

Former Fifth Church of Christ, Scientist

11623 Lake Avenue
Cleveland, Ohio 44102

Facility Assessment

October 1, 2009

Prepared for:

City of Cleveland

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2009 view

1976 view

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I. Executive Summary

The former Fifth Church of Christ structure is a magnificent structure at Lake Avenue and 117th Street. Constructed in 1926 to serve a growing church population, it served as a church until the late 1980's when the structure was vacated. While alternative uses have been explored for the building on previous occasions, including a proposal to use the building as part of a grocery store, the building has remained empty for approximately the last 20 years.



View of former Fifth Church of Christ from north

Investigations: The project team toured and investigated the building on several occasions. The exterior of the building was observed from the ground level. No power or lighting was available at the building interior, although the main assembly space is daylit by existing windows. Scaffolding was erected at an interior wall to provide access to view a typical truss bearing condition at an exterior wall. A scaffold stair was provided to access a hatch high on the southeast wall of the building in order to reach the existing catwalk system within the dome structure. Some areas of the building's structure are concealed by plaster ceilings and other existing finish materials and construction. Other portions of the building were unable to be observed only from a distance due to their height above the existing floor surface or because of potentially unsafe conditions. This assessment represents the team's professional opinion based on the areas observed and investigated. Photo documentation of the church is included in the project appendices.

Historic Status: The Fifth Church of Christ is listed as a local landmark by the Cleveland Landmarks Commission. The building is not listed on the National Register of Historic Places.

Building condition: The City Architecture project team was retained by the City of Cleveland to evaluate the condition of the existing church building. This building has remained vacant unheated and unmaintained since its closing in 1992, and its condition has substantially deteriorated. The exterior is largely intact and includes architectural details of high quality, though there is some damage due to moisture saturation of the walls and continuing winter freeze-thaw cycles. The interior finishes are largely deteriorated beyond repair due to moisture exposure, with the exception of stone finishes and similar durable materials.

Structure: Moisture penetration into the building has caused structural damage, most significantly the corrosion of steel members and connections. The primary areas of structural concern include corrosion at the connections where the main steel roof trusses bear at the exterior walls, corroded structure under the central cupola, deteriorated joists at the one-story areas along the south and west side of the building, and deteriorated steel floor joists supporting the auditorium floor. The exterior walls show moisture damage and visual deterioration, but appear to be stable. Some steel lintels have corroded and swelled, jacking up masonry and pushing up the parapet primarily along the south one-story brick wall. Some areas of the basement floor show evidence of frost heaving. The building appears generally stable at the moment, but critical repairs should be implemented soon to reduce risks to the building and public safety.

Mechanical and electrical systems: The existing mechanical and electrical rooms have been demolished, and no useable portions of the existing systems remain intact. New systems will be required throughout to enable future occupancy.

Zoning: The existing site is zoned for as District 1F-A1 single-family residential use, and any change of building use would require a zoning variance. The City of Cleveland Citywide Plan proposes retail use for this site.

Building code: A substantial scope of work required to prepare this building for re-occupancy would include work to bring the original construction into compliance with current codes. The steel and masonry construction of the existing structure is compatible with potential uses anticipated for the building. As an existing historic building, the alternative code compliance approaches described in Chapter 34 of the Ohio Building Code can be applied to allow flexibility in developing for future building renovation strategies.

Accessibility: Existing level changes and stairs are barriers to accessibility, but can be overcome. The existing west entrance is at grade and could be easily adapted for access. Lower level access is available only via stairs and a new elevator or lift would be required to provide access. Existing restroom layouts are not compliant with the Americans with Disabilities Act and would need to be reconfigured.

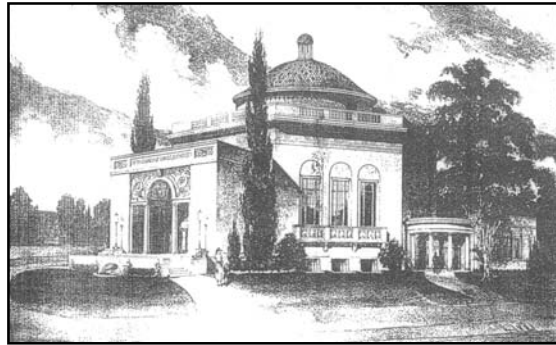
Repair scope: This report describes three levels of potential repair scope and includes estimated costs for each. 1) Critical repair items needed to stabilize the building for continued vacancy and reduce future deterioration. 2) Restoration of the building shell to provide a “whitebox” for a future user or tenant. 3) Interior buildout to prepare the space for new users.



View of the main auditorium space

II. Building Description and Condition

Building Description: The Fifth Church of Christ was constructed in 1926 to serve the needs of a congregation of Christian Scientists. The building's architect was Frank Bail. The building was designed in the Neoclassical style, with the primary mass of the building shaped as an octagon in plan, topped with a large central dome and cupola. The central octagonal auditorium housed the main gathering space, designed to seat 900 persons. The main entrance portico to the northwest served as the formal entrance lobby to the building. Low wings along the south and southwest sides of the building provided a secondary entrance and reading room space as well as access to the social hall in the basement. A mechanical room to the south east was demolished in approximately 1998, apparently to plug a leaking gas line.¹ The total floor area of the current building is approximately 22,300 square feet. Refer to the Appendix for a summary chart showing building areas.



1926 building rendering

The structure of the building consists of masonry exterior bearing walls, with steel joists and decking topped with concrete. Exterior walls are clad in sandstone with a small area of the one-story wing clad in brick. The dome is clad in Luduwici clay roof tiles. Original interior finish materials included ornamental and flat plaster, stone veneer and flooring, wood paneling and similar materials typical for institutional buildings constructed in this era. Interior materials are described as follows:

Exterior: Birmingham Warmtone Buff sandstone (Berea Sandstone) quarried in Birmingham, Erie County, Ohio was used for this church. The stone on the drum beneath the dome was painted over with a yellowish coating in 1991.

Interior: The lobby has walls and pillars faced with Saint Genevieve Golden Vein marble and flooring of pink Tennessee marble. Floor trim, bases of pillars, and balusters are a black limestone with white streaks.²

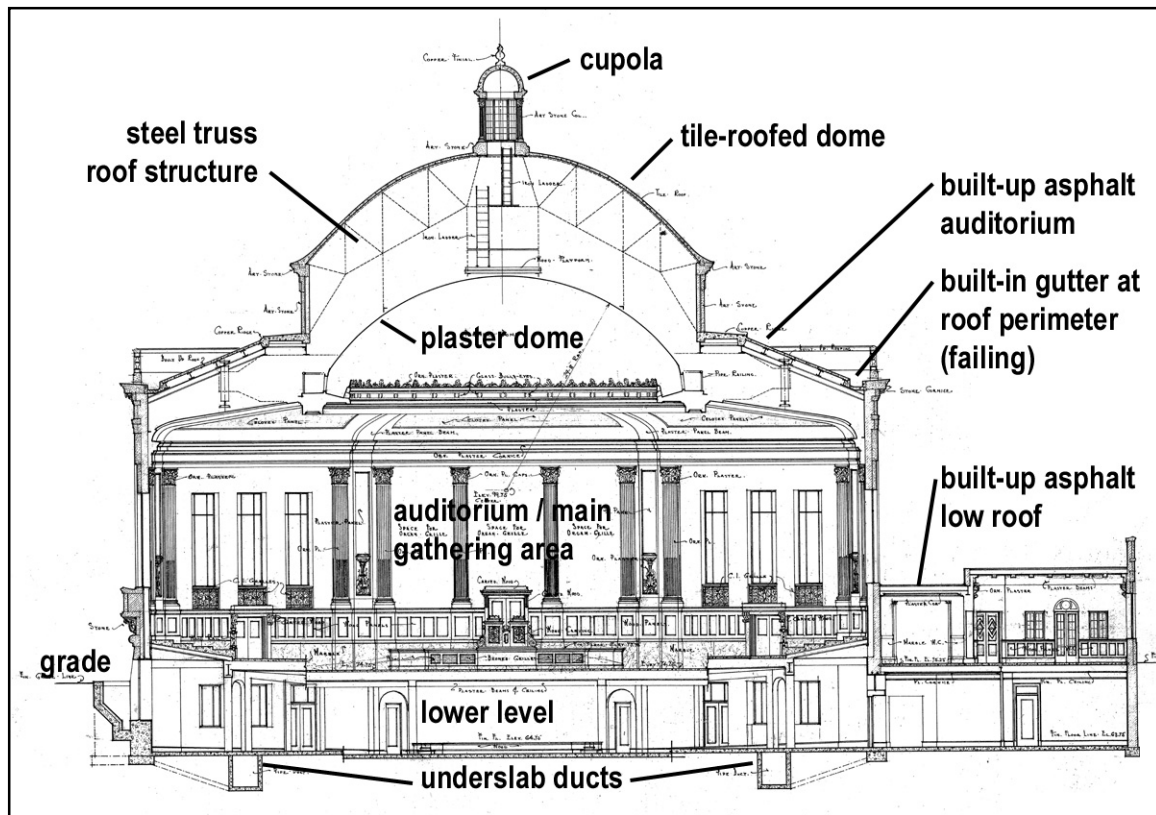
Site, Location, and Context: The building sits in the Cudell Neighborhood, adjacent to the Clifton Boulevard commercial district to the south, and surrounded by residential areas, with some multifamily apartment buildings to the west and single family residential structures to the north and east.

Building Condition:

Roof: The roof appears to consist primarily of built-up asphalt roofing, with the exception of clay tile clad roofing over the large dome. The low roof areas have failed in numerous areas, with the steel decking heavily corroded and daylight visible in several locations. At the sanctuary, water appears to have been penetrating the roof at the base of the roof slope around the exterior wall as well as from the central cupola. The tile roof dome appears to have minor leaks, but does not appear to be a significant source of water penetration at this time. We were unable to observe the built-up roof areas over the sanctuary around the dome area. The asphalt roof areas appear to have gone beyond their useful service life and must be removed and completely replaced. Existing roof decking will require repairs and replacement, although it is difficult to estimate how the scope of repair because many of these areas are inaccessible or concealed.

¹ Armstrong, Klein, and Armstrong. (1992). *A Guide to Cleveland's Sacred Landmarks*. Kent State University Press.

² *Guide to Stone used for Houses of Worship in Northeast Ohio*. (n.d.). Retrieved 5/6/2009, from the Cleveland Center for Sacred Landmarks: http://urban.csu.edu/sacredlandmarks/monograph_series/stones/fifthchurch.html



Building section at auditorium

Exterior walls: The exterior sandstone appears saturated with moisture in many areas, exhibiting efflorescence (white salt-streaked and stained areas) and spalling of the face of the stone due to repeated freeze-thaw cycles. The one story wing along the southern portion of the building is clad in brick with sandstone lintels over window openings. There is a significant horizontal crack that extends along a large portion of this wall at the level of the window heads, likely caused by the expansion of the corroding steel lintel jacking up the masonry parapet above.

The basement mechanical room and electrical room at the southeast corner of the building were previously removed along with an upper level areas behind the altar / "reader's desk" that may have housed a pipe organ. This southeast wall in the auditorium now consists of plywood applied over wood framing. This enclosure provides some weather protection but is not weather tight. Sandstone cladding from the demolished wing of the building is stockpiled on site.



Masonry cracking aligned with existing window lintels at south wall



Sandstone spalling, efflorescence, and staining

Windows: Most existing windows remain in fair condition. Existing frames appear to be steel. While a number of the glass panes are broken, many of the sanctuary windows are protected by an existing exterior plexiglass storm window, which can provide adequate protection if it remains intact. The lower level and grade level windows are boarded with plywood. Windows will need to be extensively restored or replaced for future occupancy of the building. To keep the building envelope dry, minor repair or replacement of the plywood boarding and plexiglass storms is required where it is damaged or missing.



Building Interior: Continued moisture infiltration into the building has damaged or destroyed most interior finishes. Ornamental and flat plaster has become water saturated and much of it has collapsed to the floor. Portions remain that give a sense of the original profiles and details, but it must be assumed that any future re-use would need to re-create this detail anew – no significant areas remain substantially intact. Existing wood paneling, doors and similar moisture susceptible materials have also deteriorated completely. Marble wall panels, flooring, and tile flooring that are resistant to deterioration remain intact in many areas. The basement floor slab has heaved up in the western area of the basement, and while it does not appear to be an immediate concern, it would need to be removed and replaced for future use of the building.



Reading Room



NW Entrance Lobby



Sanctuary

Structural Assessment: The critical areas of concern are corroded connections at the primary roof structural members particularly at the perimeter of the octagon and under the cupola at the top of the dome. Additionally, roof decking, roof joists and floor joists along the 1-story wing at the south and east sides of the building are deteriorated and failing in some areas. The exterior walls show moisture damage and visual deterioration, but appear to be stable. Refer to the attached structural engineer's report for a more detailed assessment.

Mechanical Systems: The original mechanical system consisted of a lower level mechanical room with a boiler connected to radiators, as well as an air handling unit that used underground ductwork. The original mechanical room was demolished in approximately 1998, and the underground ductwork under the basement slab is filled with water. Existing radiators have been removed or displaced in many locations. There are no significant components of the existing mechanical system that can be re-used.

Plumbing Systems: Existing restrooms remain in the building. It is possible that existing sewer lines could be re-used, but would require further investigation and camera inspection to verify. Original drawings show an 8" sewer line, a 2½" water line and 1½" gas line serving the building. We cannot confirm if the existing lines still remain in serviceable condition. It is likely the sewer line still is at least partially functioning since water has not flooded the basement. Sources indicate a gas leak was the reason for the demolition of the mechanical room in 1998.

Electrical Systems: No electrical service is currently functioning at this building. It appears the original electrical room was part of the rear mechanical room area that was demolished in approximately 1998. Any new use would require new electrical service and facilities.

Environmental Considerations: The building was constructed during an era when asbestos was in common use as a component of construction materials. Floor tile is 9"x9" and 10"x10", a size consistent with vinyl asbestos tile products of the era. Asbestos could potentially also be found in plaster surfaces, insulation at mechanical piping, etc. Lead paint was also commonly used in buildings of this era. While our firm is not qualified to identify environmental hazards or suggest abatement procedures, we strongly recommend that the City of Cleveland conduct Phase I and II Environmental Assessments of the site and structure prior to proceeding with any construction or demolition operations at this property.

Site: Steps at the front entrance are deteriorated at some locations and require repairs. Areawells at the perimeter of the building have some trash and debris, but drains appear to be functioning enough to prevent flooding.

The existing landscape is maintained by the City of Cleveland. Remaining ornamental trees, shrubs and landscape beds remain and are kept pruned and trimmed to provide an attractive appearance around the building. While there is some fencing around the rear of the building at the former mechanical room area, it may be worth considering removal of the existing chain link fencing and installation of heavy-duty fencing along the east and south boundaries of the property to enhance security and limit trespassing at the areas of the building that are less visible from the street.



Deteriorated front steps



Existing Landscaping



Existing fencing at south property boundary

Regulatory Review

Zoning: The building site is currently classified as District 1F-A1 (single family, 35 ft. HL), which is a single family residential district with a 35 foot height limit and maximum gross floor area restricted to half of the lot area (26,946 lot area ÷ 2 = 13,473 max. floor area). The existing zoning classification includes houses of worship as a permitted use.

Adjacent zoning classifications include, in the commercial district to the south: LR-A1 (local retail) and P-1 (parking). Further to the south, Clifton Boulevard is classified LR-C2. Residential area to the north is L1F-AA1 (limited single family). Refer to the zoning map included in the appendix.

Any re-use of the existing structure other than continued church use would require a zoning change or variance. Given the adjacency to the existing commercial district, a case could be made to support re-zoning for a use that is compatible with the surrounding residential areas. The Cleveland 2020 Citywide Plan proposes retail land use for this site.

Building Code: Building renovations and improvements will be governed by the most current (2007) edition of the Ohio Building Code.

Construction classification: The existing construction assemblies present in the building include load bearing exterior masonry walls and non-combustible steel interior framing. Given this structure, the building can be classified as a structure of Type 2A, 2B, 3A, or 3B construction for future building re-use. To be classified as Type 2A or 3A, any existing structural members that are been exposed will need to be protected with new plaster or gypsum board to achieve the required 1-hour fire-resistance rated membrane³. A preliminary analysis indicates that the building can be classified as the unprotected, unsprinklered type 2B or 3B construction types and still accommodate the existing building floor area for assembly uses

Egress: The building was designed for assembly uses, and both the large lower level and main level primary spaces include multiple exit doors evenly distributed around their perimeters, with four pairs of exit doors available for a total egress capacity in excess of 1,400 persons from each space. The building could be adapted to accommodate a wide variety of potential use groups, including assembly, mercantile, business, and residential occupancies.

Fire Protection: The installation of an automatic sprinkler system will be necessary for most assembly and residential building uses. Fire alarms and smoke detectors will be required for most if not all potential uses.

As an existing building constructed prior to 1979, the alternative code compliance approaches described in Chapter 34 of the Ohio Building Code can be applied to allow flexibility in code compliance for future building renovations. Specific applicability of chapter 34 will depend on the final building use/ configuration.

Accessibility: Due to the level of deterioration of the building, our assessment of accessibility focuses on accessible routes into the building, identifying barriers to accessibility that may be posed by the basic building structure and configuration. These barriers include existing level changes and entrance stairs. The existing W. 117th Street entrance is at grade and can be easily made accessible. There is no accessible route to the basement level, so lower level access would require an elevator or wheelchair lift.

Existing restrooms, door openings, hardware and other features were not built with today's accessibility standards in mind. These features are heavily deteriorated and will need to be replaced for any future re-use of this building in any case, and their replacement would by necessity include updating these features to meet ADA Accessibility Guidelines.

³ Except in Group M (Mercantile) and S-1 (Storage) occupancies, the roof structure above the main auditorium does not require 1-hour fire protection to be classified as Type 2A or 3A construction, since it is greater than 20 feet above the floor below.

III. Repair and Re-use Scope

We have established three tiers of building repair and rehabilitation to aid the City of Cleveland in assessing potential options for the future dispensation of the building. These tiers correspond to the cost estimates. **Tier I Repairs** involve stabilizing and weatherproofing the building as required to maintain it in a mothballed state for long-term continued dormancy.

Tier II Repairs describe work to restore the building for a potential re-use. This section is included for informational purposes only to give a sense of the order of magnitude of costs that might be anticipated by a private developer considering the redevelopment of the building. **Tier II-a** involves restoring the building shell to a 'whitebox' level as necessary to prepare for a new occupant. **Tier II-b** improvements consist primarily of the interior enhancements required for various potential new uses.

Status quo: As a baseline, we consider the option of taking no action. The building has existed in a vacant state for nearly 20 years. The building has deteriorated significantly during this time. Further exposure to water damage is the most significant risk to the building and will continue to corrode structural steel. Since interior finishes are nearly completely destroyed, the primary risk is that structural members will eventually fail. The dome roof consists of large steel trusses that are interdependent, where failure of one truss has the potential to lead to a progressive collapse. The structural engineer did not observe structural deformations in these primary members that were obvious signs of imminent failure, though corrosion is visible in many areas.

Based on the limited observations the project team was able to make within the scope of this study, it is difficult to predict how long the existing structure will remain stable without some remedial attention. Temporary repairs of open roof areas can be continued to try to reduce water leakage and structural corrosion. Structural failure of the building roof systems will occur at some point in the future if the building remains in its current state, but it cannot be known with certainty what the anticipated remaining life of the structure might be.

Since the structure is unoccupied, the primary safety risk posed by any structural failure would be to bystanders. If no repairs are made, it would be prudent to consider installing fencing and "no trespassing" signage around the site perimeter to limit public access near the building. If this status quo is maintained, the building should be observed on a regular basis for signs of structural instability, particularly on the dome roof structure. If instability in the primary roof structure is observed and conducting critical structural repairs is not a viable option at that time, consideration may need to be given to razing the structure.

Tier I Repairs - Stabilization: The intent of this scope of work is to stabilize and mothball the building to allow for an additional period of long term vacancy. This work is intended to address critical repairs, weatherize and secure the building, and reduce the risk of continuing deterioration. This level of work describes the scope of work recommended to secure and weatherize the building to reduce the potential for future damage. Refer to National Park Service Preservation Brief No. 31 in the Appendix for a detailed discussion of important considerations when mothballing an historic structure. The scope below can be adjusted based on the duration of future vacancy anticipated as well as available budget.

- **Structural repairs:** Critical structural areas include reinforcement of corroded truss connections and bearing points and replacements of deteriorated roof deck areas and supporting roof joists. This scope is further described in the structural inspection report in the appendix.
- **Re-roofing:** To stop water infiltration into the building, the roof must be thoroughly repaired after the damaged roof deck and deteriorated roof joists are replaced. Tear-off existing built-up asphalt roofing. Re-roof built-up roofing areas, replace flashings, repair and replace damaged gutters and roof drains. We assume the existing tile roof can be retained for additional service life, with missing tiles and damaged areas replaced in minor areas. Repair the cupola: If necessary, remove the existing roof tile, sheath the window openings with plywood and clad the roof assembly and boarded windows with an ice and water shield membrane.
- **Close openings:** Board up remaining windows and doors and replace damaged plexiglass storms. While exterior doors are currently boarded up, there may be some benefit to stronger protection of the entrances. Install new heavy-duty security doors at three door openings: east auditorium doors, east lower level area well, west reading room door.
- **Enclose southeast wall:** At the wall behind 'Reader's Desk' / altar area, remove the current plywood and wood frame temporary infill, and provide a new, more weather-resistant enclosure. Reframe the existing wall structure, sheathing the wall with plywood, installing an air / moisture barrier (housewrap), and install an inexpensive secondary weather barrier exterior material such as vinyl siding to reduce weather penetration through this wall.
- **Critical masonry wall repairs:** Prioritize exterior wall repairs necessary for stability and weather resistance. Replace damaged lintels along south wall and rebuild parapet to level of existing roof. Tuckpoint severely damaged areas and install sealant at visible cracks and gaps.
- **Exterior areawells:** Clean debris from exterior areawells. Inspect and clean out drains to ensure they are functioning.
- **Interior debris removal:** Remove all fallen, loose or unstable plaster and other finish materials and debris that have accumulated in the building. Salvage and store materials that may have historic significance that could be of value and use in future restoration work.
- **Drain:** Once building envelope is dried-in, pump water from flooded basement ductwork.
- **Ventilate:** Installation ventilation for the building would assist in the escape of moisture in the building and would be a benefit if further long-term mothballing is anticipated. Refer to NPS Preservation Brief No. 31. Add louvers at basement and sanctuary window openings, and if practical, a powered exhaust fan. There is an existing exhaust fan in the ceiling plenum over the northwest entrance lobby that vents out a louver of these entrance doors. This system could be replaced and adapted to provide ventilation.

- Security fencing: We recommend replacing existing fencing at the southwest side of the building with more extensive fencing along the eastern and southern boundaries of the property in order to restrict access to less visible sides of the building. We believe fencing along the streets on the north and west sides of the property does not offer a substantial security benefit if the building is stable and secure. Fencing should be heavy duty chainlink with a tight 1" mesh to be more resistant to cutting and climbing.
- Landscape: Continue pruning of trees and shrubs and general maintenance of landscaping to prevent an overgrown appearance and reduce hiding areas for vandals.
- Continue monitoring of the property on a periodic basis to promptly identify and remedy problems such as security breaches and moisture leakage.

Total estimated cost: \$560,000

Of this scope, the most important and immediate needs are the critical structural repairs, roof replacement, and opening closure. The other items listed are beneficial in a long-term vacancy scenario, but not imperative.

Tier I – Option for partial temporary repairs: The scope of Tier I repairs listed above has been developed with an intent to accomplish the first stage of repairs that might be carried forward to a potential future redevelopment. Completing this work would result in a new roof and other envelope repairs that return value to the building.

Reduced work scopes less comprehensive in their extents may also be worth consideration. Completing partial and less costly repairs will not last as long or be as reliable, but may still extend the life of the building shell to allow more time to find a future building use. A partial repair scope might include:

- Partial Structural repairs: Partial repairs might include reinforcement and/or shoring only at primary structural members where corrosion seems most severe, and particularly at the bearing points of the primary trusses supporting the dome.
- Partial re-roofing and drainage: The most severe area of water infiltration is the perimeter of the octagon, where the built-in gutter is located. The lower eight to ten feet of the perimeter area could be re-roofed, and new drainage scuppers cut through the existing parapet to allow water to be directed away from the building rather than continuing to pour into the building. Similarly, the cupola at the top of the dome could be temporarily boarded and clad in a waterproofing membrane.
- Close openings: A partial scope would include repairs to the cladding at the current temporary infill at the southeast wall and repairing or reinforcing boarding at the building windows and doors.
- Drainage: Pumping out water from the sub-slab ductwork in the basement would reduce the risk of future frost-heaving, at least temporarily.

Partial repair scope -

Estimated cost range: \$100,000 - \$130,000

Tier II-a - Restoration to White Box: This consists of work that could be undertaken by a private entity to restore the shell of the building to prepare for a future re-use. This includes full restoration of the exterior, and installation of basic mechanical systems, plumbing and electrical service. This cost can be considered together with the Tier II-b build-out costs to produce an estimate for a total building rehabilitation.

- **Structural repair:** All structure should be inspected, with plaster removed to expose representative concealed areas.
- **Roof restoration:** Beyond the roof replacement described by the Tier I stabilization scope above, provide thorough restoration of the existing tile roofing. We were unable to reach the roof tile for a close inspection, but assume a scope of removing tile, repairing and waterproofing the deck below, then reinstalling tile may be needed.
- **Re-build cupola:** The cupola appears to be very deteriorated, and we assume a scope of major repair or possibly reconstructing the cupola.
- **Repair or replace windows:** Based on the age of the windows, complete replacement with a new aluminum windows throughout may be needed. We recommend new windows match the originals in size, configuration, and detail as closely as possible.
- **Exterior Masonry Repair and Rehabilitation:** Extensive masonry restoration will be required, including cleaning all stone, removing the coating from the drum below the dome, replacing severely damaged stone pieces, patching stone with moderate damage. All joints should be tuckpointed throughout, and sealant installed in all skyward facing joints.
- **Interior finishes:** Replace missing and damaged finishes. We assume that for a basic "White Box" rehabilitation of the building, any historic plaster and detailing that is in salvageable condition will remain, but for the majority of wall and ceiling surfaces where plaster finishes have failed, they will be replaced with new gypsum board veneer surfaces over furring channels.
- **Ornamental Plaster:** We assume retention of historic plaster surfaces and detailing in two areas only where the condition appears salvageable: The vaulted main entry vestibule, and the main dome including the surrounding plaster ornament at the base. While each of these areas have portions that have suffered significant damage, it appears that the majority of the surfaces are intact and can provide a basis for restoration of these areas to a condition that resembles their original configuration.

For the purposes of this analysis, we have not anticipated restoring all damaged and missing plaster to match its original historic condition. Instead, we assume missing and heavily deteriorated plaster is to be replaced with new gypsum board. Recreation of the original plaster is possible, but can be costly. Without knowing the anticipated future use for the building, it is hard to determine if a high level of plaster restoration is of value.

- **Mechanical:** For a whitebox level of renovation, we assume new ducted mechanical systems, with rooftop units to provide conditioned air and ventilation for the enclosed volume of the building.
- **Plumbing:** We assume installation of new plumbing systems. For the whitebox, new water service and a fire line would be brought into the building, and new restrooms installed.
- **Electrical:** A new electrical service will be required; distribution panels, lighting, power wiring, fire alarm, security, communications, etc.

Total estimated whitebox cost: **\$2,054,000**

Total incl. Tier I stabilization, contingency, and contractor's OH&P: **\$3,220,000 (\$145/sq. ft.)**

Tier II-b – Full Build out: We have identified potential future uses that could be incorporated into the existing space by a potential future private developer or other entity:

- **Assembly (Church, performing arts, film):** The main auditorium gathering space could accommodate approximately 900 persons in fixed seats, or more with flexible seating. The ground floor area could accommodate support spaces, classrooms, rehearsal spaces, offices, social gathering spaces, etc. The existing sloping floor of the sanctuary could be an asset for many types of assembly uses.
- **Library:** The building would lend itself well to a public library use, with the large volume of space used for book storage and reading areas. The floor would need to be leveled and reinforced. The buildings location directly adjacent to the Cleveland border may not be ideal for the Cleveland Public Library systems goals.
- **Retail (grocery, bookstore, etc.)** The 8,000 square foot main floor area is a useful size for a retail sales floor. The slope floor would need to be rebuilt as a flat surface, or at least reconfigured in stepped tiers to accommodate retail use. The lower level is usable but less desirable as retain area, through the areawells around the perimeter bring in some daylight.
- **Office:** Previous projects have adapted church spaces for office use, including Nottingham Spirk's adaptation of a similar Church of Christ Scientist building. The 22,000 square foot building area could accommodate in the range of 100 employees, depending on use, office size, etc. Slope floors could be stepped to accommodate office areas.
- **Housing:** The project could be adapted for use as housing, using open floor plan, vertically oriented townhome-type units to take advantage of the large windows at the perimeter of the main areas. Based on the building floor areas, it could be possible to construct 8-12 for-sale condominiums within the building, with floor areas in the range of 1500-2200 sq. ft.



Nottingham Spirk Offices, Cleveland

Estimated Total Interior Build-out Cost Range: \$893,000 - \$1,340,000 (\$40-60/sq. ft.)

Historic Rehabilitation Tax Credit: This building is a local landmark designated by the Cleveland Landmarks Commission, but not listed on the National Register of Historic Places. A building of this character would likely be eligible for National Register Listing and Historic Rehabilitation Tax Credit funds at the federal and potentially the state level. However, the significant level of deterioration that has taken occurred to the character-defining features of the building interior make the eligibility more challenging. Use of tax credit funding will necessitate a higher standard of rehabilitation for historic features. This can incur additional costs that would need to be carefully balanced against the potential benefits of tax credit funding. The State of Ohio has also developed a State Historic Tax Credit program which could substantially contribute to the funding of a rehabilitation project, but the future availability of these funds is uncertain. If successful, the combined Federal and State Historic Rehabilitation Tax Credits could potentially contribute funds in excess of 30% of the project construction costs.

I. WEATHERIZATION / STABILIZATION

A. STRUCTURAL REPAIRS

1. REFER TO STRUCTURAL ENGINEERING ASSESSMENT FOR DETAILS	1	L.S.	=	\$235,000
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B. ROOF REPAIRS

1. REPLACE BUILT-UP ROOF AREAS	8,354	S.F.	x	\$25 /S.F.	=	\$208,838
2. REPAIR TILE ROOF (ASSUME 10%)	515	S.F.	x	\$50 /S.F.	=	\$25,752
3. REPAIR CUPOLA	1	L.S.			=	\$5,000
4. REPAIR GUTTERS AND DRAINS	1	L.S.			=	\$15,000
5. TOTAL ROOF REPAIRS						\$254,590

C. SECURE OPENINGS (ASSUME 30%)	956	S.F.	x	\$5 /S.F.	=	\$4,781
D. ENCLOSE SOUTHEAST WALL	1,200	S.F.	x	\$15 /S.F.	=	\$18,000
E. CRITICAL MASONRY REPAIRS (ASSUME 5%)	1,006	S.F.	x	\$25 /S.F.	=	\$25,154
F. REMOVE DEBRIS	22,282	S.F.	x	0.50 /S.F.	=	\$11,141
G. BUILDING VENTILATION (LOUVERS, EXHAUST FAN)	1	L.S.			=	\$25,000
H. SECURITY FENCING	325	L.F.	x	\$30 /L.F.	=	\$9,750

TOTAL ESTIMATED STABILIZATION COSTS						\$560,000
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II-a. EXTERIOR REHABILITATION / INTERIOR WHITEBOX

A. SITEWORK (LANDSCAPING, PAVING)	16,058	S.F.	x	\$5 /S.F.	=	\$80,290
B. INTERIOR DEMOLITION	22,282	S.F.	x	\$9 /S.F.	=	\$200,538
C. INTERIOR STRUCTURAL FLOOR REPAIRS						
1. REFER TO STRUCTURAL ENGINEERING ASSESSMENT FOR DETAILS	1	L.S.			=	\$100,000
D. ROOF REPAIRS (IN ADDITION TO BUILT-UP ROOF REPLACEMENT AND TEMPORARY REPAIRS LISTED ABOVE)						
1. REBUILD CLAY TILE ROOF	5,150	S.F.	x	\$35 /S.F.	=	\$180,266
2. REBUILD CUPOLA	1	L.S.			=	\$35,000
3. TOTAL ROOF REPAIRS						\$215,266
E. REPLACE WINDOWS WITH NEW ALUMINUM WINDOWS	2,737	S.F.	x	\$50 /S.F.	=	\$136,873
F. NEW EXTERIOR DOORS	12	PR.	x	\$3,000 /EA.	=	\$36,000
G. MASONRY CLEANING, TUCKPOINT, AND OTHER RESTORATION	20,123	S.F.	x	\$15 /S.F.	=	\$301,847
H. INTERIOR DRYWALL WALLS AND CEILINGS (PTD.)	42,810	S.F.	x	\$9 /S.F.	=	\$385,290
I. LIMITED ORNAMENTAL PLASTER REPAIR (DOME, ENTRY)	3,580	S.F.	x	\$40 /S.F.	=	\$143,181
K. NEW UTILITIES	1	L.S.			=	\$120,000
L. MECHANICAL, ELECTRICAL, AND PLUMBING WHITEBOX	22,282	S.F.	x	\$15 /S.F.	=	\$334,230
SUBTOTAL WHITEBOX						\$2,054,000
BUILDING STABILIZATION COST, FROM TIER I ABOVE					+	\$560,000
SUBTOTAL WHITEBOX + STABILIZATION					=	\$2,614,000
CONTINGENCY	10	%			=	\$261,400
CONTRACTOR'S GENERAL CONDITIONS, OVERHEAD, AND PROFIT (12%)					=	\$345,000
TOTAL ESTIMATED WHITEBOX COSTS, INCLUDING STABILIZATION						\$3,220,000
ESTIMATED WHITEBOX COST, PER SQ. FT.	22,282	S.F.		\$145 /S.F.		

II-b. INTERIOR BUILD-OUT COSTS

A. MECHANICAL, ELECTRICAL, AND PLUMBING	22,282	S.F.	x	\$25 /S.F.	=	\$557,050
B1. INTERIOR BUILD-OUT: LOW RANGE	22,282	S.F.	x	\$15 /S.F.	=	\$334,230
B2. INTERIOR BUILD-OUT: HIGH RANGE	22,282	S.F.	x	\$35 /S.F.	=	\$779,870
TOTAL ESTIMATED INTERIOR BUILD-OUT RANGE						\$893,000 - \$1,340,000
ESTIMATED BUILD-OUT COST RANGE, PER SQ. FT.	22,282	S.F.		\$40-\$60 /S.F.		