

PRESERVATION TIMBER FRAMING INC. P.O. BOX 28 BERWICK, MAINE 03901
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New Durham Meeting House
New Durham, New Hampshire
Attn: George Gale

September 5, 2012

**PHASE ONE STABILIZATION,
LEVELING AND PLUMBING AND FOUNDATION REPAIRS:
ESTIMATED COST: \$52,158.40**

Dear Mr. Gale,

Thank you for the opportunity to view the New Durham Meeting House and provide a quote for its stabilization, leveling and foundation repair. As per our recent site visit we know that the existing stone foundation is ill suited for the period of construction of the meeting house and the building was never leveled or plumbed when these temporary foundation repairs were made a number of years ago.

From our investigation we confirmed that the meetinghouse has undergone some major repairs over its lifetime. The interior of the church has suffered the loss of pulpit and box pews, but it retains much of its plaster from the late 1800's. We know that the original meetinghouse was lowered from two stories to one. We know that in the late 1980's significant work was done to replace "in kind" the entire undercarriage. We also know that the building was not leveled or plumbed during this work.

Despite these changes, many original features of the building remain and its preservation is worthwhile. Stephen Bedard and Elizabeth Durfee Hengen with Sarah Hofe record the rich history of the meetinghouse in the recent historic structures report completed in 2009. Its conditions are also well stated. From this information we know the importance of the meetinghouse to the town of New Durham.

The building is in structural failure and requires stabilization. In order to repair the structural timber framing of the building it must first be placed on a proper and level foundation. To do this, we will cross brace the damaged timber frame in preparation for a peaceful lift on jacks and cribbing while we level the structure and place a proper rubble stone foundation.

We will use existing stones that are currently stockpiled on the site. We will also dig below the frost line and place compacted gravel to grade to provide a solid base for the rubble stone above grade. This makes the building very secure and far less prone to the heaving and settling that has occurred over time.

It is this heaving and settling that has caused the building to go out of plumb and level. This places extreme stress on the timber frame and it also causes roof leaks and subsequent rot in this beautiful historic English style timber frame structure.

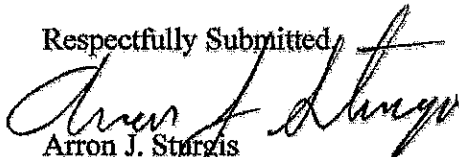
While the timber repair is outside of phase one work, it will be stabilized with cross bracing to ensure it will survive in stasis until phase two can be funded and implemented.

Three phases of work will complete the meetinghouse preservation. Phase one quoted here is the stabilization and foundation repair. Phase two will be timber frame

repair and a new roof. Phase three will be exterior and interior finishes to complete the project. This phased work is necessary to allow fundraising to occur and public awareness about this building can be increased at each work stage. It is also very important to recognize that the building is usable after phase one and its diversity of use increases with each subsequent phase of work. I encourage use of the structure once stabilized. The space is well suited for public events and historic tours. It can and should be used as a community resource. With each successful stage of work, the building becomes more viable. It can become income producing and used by the community for public gathering.

Please review the attached excel spreadsheet for the tasks that lay ahead. I welcome any comments and questions you may have. I have included the names of my preservation sub-contractors in the task list so that you know that we are using very skilled craftspeople for this work. I have spent years with historic structures and I have developed a very comprehensive team that I count on to ensure the historic integrity of our work. We look forward to helping you preserve this historic landmark.

Respectfully Submitted,



Arron J. Sturgis
Preservation Timber Framing Inc.

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9/15/12

CAT.	NEW DURHAM MEETINGHOUSE	DESCRIPTION	TASK	HOURS	MATERIALS	COSTS
101	Administrative	(meetings with client or	Review and design lifting plan	10		
102	Assessment		Check post height and length during leveling process	10		
103	Documentation, drafting, tagging, photography		Documentation, drafting, tagging, photography			
104	Travel, material & equip transport		Commute over two hours/person/day	10		
105	Moving parts / material handling/ Lull		Unloading/cutting cribbing	6 (10)	6x7x16 Hemlock	560
106	Site work and subcontractor support		set cribbing and jacks outside, 16 jack set ups	30		
106	Site work and subcontractor support		set cribbing and jacks inside, 8 jack set ups	25		
106	Site work and subcontractor support		establishing level line, lifting and leveling	45		
106	Site work and subcontractor support		work with Bob Cartmell to dig to frost and compact gravel to grade	20	Bob Cartmell to excavate perimeter	6,500
106	Site work and subcontractor support		Repair foundation, sub support	10	Rod Bishop to set appropriate stone	15,450
106	Site work and subcontractor support		Interior piers, hand dug with compacted gravel and stone above grade	60		
106	Site work and subcontractor support		Lowering sills onto foundation sequentially	20		
107	Staging and tenting		set staging to access cross bracing and stabilization of rafter heels	6		
108	Undercarriage and deck		Replacing floorboards	15	(4) 1x11x12	192
112	Rigging and final assembly (crane day)		Bracketing posts that have rotten feet (3)	15	Lag bolts	50
113	Sheathing		Replacing sheathing 1" x 2" 6" x 2(34x42)	20	1x2" 6x2(34x42)	1,140
114	Siding and exterior trim		Replacing clapboards, corner boards	80	claps to cover 380 sq. ft. fasteners	634
116	Ramps, stairs, lotts, finish, interior, exterior		Interior wainscot stabilization, for lifting	4		
119	Stabilization		Stabilize and brace rafters for lifting	20	(18) 2x8x16	216
119	Stabilization		Stabilize wall system for lifting	16	(19) 2x8x16	216
120	Demo and stripping (siding, sheathing)		Remove 2 1/2 feet of clapboards around perimeter	8		
120	Demo and stripping (siding, sheathing)		Remove first 2 1/2 feet of sheathing	8		
120	Demo and stripping (siding, sheathing)		Remove flooring for access to undercarriage	5		
122	Paint prep (scraping, sanding, priming)		Back priming clapboards	10	Primer and applicators	200
125	Miscellaneous general labor		Clean up	15		
			Subtotal (hours)	450		
			Subtotal (PTF Labor, In Dollars)			\$27,000.00
			TOTAL (Materials, Subs and Labor)			\$52,155.40

CONDITIONS:
 PHASE ONE IS STABILIZATION AND FOUNDATION REPAIRS AND THE LEVELING AND PLUMBING OF M.H.
 PHASE TWO WILL INCLUDE TIMBER FRAME REPAIRS AND IS PROVIDED UNDER SEPARATE COVER.
 EXTERIOR FINISH PAINTING IS NOT INCLUDED UNTIL PHASE THREE.
 EXTERIOR AND INTERIOR REPAIRS AND PLASTERING WILL FOLLOW IN PHASE THREE.

ALL WORK TO BE DONE WITH IN KIND MATERIALS AND TRADITIONAL METHODS TO ENSURE STRICT ADHERENCE TO THE SECRETARY OF INTERIOR STANDARDS FOR HISTORIC PRESERVATION.

LCHIP Application