Conditions Assessment

General George Stannard House Milton, Vermont



Prepared for: Bill Kaigle

Milton Historical Society

With Funding From: The Preservation Trust of Vermont

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Historic Preservation Consulting

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Dear Bill,

As requested, I met with you and Terry at the house site on May 15, 2014 to conduct a Conditions Assessment of the General Stannard House. This report details my findings, ranks recommended remediation by priority, and estimates costs associated with the work. Conditions reported are those available to visual inspection at the time of my visit. The report will assist the building owner and the Historical Society in prioritizing repair, but should not be used as a basis for contractor bids. Bid documents contain substantially more information on quantities, standards, schedules, details and conditions of the work, which guide and protect both the owner and the contractor.

REPORT OBJECTIVES

Typically, a Conditions Assessment examines a building, element by element, opines on condition and recommends remediation with estimated costs. The Stannard House is not a typical structure, and is certainly atypical with regard to condition for standing structures even of this vintage. Due to advanced deterioration, a routine assessment would be of questionable value here, and, we believe, would not best serve the owner and stakeholders of this highly significant building. For this reason, this assessment is customized to the unique conditions and values of the house, and seeks to address some fundamental questions about its future.

First and foremost among the issues facing the Stannard House is: can and should the building be saved. The recommendation will be based on a architectural description, assessment of historical significance, and assessment of general physical conditions and remediation estimates to stabilize the structure. Second is an assessment of what constraints control the building in terms of regulation and permitting. Third, is what reasonable steps can and should be taken to address immediate concerns and ensure the property has the best chance to be repurposed.

What can be discouraging in a project like the Stannard House is the amount of work, costs, and unknowns involved in getting the project all the way to the finish line. A phased approach can focus and concentrate efforts to reach critical milestones, and measurable success. The condition of the building and interest in having the structure eventually open for public use suggests a three phase approach:

Phase 1: Stabilize and Weather Envelope

Phase 2: Construction

Phase 3: Program and Occupancy

This report will break down the first phase into properly sequenced steps with specific recommendations and estimated costs. It will also provide general estimates for phase 2. Phase 3 should be a background task for the building owners and managers but should not distract attention from phase 1, for without stabilization and weather-proofing in the short term, the building will fail and phase 3 will not be realized.

PROPERTY DESCRIPTION

The ca. 1840 General Stannard House is located at 947 US RT 7 South in the Town of Milton, located in a commercial/industrial -zoned area located about 4 miles south of Milton village. The building is a 5 x 2 bay, eaves-front, 1 ½ story wood-framed structure built in the Greek Revival style. Though the historical setting has been compromized by adjacent modern industrial buildings, there is sufficient open land around the structure itself, 200 feet minimum in each direction, to soften the impacts of modern development and preserve the immediate context.

Exterior: The house is set back 35 feet from RT 7 and rests on a mortared stone foundation extending 2 feet above grade. 2/2 double hung windows and recessed panel wooden doors were boarded over and the entry porch removed in the 1980s. An unadorned wooden box soffit with plain frieze and gable returns remains, though there is evidence it has been changed from the original, a segment of which exists but was obscured by the addition. Moldings throughout the exterior are simple, flat stock. A brick chimney penetrates the peak of the asphalt shingle covered gable roof just north of center.

A non-historic, wood-framed garage addition was built onto the west side of the house in 1950s. Unlike the house, the foundation is concrete cinder block and an overhead garage door opens into its south facing façade.

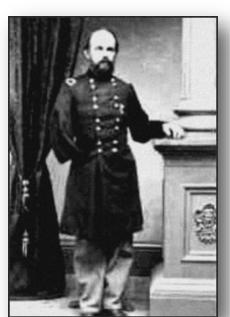
Interior: The center, main entry opens into the livingroom with dining room though an arch to the right. In the back left of the house are a study and stairs up to the 2nd floor and down to an unfinished basement; in the back right are the kitchen and only bathroom. Upstairs are 4 bedrooms located either side of the stairs and center hall which has a hatch to the unfinished attic. Like the exterior, moldings throughout the interior are plain dimensional stock except for some door casings in ground floor common areas which are slightly more ornate.



General Stannard House as it appeared in the late 1800s.

HISTORIC SIGNIFICANCE

Of critical importance is the property's association with Brigadier General George Stannard who owned and lived in the house in the 1860s and 1870s and who constructed a farm on the property. General Stannard was one of the most important Generals in the American Civil War, and by the accounts of his peers and superiors, played a pivotal role in the final outcome securing the union. This association with the General is where much of the building's historic value lies, and despite its condition, the appearance of the house has changed little since it was constructed. The house is in its original location, retains its historic appearance, and is still widely known as the General Stannard House. Because of the association to the General, the pivotal role this Vermonter played in the American Civil War, it is worth every effort to retain this part of our common history important in the local, state, and national context.



Some background on Brigadier General Stannard is included here for reference:

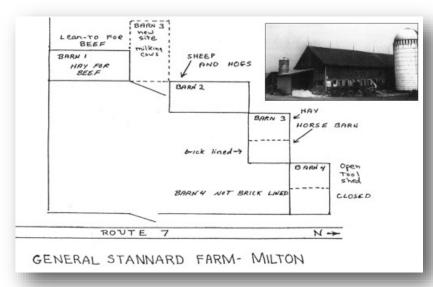
General Stannard was born in 1820 in Georgia, VT. He worked as a farmer, teacher, and brick foundry operator in St. Albans. In 1861 Stannard volunteered for duty in the Civil War, some local residents claiming he was the first Vermonter to do so. Over the next two years Stannard distinguished himself on the battlefield as a effective leader of troops in several campaigns, including the battle of Bull Run and the battle of Williamsburg. As a result, he was appointed Brigadier General on March 11, 1863 and joined the camps in defense of Washington with command of the 2nd Vermont Brigade. Stannard was known for relentless, precision drilling of his men with a quiet but effective style that won him the admiration and respect of those who served under him.

During the Gettysburg Campaign, Stannard's Brigade was sent from the capital to join the Army of the Potomac as it pursued Robert E Lee into Pennsylvania, marching 18 miles a day for a week to get there. During three separate assaults on the Union lines, Stannard swung his brigade 90 degrees to the approaching confederate forces, repelling the charges with successful flanking attacks in each case. The most significant of the flanking maneuvers was against "Pickett's Charge". About the Stannard-led repulse of Pickett, General Stannard's commanding officer, Major General Abner Doubleday, wrote "I can only say that they performed perhaps the most brilliant feat during the war. For they broke the desperate charge of Pickett, saved the day and with it, the whole North from invasion and devastation."

General Stannard continued in service to the Civil War and was wounded twice. The injury to his right arm sustained while holding Fort Harrison required that it be amputated and he returned to Vermont to recover and perform light duty military work. After resigning from the army in 1866, he served in various capacities, including as Doorkeeper of the United States House if Representatives until his death in 1886. He is buried in Lakeview cemetery in Burlington, and statues of General Stannard were commissioned and placed atop the Vermont Memorial at Gettysburg Battlefield, and at Lakeview Cemetery. The town of Stannard in Caledonia County in named for the General.

OWNERSHIP AND DEVELOPMENT

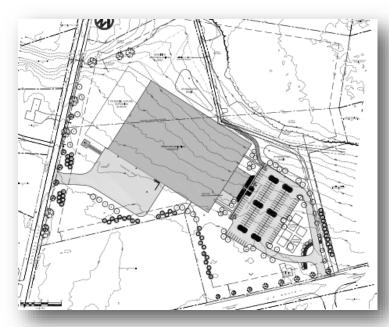
In 1868, General Stannard bought the subject property and house on Petty Brook in Milton. Soon after the purchase he built several barns, reported to have been specially arranged for operation by a man with one arm. Stannard raised horses and beef cows on the farm and ran a brick-making foundry in St. Albans until relocating to Washington DC in 1873.



Left photo shows the General Stannard Farm site plan with barns for raising beef cows and horses. The barns were known to have been specially constructed for Stannard who had lost his right arm to battle in the Civil War. The barns were burned by the Milton Fire Department as a training exercise in 1989. The same year the property was purchased by GBIC.



Above photo shows how the house appeared in the 1977 Vermont Division for Historic Preservation photo, when it was listed in the VT State Register of Historic Places. Raymond Sanderson Family owned the property until 1989, and subsequently sold it to the to the Greater Burlington Industrial Corporation (GBIC) who developed the land.



This plan sheet shows GBIC's completed project to redevelop the Property, including the Stannard Farm. The house is located in the lower right quadrant of the image, between the access driveway and RT 7. Despite commercial/industrial zoning in place, the house retains sufficient open space around it, and vistas from it, to preserve its immediate context.

CONDITIONS ASSESSMENT

General Discussion

The historic Stannard house has been vacant for approximately 25 years, owned by and under the stewardship of the Greater Burlington Industrial Corporation. During that time the asphalt roof shingles reached the end of their serviceable life and began to leak. Conditions worsened over time and the water has been penetrating unabated through multiple holes in the now collapsing roof for what appears to have been many years. The result has been catastrophic for the building interior, of which little appears to be savable. The good news: the foundation and building exterior were observed to be in better than fair condition. 2/2 historic sash are extant under plywood boarding, some with wooden storm windows. Some recessed panel exterior and interior doors also remain and appear to be salvageable. Even the wooden clapboards appear salvageable to a large degree.

The rear addition constructed on cinderblocks with an overhead garage door is of little historical value to the property. It is not uncommon to remove additions in poor condition to concentrate efforts and limited resources on the significant aspects of the property. In this case, the needs of the main house will be a challenge to address, and retaining the addition which is also in very poor condition would not make practical sense in that it would sap resources from the house configuration associated with General Stannard.

Site and Drainage

The eaves-front house measures 35 ft x 28 ft (eaves/gable) and is set back 35 ft from RT 7 on level ground. Drainage is presently an issue because of several excavations against the foundation that were not filled in, presumably from a previous inspection. Drainage could be improved by filling the voids and regarding to achieve positive drainage to achieve positive slope away from the building.



Photo left shows the building sited slightly elevated on level ground with ample room around it. It is anticipated that the site can be re-graded for drainage without need for a curtain drain or other extra measures.

Site and Drainage Recommendations

1) fill voids and re-grade to allow positive drainage away from the structure. Allow \$ 1000

Foundation

The foundation generally comprises mortared stone to grade and mortared brick above grade. The basement ceiling height was observed to be 9 feet which was unusual. The stairs down to the basement were extended by 35 inches, also unusual. An examination of the interior foundation wall showed a mortar line approximately 35 inches below the joists. In combination, these three factors point to the house having been raised by 35 inches at some point, and based on the bricks and mortar it appears it was done in the 1800s. Because the increase in foundation height is primarily brick, and General Stannard managed a brick foundry in St. Albans, it is possible the house was raised while Stannard owned the property, but that is not certain by any means.



The condition of the foundation is generally good, as shown left, which was good news. Here the stone is well mortared with a soft lime mix.



In some areas the foundation need to be reset, Branches are growing in and through the wall in some places, and stones are loose and need to be pointed.



The bulkhead shown left has been open to the weather for an undetermined period. Trees and shrubs growing adjacent have dislodged the bricks. They will need to be removed and the bulkhead will need to be repaired or removed.



Photo shows lower mortared stone with brick extending above grade in good condition This and other evidence including a 9 ft ceiling height suggests the building was raised 35 inches.

Foundation Recommendations

 Retain and repair foundation. Repoint brick and stone as required. Ensure use of soft, compatible mortar suitable for use with the old bricks. Repair or pour concrete wall in place of bulkhead entrance to basement. Allow \$4000 in Phase 1

Wood Structure

The building's structural wooden framing is visible in the basement and attic. Dimensional lumber joists rest on the foundation walls and two main carry beams in the basement: one beam parallel to the eaves supports the joists under the southern 2/3 of the building, the second beam parallel to the eaves carries the northern 2/3 of the building.



As observed in the basement, much of the framing is water-stained with organic material growing on it. This is due to water leaking through the roof and down through the building floors into the basement. The material should be tested to decide on a course of action, but many molds can be cleaned from wood and do not present an ongoing issue. Though the accessible wood "sounded" free passed the screwdriver test, a more detailed inspection will be needed once interior demolition is complete.



Rafters are original 4"x4", pegged at the ridge. Due to ongoing water infiltration they are also stained with the presence of organic material. Some rotting wood was observed at the peak and will require further inspection once it is exposed.

Not visible during inspection is the framing within the wall cavities. Because the roof is leaking heavily over the exterior walls, damage can be expected in that area. The optimistic view is that surface organic material can be removed from framing once exposed, and the wood treated with a boron solution to kill any remaining mold or fungus.

The sill tested poorly on the street façade, but well on remaining facades. In can be expected that 50% of the sill will need to be replaced. How far to take the framing work in Phase 1 will depend on budget, but at a minimum the building needs to be stable in this phase. Framing conditions will be more clearly ascertainable after interior demolition.

Wood Structure

Recommendations

- 1) Inspect framing for damage and rot once exposed after interior demolition.
- 2) Replace or reinforce damaged framing to ensure the building is stable. Anticipate 50% sill replacement. Cross bracing will likely be required after the interior lath is removed.
- 3) Test for presence and type of mold on framing and remediate as needed. Allow \$ 6,000 in Phase 1.

Exterior Woodwork



This is a Phase 2 Item. Like the foundation, exterior woodwork was observed to be in better than expected condition thanks to the attention given it by the Milton Historical Society who painted the building and covered the windows. There is damage to the soffit due to roof leaks, but much of the siding can be simply painted. The skirt board seen at the bottom of the siding in the left photo overhangs the stone foundation by some 3 inches which has further limited deterioration. This is all very good news for character-defining features, and the budget.



Left photo shows water-damaged soffit and board where the entry porch roof was attached. A porch half-column remains and should be preserved. The siding tends to bow out in places and the condition will not be fully known until interior surfaces are removed. Expect 20% replacement on the soffit, and 10% on the siding in Phase



Greek Revival details such as the unadorned frieze, corner boards, and gable returns have water damage. It is important to retain these features but limited replacement will be necessary in Phase 2.

Exterior Woodwork Recommendations

Phase 1:

Allow \$ 0.00

Phase 2:

- 1) Repair and/or replace damaged woodwork in-kind
- 2) Refasten, re-nail loose siding
- 3) Reconstruct entry porch
- 4) Reconstruct back stairs Allow \$6,500

Windows and Doors



Historic 2/2/ wooden double hung sash windows were observed to be extant in the main block: visible on the second floor as shown in left photo and covered with plywood boards for security reasons on the first floor. Conditions of the windows and exterior trim appeared to be generally good. The historic main entry door also remained in place and should be retained and restored for reuse.

Windows and Doors Recommendations

Phase 1

1) remove plywood boarding and replace with plexiglass panels installed over spacers. This will provide security, protect the windows, ventilate the building, and allow light into the building so work can begin.

Allow \$ 1,500

Phase 2

1) Free, lubricate, weatherstrip, paint, and install compatible storm windows (wood, triple track, or allied invisible).

Allow \$ 5,000

Roof

The asphalt roof shingles and plank sheathing, as evident from exterior and attic observations have failed due to long term roof leaks. Both will need to be replaced. The disposition of the existing pegged rafters which are historically significant, needs more evaluation once the building framing has been exposed. Depending on condition, the roof support system may need to be augmented with additional rafters and the plates may need to be replaced.

For the above reasons we recommend that the existing shingles and sheathing be removed, the 4x4 rafters reinforced as required, and a temporary metal roof be installed as soon as possible to eliminate further water penetration into the building and potential structural collapse. The non-historic shed dormer should be removed in Phase 1. We don't believe this will result in an unnecessary duplication of effort as most of the work involved would be required to prepare for the permanent roof. A temporary roof can be installed quickly, and will allow the balance of Phase 1 work to be completed and proper assessments made in preparation for phase 2 when a permanent roof would be installed.



Photo left shows failed roof shingles and sheathing evident by the valleys between rafters. Of concern is the extend of water leaking into the exterior wall cavities. This will be known once the interior surfaces are removed.

Roof

Recommendations

Phase 1 (urgent)

1) Remove existing roof shingles and sheathing, brace and reinforce rafters as required, install wood strapping, install new temporary steel roof. Allow \$18,000.

Phase 2

- 1) Remove and sell/return temporary roof steel. Reinforce rafters as directed by engineer and construction permit.
- 2) Allow \$ 20,000.

Chimney



A single brick chimney extends from the basement and penetrates the roof just north of center. Loose bricks and missing mortar above the roof line will need remediation

Chimney Recommendations

Phase 1

1) Repoint brick chimney to prevent further deterioration when the roof is being replaced.

Allow \$ 500

Paint

Paint conditions are in fair to good condition on most of the building. Where the paint is failing, particularly on the soffit, the cause is the leaking roof. Addressing paint conditions is not urgent on this structure, other than priming any bare wood, and any unpainted surfaces exposed after the addition is removed. The entire building should be painted in phase 2 after the roof has been replaced and the woodwork repaired.

Getting painters who are capable of the kind of careful and thorough preparation necessary to ensure good paint performance is difficult; *Preservation Brief #10: Exterior Paint Problems on Historic Woodwork* should be used as a guideline, and painters pre-qualified by their familiarity with these guidelines and a willingness to follow them. Protecting the brickwork from any drips or spills is a critical and necessary part of any painting repairs.

Proper preparation of surfaces work is 90% of the success of a paint job, and is skilled work that should not be left to amateurs; there are also new paints on the market which extend the cycle of repainting by several years. Although the materials are more expensive, most of the cost of painting is in labor, so that extending the cycle quickly becomes a substantial net gain.

Paint

Recommendations

Phase 1:

 Prime bare wood and any unpainted wood exposed when the rear addition is removed.

Allow \$ 500

Phase 2:

1) Paint the building. Allow \$ 6,000

Interior

As stated earlier, most of the building's building interior cannot reasonably be salvaged. The roof has been leaking and the building holding moisture for so long that surfaces and underlying materials have been ruined. Important exceptions are the stairs and railing to the second floor, interior doors, and a limited amount of flooring. Existing wooden moldings are simple flat stock likely painted with lead paint. These moldings can be replaced more cheaply and without harm to historic character. Below is a list of what should be removed and what can possibly be saved:

Interior Remove:

Plaster and sheetrock surfaces, walls and ceilings -100%
First floor flooring - 75%
Second floor flooring - 50%
Cabinets and furnishings -100%
Trim and molding -100%
Plumbing and Heating -90%

<u>Interior Save:</u>

Framing

Stairs to Second floor (do not meet code if public use upstairs)

Doors—Interior and Front

Pipes and conduit through foundation



Left photo is upstairs bedroom showing collapsed roof and soaked interior. The dormer and all interior surfaces should be removed in Phase 1.



Extant historic windows but ruined interior walls, ceiling, and floors. The site and exterior are more important historically than the building interior which is very simple. Discussion should take place about rebuilding the interior with the same, or similar configuration allowing for ADA as needed.



Shown left is the livingroom—not as damaged but still requiring removal of surfaces. Flooring could possibly be saved in this location. 2/2/ windows are important features and should be retained.

Interior Recommendations

Phase 1

 Complete demolition of interior spaces back to framing using list on page 15 as a guide:

Allow \$ 7,500

Phase 2

Rebuild complete interior with new plumbing, electrical, and ADA use.
 Allow \$ 100,000—150,000
 (*will require further planning)

PERMITTING CONSTRAINTS

Rehabilitation of the property will be subject to several permit requirements: An ACT 250 permit established when GBIC bought and developed the property contains legally binding regulatory language that requires review by the VT Division for Historic Preservation (VDHP) for any significant improvements to the Stannard House, as excerpted below.

5) Any proposed changes to the Stannard House, including, but not limited to, stabilization, rehabilitation, relocation, or demolition will be submitted to the Division for Historic Preservation for review and comment prior to the commencement of the proposed changes.

This regulatory language requires, for a proposed project, a package of information be generated and submitted to VDHP outlining the work and impacts to the historic features of the house. The Division will review and comment on the proposal, accepting, rejecting, or suggesting changes to the proposed work. If the building is to be opened to the public, permits will be needed from the VT Division of Fire Safety for construction, plumbing, electrical, egress, and ADA. Master plumbers will need to certify the work and obtain permits for their own work. The VDHP approval needs to be obtained before any work is done, and because that process may take several weeks, it should begin immediately if any Phase 1 work will take place this year.

REMEDIATION SUMMARY

It is recommended that a 20% contingency be included to Phases 1 and 2 for conditions that cannot be seen in a non-destructive investigation such as this one. Use of contractors skilled and experienced in preservation work will help manage discovered conditions and insure that proper consideration is given to materials, practices and preservation concerns; this is usually the most cost-effective approach and protects the integrity of the building, including its eligibility for grant funding.

This opinion of probable cost addresses historic preservation issues; it is not based on full research, specifications or details, and should be considered advisory only.

Our estimates are explicitly "Order of Magnitude" preliminary opinions of probable cost, exclusive of any Div.1 (General Conditions) costs, any specific costs associated with choice of materials and methods, any scale of work issues (small projects are more expensive per unit than larger ones), any project-specific conditions, any discovered conditions or additional information that a bidding contractor may well uncover, and that a specification can address but this brief report does not. They are probably lower than actual costs when all information has been gathered. Costs are based on hired labor and new materials, both at market rates in a volatile economy, taking into account special contractor expertise as required.

PHASE 1 OVERALL SCHEDULE: Stabilize and Weather Envelope

- 1) Generate work plan with specifications for items 5-12
- 2) Obtain regulatory approvals from VT Div. for Historic Preservation
- 3) Obtain Contractor quotes based on work specifications
- 4) Seek funding based on approved work plan and costs
- 5) Remove rear addition and weatherproof newly exposed main block
- 6) Remove existing shingles, and deteriorated roof sheathing; install temporary steel roof on new wooden strapping fixed to rafters
- 7) Repair foundation and bulkhead, fill in voids and re-grade for proper drainage
- 8) Gut interior to the framing; remove bad flooring, retain planks on second floor as possible; have the building inspected by a structural engineer at this step to ensure building stability and scope of work required in Phase 2
- 9) Replace and reinforce existing framing as needed based on engineers evaluation.
- 10) Remove window boarding and install plexiglass panels with spacers over windows
- 11) Ventilate and dry the building
- 12) Install new back door

CONCLUSION

The General Stannard House is a nationally important resource tied to the American Civil War. The General's house is demonstrably close to the point of no -return which would occur in a structural collapse, but the building has been stubbornly resisting that outcome. Action is urgently needed to arrest the cause of deterioration, and remediate the results of water penetrating the roof over the years. The loss of this building and it's connection to a man who changed the course of American history would be more challenging to absorb, we suspect, than is the challenge confronted by the stakeholders who wish to preserve this piece of history.

Repairs now will return a number of deferred maintenance details to a condition requiring only routine maintenance; conversely, these problems will accelerate shortly if not addressed. Employment of tradesmen with demonstrated expertise in historic building repairs - even though they appear more expensive than others - will avoid most maintenance problems created by unskilled repairs.

Once rehabilitated, a comprehensive plan for the use and periodic maintenance of the building should be developed to organize records, avoid costly repairs, anticipate cyclical replacement of materials, and utilize the best methods and materials from a growing body of research and experience with historic building maintenance, which often differs significantly from maintenance of newer buildings. While professional assistance will be required to generate proper specifications and provide some project oversight, we do not believe, considering the scope of repairs that focus in preservation, that an architect will need to be engaged to advance the project.

We are pleased to have had this opportunity to assist you in the on-going stewardship of this significant historic resource. Please don't hesitate to call if you have questions on any of the above, or need additional information or assistance in continuing restoration work on the building.

219,060-279,060

REHABILITATION SCHEDULE AND ESTIMATES

PHASE 1: Stabilization and Weather Envelope	ALLOW (\$)
1. Generate Phase 1 scope of work and specifications	1,200
2. Obtain regulatory approvals from VDHP	500
3. Obtain Contractor quotes from work specifications	350
4. Seek funding based on approved Phase 1 work plan	n/a
5. Remove rear addition and paint all exterior bare wood	3,500
6. Remove roof and sheathing and install temporary steel roof, repoint chimney (*)	18,500
7. repair foundation and bulkhead, fill voids and re-grade perimeter for drainage	5,000
8. Gut interior to framing per list on pp 15 (*)	7,500
9. Reinforce/replace existing framing per engineer specs (*)	6,000
10. Remove window boarding and replace with plexiglass with spacers	1,500
11. Ventilate and Dry the building	750
12. Install new exterior back door Sub-Total Phase 1	750 45,550
PHASE 2: Construction	
1. Exterior woodwork repairs, rebuild porch and back stairs	6,000
2. Repair windows, purchase and install storm windows	5,000
3. Install new standing seam metal roof	20,000
4. Paint the building	6,000
5. Rebuild Interior, framing, mechanicals	100,000—150,000
Sub-Total Phase 2	137,000—187,000
TOTAL	182,550—232,550

TOTAL w/ 20% Contingency