

GENERAL STRUCTURAL NOTES

SI Job # 17-0013
Brian Boru Roof Vault
 57 Center St
 Portland ME

DESIGN LOADS: 2009 IBC, U.O.N.
 • Roof: 60 psf ground snow
 • Wind: 100 mph, exp. C

WOOD FRAMING:

- "Pressure treated lumber" shall be framing material of the specified species which has been pressure treated with a decay and insect resistant solution, meeting all current standards for wood in contact with concrete or earth.
- Acceptable treatment mediums for wood in contact with concrete include ACQ-C and ACQ-D (Alkaline Copper Quaternary) and copper azole (CBA-A and CBA-B).
- DO NOT USE WOODS WHICH HAVE BEEN TREATED WITH AMMONIA BASED CARRIERS.
- All connectors shall meet the recommendations of the pressure treated wood manufacturer, but shall be not less than Hot Dipped Galvanized meeting requirements of ASTM A653, such as Simpson ZMAX, (G185). All screws, nails and bolts shall match hangers and other connectors, and shall meet ASTM A123 for individual connectors, and ASTM A153 for fasteners.
- For durability, it is our recommendation that connectors used in exposed conditions with treated lumber be stainless steel.
- Do not mix galvanized and stainless products.
- Do not allow aluminum to contact treated wood.
- Floor Joists: Antique Reclaimed Pine or Spruce Fb=1450 psi,
- Beams: Antique Reclaimed Pine or Spruce Fb=2000 psi,
- Laminated Veneer Lumber (LVL): Manufactured 1 3/4" wide Microlams (ML) by Trus Joist or equivalent. Fb=2,600 psi, E=1,900,000 psi, Fv=285 psi, depth noted on plans.
- All plywood and oriented strand board (OSB) sheathing shall be engineered grades with APA grade stamp indicating appropriate maximum spacing of supports.
- Minimum nailing shall comply with UBC Table 23-II-B-1 or IBC Table 2304.9.1 except where more or larger nailing shown on drawings.
- Cross bridge floor joists at midspan and provide solid blocking or rim joists at all joist supports and joist ends.
- Metal connectors: Simpson Strong-Tie unless otherwise noted, installed with number and type of nails to achieve maximum rated capacity. Note that heavy duty and skewed hangers may require special order.
- All beams shall be braced against rotation at points of bearing.
- Drypack grout all beam pockets full after beams are set.
- Unless otherwise indicated, install two lengths of solid blocking x joist depth x 12 inches long in floor framing under column loads.
- Columns must have a continuous load path to foundation.
- Lead holes for lag bolts shall be 60% to 70% of lag shank diameter in compliance with AISC criteria.

STRUCTURAL STEEL:

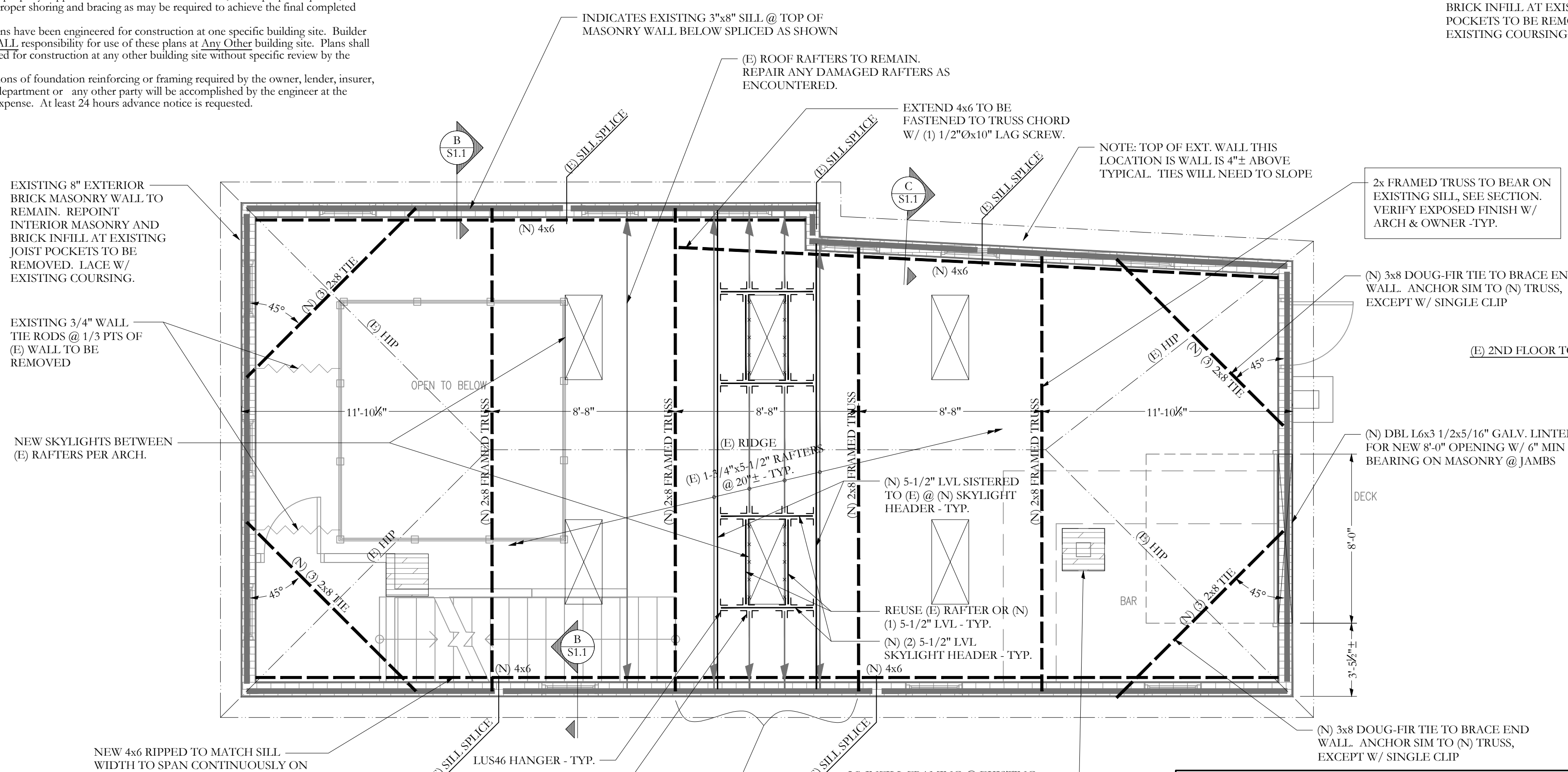
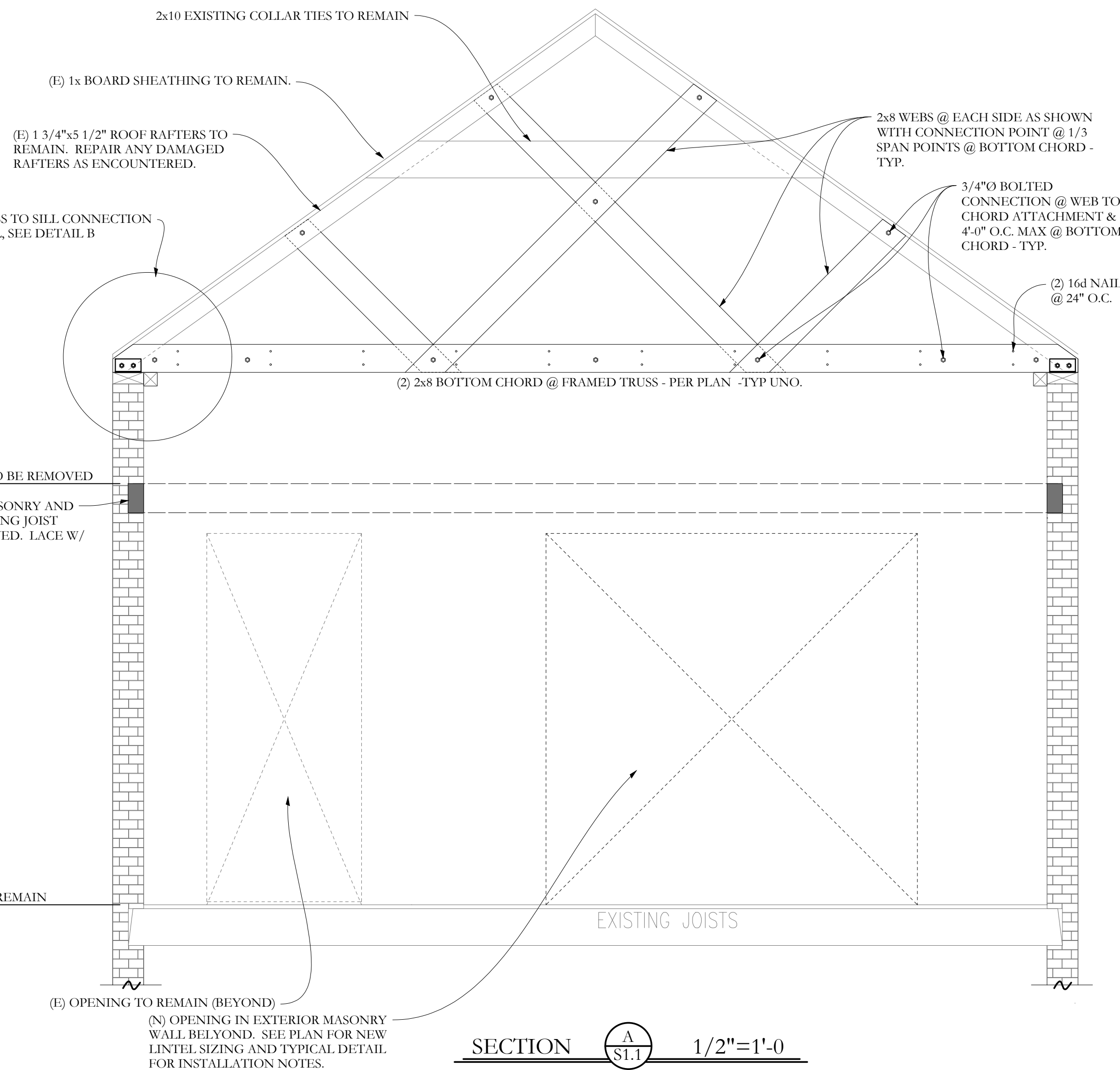
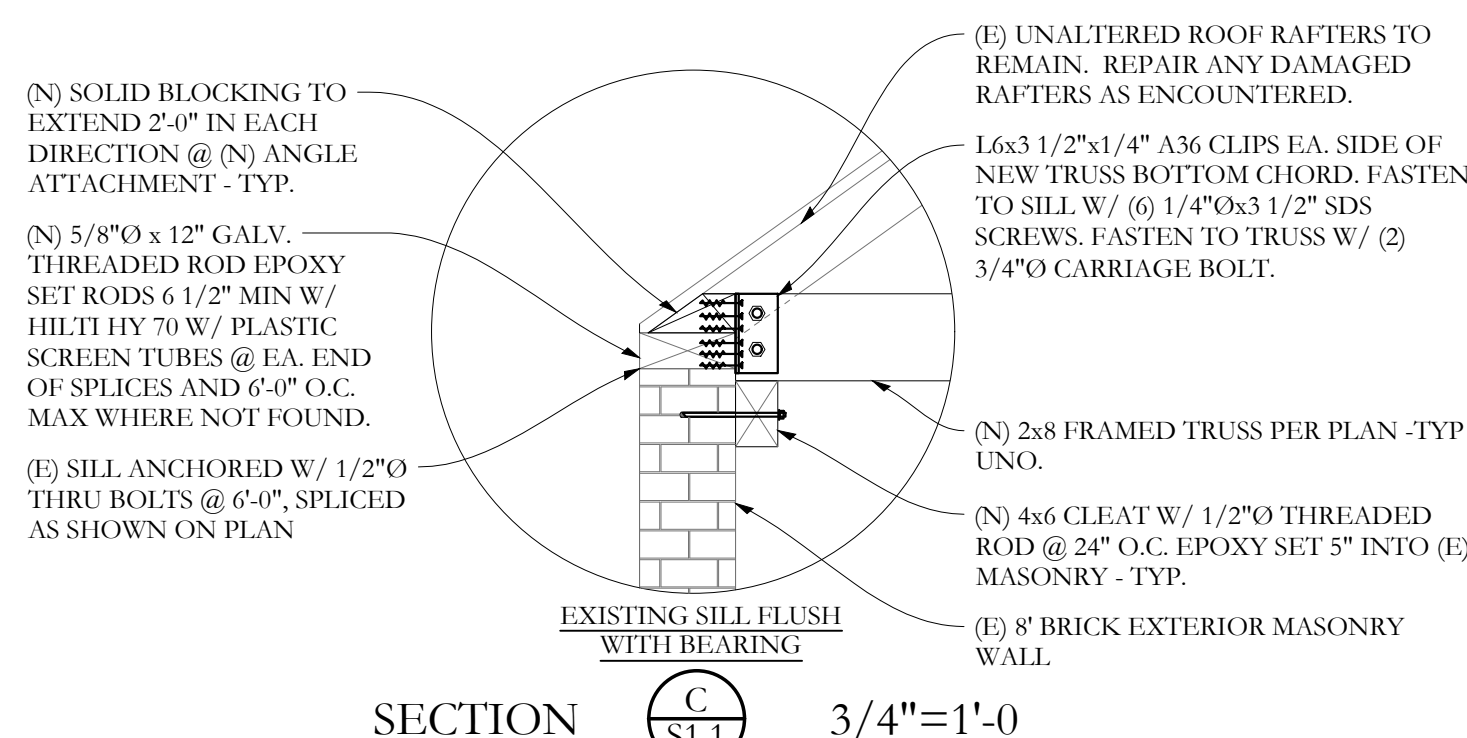
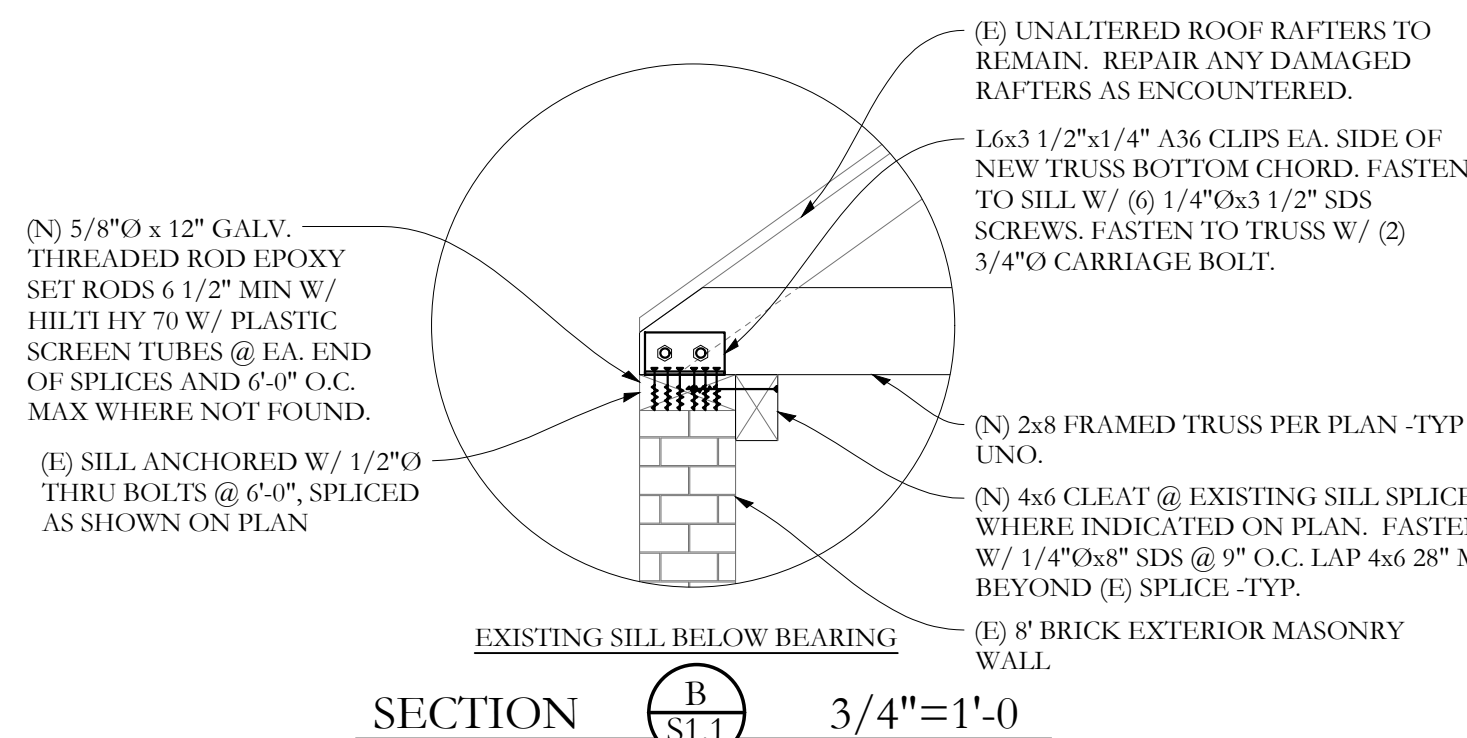
- Structural Beams: ASTM A992
- Angles, misc.: ASTM A36
- Anchor Bolts: ASTM A307 or A36
- Standard pipe columns: ASTM A 53, Grade B
- Tube Columns: ASTM A500, Grade B, 46 ksi
- Connector bolts: ASTM A307

STRUCTURAL ERECTION AND BRACING REQUIREMENTS

- The structural drawings illustrate the completed structure with all elements in their final positions, properly supported and braced. The contractor, in the proper sequence, shall provide proper shoring and bracing as may be required to achieve the final completed structure.
- These plans have been engineered for construction at one specific building site. Builder assumes ALL responsibility for use of these plans at Any Other building site. Plans shall not be used for construction at any other building site without specific review by the engineer.
- Observations of foundation reinforcing or framing required by the owner, lender, insurer, building department or any other party will be accomplished by the engineer at the owner's expense. At least 24 hours advance notice is requested.

ABBREVIATIONS KEY

BRG	BEARING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
DWG	DRAWING
EA	EACH
ES	EACH SIDE
<E>	EXISTING
GALV	GALVANIZED
LOC	LOCATION
LVL	LAMINATED VENEER LUMBER
NTS	NOT TO SCALE
<N>	NEW
PT, P.T.	PRESSURE TREATED
<R>	REMOVE
SIM	SIMILAR
SQ	SQUARE
T&B	TOP AND BOTTOM
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
WA	WEDGE ANCHOR

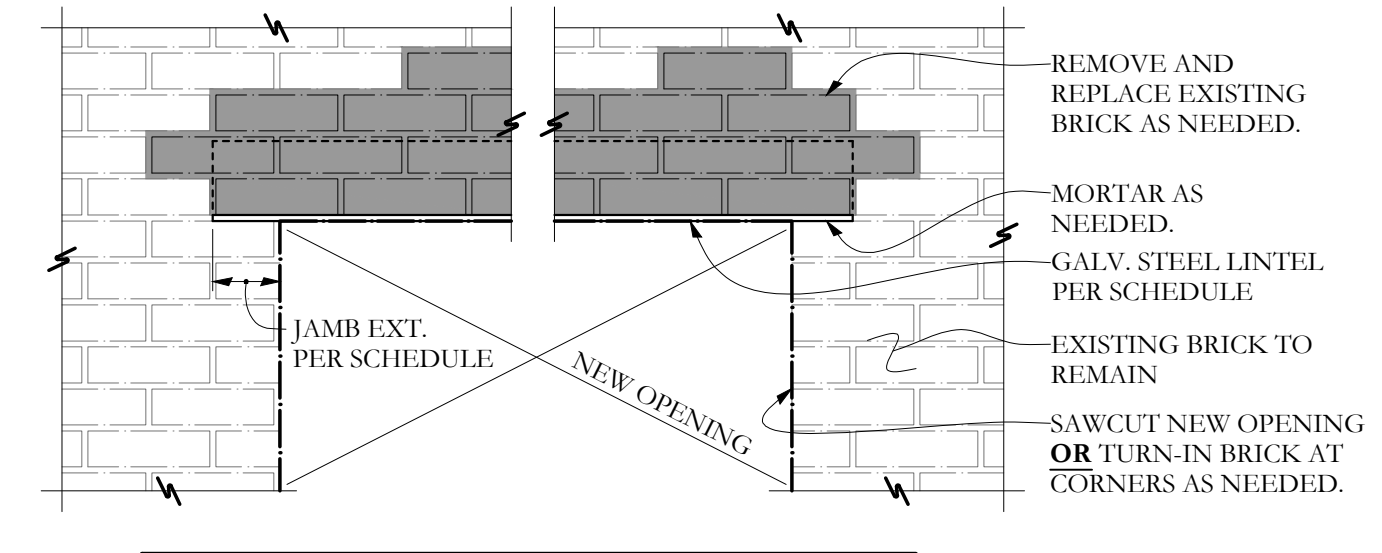


ROOF FRAMING PLAN

- NOTES:
- SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
 - TEMPORARY SHORING OF ALL REPAIR WORK BY CONTRACTOR -TYP
 - (E) INDICATES EXISTING, (N) INDICATES NEW.
 - ALL WOOD COLUMNS IN 2x6 WALLS SHALL BE 3-2x6 AND IN 2x4 WALLS SHALL BE 3-2x4 UNLESS NOTED OTHERWISE ON PLANS.
 - ALL BEAMS ARE FLUSH, UNO.
 - ALL ROOF SHEATHING TO BE 5/8", SEE GENERAL NOTES FOR ADDITIONAL INFORMATION -TYP.
- SCALE 1/4"=1'-0"

FRAMING PLAN SYMBOLS KEY

(X)	WOOD OR STEEL POST/COLUMN
A / B / C	NUMBER OF WOOD STUDS IN POST BELOW COLUMN (ABOVE, BELOW, CONTINUOUS) AT THIS LEVEL.
(E) / (N)	EXISTING / NEW
(N)	JOIST BEARING
(E)	JOIST BEARING
(N)	CONTINUOUS JOIST WITH INTERMEDIATE BEARING
(E)	CONTINUOUS JOIST WITH INTERMEDIATE BEARING
(N)	FLUSH FRAMED JOIST BEARING WITH HANGER
(E)	JOIST W/ (N) FLUSH HANGER
(N)	WOOD STUD BEARING WALL BELOW
(E)	MULTI-WYTHE BRICK MASONRY WALL TO REMAIN/ BE REPAIRED AS NEEDED.
(N)	INDICATES (N) FLOOR INFILL W/ 2x @ 16" O.C. FLOOR JOISTS. JOIST DEPTH TO (E) MATCH FLOOR FRAMING
(E)T	NUMBER OF TRIM STUDS UNDER HEADER
(E)K	NUMBER OF KING STUDS ADJACENT TO HEADER

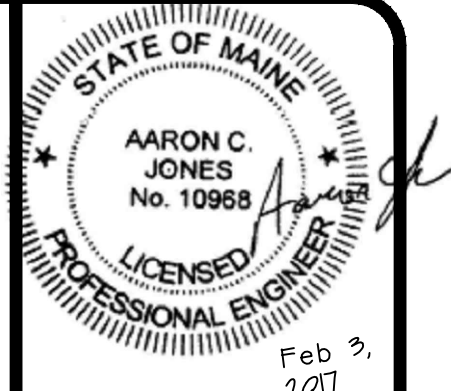


OPENING SIZE*	LINTEL PER WYTHE	JAMB EXTENSION
LESS THAN 4'-0"	1.5x 3 1/2x 1/4	4"
4'-1 TO 5'-4"	1.5x 3 1/2x 1/4	4"
5'-5 TO 6'-6"	1.6x 3 1/2x 5/16"	8"

* FOR OPENINGS GREATER THAN LISTED, SEE PLAN.
 ** ALL TEMPORARY SHORING BY G.C. -TYP.

NEW LINTEL INSTALLATION IN EXISTING BRICK

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CONSULTANTS:

REVISIONS:

Permit Set

DATE: 3 April, 2016
 PROJECT No. 17-0013
 DRAWN BY: MKL
 CHECKED BY:
 SCALE: AS NOTED

SHEET TITLE:
 STRUCTURAL PLANS AND SECTIONS

S1.1