

APPENDIX M
**Assessment of Repairs, Restoration,
and Mitigation Costs**

ERWIN·LOBO·BIELINSKI PLLC

FORENSIC ARCHITECTS AND ENGINEERS

ASSESSMENT OF REPAIRS AND RESTORATION

OF ST. PAUL'S SCHOOL, GARDEN CITY, NEW YORK

Erwin Lobo Bielinski was retained to provide an independent assessment of the condition of St. Paul's School in Garden City, New York, including an analysis of:

- The repairs that would be necessary to stabilize the structure for partial use pending future restoration
- The repairs that would be necessary during a future restoration for full use
- The limitations of the structure for reuse.

We were also asked to review and comment on various documents that have been submitted related to the reuse of the building including:

- Einhorn Yaffee Prescott, PC; Condition Survey and Program Study; February 2, 2002
- Beatty, Harvey & Associates, Architects, Einhorn Yaffee Prescott Architects; Library reuse proposal; April 24 2002
- Sullivan & Nickel Construction Cost Estimate of Einhorn Yaffee Prescott February 2002 Report; August 11, 2004, November 16, 2004
- Furnstahl Simon Architects; Cost estimate for conversion to public offices and meeting rooms; April 25, 2006
- Litas Investing, Eskar International; Development Proposal; July 19, 2006
- Litas Investing; Supplementary submittal; January 3, 2007
- Village of Garden City; Response to Litas Proposal; April 20, 2007
- Litas Investing; Letter of response; May 7, 2007
- K. Backus & Associates; Analysis of Recommendations; April 16, 2007
- The Nelson New York Operating Company; Mothballing option memo; June 16, 2008
- Report of the Mayor's Committee on St. Paul's; July 2008
- Committee to Save St. Paul's & The Garden City Historical Society; June 29, 2010
- HRH Cost Estimate; November 4, 2010

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EXECUTIVE SUMMARY

The past and present proposals for the restoration and redevelopment of the St. Paul's School in Garden City, New York each confront significant hurdles and/or have substantive drawbacks. Prior proposals that envisioned use of the building for public school, library, or other municipal occupancies have been determined to be unneeded and/or too costly. The proposals which envision reuse of the building for residential occupancy are financially viable only with additional financial support from the community or with the granting of additional development rights (density) on the site. Neither of these has garnered a consensus of community support. Similarly, various commercial uses have not been acceptable to the community.

There are several inherent physical attributes of the building that serve as impediments to reuse for most occupancies. First, the layout with large load bearing corridor walls and many small rooms results in a very limited number of viable uses such as educational, certain types of office occupants, and residential. Second, the building is enormous. This results in a high cost of preserving the building and limits users to those in need of approximately 125,000 square feet of space. Third, the building is in serious disrepair and is in need of extensive structural repairs. Fourth, there are environmental hazards on the site that will need to be abated before any reuse, and that cost is higher than the cost of abatement if the building is simply demolished. Finally, the building does not comply with current industry standards or building codes and will require extensive work simply to bring it into compliance.

The current proposal by the Committee to Save St. Paul's envisions temporarily stabilizing and making water-tight the structure, isolating most of the building, and partially occupying the ground floor and chapel with community occupancies. This proposal would initiate some aspects of the preservation of the building. But the proposal is costly and defers the significant bulk of the work and expense of the required stabilization, restoration and renovation until a viable future use is proposed for the entire building.

As explained below, the \$8 million projected cost of this proposal is, however, (i) underestimated; (ii) would be largely wasted if a reuse option is implemented; (iii) defers the cost of full stabilization, restoration and renovation; (iv) requires a significantly higher initial

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Village expenditure than demolition; (v) requires continued annual funding; (v) is insufficient to avoid future deterioration of unused portions of the building; and (vi) relies on funding to complete the restoration from a yet to be defined future reuse.

There are possible ways in which portions of the building may be salvaged for re-use ranging from partial demolition and reuse, to salvaging portions of the building as monuments. All of these options result in increased cost to the community, or result in a partially renovated building for which no potential occupant has been identified.

BUILDING DESCRIPTION

St. Paul's School in Garden City, New York is a handsome example of high-Victorian eclectic architectural design constructed in the 1880's. It is a four story tall, bearing-wall brick and stone structure with wood framed floors and roofs. It has an approximate footprint of 30,000 square feet and a total floor area of 125,000 square feet. The building is "E" shaped in plan with three projecting wings behind the front facade. The interior layout consists of double-loaded corridors with various rooms on each side which once served as classrooms, administrative offices and dormitory rooms. There are also larger spaces including dining rooms, large classrooms and a chapel. There is a monumental cast-iron central stairway serving all floors, and various cast iron and wood stairs located throughout the facility. An elevator was added to the building at some point.

The exterior walls are bearing brick masonry with ornamental sandstone, brownstone and granite trim pieces. The interior face of the exterior walls is sheathed with a layer of lightweight concrete units finished with plaster. The roofs consist of both flat and steep roofs with asphalt tile or slate. Almost all of the original slate roofs have been removed and replaced with asphalt shingles. Rainwater is managed through gutters and downspouts.

The floors and roofs of the building are wood framed and covered with wood sheathing. The joists and rafters are supported on the exterior masonry walls and on the interior corridor walls which are also constructed of brick masonry. There are lightweight concrete panels nailed to the bottom of the wood joists, and similar concrete panels are used as infill between the wood framing of the mansard roofs and under the floors in some of the rooms and

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corridors. The finished floors throughout are typically hardwood strip flooring over wood furring, except for the ground floor corridors which are ceramic tile.

The interior is also a handsome representative of Victorian design with extensive use of hardwood wainscoting, arts-and-crafts style tile work, raised panel doors, and monumental cast iron staircases. Some of the original plaster finish is still in place on the walls and ceilings, although most has either been damaged by water, removed during restorations, or concealed behind dropped ceilings or new partitions.

Approximately two-thirds of the original wood windows were replaced in 1969 with double hung thermally broken aluminum units. There are stained glass windows in the chapel.

ASSESSMENT OF THE CONDITION OF THE BUILDING

The overall structure is in relatively stable condition and free of significant distortion.

However, there are local areas of severe masonry deterioration and cracking, and portions of the floor and roof framing are severely deteriorated. If left unchecked, these conditions will eventually render the building unstable and unsafe. Currently, areas of the building have been cordoned off to prevent possible injury from falling bricks. However, at the moment the building is not in danger of wholesale collapse.

Despite being in stable condition, the building is generally in derelict condition and unusable in its current condition and configuration. It will require substantial work merely to stabilize the building to prevent further structural decay, without any consideration of repairs necessary for occupation. There are widespread and serious roof and window leaks that have caused severe damage to the roof structure, to the exterior masonry walls and to the interior wood floor structure. In addition, the brick and stone exterior has not been maintained and there are areas of severe cracking, eroded mortar joints and deteriorated stone.

Buildings of this age and type of construction require regular maintenance and upkeep even after they are renovated. Exterior masonry walls must be protected from flooding from damaged or missing gutters. They must be pointed and repaired at regular intervals. Wood windows must be painted and repaired on regular basis, and they have a finite life expectancy

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that here has been long exceeded. The roofs and flashings must be inspected on an annual basis and repaired and replaced at regular intervals. .

The entire exterior envelope of the building will need to be repaired and refurbished, and in places reconstructed or replaced. Substantial areas of the wood floor and roof framing on the interior will need to be repaired or replaced. The roofs and windows will need to be replaced. Once this work is done, it will be sufficiently stable to consider occupying.

In order for the building to be legally and safely occupied after it is stabilized, it will require a substantial investment to bring it into compliance with applicable building codes and technical standards. These include provisions for such items as emergency egress, access for the disabled, energy conservation, and utility service and distribution.

Our assessment of the condition of the building and the need for substantial work in order to stabilize or reuse the building is consistent with the reports and proposals previously submitted to the Garden City and made available to us for review.

ASSESSMENT OF THE COMMITTEE TO SAVE ST. PAUL'S PROPOSAL

We understand that several proposals for redeveloping St. Paul's into residential or other uses have been considered over the years, but rejected by the community for various reasons including the requirement for continuing financial support from the community for the project after development, inappropriate uses being proposed, or excess development area being proposed.

The Committee to Save St. Paul's has prepared a proposal for making limited repairs to the building in order to stabilize the facility and make portions of the ground floor usable for some public activities. The large majority of the building would be unused and partially stabilized for future restoration. In broad terms, the proposal envisions the following work:

- Install new flat roofs and asphalt shingle mansard roofs. This includes repairing the wood substructure as needed.
- Repair portions of the leaders and gutters
- Partial repairs to the exterior masonry and stone work.
- Partial cleaning of the exterior.

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- Repair or replace windows to render them water-tight.
- Isolate the three wings of the building along with the upper floors of the main wing from the occupied portion on the ground floor by means of fire-rated assemblies.
- Install a dry sprinkler throughout the building.
- Partial renovation of finishes in the occupied area on the ground floor and chapel.
- Install mechanical, electrical and plumbing services in the occupied areas.
- Provide access for the disabled to the chapel
- Provide legal means of egress from the chapel
- Protect the stained glass windows in the chapel

The strength of the Committee's proposal is that it does attempt to partially restore the facility and make it available for partial public use until such time as a future occupant or use presents itself.

However, there are several weaknesses or drawbacks to the Committee's proposal that the community should be aware of.

We believe that the Committee underestimates the cost of the work. The Committee estimates the general conditions at 5% of the construction cost, while 10% is more consistent with industry standard. Similarly, the Committee estimates that the contractor overhead and profit will be 5%, while 10% is more consistent with industry standards. The Committee underestimates the various contingencies that should be included in this type of project. On the attached spread sheet, we have calculated the soft costs associated with the Committee's estimates we believe are more accurate. The net effect of these underestimates of soft costs is that the Committee's estimate for the limited work may be underpriced by over \$1,000,000.

Finally, the Committee does not include the cost of abating the hazardous materials within the building, except for a blanket \$75,000 allowance for lead paint. There is no substantiation that this allowance is appropriate, and that lead paint is the only environmental hazard that exists within the proposed occupied areas. A prudent course would be to undertake the environmental abatement of the entire building before the partial renovation and occupancy. This would serve to make it safe for persons to enter any part of the building, and would

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eliminate the possibility of contaminants entering the 10,500 square foot renovated and occupied space. Also, since some of the work included in the Committee's proposal involves the installation of HVAC and building wide fire, security and sprinklers systems in the unoccupied areas of the building, hazardous materials will be encountered and disturbed during this work. This will require local abatement at multiple locations. Finally, partially abating the building, which ultimately must be fully abated regardless of its ultimate disposition, results in the loss of the economies of scale of a larger abatement project, and results in paying twice for the complex isolation and decontamination facilities that the work requires.

The Committee's proposal does not restore the entire building for use. At the end of the proposed repairs, a maximum of 10% of the interior of the building will have been rendered legal for occupancy, and approximately 25% of the exterior stabilized. The cost of the full repairs to the facility is postponed, not eliminated. In addition no climate control is proposed for the unused portions of the building, this coupled with the mere passage of time will permit the continued deterioration of that space,

Not all of the repairs completed in the Committee's proposal will be salvageable or reusable in the future. The scope of current work is limited, and the full use of the building will require much of the repairs to be done again or in a different manner. For example the Committee envisions installing asphalt shingles instead of slate or synthetic slate shingles that will be required for historic restoration in the future. Also, the cost of patching the windows proposed by the Committee will result in a temporary benefit, but in the future further patching and ultimately window replacement will be required. Mechanical systems installed for the interim use will probably not be appropriate for the future use. The costs of this work will be lost in future restorations.

Furthermore, the entire investment by the community would likely be lost if the building is turned over to a private entity for development. There is little incentive for a profit-motivated developer to repay the community for its investments, which were primarily intended to preserve the building until such time as a viable reuse option is implemented. In fact, the proposals we reviewed contained only passing references to the purchase price of the

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building, if any, since it was not the deciding factor in the decision; the cost of the restoration and reuse is the driving consideration.

Over \$3.5 million of the budget for the work proposed by the Committee is allocated for soft costs such as contractor profits, scaffolding and fees that don't result in any tangible work product; these costs are simply the costs of getting the work done. These soft costs are not one-time expenses, and will be required to be incurred again in the future during a potential full restoration.

The Committee's proposal includes a \$2,000,000 maintenance cost, but the proposal does not point out that there is an indeterminate expense that will be incurred every year until a future occupant takes control of the building. The duration of this wait is unknowable.

The Committee's construction schedule is unrealistic. We believe that the proposed 1 week to mobilize and approximately 6 weeks to complete the construction is unrealistic. From merely a cash-flow basis, this would represent completing over \$1,000,000 of work per week, an astounding and untenable rate. We also believe that maintaining an appropriate level of quality control and project oversight at this rate of production would be very difficult if not impossible. Renovation projects of this type must include generous allowances for uncovering field conditions and coordinating the work of the various contractors. A more realistic estimate of the timeframe for completion would be a full construction season of approximately 8 months or more. This increase in construction time will result in an increase in expense.

The Committee's proposal does accomplish the limited goal of partial stabilization and partial reuse of the building, but does not address the long-term viability of the building. It is our opinion, however, that the amount of work proposed by the Committee to Save St. Paul's is substantially inadequate to fully and completely stabilize the building. In essence, the proposal buys time for a potential use to present itself in the future. If such a future use does not present itself, the cost of the current stabilization will have been wasted.

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PROPOSAL FOR FULL RESTORATION OF ST. PAUL'S

Restoration of the building for generic future occupants will require substantial work. The major areas of work include the following.

- The exterior requires extensive restoration and reconstruction to repoint all masonry, repair cracks and to prevent further deterioration.
- The existing wood windows will need to be replaced with new windows, and the existing aluminum windows will need to be replaced or refurbished.
- New egress stairs need to be installed in multiple locations throughout the building. There are no legal stairs or other means of egress that can be reused for any new occupancy.
- The building will need to be subdivided into fire compartments by means of self-closing fire doors.
- Insulation will need to be installed in the exterior walls and roof
- New ventilation and smoke purge systems will be required in corridors and stairs throughout.
- New electrical, gas and water service will need to be provided to the building.
- New electrical and plumbing distribution will need to be provided throughout the building.
- The corridors and means of egress will require lighting and emergency lighting
- New toilets, elevators and wheelchair lifts will be required throughout the facility.
- The exterior corridor linking the main building to Cluett Hall will be removed and the existing exterior walls of both buildings cleaned and repaired. (The corridor was added at a later date and does not affect the structure of either building. Thus, it can be removed without any significant restoration expense of Cluett Hall.)

We have prepared a conceptual restoration cost estimate for the building that incorporates these items of work. We estimate that the cost of such a repair would be approximately \$40,000,000, not including over \$4,000,000 for hazardous material abatement and demolition of Ellis Hall, discussed below. This also does not include any cost associated with furniture, fixtures or equipment in any of the occupied areas. This limited scope of work translates into

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a budget of approximately \$320 per gross square foot, a figure that is in line with comparable historic restoration projects. Other cost estimates that we reviewed vary from \$30,000,000-\$50,000,000 depending on the intended future use. We concur with the prior projections of the cost of interior and exterior restoration on a per-square foot basis.

It is our opinion, however, that the amount of work proposed by the Committee to Save St. Paul's is substantially inadequate to fully and permanently stabilize the building.

ANALYSIS OF FUTURE USE OF ST. PAUL'S

After a restoration program similar to the one outlined by us above, St. Paul's will be ready to be renovated for use by some type of tenants. There will be "white box" spaces along central corridors, there will be central services including rough electrical distribution, ventilation and tempered water for heat pumps in the occupied spaces. There will be lighting in the public spaces and the building will have a fire-alarm system and will be fully sprinkled. There will be new toilets, elevators and wheelchair lifts. The finishes of the corridors will be cleaned and refurbished. In short, it will be rough-space that can be customized and fitted out by a tenant.

Even with these improvements we believe that the building has several serious shortcomings that severely limit the options for future occupancy.

- The floor plan was configured in narrow wings originally intended to provide natural light to the classrooms; this is a very inefficient layout and unsuitable for modern commercial tenants that prefer large blocks of space and do not depend on natural light.
- The floor plan is very inefficient in terms of space required for circulation and in terms of the amount space that will be unusable for rental purposes. This results in a relatively large "loss factor" in the actual usable/occupied areas, and therefore would require extremely high per-square-foot costs in order to recoup the investment in the cost of repairs.
- The floor plans consists of myriad of small rooms along central corridors, a layout that is unsuitable for almost all type of uses other than residential or educational.

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Furthermore, the corridor walls are load bearing and cannot be removed to make larger blocks of space.

- The non-load bearing walls that separate the rooms along the corridors were installed prior to the hardwood and tile floors. When these walls are removed to combine the adjacent rooms, the floors will not match in elevation, design or finish, and there will be a trench in the floor that will need to be repaired at significant expense.
- There are numerous rooms that cannot be legally occupied because they have only one means of egress, or because they open directly into staircases. For example, the entire fourth floor would be difficult or impossible to configure so that it could be legally occupied under current building codes. The cost of legalizing the spaces in some cases would far exceed the likely income to be derived.
- The floor-to-floor height of as much as 16' far exceeds the current industry standard, and requires additional heating and cooling as well as longer stairs and additional utility runs. It is also insufficient height to create usable mezzanines for rental purposes.
- There are rooms at the center of the building that are a half level below the main floor, making circulation to those areas difficult, particularly for the disabled.

Of these problems, two appear to be most detrimental to reuse: the extremely inefficient floor plates and the inability to provide efficient room layouts for almost all current or foreseeable uses.

The primary asset of the building is its handsome façade and detailed interiors, neither of which could be reasonably replicated today. These characteristics invest the building with tremendous nostalgic value, but not with utilitarian value.

Conversion to residential use is one of the few viable options available for the building as it is currently configured. De-accessioned suburban schools are regularly and successfully converted to residential use because the requirements for circulation and natural lighting are similar for both occupancies. In addition, the tall ceiling heights and large windows are appealing for residential use. We reviewed the responses by Garden City to the various proposals submitted by developers for residential conversion of the facility. It is worth noting

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that there is no question that the facility could be renovated for residential use. However it is clear from the content of all of the submittals that in order for the project to be financially viable, the community would either have to compromise on the amount of commercial space it would allow in the development; accept a higher density of residential development on the site than currently allowed; or offer continuing financial support for the project.

ALTERNATE APPROACHES AND COST OF POTENTIAL MITIGATION MEASURES

The community may conclude that continuing to commit to financially underwriting St. Paul's is untenable. However, recognizing that St. Paul's is a significant presence in Garden City and that it has a historic resonance with some residents, some have proposed less-than-total demolition proposals for the facility.

In order to assess any demolition or reuse proposal, the costs for abating hazardous materials that have been identified on site must be taken into account. Bids received in response to a recent request for proposals issued by the Village indicate the cost of the environmental abatement required prior to the full demolition of both the main building and Ellis Hall is approximately \$2,095,500. The cost of the mandatory environmental monitoring required for the abatement is \$378,952. This results in the total cost for abatement and demolition of both buildings of approximately \$3,484,452. It should be noted that abatement necessary for demolition of buildings is less expensive than the abatement necessary for the reuse of buildings. Bids of \$5,055,822 have been received for the work necessary to abate the main building in anticipation for re-use and for abating and demolishing Ellis Hall, including the mandatory monitoring, a premium of over \$1.1 million above the cost of the complete demolition option. This premium cost is what the community will incur prior to any actual restoration work is undertaken, regardless of which reuse option is selected.

The cost estimates below include both the known costs for abatement and demolition and an "order-of-magnitude" budget estimate for various partial reuse options. The intent of this is to show the relative cost of each conceptual option compared to others and not propose an actual proposal based on a concrete scope of work. If one of the options is attractive to the community, further refinement of the estimate must be undertaken, based on a detailed

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description of the desired scope of work. The following are rank-ordered in least expensive to most expensive options.

1. Full demolition, no reuse. \$3,105,500

This is the least expensive option, and simply abates the buildings and demolishes them entirely and creates an open park. (By way of comparison, in 2008, Gardiner and Theobald estimated that the demolition of the main building and Ellis Hall, complete with the necessary hazardous material abatement would cost \$5.8 million.)

2. Full demolition, restore porte-cochere as monument \$3,605,500

This option envisions demolishing the entire building except for the porte-cochere, which would be restored as a stand-alone monument. This would require protecting the porte-cochere during demolition, controlled demolition around its perimeter, and stabilization and restoration of the structure. This type of restoration requires very specialized crafts trades, and we estimate that the premium above total demolition would be approximately \$500,000, not including site improvements around the monument. There would also need to be a continuing commitment to maintain the monument over time.

- 3 Full demolition, restoration of clock tower.....\$5,000,000 - \$6,000,000

The clock tower is another portion of the building that could be restored as a stand-alone monument if desired. This would require controlled demolition of the surrounding construction, partial abatement of the clock tower, and the installation of new structural steel framing within the remaining tower. The exterior of the clock tower is in poor condition and would need extensive restoration. Also since the tower lacks exterior walls on two sides below the roof level, new exterior walls in those places will need to be constructed. One concern with this proposal is that there would need to be significant structural modifications to the structure to assure that it is properly braced and brought into conformance with modern seismic codes. Once complete, the tower interior would be essentially hollow, and contain only stairs and structural steel. There would also need to be a continuing commitment to maintain the clock tower over time.

4. Full demolition, preserve portion of facades as monument.....\$7,000,000-\$8,000,000

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This more radical approach would demolish all of the floors and the three wings at the rear of the front façade, but salvage the front and side walls of the front portion of the facility as a purely ornamental screen wall. This would require installation of new structural footings and structural steel frames to support the wall, and then careful controlled demolition of the building after the façade is resupported. The façade would require restoration after it is isolated from the building, and the internal side of the façade and the top of the wall would need to be made water tight. In the end, the wall would simply be a sculptural feature in a park setting that perhaps could be used as a band shell or other public use. In addition the community would also have to budget for annual repairs to the façade to maintain it, much like a normal building. Because of its radical nature, it very likely that the project would not be eligible for certain tax benefits available for historic preservation project.

5. Demolition of two wings, restoration of front wing and Chapel .. \$15,000,000-\$20,000,000

This option would remove the two side wings from the building including the clock tower, and restore the front wing and the chapel for reuse. The areas where the wings had attached to the remaining building would be reconstructed in masonry that would be similar to the original, but not perfectly matching in detail. Recreating historic details using salvaged materials would increase the cost of the project. We estimate the cost of just closing the rear façade if the side wings were removed to be approximately \$400,000 for conventional construction and \$800,000 if historic details were to be restored.

6. Demolition of all but central pavilion and Chapel..... \$10,000,000 – \$12,000,000

This option would salvage the central pavilion of the main building, the main stair and the ceremonial rooms flanking the main entry and the chapel. All five floors would be restored for some type of public use, and the chapel would be restored. Additional stairs and toilets would still be required, and the side walls where the wings were demolished would need to be reconstructed.

It should be noted that the configuration of the final facility in the two final options would not reflect the original layout, and might not be eligible for certain tax benefits available for historic preservation project. Also, partial restoration options have the same impediment of

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all of the re-use proposals: there is no particular occupant that may be deemed appropriate for the building. The community may face a continuing necessity to maintain a facility with large maintenance demands and little use.

CONCLUSION

All of the prior and current proposals for restoration of the St. Paul's School face one or more substantive impediments. The fundamental impediment to reuse of the building is the limited number of viable types of occupancy for the building due to its inherent limitations. Prior proposals have demonstrated in the abstract that it is possible to convert the building into residential or certain commercial uses. But there has not been a consensus of community support for those proposals.

It is our opinion that the proposal from the Committee to Save St. Paul's underestimates the cost and duration of the repairs. Even if these errors are corrected and more reasonable estimates are developed, the proposal does not address two critical questions:

1. What is the ultimate beneficial use of the entire building that will fund the completion of the required stabilization and restoration? and
2. What is the cost to fully stabilize the building now and maintain the building over time until such a beneficial use is implemented?

ATTACHMENTS

Photographs

Cost estimate work sheet

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General view of front facade



Detail of front entry

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Typical Corridors. Corridor walls are structural and support the floor framing.

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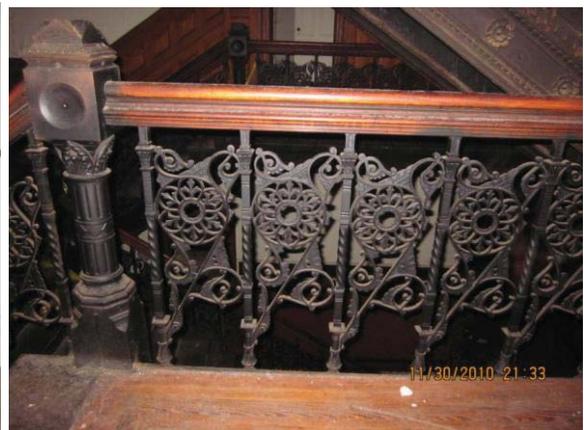
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Corridor finish details

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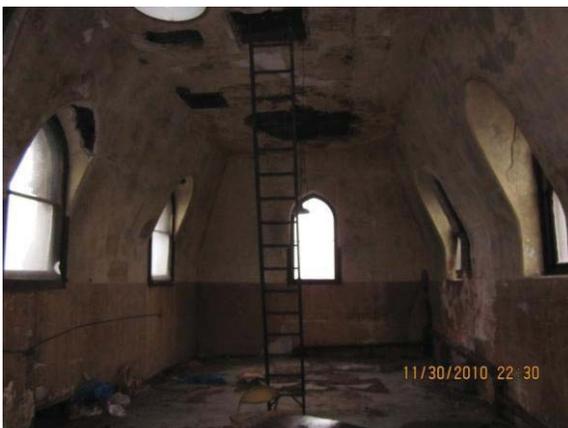
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Typical stairs.

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Typical rooms and finishes. Note that the water damage extends to virtually all rooms.

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Typical room size and condition of finishes is evident in these photographs.

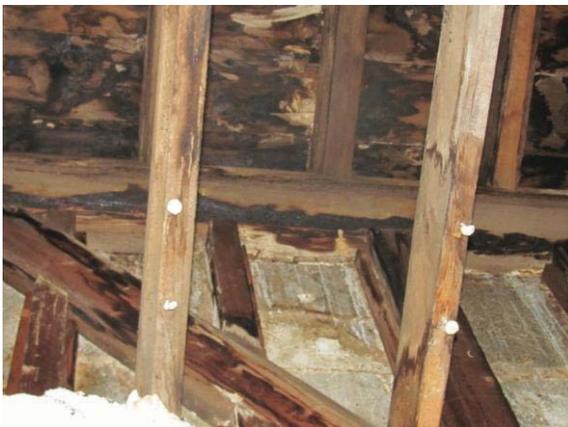
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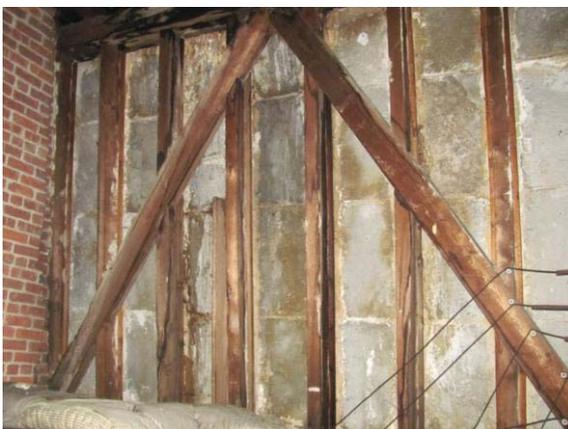
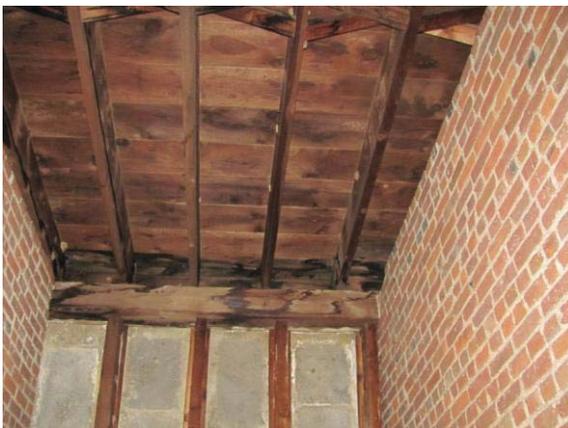
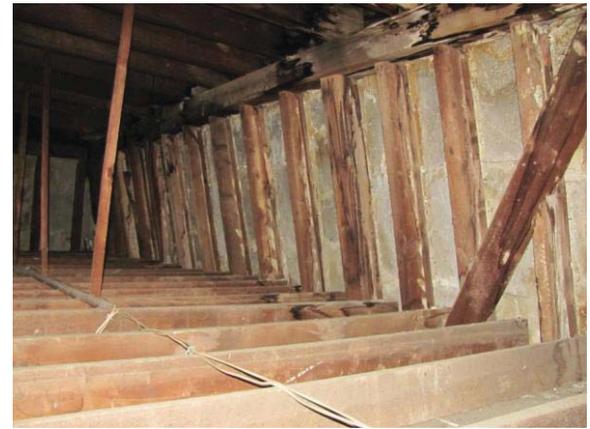
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Damage to the wood floor and roof framing is extensive and serious.

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Virtually all of the roof members are deteriorated to some degree and will require extensive restoration or replacement.

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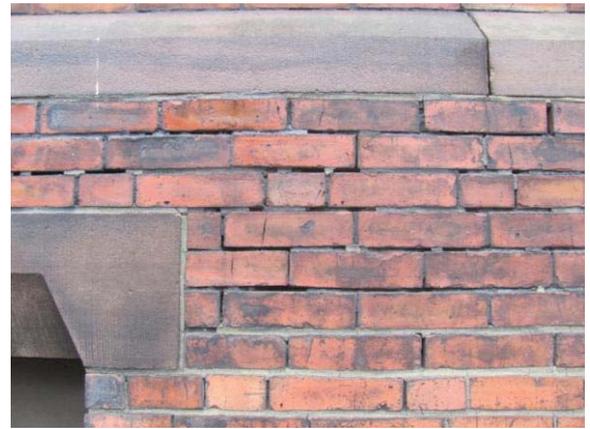
Areas of the roof have been replaced after structural failure. All of the rafters will need to be inspected and repaired.



There is no fire-safing around the perimeter of the building. Cavities in the walls and floors extend from the roof to the basement, creating pathways for potential fire and smoke spread

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Areas of the brick have been badly damaged by water. In some areas, most of the mortar joints have been washed away and the stone trim is loose.



In areas the stone trim is cracking and delaminating

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Cracks are developing at most of the stone piers between windows on the ground floor and the stone is deteriorating.



Some of the stone is delaminating, and some of the brick is severely damaged by water.

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Structural cracks are developing at piers and corners of the building throughout

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The wood windows are in poor condition. The gutters and downspouts are in need of extensive repair and replacement. The shingle roofs will need to be replaced with slate to restore the building to its original condition.



The porte-cochere is in poor condition but could be restored if the community wishes to salvage it as a stand-alone monument.

Description	Quantity	Unit	Cost	Committee to Save St. Paul's Scope of Work	Lost Investment on Commit	ELB Scope of Work
I. EXTERIOR RESTORATION						
A) Roof Repair/Replacement						
Manlifts/Scaffolding Safety Partial Scope	1	LS	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	
	83,000	SF	\$ 10.00			\$ 830,000.00
Remove Existing Flat Roof	33,100	SF	\$ 4.00	\$ 132,400.00	-	\$ 132,400.00
Install New 3 Ply Modified Bitumen Roof System	33,100	SF	\$ 9.00	\$ 297,900.00	-	\$ 297,900.00
Install New Perimeter Thru-wall Flashing @ Flat Roof Areas	1,679	LF	\$ 120.00	\$ 201,480.00	-	\$ 201,480.00
Remove Existing Shingle Roof	31,601	SF	\$ 4.00	\$ 126,404.00	-	\$ 126,404.00
Replace Water Damaged Sheathing	15,000	SF	\$ 6.00	\$ 90,000.00	-	\$ 90,000.00
Replace Water Damaged Structural Wood Components	1	Allow	\$ 50,000.00	\$ 50,000.00	-	-
Replace Water Damaged Structural Wood Components	30,000	SF	\$ 10.00	-	-	\$ 300,000.00
Install New Shingle Roof	320	SQ	\$ 150.00	\$ 48,000.00	\$ 48,000.00	-
Install New Slate Roof (ELB)	320	SQ	\$ 2,000.00	-	-	\$ 640,000.00
Install New Copper Roof Flashings @ Slate Roof	5,129	LF	\$ 25.00	\$ 128,225.00	-	\$ 128,225.00
Install New Copper Gutters and Downspouts in Selected Areas	479	LF	\$ 25.00	\$ 11,975.00	-	-
Install New Copper Gutters and Downspouts in Selected Areas (ELB)	479	LF	\$ 100.00	-	-	-
Install New Copper Gutters and Downspouts in All Areas (ELB)	2,000	LF	\$ 100.00	-	-	\$ 200,000.00
New Skylight at Grand Stair	100	SF	\$ 100.00	-	-	\$ 10,000.00
SUBTOTAL Roof Repair & Replacement				\$ 1,236,384.00	\$ 198,000.00	\$ 2,956,409.00
B) Masonry Repair/Replacement						
Manlifts/Scaffolding			Included Above			Included above
Clean Exterior Façade-Basic	1	Allow	\$ 50,000.00	\$ 50,000.00	-	-
Clean Exterior Façade-Full	70,000	SF	\$ 3.00	-	-	\$ 140,000.00
Repoint Façade-Selective	1	Allow	\$ 50,000.00	\$ 50,000.00	-	-
Repoint Façade-Full	70,000		\$ 9.00	-	-	\$ 630,000.00
Replace/Repair Stone Sills-Selected	1	Allow	\$ 15,000.00	\$ 15,000.00	-	-
Replace/Repair Stone throughout	2,800	SF	\$ 100.00	-	-	\$ 280,000.00
Spalling Brick Repair	1	Allow	\$ 25,000.00	\$ 25,000.00	-	Included below
Repair Structural Masonry Cracking-Selective	1	Allow	\$ 25,000.00	\$ 25,000.00	-	\$ 120,000.00
Repair Structural Masonry Cracking-Complete	5,350		\$ 50.00	-	-	Included below
Replace Structural Masonry as Required	1	SF	\$ 25,000.00	\$ 25,000.00	-	\$ 267,500.00
Heavy Stain and Growth Removal	1	SF	\$ 20,000.00	\$ 10,000.00	-	Incl.
Subtotal Exterior Repairs				\$ 200,000.00	\$ -	\$ 1,437,500.00
C) Window Repair/Replacement						
Manlifts/Scaffolding/Safety	1	Allow	\$ 35,000.00	\$ 35,000.00	-	In Window Cost
Repair/Replace Existing Windows Where Damaged	1	Allow	\$ 75,000.00	\$ 75,000.00	-	-
Replace wood windows	90	ea	\$ 2,000.00	-	-	\$ 180,000.00
Retrofit and repair new windows to meet landmarks	360	ea	\$ 500.00	-	-	\$ 180,000.00
Furnish and Install New Weather Shield Over Stained Glass	1	Allow	\$ 25,000.00	\$ 25,000.00	-	-
Furnish and Install New Weather Shield Over Stained Glass (ELB)	20	ea	\$ 2,000.00	-	-	\$ 40,000.00
Restore and protect stained glass	20	ea	\$ 10,000.00	-	-	\$ 200,000.00
Exterior Sealants	1	Allow	\$ 15,000.00	\$ 15,000.00	-	Included Elsewhere
Furnish, Install or Repair Exterior Entrance Doors	1	Allow	\$ 30,000.00	\$ 30,000.00	-	\$ 30,000.00
Repair Miscellaneous Exterior Doors	1	LS	\$ 20,000.00	\$ 20,000.00	-	\$ 75,000.00
SUBTOTAL Window Repair & Replacement				\$ 200,000.00	\$ -	\$ 705,000.00
SUBTOTAL EXTERIOR RESTORATION DIRECT COST				\$ 1,636,384.00	\$ 198,000.00	\$ 5,098,909.00
GENERAL CONDITIONS (8%)				\$ 130,911.00	\$ 19,800.00	10% \$ 509,890.90
CONTRACTOR OH/P (5%)				\$ 88,365.00	\$ 19,800.00	10% \$ 509,890.90
SUBTOTAL				\$ 1,855,660.00	\$ 237,600.00	\$ 6,118,690.80
INCIDENTALS (16%)				\$ 296,906.00	\$ 47,520.00	20% \$ 1,223,738.16
DESIGN CONTINGENCY (8%)				\$ 148,453.00	\$ 23,760.00	10% \$ 611,869.08
CONSTRUCTION CONTINGENCY (8%)				\$ 148,453.00	\$ 23,760.00	10% \$ 611,869.08
SUBTOTAL EXTERIOR REPAIRS WITH SOFT COSTS				\$ 2,449,472.00	\$ 332,640.00	\$ 8,566,167.12
II. INTERIOR FINISH RESTORATION						
A) Interior Finishes						
Remove Existing Finishes	5,600	SF	\$ 10.00	\$ 56,000.00	-	
Remove Existing Finishes Full Scope	60,000	SF	\$ 10.00		-	\$ 600,000.00
Structural Modifications @ Existing Masonry Walls	5,600	SF	\$ 12.00	\$ 67,200.00	\$ 67,200.00	
Restore Existing Finishes @ Corridors	2,500	SF	\$ 20.00	\$ 50,000.00	-	
Restore Existing Finishes @ Corridors Full Scope	20,000	SF	\$ 20.00		-	\$ 400,000.00
Chapel Woodwork Cleaning	1	Allow	\$ 150,000.00	\$ 150,000.00	-	
Chapel Finishes	2,400	SF	\$ 85.00	\$ 204,000.00	-	\$ 204,000.00
Chapel Electrical Lighting	2,400	SF	\$ 20.00	\$ 48,000.00	-	\$ 48,000.00
Grand Stairway Work	1	Allow	\$ 65,000.00	\$ 65,000.00	-	
Grand Stairway Work Full Scope	1	Allow	\$ 585,000.00		-	\$ 585,000.00
Install Fire Rated "Separation" Partitions W/ Doors	1	Allow	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	
Install Fire Compartment Partitions W/ Doors	21	ea	\$ 10,000.00	-	-	\$ 210,000.00
Install Fire Doors at Stairs	13	ea	\$ 2,000.00	-	-	\$ 26,000.00
Install New 2nd Means of egress Stairs from Chapel	1	Allow	\$ 100,000.00	\$ 100,000.00	-	
Install new stairs for Chapel	2	Ea	\$ 77,500.00	-	-	\$ 155,000.00
4 new egress stairs, four stories	4	Ea	\$ 155,000.00	-	-	\$ 620,000.00
Create New Toilets Complete	2	Allow	\$ 50,000.00	\$ 100,000.00	-	
New Toilets at each floor	6	Allow	\$ 50,000.00	-	-	\$ 300,000.00
Install New Finishes (Ceilings, Floors, Walls, Paint)	5,600	SF	\$ 55.00	\$ 308,000.00	-	
Install New Finishes (Ceilings, Floors, Walls, Paint) Full Scope	200,000	SF	\$ 20.00		-	\$ 4,000,000.00
Building Specialties	5,600	SF	\$ 8.00	\$ 44,800.00	-	
Building Specialties	125,000	SF	\$ 8.00		-	\$ 1,000,000.00
Subtotal Interior Finish Restoration				\$ 1,243,000.00	\$ 117,200.00	\$ 8,148,000.00
III. MECHANICAL/ELECTRICAL/FIRE PROTECTION ACTIVITIES						
New HVAC System (10,500 SF)	35	Tons	\$ 5,000.00	\$ 175,000.00	-	

Description	Quantity	Unit	Cost	Committee to Save St. Paul's Scope of Work	Lost Investment on Commit	ELB Scope of Work
New HVAC Systssem (120,000 sf)	400	Tons	\$ 5,000.00			\$ 2,000,000.00
HVAC Distribution	10,500	SF	\$ 14.00	\$ 147,000.00	-	
HVAC Distribution (120,000 sf)	125,000	SF	\$ 14.00	-		\$ 1,750,000.00
Electrical Wiring Power and Lighting Distribution	10,500	SF	\$ 17.00	\$ 178,500.00	-	
Electrical Wiring Power and Lighting Distribution (120,000 sf)	125,000	SF	\$ 17.00	-		\$ 2,125,000.00
Upgrade Electrical Service Incoming	1	Allow	\$ 45,000.00	\$ 45,000.00	-	\$ 45,000.00
Lighting	10,500	SF	\$ 12.00	\$ 126,000.00	-	
Lighting (120,000 sf)	120,000	SF	\$ 12.00	-	-	\$ 1,440,000.00
Install New Fire Sprinkler System "DRY"	125,000	SF	\$ 8.00	\$ 1,000,000.00	-	\$ 1,000,000.00
LULA Elevator	1	Allow	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00
Two Passenger Elevators	2	Ea	\$ 120,000.00	-	-	\$ 240,000.00
Wheelchair lifts	4	Ea	\$ 15,000.00	-	-	\$ 60,000.00
Fire Alarm/Security	125,000	SF	\$ 5.50	\$ 687,500.00	\$ 687,500.00	\$ 687,500.00
Subtotal MEP Systems				\$ 2,419,000.00	\$ 747,500.00	\$ 9,407,500.00

IV. BUILDING PREMIUMS

Lead Area Premium	1	Allow	\$ 75,000.00	\$ 75,000.00	-	See environmental report
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SUBTOTAL EXTERIOR RESTORATION DIRECT COST				\$ 3,737,000.00	\$ 864,700.00	\$ 17,555,500.00
GENERAL CONDITIONS (8%)				\$ 298,960.00	\$ 86,470.00	10% \$ 1,755,550.00
CONTRACTOR OH/P (5%)				\$ 190,600.00	\$ 86,470.00	10% \$ 1,755,550.00
SUBTOTAL				\$ 4,226,560.00	\$ 1,037,640.00	\$ 21,066,600.00
INCIDENTALS (16%)				\$ 676,250.00	\$ 207,528.00	20% \$ 4,213,320.00
DESIGN CONTINGENCY (5%)				\$ 245,140.00	\$ 103,764.00	10% \$ 2,106,660.00
CONSTRUCTION CONTINGENCY (9%)				\$ 392,225.00	\$ 103,764.00	10% \$ 2,106,660.00
SUBTOTAL EXTERIOR REPAIRS WITH SOFT COSTS				\$ 5,540,175.00	\$ 1,452,696.00	\$ 29,493,240.00

GRAND TOTAL INTERIOR AND EXTERIOR WITH SOFT COSTS				\$ 7,989,647.00	\$ 1,785,336.00	\$ 38,059,407.12
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COMMITTEE'S PROPOSAL WITH CORRECTED SOFT COSTS

SUBTOTAL INTERIOR AND EXTERIOR REPAIRS	\$ 5,373,384.00
GENERAL CONDITIONS (10%)	\$ 537,338.40
CONTRACTOR OH/P (10%)	\$ 537,338.40
SUBTOTAL	\$ 6,448,060.80
INCIDENTALS (20%)	\$ 1,289,612.16
DESIGN CONTINGENCY (10%)	\$ 644,806.08
CONSTRUCTION CONTINGENCY (10%)	\$ 644,806.08
GRAND TOTAL INTERIOR AND EXTERIOR WITH SOFT COSTS	\$ 9,027,285.12



Environmental and Planning Consultants

440 Park Avenue South
7th Floor
New York, NY 10016
tel: 212 696-0670
fax: 212 213-3191
www.akrf.com

January 6, 2011

Mr. David Yudelson
Sive, Paget & Riesel, P.C.
460 Park Avenue, 10th floor
New York, NY 10022

Re: **St. Paul's School Demolition**
HABS Documentation for the St. Paul's School

Dear Dave:

AKRF, Inc. can prepare the Historic American Buildings Survey (HABS) documentation as described in Chapter 10, "Mitigation" of the *St. Paul's Demolition for Additional Open Space Environmental Impact Statement* (EIS). The documentation would provide a permanent documentary record for the Main Building of St. Paul's School and will include archival black and white photographs, a descriptive and historical narrative, and reproductions of any historic photographs and drawings if available, all of which would be assembled as per HABS standards. Also provided as a contingency cost is the preparation of floor plans and selected elevations of the building, if existing drawings do not exist or cannot be located. A scope and cost estimate for preparation of the HABS Level II documentation for St. Paul's school is provided below.

1. Photographs

New large-format (e.g., 4 x 6 or 5 x 7 inches) black and white photographs will be taken to include representative views of the Main Building in its existing setting, photos of each of the facades, as well as close-up views of the exterior of the building to show architectural detail. Large-format photos of the interior of the Main Building will also be provided, to include main circulation elements (halls & stairways including the architectural detail associated with those spaces such as paneling and mosaic floors), significant spaces including the chapel, and representative photos of the dormitory rooms. The photographs will be taken by a professional photographer. Costs for the black and white photography assume up to 5 days of photography and up to 25 archival photographs. Sufficient notice is required for photography assuming there is no electricity. Photographs cannot be taken in rainy or extremely cold weather.

As a number of the building's features are best documented through color photography, including the stained glass windows, murals in the dining room, paneling, and polychrome mosaic floors, the photographic record will also be supplemented with color digital photography as appropriate.

Any historic photographs of the building would be duplicated and included in the documentation package.

2. Descriptive and Historical Narrative

The HABS also includes a historical narrative and supporting figures in HABS format. Information previously compiled in the National Register nomination form will be utilized. Additional sources will be consulted as appropriate to augment the history of the building and to locate any historical images and drawings. As set forth in the HABS guidelines, an architectural description of the Main Building will be

prepared that includes descriptions of the exterior and interior of the building including general architectural character, and descriptions of the floor plans and interior floor, ceiling, and wall finishes and fixtures.

3. Drawings

Existing drawings of the Main Building, where available, would be copied onto archivally stable material, (e.g. Mylar sheets). However if appropriate architectural drawings do not exist or cannot be located, then the building's floor plans and selected significant elevations will be drawn to scale to include 1) the south façade with main entrance and port-cochere, 2) east façade with clock tower, and 3) north façade of the central wing that houses the chapel would be prepared and also produced on archivally stable material. The cost for the preparation of any new drawings of the selected elevations described above and of the floor plans is provided as a contingency cost of \$12,500 as shown in Table 1.

Deliverables shall be three sets of the HABS documentation for submission to local and state agencies (e.g. the Society for the Preservation of Long Island Antiquities, (SPLIA), the Garden City Library, and the New York State Office of Parks, Recreation and Historic Preservation [OPRHP]) for curation and public access.

The total cost for the HABS documentation excluding the contingency for new drawings would be a fixed fee of \$25,000. As shown in Table 1 this includes \$15,825 for photography and \$9,175 for the historical narrative, architectural description, reproduction of historical images and drawings, document assembly in archival format, submission to the selected state and local repositories, and required site visits and coordination to prepare the document. Costs assume one round of client review prior to submission to the selected repositories.

Table 1
Cost Estimate

Task	Cost
Photography*	
Photographer's fee and assistant	\$7,000
Film, Processing, Printing, Expenses (travel, archival mounting, assembly, binders)	\$8,825
Total Photography Fee (without contingencies)	\$15,825
HABS Narrative, Assembly & Coordination Fee	\$9,175
TOTAL FIXED FEES	\$25,000
CONTINGENCY TASKS: PREPAR DRAWINGS**	
CONTINGENCY TASKS: PHOTOGRAPHY	
Additional sets of 25 photos each	\$1,800/set
Additional days of shooting	\$2,500/day
Additional negatives	\$50 each
Additional prints and mounting	\$70 each
Notes: This estimate is effective through December 31, 2011. Direct expenses will be billed at cost.	
* Direct Expense, William McGilvray	
** Direct Expense, Erwin Lobo Bielinski, PLLC.	

Please let me know if you have any questions or require further information at (646) 388-9745.

Sincerely,
AKRF, Inc.



Claudia Cooney
Vice President