. Add sprinklers according to code.

Balcony Railing

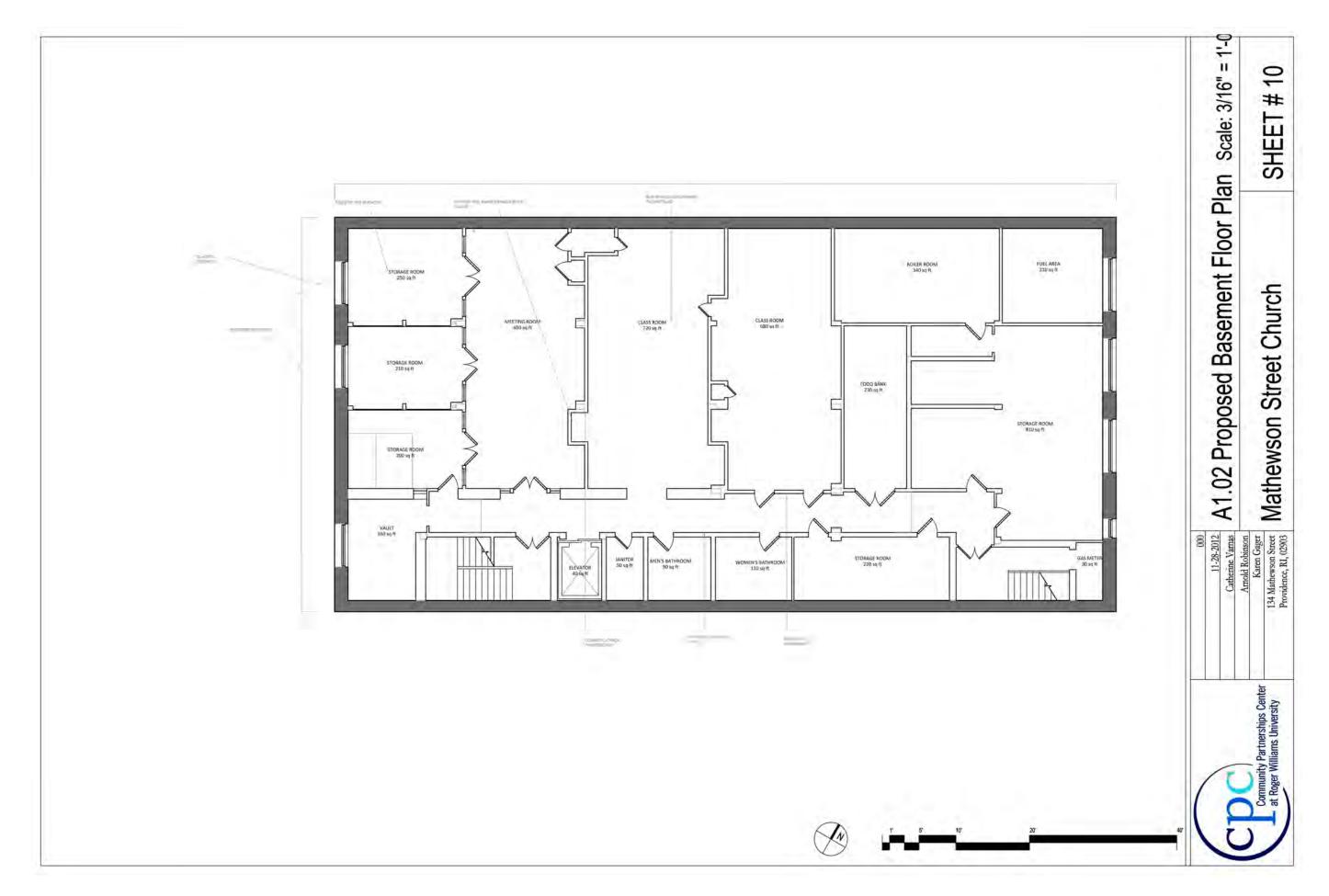
- Problem: The handrail on the sanctuary balcony does not meet minimum height requirements of 42 inches for public buildings.
- Solution: The balcony railing's brass stanchions will be replaced with taller brass stanchions that can also support glass panels. The railing's height will be raised to 42 inches and a clear panel will be installed behind the railing. Impact will be the raising of the original railing to meet code requirements.

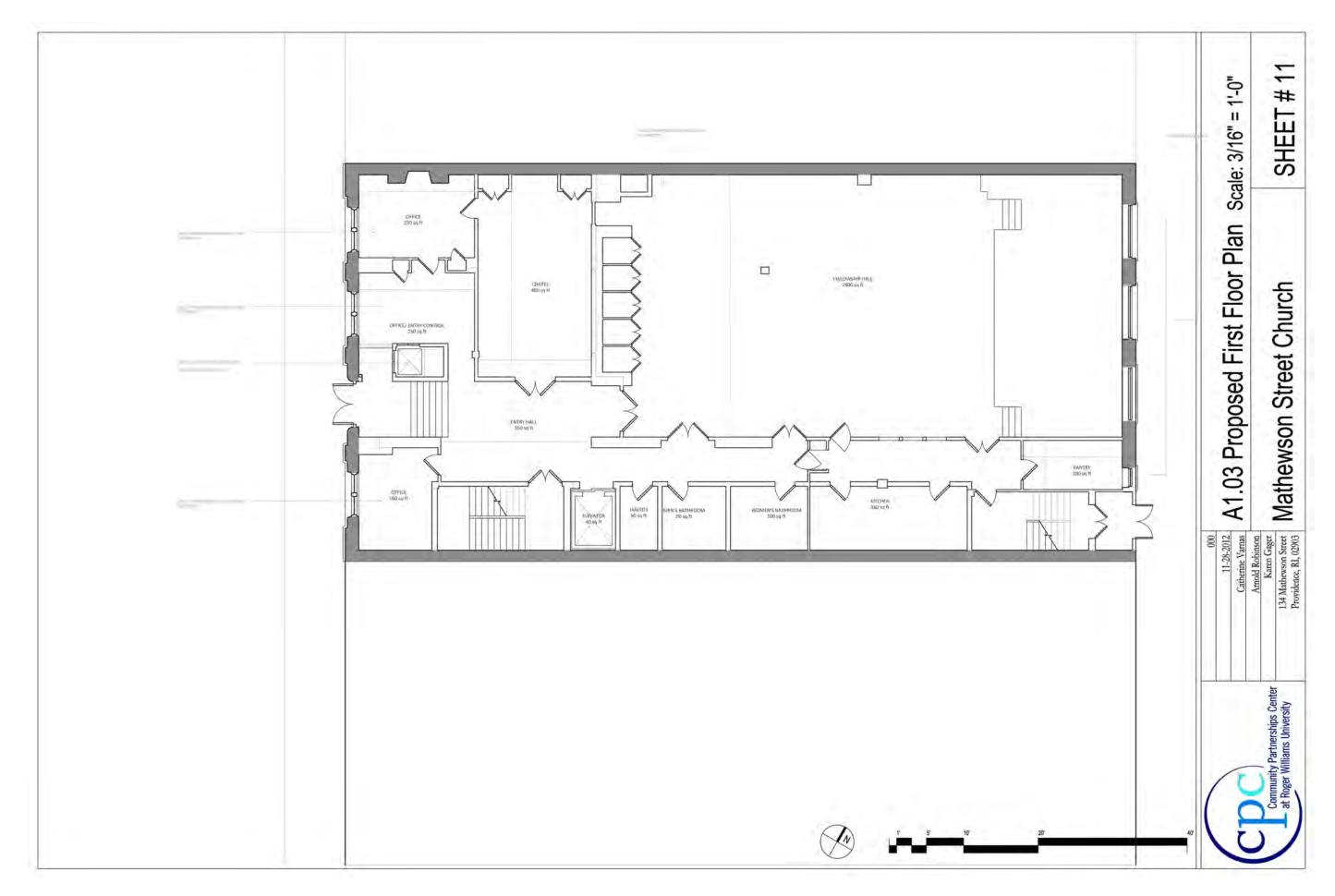
Fourth Floor Bathrooms

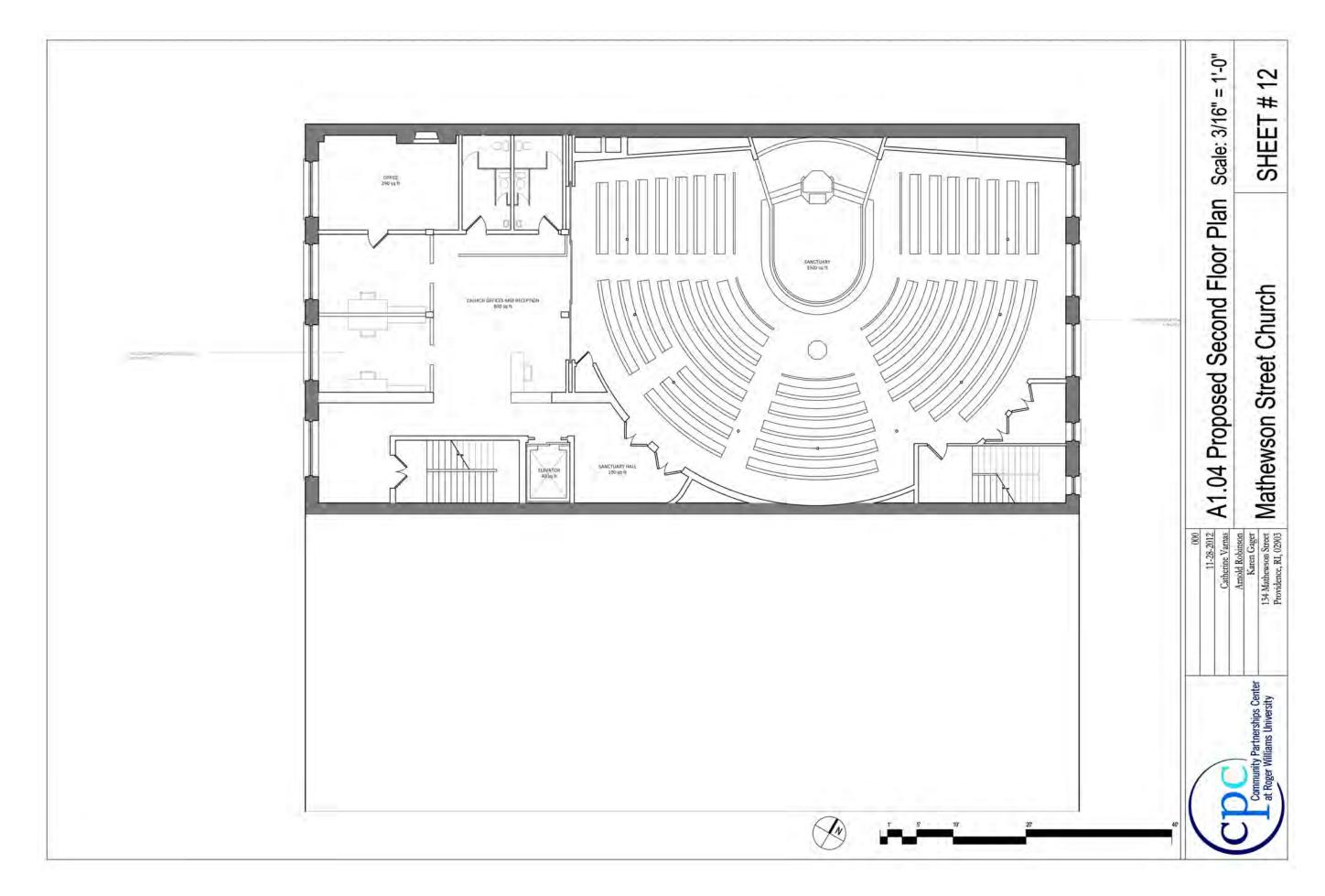
- Problem: The black box theatre on the fourth floor does not have handicapped accessible bathrooms due to a small set of stairs.
- Solution: Redesign the location of the bathroom and adjacent closet spaces so a unisex handicapped accessible bathroom can be entered from the same level as the theatre. Additional bathrooms will be added on the level that steps up.

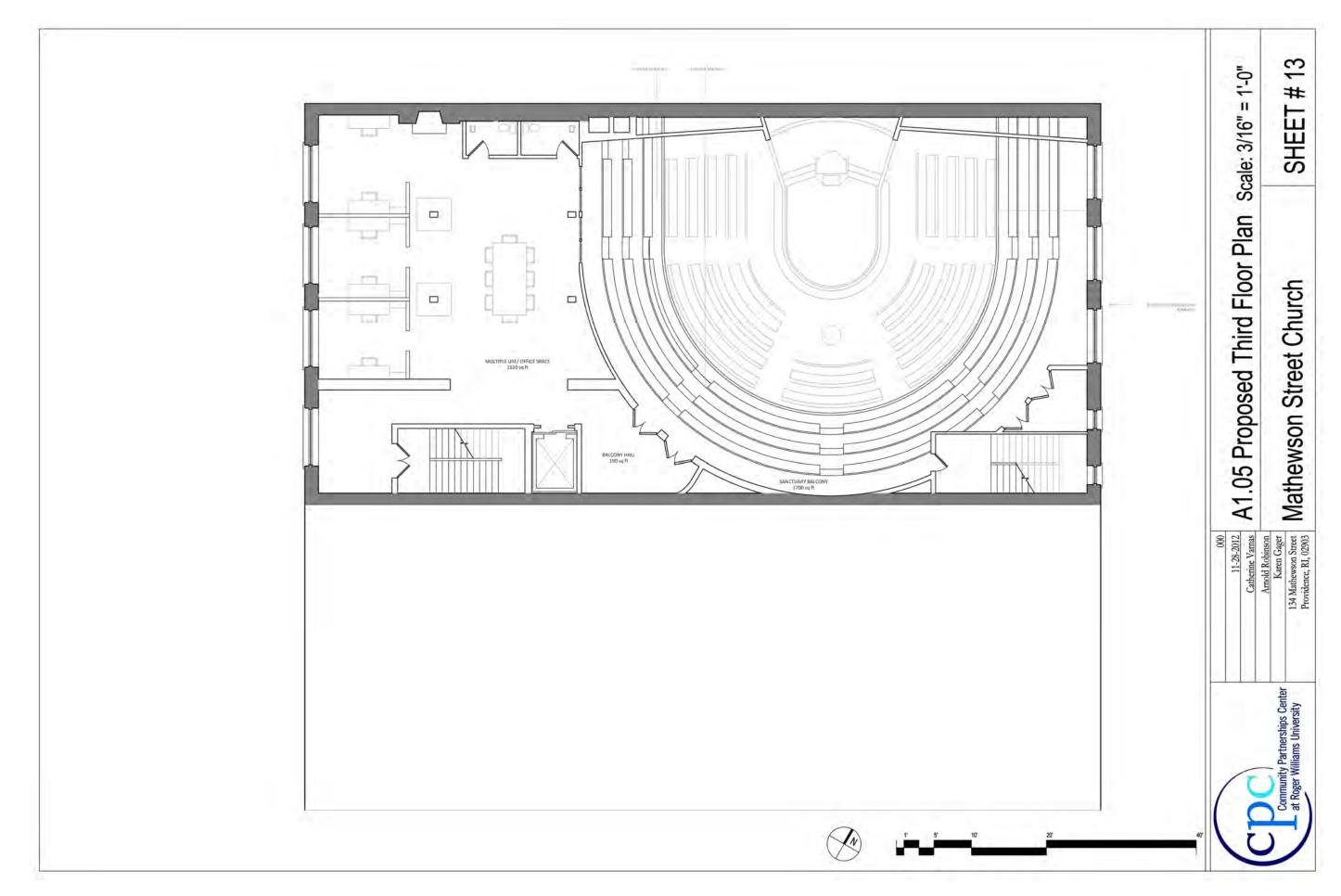


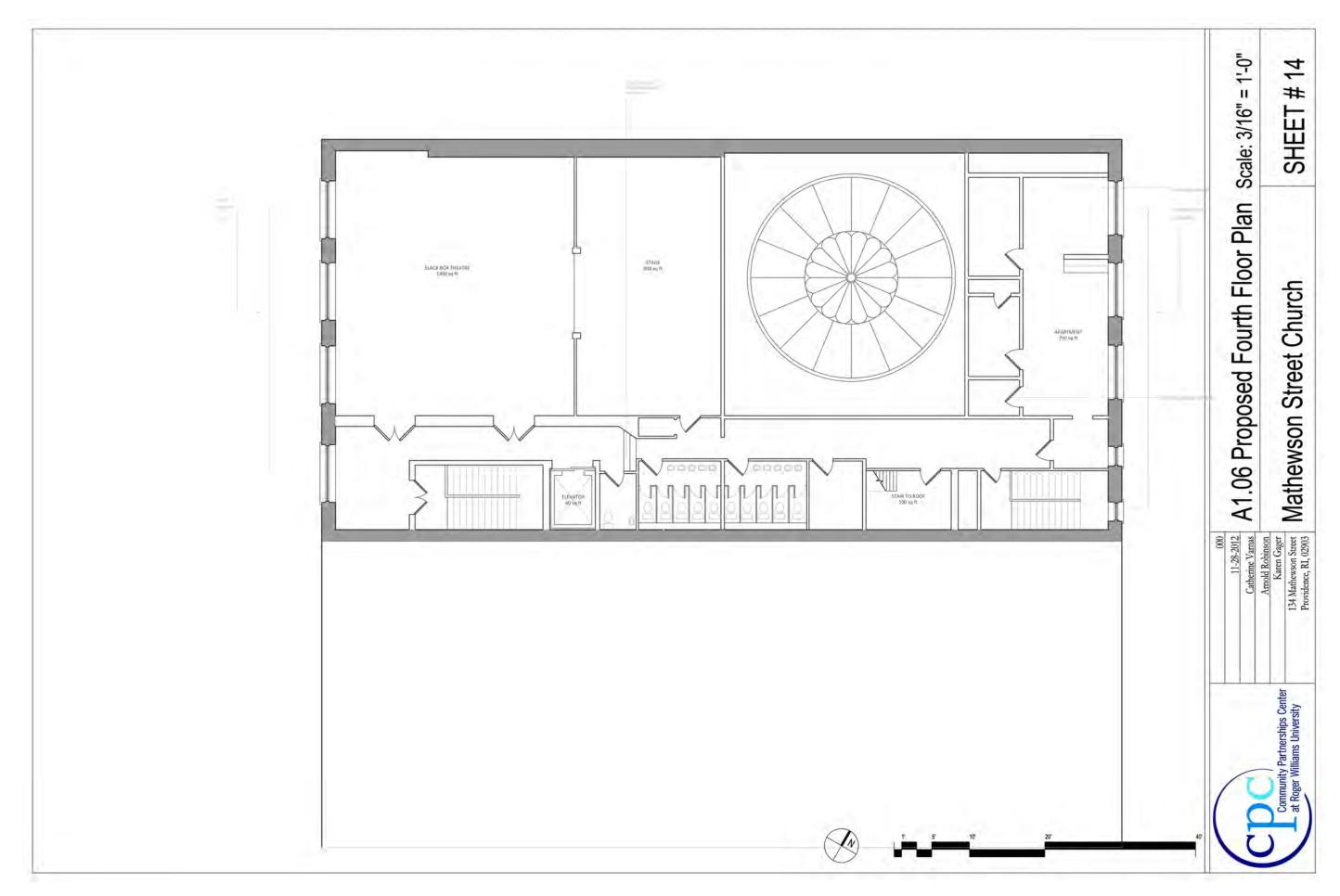
Present church entry on **Mathewson Street needs** to be made handicapped accessible.















HP681L students examine historical plans for the Mathewson Street United **Methodist Church.**

Conclusion

The rehabilitation of the Mathewson Street United Methodist Church should be phased. The first phase should encompass critical issues that inhibit access and inhabitability with the structure. The most critical issues to address in the first phase are the failed finishes throughout (plaster and paint), the deteriorated chimneys, deteriorated windows, the exposed metal beam on the roof and ADA accessibility. The remaining issues can be addressed after these as they are not as critical to the function of the building and the safety of occupants and pedestrians.

The rehabilitation of the Mathewson Street United Methodist Church will allow the building to be more accessible and inviting to the public so that the church and affiliated organizations can continue their important mission in the downtown area: providing valuable services to those in need. Small non-profits and start-ups will have an affordable space for their activities. Rehabilitating the church will allow the building to be more fully utilized for such purposes, allowing the church to become more self-sustaining. It will also be valuable architecturally by preserving a unique piece of the downtown's fabric for future generations.



Roger Williams University One Old Ferry Road Bristol, Rhode Island 02809

cpc@rwu.edu http://cpc.rwu.edu