## GENERAL

G1. THE GENERAL NOTES APPLY UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS.

G2. STRUCTURAL WORK SHALL CONFORM TO REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE, 2009 EDITION AND ALL NEW HAMPSHIRE AMENDMENTS.

G3. THE INTENT OF THE STRUCTURAL DRAWINGS IS TO SHOW THE MAIN STRUCTURAL FEATURES AND DESIGN FOR THE COMPLETED PROJECT. ARCHITECTURAL DETAILS AND OTHER COMPONENTS THAT MAY BE NECESSARY TO CONSTRUCT THE PROJECT ARE SHOWN INCIDENTALLY ONLY AND NOT COMPLETELY.

G4. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, SITE, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS, APPROVED SHOP DRAWINGS, AND SPECIFICATIONS.

G5. REFER TO ARCHITECTURAL, SITE, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS FOR VERIFICATION OF LOCATIONS AND DIMENSIONS OF ALL SHAFTS, INSERTS, CURBS, OPENINGS, SLEEVES, ANCHOR BOLTS, FLOOR PITCHES, ANGLE FRAMES, AND OTHER PROJECT REQUIREMENTS NOT SHOWN ON STRUCTURAL DRAWINGS.

G6. THE CONTRACTOR SHALL INFORM THE ARCHITECT OF ALL DISCREPANCIES BETWEEN DRAWINGS OF DIFFERENT TRADES PRIOR TO INITIATION OF ANY WORK.

G7. EXISTING DIMENSIONS AND CONDITIONS MUST BE VERIFIED OR DETERMINED IN THE FIELD AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

G8. THE CONTRACTOR SHALL PROVIDE ALL THE NECESSARY ENGINEERED TEMPORARY BRACING AND SHORING TO SAFELY SUPPORT THE NEW AND EXISTING WORK AND THE APPLIED LOADS UNTIL THE PERMANENT STRUCTURE IS FULLY INSTALLED AND AT FULL STRENGTH.

G9. SHOP DRAWINGS FOR REINFORCING STEEL, STRUCTURAL STEEL, AND PREFABRICATED WOOD TRUSSES SHALL BE SUBMITTED TO THE ARCHITECT AND A STAMPED APPROVAL RECEIVED BEFORE FABRICATION MAY PROCEED. FABRICATION SHALL PROCEED FROM APPROVED SHOP DRAWINGS ONLY.

G10. NOTES AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS, UNLESS NOTED.

G11. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.

## STRUCTURAL LOADS - INTERNATIONAL BUILDING CODE - 2009 EDITION (WITH NEW HAMPSHIRE AMENDMENTS)

L1. DEAD LOADS
- A. WEIGHT OF BUILDING COMPONENTS
  - 1. ROOFS — 25 PSF

L2. SNOW LOADS
- A. GROUND SNOW LOAD - (ERDC/CRREL TR-02-6) — P(g) = 90 PSF
- B. FLAT ROOF SNOW LOAD - (ASCE 7-05 - SECTION 7.3) — P(f) = 76 PSF
- C. SNOW EXPOSURE FACTOR - (ASCE 7-05 - TABLE 7-2) — C(e) = 1.0
- D. SNOW IMPORTANCE FACTOR - (ASCE 7-05 - TABLE 7-4) — I(s) = 1.0
- E. ROOF THERMAL FACTOR - (ASCE 7-05 - TABLE 7-3) — C(t) = 1.2
- F. ROOF SLOPE FACTOR - (ASCE 7-05 - FIGURE 7-2) — C(s) = 1.0
- G. SNOW DRIFT - (ASCE 7-05 - FIGURES 7-7, 7-8 & 7-9)

L3. LIVE LOADS
- A. LOADS (I.B.C. - TABLE 1607.1)
  - 1. SLAB ON GRADE — 150 PSF

L4. WIND LOADS - MAIN WIND FORCE RESISTING SYSTEM (MWFRS)
- A. BASIC WIND SPEED (3-SECOND GUST) - TABLE 1604.10 — V(3s) = 90 MPH
- B. WIND IMPORTANCE FACTOR - ASCE 7-05 - TABLE 6-1 — I(w) = 1.0
- C. WIND EXPOSURE CATEGORY - ASCE 7-05 - TABLE 6.5.6 — EXPOSURE C
- D. DIRECTIONALITY FACTOR - ASCE 7-05 - TABLE 6-4 — Kd = 0.85
- E. TOPOGRAPHIC FACTOR - ASCE 7-05 - SECTION 6.5.7 — Kzt = 1.0
- F. HORIZONTAL WALL PRESSURES:
  - 1. AT NON-SALIENT AREA: — 16.4 PSF
  - 2. AT SALIENT AREA: — 22.5 PSF

L5. WIND LOADS - COMPONENTS AND CLADDING
- A. EFFECTIVE WIND AREA ASSUMED: — 20 SF
- B. WIDTH OF EXTERIOR ZONE: — 9.0 FT
- C. HORIZONTAL WALL PRESSURES:
  - 1. INTERIOR ZONE: — + 19.5 / - 21.1 PSF
  - 2. EXTERIOR ZONE: — + 19.5 / - 25.5 PSF
- D. ROOF PRESSURES:
  - 1. AT INTERIOR ZONE: — + 10.8 / - 18.2 PSF
  - 2. AT EXTERIOR ZONE: — + 10.8 / - 30.0 PSF
  - 3. AT CORNER ZONE: — + 10.8 / - 45.0 PSF
- C. OVERHANG WIND PRESSURES:
  - 1. INTERIOR ZONE: — - 38.1 PSF
  - 2. EXTERIOR ZONE: — - 57.7 PSF

L6. SEISMIC LOADS
- A. OCCUPANCY CATEGORY - ASCE 7-05 - TABLE 1-1 — OCCUPANCY CATEGORY II
- B. MAPPED SPECTRAL ACCELERATION FOR SHORT PERIODS - ASCE 7-05 FIG. 22-1 — S(S) = 0.395g
- C. DESIGN SPECTRAL RESPONSE ACCELERATION FOR SHORT PERIODS — S(DS) = 0.390g
- D. MAPPED SPECTRAL ACCELERATION FOR 1-SECOND PERIOD - ASCE 7-05 FIG. 22-2 — S(1) = 0.087g
- E. DESIGN SPECTRAL RESPONSE ACCELERATION FOR 1-SECOND PERIOD — S(D1) = 0.139g
- F. SITE CLASS - REFER TO GEOTCHNICAL REPORT — SITE CLASS D
- G. SEISMIC DESIGN CATEGORY - ASCE 7-05 - TABLES 11.6-1 & 11.6-2 — CATEGORY C
- H. BASIC SEISMIC-FORCE-RESISTING SYSTEM - ASCE 7-05 - TABLE 12.2-1 — NORTH/SOUTH - MOMENT FRAMES EAST/WEST - CONCETRICALLY BRACED FRAMES
- I. RESPONSE MODIFICATION COEFFICIENT - ASCE 7-05 - TABLE 12.2-1 — R = 3.0
- J. DEFLECTION AMPLIFICATION FACTOR - ASCE 7-05 - TABLE 12.2-1 — C(d) = 3.0
- K. SYSTEM OVERSTRENGTH FACTOR - ASCE 7-05 -TABLE 12.2-1 — Ωo = 3.0
- L. SEISMIC IMPORTANCE FACTOR - ASCE 7-05 - TABLE 11.5-1 — I(E) = 1.0
- M. DESIGN BASE SHEAR — V = Cs(sW = [S(DS)]/[R/(I(E))]W
- N. ANALYSIS PROCEDURE USED — EQUIVALENT LATERAL FORCE

## FOUNDATION

F1. FOUNDATION WORK SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT BY R.W. GILLESPIE & ASSOCIATES, INC, FILE #0515-139, DATED AUGUST 19, 2016.

F2. THE OWNER AND ARCHITECT ASSUME NO RESPONSIBILITY FOR THE VALIDITY OF THE SUBSURFACE CONDITIONS DESCRIBED ON THE DRAWINGS, SPECIFICATIONS, BORING LOGS, OR TEST PITS. THIS DATA IS INCLUDED ONLY TO ASSIST THE CONTRACTOR DURING BIDDING AND SUBSEQUENT CONSTRUCTION AND REPRESENT CONDITIONS ONLY OF THOSE SPECIFIED LOCATIONS AT THE PARTICULAR TIME THEY WERE MADE.

F3. THE CONTRACTOR SHALL INFORM THE ARCHITECT AND RELOCATE, AS REQUIRED, ANY EXISTING UTILITY LINES THAT MAY INTERFERE WITH NEW FOUNDATIONS. THE CONTRACTOR SHALL REMOVE ANY EXISTING UTILITY LINES THAT ARE BEING ABANDONED IN THE VICINITY OF THE NEW FOUNDATION AND BACKFILL THE AREA WITH COMPACTED STRUCTURAL FILL.

F4. THE BOTTOM SURFACE OF ALL SPREAD FOOTINGS SHALL REST ON A UNDISTURBED APPROVED SOIL OR COMPACTED STRUCTURAL FILL, WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 1.5 TONS PER SQUARE FOOT. REMOVE ALL ORGANICS, CLAYS, SILTS, OR UNSUITABLE OR UNCOMPACTED FILL MATERIALS FROM BENEATH NEW FOOTINGS AND REPLACE WITH COMPACTED STRUCTURAL FILL.

F5. THE ESTIMATED BOTTOM ELEVATION OF EACH FOOTING IS INDICATED THUS [X'-X"] ON PLAN. THE BOTTOM OF EACH EXTERIOR FOOTING SHALL BE A MINIMUM OF 4'-0" BELOW ADJACENT EXTERIOR FINISH GRADE.

F6. PROVIDE 10 MIL REINFORCED VAPOR BARRIER UNDER INTERIOR CONCRETE SLABS ON GRADE. PROVIDE 12" MINIMUM OF COMPACTED STRUCTURAL FILL UNDER GROUND FLOOR SLABS ON GRADE.

F7. BACKFILL UNDER STRUCTURAL SLABS, MATS, AND FOOTINGS SHALL BE ENGINEERED BACKFILL COMPACTED IN SPECIFIED LIFTS TO 95 PERCENT OF MAXIMUM DENSITY, UNLESS OTHERWISE INDICATED OR SPECIFIED. REFER TO GEOTECHNICAL REPORT AND EARTHWORK SPECIFICATION FOR ADDITIONAL REQUIREMENTS.

F8. VERIFY LOCATIONS AND REQUIREMENTS FOR INSERTS, SLEEVES, CONDUITS, EMBEDMENTS, AND PENETRATIONS WITH RESPECTIVE TRADES BEFORE PLACING CONCRETE.

F9. FOUNDATIONS SHALL BE CENTERED UNDER SUPPORTED MEMBERS, UNLESS NOTED OTHERWISE.

F10. DOWELS FROM FOUNDATIONS INTO PIERS, COLUMNS, BUTTRESSES, OR WALLS SHALL BE THE SAME SIZE AND NUMBER AS REINFORCEMENT IN PIERS, COLUMNS, AND BUTTRESSES, OR WALLS ABOVE, UNLESS NOTED OTHERWISE.

F11. NO CONCRETE SHALL BE PLACED UNDER WATER OR ON FROZEN SUBGRADE. PROTECT IN-PLACE FOUNDATIONS AND SLABS FROM FROST PENETRATION UNTIL PROJECT IS COMPLETED.

F12. DO NOT BACK FILL FOUNDATION WALLS UNTIL WALLS HAVE REACHED THEIR 28 DAY STRENGTHS..

F13. THE CONTRACTOR SHALL DESIGN, PERMIT, INSTALL AND MAINTAIN TEMPORARY EARTH RETAINING CRIBBING AND SHEETING AS NECESSARY TO COMPLETE THE WORK AND PROTECT ADJACENT STRUCTURES, SIDEWALKS AND ROADWAYS.

## CAST-IN-PLACE CONCRETE

C1. CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318 - 2008/318R - 2008)".

C2. CONCRETE SHALL BE PLACED IN THE PRESENCE OF THE APPROVED TESTING AGENCY.

C3. CONCRETE QUALITY IN ACCORDANCE WITH THE REQUIREMENTS OF THESE DRAWINGS AND SPECIFICATIONS IS ESSENTIAL TO THE STRUCTURAL PERFORMANCE OF THE BUILDING. CONCRETE THAT IS NOT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS WILL NOT BE ACCEPTED.

C4. CONCRETE EXPOSED TO WEATHER SHALL CONTAIN AN AIR ENTRAINMENT ADMIXTURE.

C5. NORMAL WEIGHT CONCRETE SHALL HAVE AN AIR-DRY UNIT WEIGHT OF 145 PCF.

C6. CONCRETE MINIMUM 28-DAY STRENGTH, UNLESS NOTED OTHERWISE, SHALL CONFORM TO FOLLOWING:
- A. FOOTINGS, PIERS, FOUNDATION WALLS, GRADE BEAMS: — 3000 PSI (NORMAL WEIGHT)
- B. SLABS ON GRADE: — 3000 PSI (NORMAL WEIGHT)
- C. SITE PAVING: — 4000 PSI (NORMAL WEIGHT)

C7. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED BARS. LAP ALL CONTINUOUS BARS A MINIMUM OF 40 DIAMETERS, UNLESS NOTED. PROVIDE MATCHING CORNER AND INTERSECTION BARS.

C8. PROVIDE A MINIMUM OF #4 AT 12" EACH WAY, EACH FACE, FOR ALL WALLS, FOOTINGS, PITS, OR PADS, UNLESS NOTED OTHERWISE.

C9. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064 IN FLAT SHEETS. LAP ONE AND ONE-HALF SQUARES AT ALL JOINTS AND TIE AT 3'-0" o.c. AT SLAB ON GRADE, PLACE WELDED WIRE FABRIC ON SLAB BOLSTERS WITH SOIL PLATES SPACED AT 3'-0" o.c. EACH WAY.

C10. PROVIDE REINFORCING STEEL DETAILING, LAP SPLICES, EMBEDMENTS, BAR SUPPORTS, SPACERS, AND ACCESSORIES AS RECOMMENDED IN THE "ACI DETAILING MANUAL 2004". ACCESSORIES, SUCH AS SLAB BOLSTERS AND BEAM AND SLAB CHAIRS IN CONTACT WITH EXPOSED SURFACES, SHALL BE ZINC COATED AND PLASTIC TIPPED.

C11. REINFORCING STEEL DETAILS NOT SHOWN ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH THE "ACI DETAILING MANUAL 2004".

C12. CLEAR CONCRETE COVER FOR REINFORCING BARS OR WELDED WIRE FABRIC SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED:
- A. FOOTINGS: — 3"
- B. FOUNDATION WALLS: — 1-1/2"
- C. PILASTERS/PIERS: — 1-1/2" TO TIES
- D. SLABS ON GRADE: — 1/3 THICKNESS FROM TOP
- E. BEAMS: — 1-1/2" TO STIRRUPS
- F. STRUCTURAL SLABS: — 1" TOP & BOTTOM
- G. TOPPINGS ON METAL DECK: — 1" FROM TOP

C13. SET AND TIE ALL REINFORCING STEEL BEFORE PLACING CONCRETE. SETTING DOWELS AND REINFORCING STEEL INTO WET CONCRETE IS PROHIBITED.

C14. NO REINFORCING STEEL SHALL BE CUT OR OMITTED IN THE FIELD BECAUSE OF CONFLICT WITH SLEEVES, DUCT OPENINGS, OR RECESSES. REINFORCING STEEL MAY BE MOVED ASIDE WITHOUT CHANGE IN LEVEL, WITH THE APPROVAL OF THE ARCHITECT.

C15. NO CHASES, RECESS, OPENINGS, OR SLEEVES SHALL BE INSTALLED IN CONCRETE WITHOUT APPROVAL OF THE ARCHITECT.

C16. NO CONDUITS SHALL BE PLACED IN CONCRETE SLABS ON METAL DECK.

C17. KEYS SHALL BE A MINIMUM OF 2" x 4" WITH BEVELED SIDES, UNLESS NOTED OTHERWISE.

C18. DOWELS AND ANCHOR RODS SHALL BE SET BY TEMPLATE. SET EMBEDDED ITEMS FOR CONNECTION OF OTHER WORK ACCURATELY.

C19. HORIZONTAL CONSTRUCTION JOINTS SHALL BE AS INDICATED ON THE DRAWINGS. VERTICAL CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ARCHITECT. CONSTRUCTION JOINTS SHALL BE FORMED WITH A STANDARD KEY AND ALL REINFORCING STEEL EXTENDED A MINIMUM OF 40 DIAMETERS, UNLESS NOTED. ALL CONSTRUCTION JOINTS BELOW GRADE SHALL HAVE CONTINUOUS BENTONITE WATERSTOPS.

C20. CONSTRUCTION AND CONTROL JOINT LOCATIONS OTHER THAN THOSE SHOWN ON THE DRAWINGS MAY BE PERMITTED SUBJECT TO THE PRIOR APPROVAL OF THE ARCHITECT. EXPANSION JOINT LOCATIONS ARE MANDATORY AS SHOWN.

C21. SEE ARCHITECTURAL AND SITE DRAWINGS FOR FINISHES, DEPRESSIONS, REGLETS, NOTCHES, AND OTHER ARCHITECTURAL FEATURES.

C22. PROVIDE CONCRETE PADS FOR MECHANICAL EQUIPMENT ACCORDING TO THE REQUIREMENTS OF THE MANUFACTURER AND IN ACCORDANCE WITH THE TYPICAL DETAILS. COORDINATE LOCATIONS WITH M.E.P. WORK.

C23. PROVIDE SEALANT FOR ALL EXPOSED-TO-VIEW CONSTRUCTION JOINTS, CONTROL JOINTS, AND SHEAR KEYS.

C24. EXPOSED EDGES OF CONCRETE ELEMENTS SHALL HAVE A 1-INCH CHAMFER.

C25. NOT ALL OPENINGS THROUGH CONCRETE SLABS AND WALLS ARE SHOWN ON STRUCTURAL DRAWINGS. OPENINGS INDICATED, OR ANY ADDITIONAL OPENINGS OR INSERTS REQUIRED, SHALL BE VERIFIED WITH RESPECTIVE TRADES PRIOR TO PLACING CONCRETE.

C26. ADHESIVE ANCHORS POST-INSTALLED IN CONCRETE SHALL BE HILTI HIT-HY 200 HAS THREADED ANCHOR RODS UNLESS OTHERWISE NOTED.

## UNIT MASONRY

M1. CONCRETE MASONRY CONSTRUCTION WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS AND COMMENTARY FOR MASONRY STRUCTURES (ACI 530/530R -02)" AND "SPECIFICATIONS FOR MASONRY STRUCTURES AND RELATED COMMENTARIES (ACI 530.1/530.1R -08)". CONCRETE MASONRY WALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOW LIFT GROUTING METHOD.

M2. CONCRETE MASONRY STRENGTH (f'm) SHALL NOT BE LESS THAN 1500 PSI WITH SPECIAL INSPECTION.

M3. CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO ASTM C90, NORMAL WEIGHT, TYPE 1 AND TO NCMA "REQUIREMENTS FOR LOAD BEARING CONCRETE MASONRY". COMPRESSIVE STRENGTH SHALL BE AS REQUIRED FOR SPECIFIED CONCRETE MASONRY STRENGTH (f'm), BUT NOT LESS THAN 1900 PSI FOR THE AVERAGE OF 3 UNITS OR 1700 PSI FOR AN INDIVIDUAL UNIT, BASED ON THE AVERAGE NET AREA.

M4. MORTAR FOR REINFORCED CMU SHALL CONFORM TO ASTM C270, TYPE M OR S, AND HAVE A 28-DAY COMPRESSIVE STRENGTH EQUAL TO THE SPECIFIED CONCRETE MASONRY STRENGTH (f'm), BUT NOT LESS THAN 1800 PSI.

M5. GROUT SHALL CONFORM TO ASTM C476, FINE TYPE, AND HAVE A 28-DAY COMPRESSIVE STRENGTH EQUAL TO THE SPECIFIED CONCRETE MASONRY STRENGTH (f'm), BUT NOT LESS THAN 3000 PSI.

M6. GROUTING SHALL BE LIMITED TO A MAXIMUM WALL HEIGHT OF 5'-4" FT PER LIFT.

M7. HORIZONTAL JOINT REINFORCEMENT SHALL CONFORM TO ASTM A82, LADDER TYPE, #9 WIRE. PROVIDE PREFABRICATED CORNERS AND TEES.

M8. MINIMUM HORIZONTAL JOINT REINFORCEMENT FOR WALLS AND PARTITIONS SHALL BE #9 WIRE SPACED VERTICALLY AT 16"o.c. AT A MINIMUM, PROVIDE A BOND BEAM, WITH 2-#5 HORIZONTAL AND CONTINUOUS BARS, AT EACH FLOOR LEVEL AND AT THE TOP OF WALL.

M9. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED BARS. LAP ALL CONTINUOUS BARS A MINIMUM OF 48 DIAMETERS.

M10. STAIR AND ELEVATOR SHAFT WALLS SHALL BE FULLY GROUTED SOLID AND IN ADDITION TO HORIZONTAL REINFORCEMENT SHALL BE REINFORCED VERTICALLY WITH A MINIMUM OF #5 BARS AT 32" O.C., UNLESS NOTED.

M11. THE TOP OF CMU WALLS AND PARTITIONS SHALL BE ANCHORED AS SHOWN IN THE TYPICAL DETAILS AND THE SECTIONS.

M12. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIRED FIRE RATINGS.

### FBRA STRUCTURAL DRAWING LIST

| Drawing Number | Drawing Name |
|---|---|
| S0.1 | GENERAL NOTES |
| S0.2 | TYPICAL DETAILS I |
| S0.3 | TYPICAL DETAILS II |
| S0.4 | TYPICAL DETAILS III |
| S1.1 | FOUNDATION PLAN |
| S1.2 | PORCH AND EXISTING FRAMING PLAN |
| S1.3 | ROOF STEEL FRAMING PLAN |
| S1.4 | ROOF FRAMING PLAN |
| S2.1 | BRACE ELEVATIONS AND DETAILS |
| S2.2 | TRUSS ELEVATIONS |
| S2.3 | TRUSS ELEVATIONS |
| S2.4 | TRUSS ELEVATIONS |
| S2.5 | WALL ELEVATIONS |
| S3.1 | FOUNDATION DETAILS |
| S4.1 | FRAMING DETAILS |

## STRUCTURAL STEEL FRAMING

S1. STRUCTURAL STEEL WORK SHALL CONFORM TO THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - 360-05" AND AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES - 2005", AS MODIFIED BY THE SPECIFICATIONS.

S2. WELDING SHALL BE IN ACCORDANCE WITH AWS "D1.1 2006-STRUCTURAL WELDING CODE-STEEL".

S3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED:
- A. PLATES — ASTM A36 — Fy = 36KSI
- B. STRUCTURAL TUBING — ASTM A500 GRADE B — Fy = 46KSI (SQUARE & RECTANGULAR TUBING), Fy = 42KSI (ROUND TUBING)
- C. ALL OTHER SHAPES — ASTM A992 OR A588 GRADE B — Fy = 50KSI

S4. CONNECTIONS MAY BE BOLTED OR WELDED, UNLESS SPECIFICALLY NOTED OTHERWISE. CONNECTIONS SHALL BE DESIGNED AND DETAILED IN ACCORDANCE WITH AISC STANDARDS, USING THE ASD METHOD.

S5. CONNECTIONS SHALL BE WELDED TO CONFORM TO ASTM A233, E70 SERIES, OR BOLTED TO CONFORM TO ASTM F3125, TYPE N BOLTS.

S6. PROVIDE 3/4" DIAMETER MINIMUM HEADED TYPE ANCHOR RODS AT COLUMNS AND POSTS, UNLESS NOTED OTHERWISE.

S7. FURNISH AND INSTALL ONE WASHER AND ONE HEAVY HEX NUT WITH ALL ANCHOR RODS, UNLESS NOTED.

S8. SIMPLY SUPPORTED BEAM-TO-BEAM CONNECTIONS SHALL BE DOUBLE ANGLE TYPE IN CONFORMANCE WITH THE AISC "MANUAL OF STEEL CONSTRUCTION", UNLESS SPECIFICALLY NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS.

S9. PROVIDE A 1/4" THICK LEVELING PLATE UNDER EACH COLUMN BASE PLATE FOR USE IN ALIGNING ANCHOR RODS AND BASE PLATES. LEVELING PLATE SHALL BE SET AND GROUTED WITH AN APPROVED NON-SHRINK, NON-METALLIC GROUT. GROUT SHALL HAVE ATTAINED DESIGN STRENGTH BEFORE ERECTION OF COLUMN.

S10. PROVIDE A 1/4" THICK MINIMUM CAP PLATE WELDED AT TOP OF HSS COLUMNS, UNLESS NOTED.

S11. SPLICING STRUCTURAL MEMBERS WHERE NOT DETAILED ON DRAWINGS IS PROHIBITED WITHOUT PRIOR APPROVAL OF ARCHITECT.

S12. STRUCTURAL STEEL EXPOSED TO THE WEATHER IN THE FINISHED PROJECT SHALL BE HOT DIP GALVANIZED TO CONFORM TO ASTM A123.

S13. REFER TO THE SPECIFICATION FOR PAINTING AND SURFACE PREPARATION REQUIREMENTS.

S14. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE NEW STRUCTURE FOR WIND AND CONSTRUCTION LOADS. TEMPORARY SUPPORTS SHALL REMAIN IN PLACE UNTIL ALL ELEMENTS REQUIRED FOR STABILITY OF THE STEEL FRAME ARE COMPLETED.

## ROUGH CARPENTRY

RC1. STRUCTURAL LUMBER SHALL CONFORM TO THE AF&PA, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND SUPPLEMENT, "DESIGN VALUES FOR WOOD CONSTRUCTION" LATEST EDITION. MAXIMUM MOISTURE CONTENT SHALL BE 19%.

RC2. SAWN LUMBER SHALL BE SOUTHERN PINE NO. 1 OR BETTER, INCLUDING JOISTS, RAFTERS, BEAMS, STUDS, POSTS AND PLATES.

RC3. FOUNDATION SILLS SHALL BE PRESERVATIVE PRESSURE TREATED SOUTHERN PINE NO. 2 OR BETTER. ANCHOR BOLTS IN PRESERVATIVE PRESSURE TREATED WOOD SHALL BE HOT DIP GALVANIZED. NAILS IN PRESERVATIVE PRESSURE TREATED WOOD SHALL BE STAINLESS STEEL.

RC4. WOOD EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE PRESSURE TREATED SOUTHERN PINE NO. 2 OR BETTER. BOLTS IN PRESERVATIVE PRESSURE TREATED WOOD SHALL BE HOT DIP GALVANIZED. NAILS IN PRESERVATIVE PRESSURE TREATED WOOD SHALL BE STAINLESS STEEL.

RC5. LAMINATED VENEER LUMBER (LVL) SHALL BE MICROLLAM, AS MANUFACTURED BY WEYERHAEUSER, OR EQUAL.

RC6. PARALLEL STRAND LUMBER (PSL) SHALL BE PARALLAM, AS MANUFACTURED BY WEYERHAEUSER, OR EQUAL.

RC7. FLUSH FRAMED CONNECTIONS SHALL HAVE METAL BEAM OR JOIST HANGERS, MANUFACTURED BY SIMPSON STRONG-TIE CO., INC., OR EQUAL.

RC8. ALL INDIVIDUAL POSTS SHALL HAVE METAL CAPS AND BASES, MANUFACTURED BY SIMPSON STRONG-TIE CO., INC., OR EQUAL.

RC9. ROOF SHEATHING SHALL BE A MINIMUM OF 3/4" EXPOSURE 1, STRUCTURAL 1 APA RATED SHEATHING WITH 10d NAILS 6" o.c. AT EDGES AND 12" o.c. AT INTERMEDIATE SUPPORTS. PROVIDE METAL "H" CLIPS AT PANEL EDGES.

RC10. WALL SHEATHING SHALL BE A MINIMUM OF 1/2" EXPOSURE 1 APA RATED SHEATHING WITH 8d NAILS 6" o.c. AT EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. BLOCK ALL EDGES OF PLYWOOD WALL SHEATHING.

RC11. FLOOR SHEATHING SHALL BE A MINIMUM OF 3/4" EXPOSURE 1 STURD-I-FLOOR APA RATED SHEATHING TONGUE AND GROOVE, GLUED AND NAILED WITH 10d NAILS AT 6" o.c. AT ENDS AND 12" o.c. AT INTERMEDIATE SUPPORTS.

RC12. SHEATHING SHALL HAVE STAGGERED JOINTS AND NAILS SHALL BE THREADED. ALL SHEATHING SHALL BE INSTALLED WITH THE FACE GRAIN PERPENDICULAR TO THE SUPPORTS.

RC13. NAILING SHALL BE IN ACCORDANCE WITH THE 2009 INTERNATIONAL BUILDING CODE, TABLE 2304.9.1, UNLESS OTHERWISE NOTED.

RC14. ALL WALL STUDS SHALL BE BLOCKED AT 4'-0" o.c. MAX. AND AT ALL PLYWOOD EDGES.

RC15. PROVIDE SOLID BLOCKING BETWEEN JOISTS AND RAFTERS OVER ALL STUD BEARING WALLS OR SUPPORTING BEAMS.

RC16. ALL POSTS SHALL BE (VERTICALLY) BLOCKED THROUGH FLOOR CONSTRUCTION AT ALL LEVELS, TO THE TOP OF FOUNDATION WALL OR SUPPORTING BEAM.

RC17. PROVIDE MINIMUM HEADERS AS REQUIRED BY TABLE 2308.9.5 OF THE INTERNATIONAL BUILDING CODE 2009 UNLESS OTHERWISE NOTED.

RC18. PROVIDE MINIMUM BUILT-UP WALL STUDS AT JAMBS OF ALL WINDOW AND DOOR OPENINGS AS NOTED BELOW, UNLESS MORE STRINGENT REQUIREMENTS ARE NOTED ON THE DRAWINGS.

| OPENING SIZE | JACK STUDS | KING STUDS | TOTAL STUDS |
|---|---|---|---|
| UP TO 4'-0" | 1 | 1 | 2 |
| 4'-0" TO 6'-0" | 1 | 2 | 3 |
| 6'-0" TO 8'-0" | 2 | 2 | 4 |
| 8'-0" TO 10'-0" | 2 | 3 | 5 |

ALL KING AND JACK STUDS SHALL BE OF THE SAME MATERIAL AS THE TYPICAL WALL STUDS, UNLESS OTHERWISE NOTED ON THE DRAWINGS. ALL KING STUDS SHALL BE FULL HEIGHT, EXTENDING FROM THE SOLE PLATE TO THE CAP PLATE. JACK STUDS SHALL TERMINATE BELOW THE HEADER AND BE THOROUGHLY NAILED TO THE KING STUDS. FRAMING SHOWN IN THE TABLE ABOVE IS FOR ONE OPENING - PROVIDE 2X THE NUMBER OF JACK AND KING STUDS FOR MULTIPLE OPENINGS IMMEDIATELY ADJACENT TO EACH OTHER. IN CASES WHERE THE DISTANCE BETWEEN OPENINGS DOES NOT ACCOMMODATE THE TOTAL NUMBER OF JACK AND KING STUDS, ELIMINATE THE JACK STUD(S) AND CONNECT THE HEADER TO THE KING STUDS WITH A STANDARD METAL JOIST HANGER (CONCEALED FLANGES).

RC19. PROVIDE A MINIMUM OF 3 - 2X CORNER POSTS AT ALL CORNERS AND WALL INTERSECTIONS.

RC20. PROVIDE METAL HURRICANE ANCHORS AT ALL ROOF RAFTERS TO PLATE CONNECTIONS.

RC21. FRAME ALL OPENINGS IN FLOOR AND ROOF CONSTRUCTION WITH MINIMUM OF 2 - 2X HEADERS AND TRIMMERS (DEPTH TO MATCH THE ADJACENT FRAMING) WITH METAL JOIST/BEAM HANGERS, UNLESS OTHERWISE NOTED.

RC22. NOTCHING OF JOISTS, BEAMS, STUDS OR PLATES SHALL NOT BE PERMITTED.


LAVALLEE BRENSINGER ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101


**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

**WOLFEBORO PUBLIC LIBRARY**

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

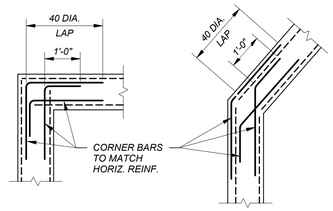
| NO. | DESCRIPTION | DATE |
|---|---|---|
| | | |

CONTENT: GENERAL NOTES

DRAWN BY: SJB
PROJECT NO: 2016141
DATE: 8/1/18
REVISED:
SCALE: As indicated

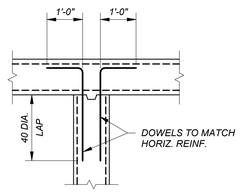
S0.1

Project Phase
**BID DOCUMENTS**



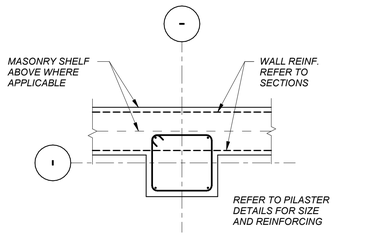

CORNER

CONCRETE WALLS CW1



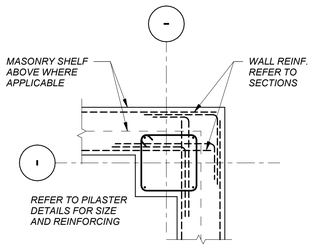

INTERSECTION

CONCRETE WALLS CW2



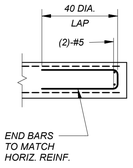

EDGE PILASTER

CONCRETE WALLS CW3



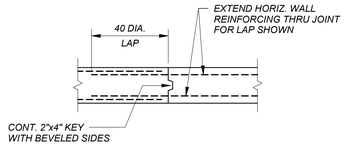

CORNER PILASTER

CONCRETE WALLS CW4



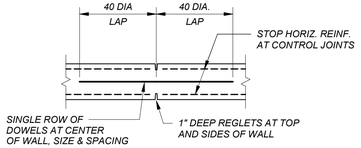

END

CONCRETE WALLS CW5




CONSTRUCTION JOINT

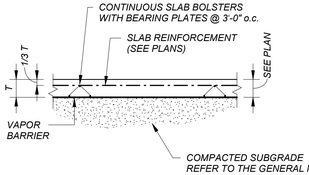
CONCRETE WALLS CW6




CONTROL JOINTS SHALL BE AT 30'-0" o.c. MAX. COORDINATE LOCATIONS WITH ARCHITECTURAL AND LANDSCAPE DRAWINGS.

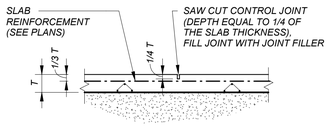
CONTROL JOINT

CONCRETE WALLS CW7




GENERAL CONSTRUCTION

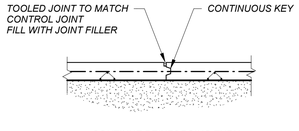
SLAB ON GRADE CS1




PROVIDE CONTROL JOINTS ON COLUMN GRID LINE CENTERS OR AS INDICATED ON THE PLANS

CONTROL JOINT

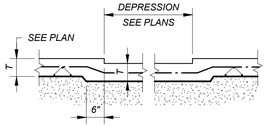
SLAB ON GRADE CS2




CONTINUE REINFORCING THRU CONSTRUCTION JOINT AND LAP IN ACCORDANCE WITH GENERAL NOTES

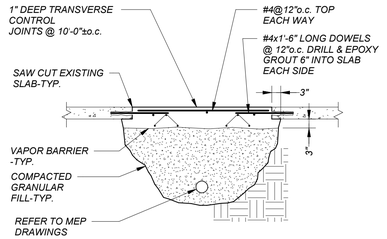
CONSTRUCTION JOINT

SLAB ON GRADE CS3



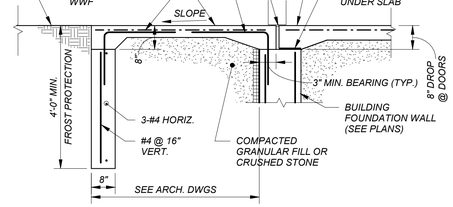

DEPRESSION

SLAB ON GRADE CS4



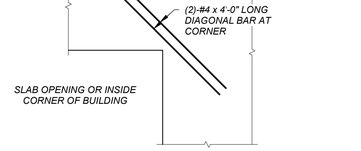

TRENCH REPAIR

SLAB ON GRADE CS10




APPROACH SLAB W/ FROST PROTECTION

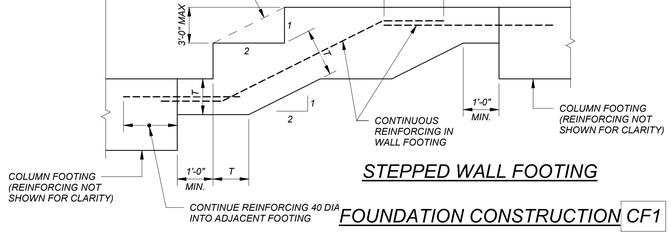
SLAB ON GRADE CS13




PLAN VIEW

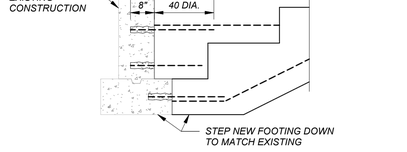
ADDED REBAR AT INSIDE CORNERS

CONCRETE SLABS CS19



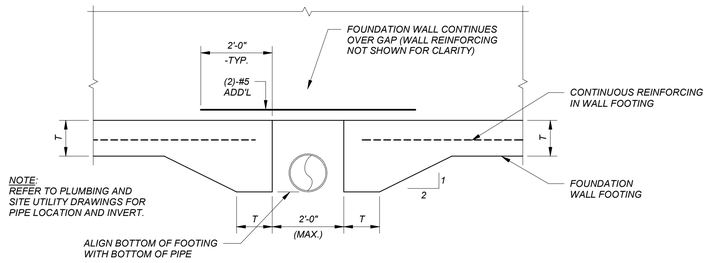

STEPPED WALL FOOTING

FOUNDATION CONSTRUCTION CF1




NEW TO EXISTING FOUNDATION WALL

FOUNDATION CONSTRUCTION CF3




CONCRETE WALL FOOTING AT PIPE

FOUNDATION CONSTRUCTION CF2


LAVALLEE BRENSINGER
ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101


**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

**WOLFEBORO PUBLIC LIBRARY**

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|
| | | |

CONTENT:
TYPICAL DETAILS I

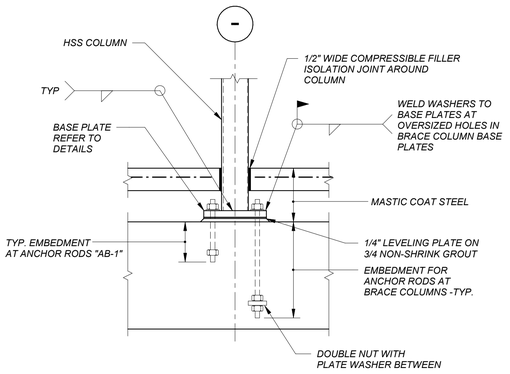
| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S0.2

Project Phase
**BID DOCUMENTS**

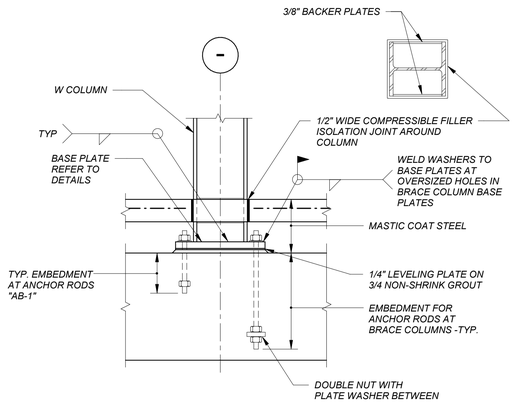



10/12/2018 11:18:50 AM G:\2016\141-10 Wolfeboro Library\RVT\Wolfeboro Libe Str 1 R18.rvt



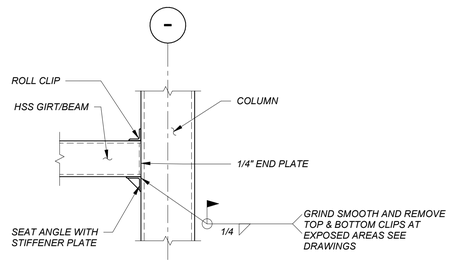

## HSS COLUMN BASE DETAIL

STEEL CONSTRUCTION S1



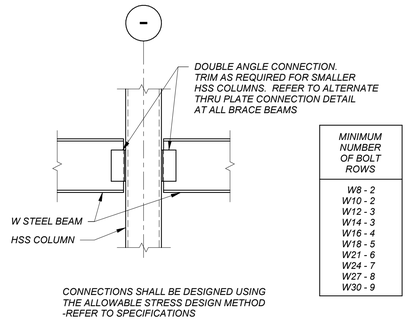

## W COLUMN BASE DETAIL

STEEL CONSTRUCTION S2




## HSS BEAM TO COLUMN CONNECTION

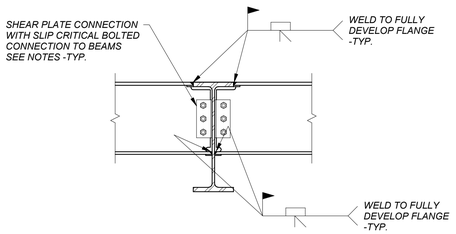
STEEL CONSTRUCTION S9




| MINIMUM NUMBER OF BOLT ROWS |
|---|
| W8 - 2 |
| W10 - 2 |
| W12 - 3 |
| W14 - 3 |
| W16 - 4 |
| W18 - 5 |
| W21 - 6 |
| W24 - 7 |
| W27 - 8 |
| W30 - 9 |

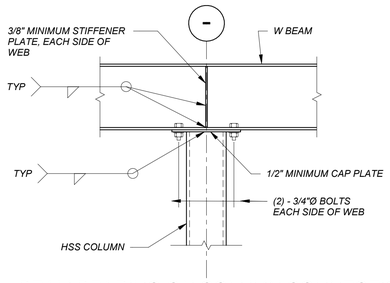
## BEAM TO HSS COLUMN CONNECTION

STEEL CONSTRUCTION S10



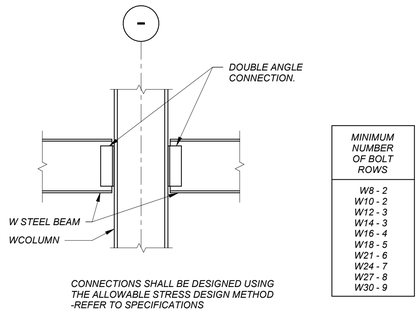

## BEAM TO BEAM MOMENT CONNECTION

STEEL CONSTRUCTION S16




## BEAM BEARING ON COLUMN CONNECTION

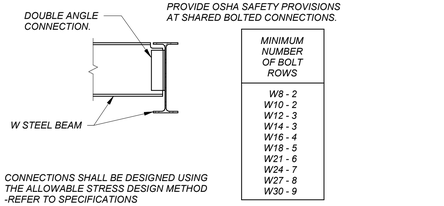
STEEL CONSTRUCTION S14




| MINIMUM NUMBER OF BOLT ROWS |
|---|
| W8 - 2 |
| W10 - 2 |
| W12 - 3 |
| W14 - 3 |
| W16 - 4 |
| W18 - 5 |
| W21 - 6 |
| W24 - 7 |
| W27 - 8 |
| W30 - 9 |

## BEAM TO W COLUMN CONNECTION

STEEL CONSTRUCTION S11




| MINIMUM NUMBER OF BOLT ROWS |
|---|
| W8 - 2 |
| W10 - 2 |
| W12 - 3 |
| W14 - 3 |
| W16 - 4 |
| W18 - 5 |
| W21 - 6 |
| W24 - 7 |
| W27 - 8 |
| W30 - 9 |

## BEAM TO BEAM CONNECTION

STEEL CONSTRUCTION S12

### LOOSE LINTEL SCHEDULE AT MASONRY
(BY MISC. METAL)

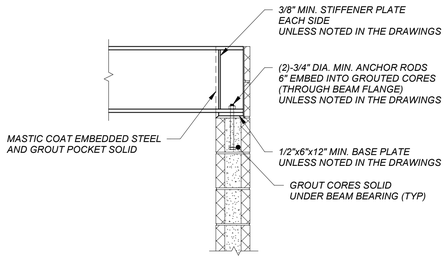
| MASONRY OPENING | LINTEL SIZE | | MIN. BEARING AT EACH END |
|---|---|---|---|
| UP TO 3'-0" | L3-1/2 x 3-1/2 x 5/16 | | 8" |
| 3'-1" TO 4'-6" | L4 x 3-1/2 x 5/16 | (4" LEG VERT.) | 8" |
| 4'-7" TO 6'-0" | L5 x 3-1/2 x 3/8 | (5" LEG VERT.) | 8" |
| 6'-1" TO 8'-0" | L6 x 3-1/2 x 3/8 | (6" LEG VERT.) | 8" |

**NOTES:**

1. PROVIDE LINTELS OVER ALL OPENINGS (INCLUDING M.E.P. OPENINGS) EXCEPT WHERE LINTEL BLOCKS ARE PROVIDED.
2. PROVIDE ONE ANGLE FOR EACH 4" OF WALL THICKNESS. FOR 6" WALLS, PROVIDE A TEE OR BUILT-UP SECTION WITH PROPERITES EQUAL TO OR GREATER THAN 1.5 TIMES THE ANGLE PROPERTIES FOR A 4" WALL THICKNESS.
3. ALL EXTERIOR LINTELS SHALL BE GALVANIZED BY THE HOT DIP PROCESS.

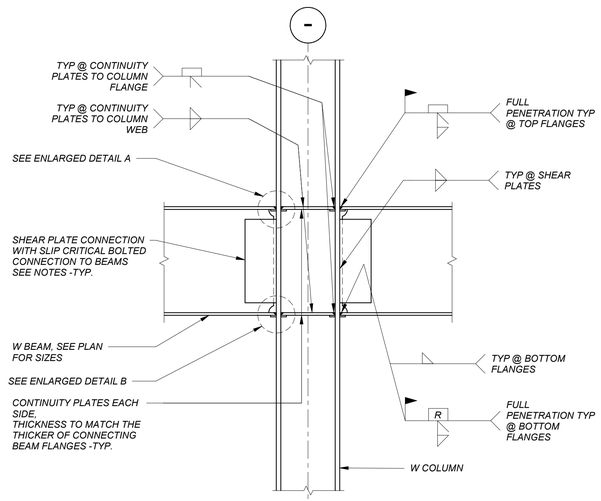
## LOOSE LINTEL SCHEDULE AT MASONRY

MASONRY CONSTRUCTION M15




## BEAM BEARING ON CMU

MASONRY CONSTRUCTION M20

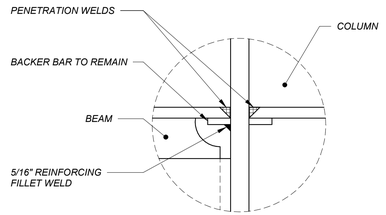



MOMENT CONNECTION NOTES:

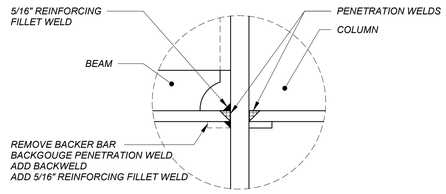
1. FILLER MATERIAL USED IN ALL WELDS AT BEAM TO COLUMN MOMENT FRAME CONNECTIONS SHALL HAVE A MINIMUM CHARPY V-NOTCH VALUE OF 20 FT-LBS AT 40° F.
2. BACKER BARS SHALL BE REMOVED AT ALL BOTTOM FLANGE WELDS AND THE ROOT PASS SHALL BE BACK GOUGED AND REWELDED. A REINFORCING FILLET WELD SHALL BE ADDED AT THE BOTTOM OF BOTTOM FLANGE FULL PENETRATION WELDS.
3. A REINFORCING FILLET WELD SHALL BE ADDED AT THE BOTTOM OF TOP FLANGE BACKER BAR TO THE FACE OF THE COLUMN.
4. ALL PENETRATION WELDS SHALL BE ULTRASONICALLY TESTED AND ALL FILLET WELDS SHALL BE VISUALLY INSPECTED BY THE OWNER'S TESTING AGENCY.

## MOMENT FRAME CONNECTION

STEEL CONSTRUCTION S18




## TOP FLANGE DETAIL A




## BOTTOM FLANGE DETAIL B

LAVALLEE BRENSINGER ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101

**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

**WOLFEBORO PUBLIC LIBRARY**

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|

CONTENT: TYPICAL DETAILS II

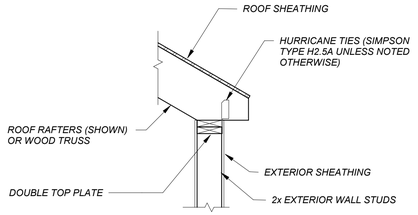
| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S0.3

Project Phase
**BID DOCUMENTS**

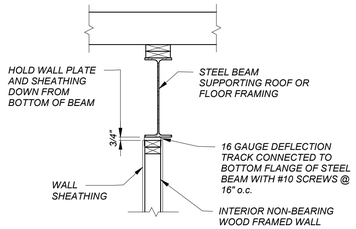


10/12/2018 11:18:51 AM G:\2016141-10 Wolfeboro Library\RVT\Wolfeboro Libe Str 1 R18.rvt



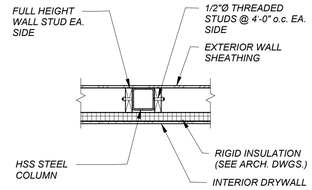

## TYPICAL SLOPED RAFTER DETAIL

## WOOD CONSTRUCTION W12



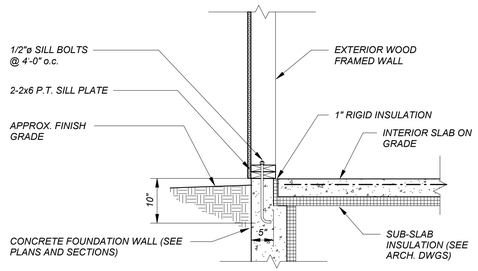

## NON-BEARING WALL UNDER BEAM

## WOOD CONSTRUCTION W13



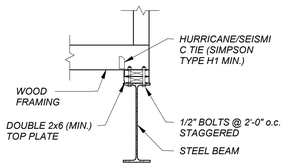

## STEEL COLUMN/BRACE IN WOOD WALL

## WOOD CONSTRUCTION W5



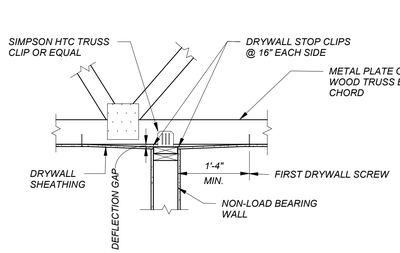

## TYPICAL SILL PLATE TO CONCRETE

## WOOD CONSTRUCTION W2

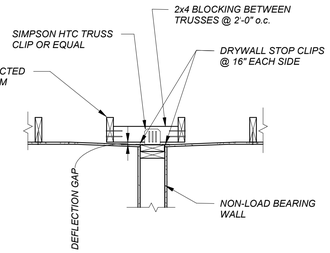



## BEARING ON STEEL BEAM

## WOOD CONSTRUCTION W8




TRUSS PERPENDICULAR TO WALL



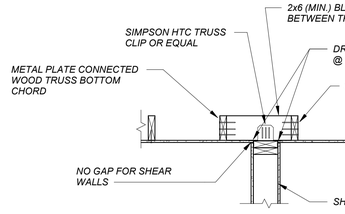

TRUSS PARALLEL TO WALL

NOTES:

1. NON-BEARING PARTITIONS SHALL BE CONSTRUCTED TO ALLOW FOR A DEFLECTION GAP BETWEEN THE TOP PLATE AND THE TRUSS ABOVE. DIMENSION OF THE GAP TO BE DETERMINED BY THE TRUSS MANUFACTURER.
2. TRUSS CLIP SHALL BE OF THE SIMPSON HTC TYPE FOR DEFLECTION GAPS GREATER THAN 1/4". SIMPSON TRUSS CLIP TYPE DTC MAY BE SUBSTITUTED FOR DEFLECTION GAPS OF 1/4" OR LESS.
3. COORDINATE DETAIL WITH ARCHITECTURAL DRAWINGS.

## TRUSS TO NON-BEARING WALL

## WOOD CONSTRUCTION W9



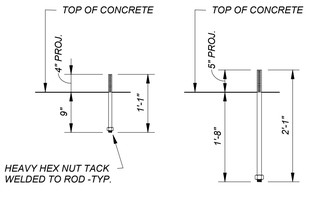

NOTES: PROVIDE BLOCKING AND TRUSS CLIPS AT SPACING INDICATED BELOW:

| SHEAR WALL | SPACING |
|---|---|
| A2, F2, G2, H2 | 2'-0" o.c. |
| B2, C2, D2, K2 | 1'-0" o.c. |

TRUSS PARALLEL TO SHEAR WALL

## TRUSS TO SHEAR WALL

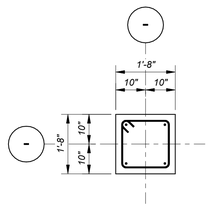
## WOOD CONSTRUCTION W10




3/4" DIAMETER F1554 GRADE 36 (AB-1)

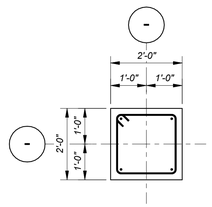
1" DIAMETER F1554 GRADE 55 (AB-2)

## ANCHOR ROD DETAILS



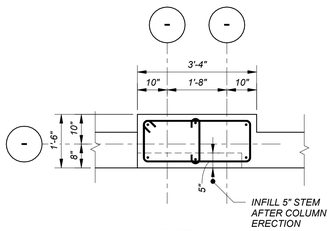
4-#7 VERT. #4 TIES @ 12"o.c.

P1



4-#8 VERT. #4 TIES @ 12"o.c.

P2




6-#7 VERT. #4 TIES @ 12"o.c.

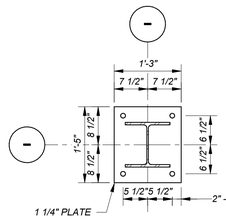
P3

NOTES:

1. AT THE TOP OF PIERS/PILASTERS, PROVIDE TIES WITH 4 SPACES @ 3"o.c. AND THE BALANCE AS INDICATED ABOVE (SEE SECTIONS) -TYPICAL.
2. WALL REINFORCING NOT SHOWN FOR CLARITY, CONTINUE THROUGH PILASTER.
3. REFER TO SECTIONS FOR WALL THICKNESS, REINFORCING, AND LOCATION FROM COLUMN GRID.

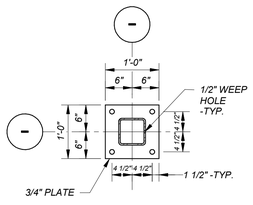
## PIER AND PILASTER DETAILS

1/2" = 1'-0"



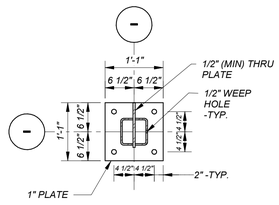
W10

BP-A



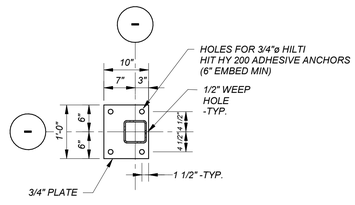
HSS5x5 AND HSS6x6

BP-B



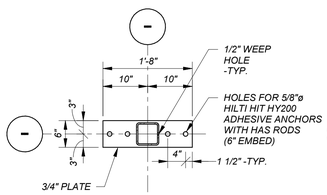
HSS5x5 AND HSS6x6

BP-C



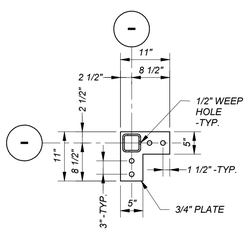
HSS5x5

BP-F



HSS5x5 AND HSS6x6

BP-D



HSS5x5

BP-E

NOTES:

1. PROVIDE 3/4"øx9" EMBEDMENT F1554-36 ANCHOR RODS WITH TACK WELDED NUT AT ALL BASE PLATES UNLESS NOTED OTHERWISE.
2. PROVIDE 1"øx1'-8" EMBEDMENT F1554-55 ANCHOR RODS WITH TACK WELDED NUT. PROVIDE PLATE WASHERS UNDER NUTS ON TOP OF COLUMN BASE PLATES. (NOTED ON PLANS AS BASE PLATE TYPE BP-A AND BP-C)
3. PROVIDE 1/4" LEVELING PLATE AND 3/4" NON-SHRINK GROUT UNDER ALL BASE PLATES.
4. ANY OVERSIZED HOLES IN BASE PLATES TO BE GROUTED SOLID PRIOR TO INSTALLING NUTS AND WASHERS.
5. WELD PLATE WASHERS ALL AROUND TO BASE PLATES AT BRACED BAYS.
6. BASE PLATE TYPE NOTED ON PLAN AS BP-"X".

## BASE PLATE DETAILS

3/4" = 1'-0"

LAVALLEE BRENSINGER ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101

**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

# WOLFEBORO PUBLIC LIBRARY

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|
| | | |

CONTENT:
TYPICAL DETAILS III

| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

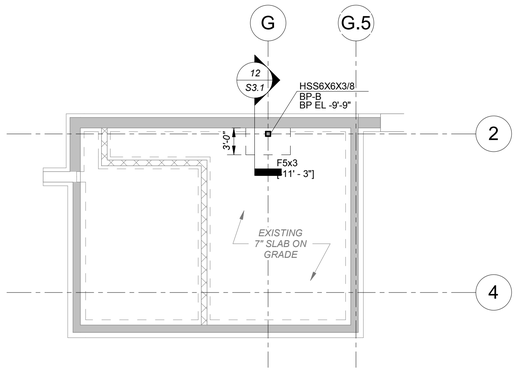
S0.4

Project Phase
**BID DOCUMENTS**



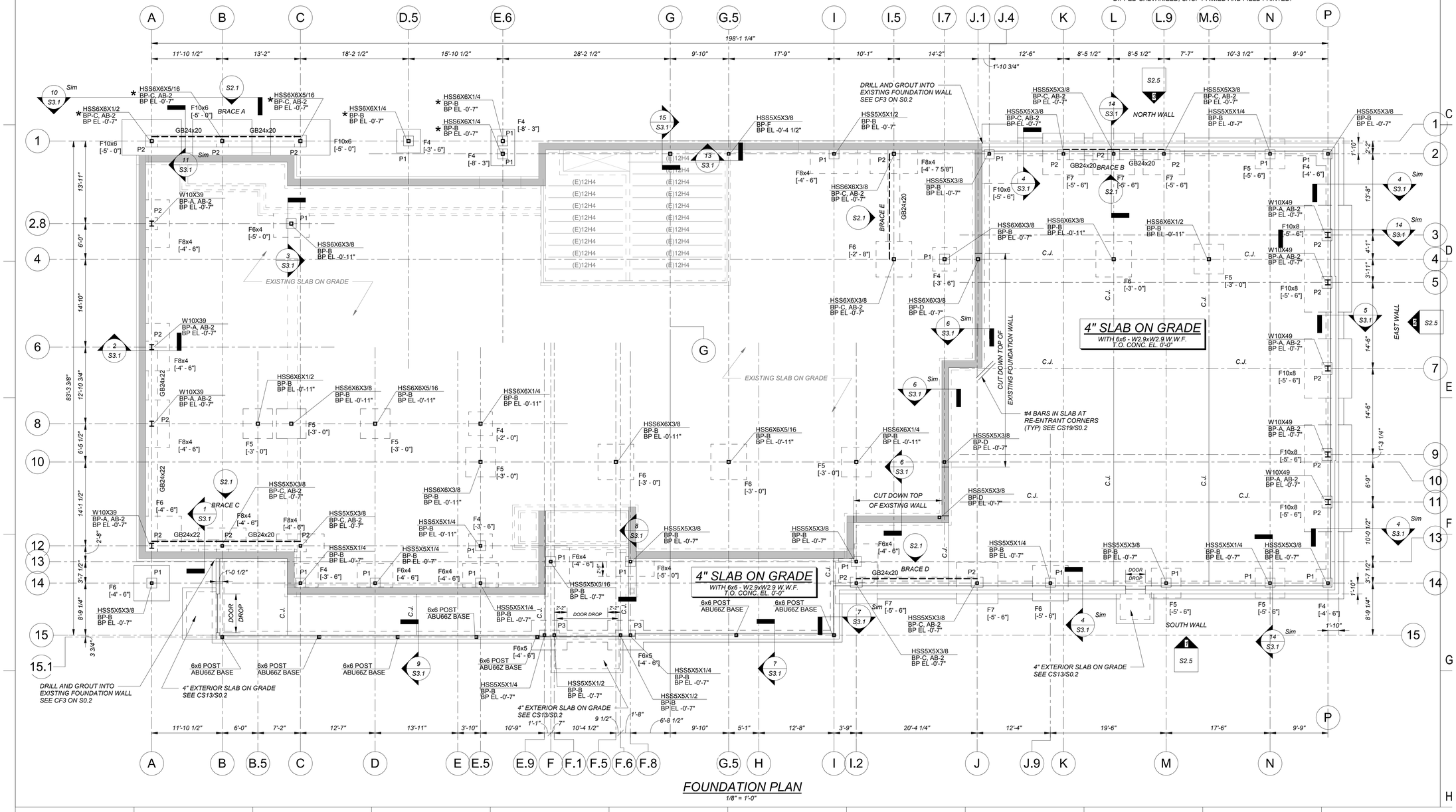
10/12/2018 11:18:52 AM G:\2016141-10 Wolfeboro Library\RVT\Wolfeboro Libs Str-1 R18.rvt

| SPREAD FOOTING SCHEDULE | | | | |
|---|---|---|---|---|
| | DIMENSIONS | | | |
| TYPE | WIDTH | LENGTH | DEPTH | REINFORCING |
| F4 | 4' - 0" | 4' - 0" | 1' - 0" | (6) #4 EACH WAY BOTTOM |
| F5 | 5' - 0" | 5' - 0" | 2' - 0" | (7) #4 EACH WAY BOTTOM |
| F5x3 | 3' - 0" | 5' - 0" | 1' - 6" | (5) #5 LONG WAY, (7) #4 SHORT WAY, BOTTOM |
| F6 | 6' - 0" | 6' - 0" | 2' - 0" | (9) #5 BOTTOM EACH WAY |
| F6x4 | 6' - 0" | 4' - 0" | 2' - 0" | (6) #5 LONG WAY, (9) #4 SHORT WAY, BOTTOM |
| F6x5 | 6' - 0" | 5' - 0" | 1' - 0" | (8) #5 LONG WAY, (9) #4 SHORT WAY, BOTTOM |
| F7 | 7' - 0" | 7' - 0" | 2' - 0" | (9) #6 EACH WAY, TOP AND BOTTOM |
| F8x4 | 8' - 0" | 4' - 0" | 2' - 0" | (8) #5 LONG WAY, (12) #5 SHORT WAY; TOP AND BOTTOM |
| F10x6 | 10' - 0" | 6' - 0" | 2' - 0" | (10) #6 LONG WAY, (16) #5 SHORT WAY, TOP AND BOTTOM |
| F10x8 | 8' - 0" | 10' - 0" | 2' - 0" | (12) #6 LONG WAY, (16) #5 SHORT WAY; TOP AND BOTTOM |




## BASEMENT PLAN

1/8" = 1'-0"




## FOUNDATION PLAN

1/8" = 1'-0"

*NOTES:*

1. *FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S0.1 THROUGH S0.4.*
2. *FINISHED FIRST FLOOR ELEVATION (EL. 0'-0") IS REFERENCED AS THE DATUM. ALL BOTTOM OF FOOTING ELEVATIONS GIVEN ON THE PLANS ARE RELATIVE TO THIS FLOOR.*
3. *BOTTOM OF FOOTING ELEVATION FOR ALL EXTERIOR WALLS AND FOOTINGS IS 4'-0" MINIMUM BELOW EXTERIOR FINISHED GRADE. UNLESS NOTED OTHERWISE THUS ['X'-'X"] IN PLANS OR IN SECTIONS.*
4. *THE NOTATION "F3" INDICATES THE SPREAD FOOTING TYPE. SEE SCHEDULE ON THIS SHEET FOR FOOTING SIZE AND REINFORCING.*
5. *THE NOTATION "P1" INDICATES THE PIER/PILASTER TYPE. TOP OF ALL PILASTERS SHALL BE 1" BELOW THE BASE PLATE ELEVATION GIVEN FOR THE SUPPORTED COLUMN. SEE PILASTER DETAILS ON S0.4.*
6. *THE NOTATION "BP-A" INDICATES THE BASE PLATE TYPE. THE BOTTOM OF BASE PLATE ELEVATION IS INDICATED AS "B.P. EL. -X'-X"" AND IS RELATIVE TO THE FINISH FLOOR ELEVATION. SEE BASE PLATE DETAILS ON S0.4.*
7. *THE NOTATION "AB-2" INDICATES ANCHOR ROD TYPE. SEE TYPICAL DETAILS ON S0.4. ANCHOR BOLTS SHALL BE TYPE AB-1 UNLESS NOTED OTHERWISE.*
8. *LOCATE CONTROL JOINTS MARKED "C.J." IN SLABS ON GRADE ALONG COLUMN LINES AND WHERE NOTED ON PLANS.*
9. *CONTRACTOR SHALL PROVIDE HOUSEKEEPING PADS UNDER MECHANICAL EQUIPMENT. SEE THE MECHANICAL DRAWINGS FOR PAD SIZES AND LOCATIONS. HOUSEKEEPING PADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TYPICAL DETAILS ON DRAWING S0.2.*
10. ** INDICATES EXTERIOR EXPOSED STRUCTURAL STEEL. STEEL SHALL BE HOT DIPPED GALVANIZED, SHOP PRIMED AND FIELD PAINTED.*


LAVALLEE BRENSINGER
ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101


**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

# WOLFEBORO PUBLIC LIBRARY

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|

CONTENT: FOUNDATION PLAN

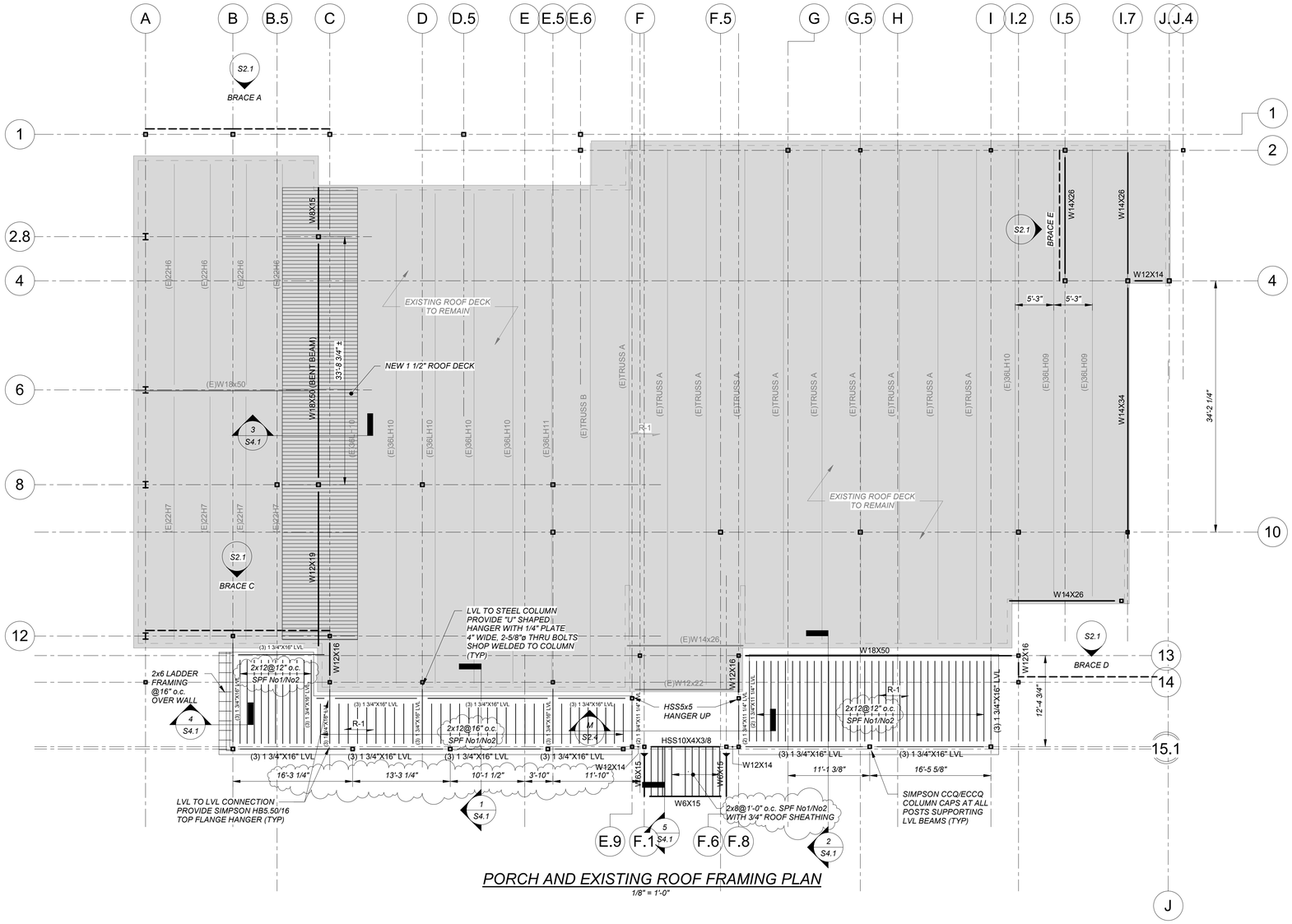
| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S1.1

Project Phase
**BID DOCUMENTS**



10/12/2018 11:18:53 AM G:\2016\141-10 Wolfeboro Library\RVT\Wolfeboro Libr Str 1 R18.rvt




## PORCH AND EXISTING ROOF FRAMING PLAN

1/8" = 1'-0"

*NOTES:*

1. *FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S0.1 THRU S0.4.*
2. *"R-1" INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 40/20 APA RATED SHEATHING, 3/4" THICK WITH A STRUCTURAL 1 AND EXPOSURE 1 RATING.*
3. *SPAN ARROW INDICATES DIRECTION OF DECK SPAN OF THE THE OUTER PLIES.*
4. *"BRACE-A" INDICATES THE LOCATION OF A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS AND DETAILS REFER TO DRAWING S2.1.*
5. *PREFABRICATED TRUSS OVERFRAMING AREAS: PROVIDE OVERFRAMING TRUSS SETS WITH VERTICAL STUDS. SPACE TRUSSES NOT MORE THEN 2'-0" o.c. STUD SPACING SHALL NOT EXCEED 4'-0" o.c. AND SHALL BE STAGGERED BETWEEN ROWS SO THAT LOADS ARE SIDTRIBUTED UNIFORMLY AND EVENLY ON THE ROOF STRUCTURE BELOW. PROVIDE SIMPSON VTCR VALLY TRUSS CLIPS AT 2'-0" o.c. FOR ALL OVERFRAMING TRUSSES. ALIGN CLIPS WITH TRUSSES BELOW.*


LAVALLEE BRENSINGER ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101


**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

**WOLFEBORO PUBLIC LIBRARY**

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|
| 1 | Conformance Set | 10/10/18 |

CONTENT:
PORCH AND EXISTING FRAMING PLAN

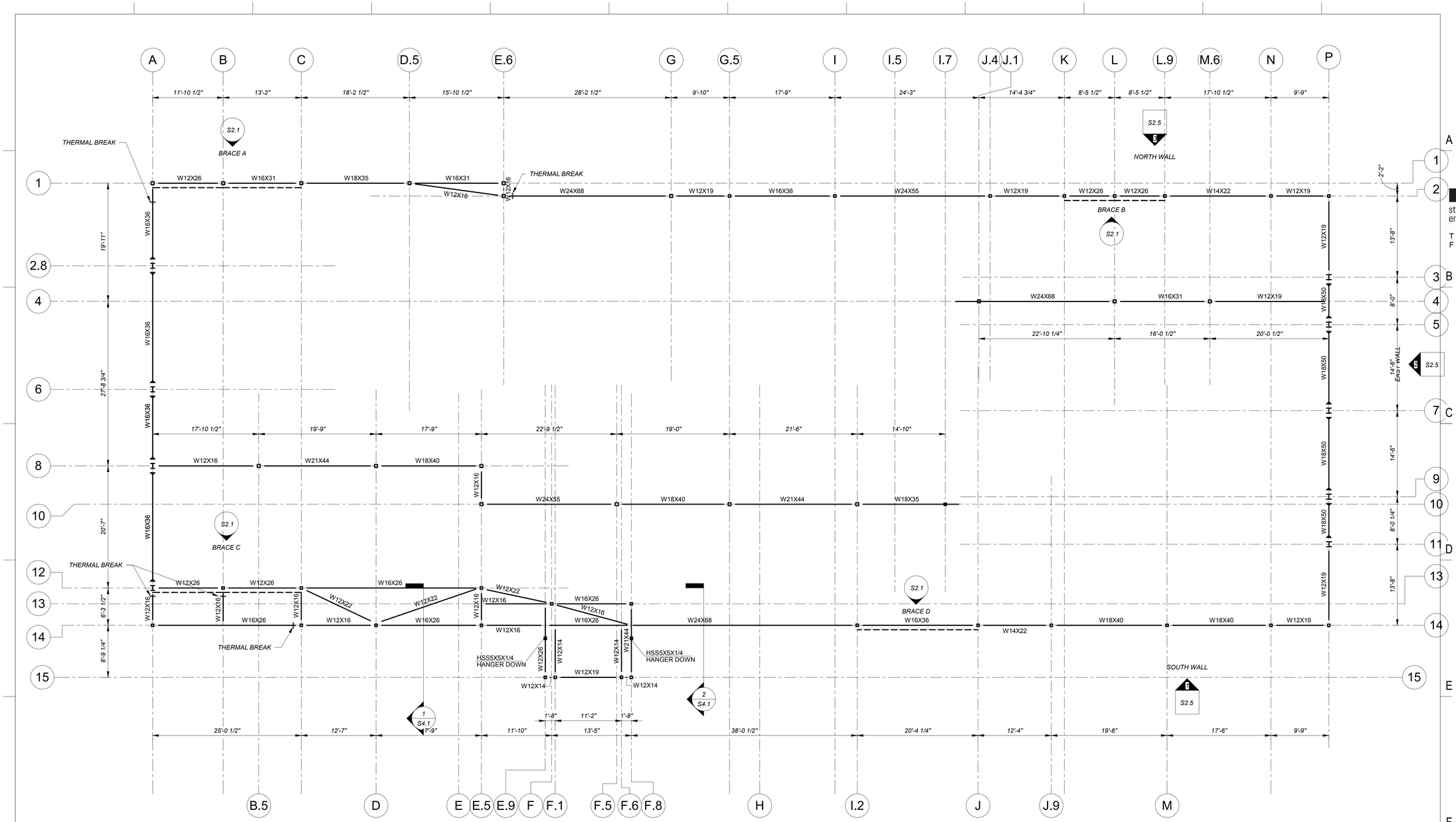
| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S1.2

Project Phase
**BID DOCUMENTS**




10/22/2018 11:18:53 AM G:\2016141-10 Wolfeboro Library\RVT\Wolfeboro Libr Str 1 R18.rvt




## ROOF STEEL FRAMING PLAN

1/8" = 1'-0"

NOTES:

1. FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S0.1 THROUGH S0.x.
2. TOP OF STEEL ELEVATIONS FOR BEAMS IS INDICATED IN ELEVATIONS AND SECTIONS.VARIATIONS FROM THIS ELEVATION ARE SHOWN IN PARENTHESIS THUS (±X'-X") OR IN THE SECTIONS.
3. "BRACE-A" INDICATES THE LOCATION OF A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS AND DETAILS REFER TO DRAWING S2.x.
4. ⊢ INDICATES A FULL CAPACITY MOMENT CONNECTION. REFER TO TYPICAL DETAILS ON S0.x
5. ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED.


LAVALLEE BRENSINGER ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101


**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

**WOLFEBORO PUBLIC LIBRARY**

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|

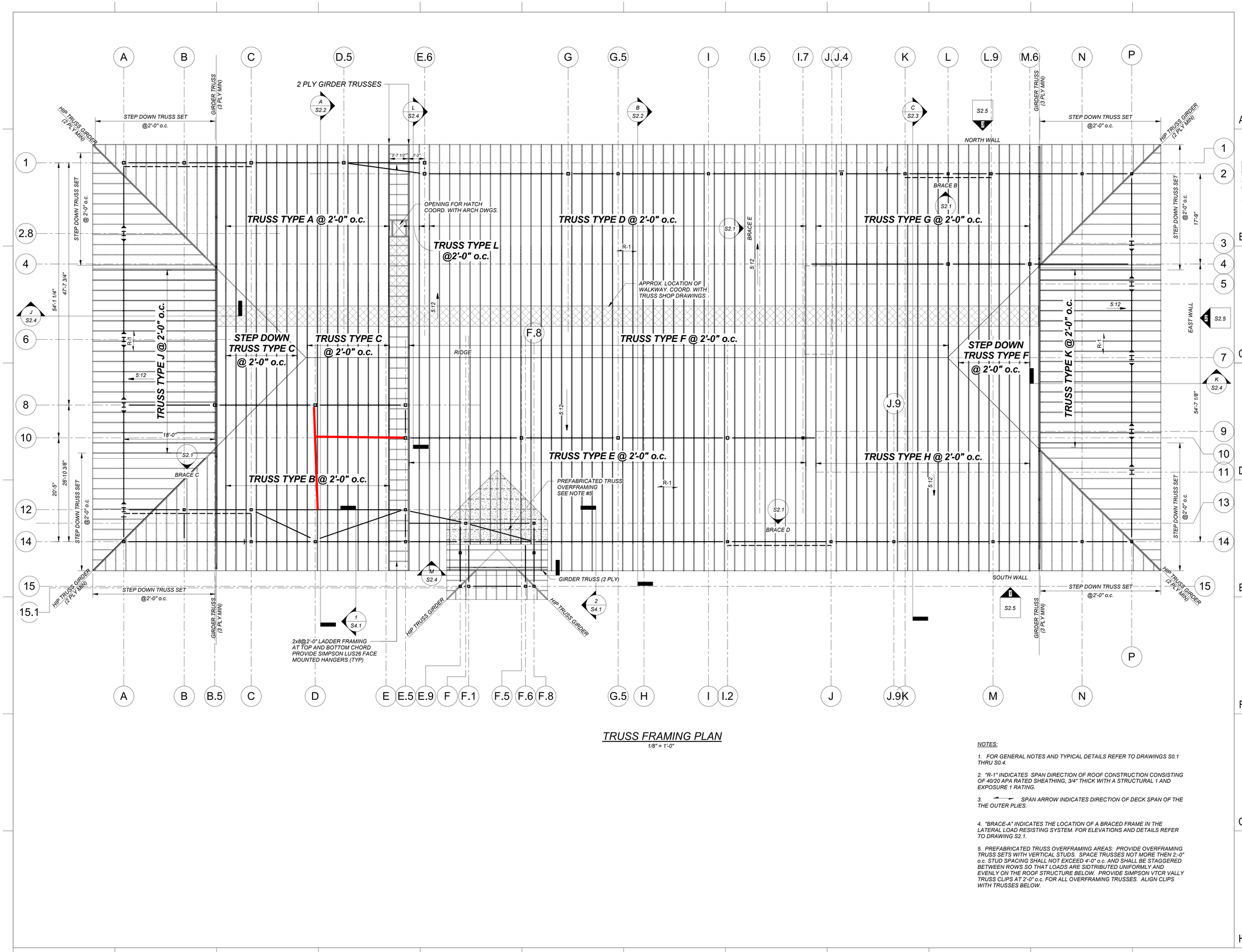
| | |
|---|---|
| CONTENT: | ROOF STEEL FRAMING PLAN |
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S1.3

Project Phase
**BID DOCUMENTS**



10/12/2018 11:18:54 AM G:\2016141-10 Wolfeboro Library\RVT\Wolfeboro Libs Str 1 R18.rvt




## TRUSS FRAMING PLAN

1/8" = 1'-0"

*NOTES:*

1. *FOR GENERAL NOTES AND TYPICAL DETAILS REFER TO DRAWINGS S0.1 THRU S0.4.*
2. *"R-1" INDICATES SPAN DIRECTION OF ROOF CONSTRUCTION CONSISTING OF 40/20 APA RATED SHEATHING, 3/4" THICK WITH A STRUCTURAL 1 AND EXPOSURE 1 RATING.*
3. *SPAN ARROW INDICATES DIRECTION OF DECK SPAN OF THE THE OUTER PLIES.*
4. *"BRACE-A" INDICATES THE LOCATION OF A BRACED FRAME IN THE LATERAL LOAD RESISTING SYSTEM. FOR ELEVATIONS AND DETAILS REFER TO DRAWING S2.1.*
5. *PREFABRICATED TRUSS OVERFRAMING AREAS: PROVIDE OVERFRAMING TRUSS SETS WITH VERTICAL STUDS. SPACE TRUSSES NOT MORE THEN 2'-0" o.c. STUD SPACING SHALL NOT EXCEED 4'-0" o.c. AND SHALL BE STAGGERED BETWEEN ROWS SO THAT LOADS ARE SIDTRIBUTED UNIFORMLY AND EVENLY ON THE ROOF STRUCTURE BELOW. PROVIDE SIMPSON VTCR VALLY TRUSS CLIPS AT 2'-0" o.c. FOR ALL OVERFRAMING TRUSSES. ALIGN CLIPS WITH TRUSSES BELOW.*


LAVALLEE BRENSINGER ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

structural engineers
Foley Buhl Roberts & ASSOCIATES INC
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101


**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

**WOLFEBORO PUBLIC LIBRARY**

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|

CONTENT:
ROOF FRAMING PLAN

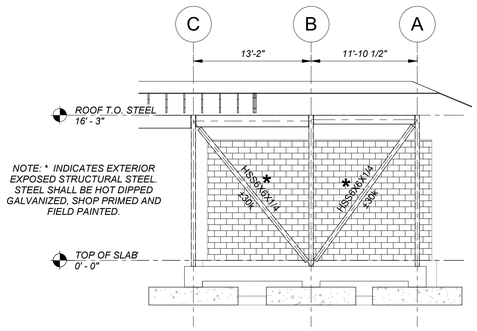
| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S1.4

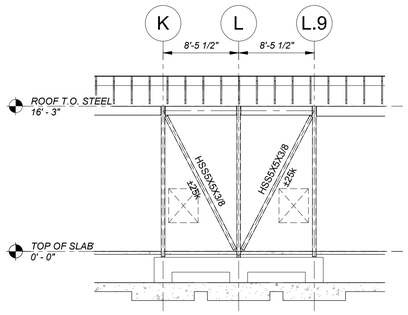
Project Phase
**BID DOCUMENTS**



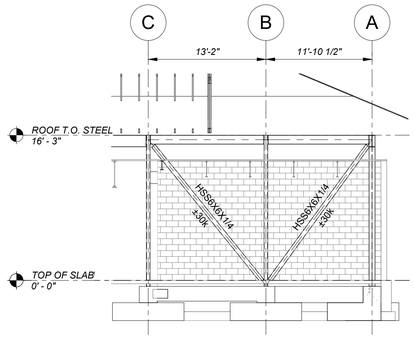

10/12/2018 11:18:55 AM G:\2016\141-10 Wolfeboro Library\RVT\Wolfeboro Libe Str 1 R18.rvt



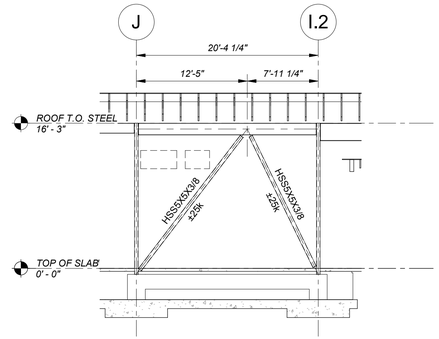

BRACE A
1/8" = 1'-0"




BRACE B
1/8" = 1'-0"

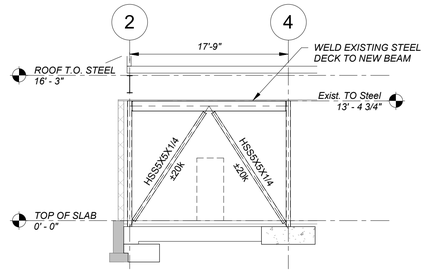



BRACE C
1/8" = 1'-0"

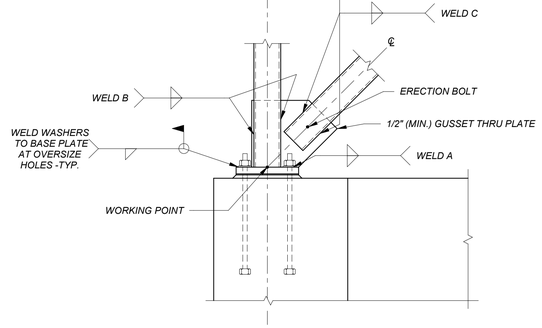



BRACE D
1/8" = 1'-0"

NOTE:
ADD THREADED STUDS TO ALL BRACES IN WOOD WALLS (BRACE B AND D).
SEE W5 ON S0.4

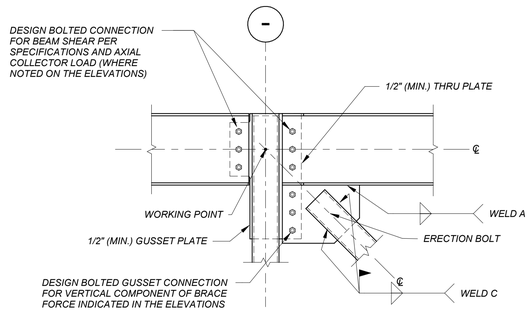



E BRACE E
1/8" = 1'-0"



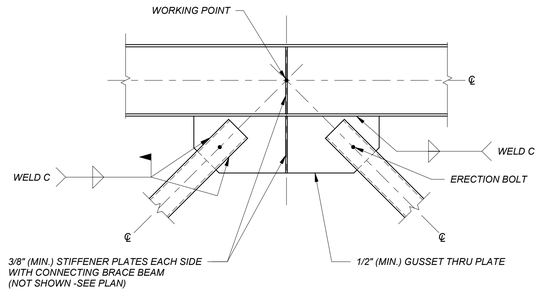

HSS COLUMN BASE AT BRACE DETAIL

STEEL BRACE CONSTRUCTION BF1




HSS COLUMN TO W BEAM BRACE DETAIL

STEEL BRACE CONSTRUCTION BF2




W BEAM BRACE DETAIL

STEEL BRACE CONSTRUCTION BF3

DETAIL NOTES:

WELD A: WELD SIZE TO FULLY DEVELOP THE HORIZONTAL COMPONENT OF THE BRACE FORCE SHOWN.

WELD B: WELD SIZE TO FULLY DEVELOP THE VERTICAL COMPONENT OF THE BRACE FORCE SHOWN.

WELD C: WELD SIZE TO FULLY DEVELOP THE BRACE FORCE SHOWN.

BRACE FRAME DETAILS

LATERAL LOAD RESISTING SYSTEM NOTES:

1. BRACING ELEVATIONS AND DETAILS ARE SCHEMATIC ONLY AND ARE INTENDED TO SHOW BRACING CONFIGURATIONS AND CONNECTIONS DESIGN REQUIREMENTS.

2. BRACE FORCE (KIPS) TO BE USED FOR CONNECTION DESIGN IS INDICATED THUS (±0.0 K). ONE THIRD INCREASE IN ALLOWABLE STRESS IS NOT PERMITTED IN BRACING CONNECTIONS. CONNECTIONS ARE TO BE DESIGNED USING THE ALLOWABLE STRESS DESIGN (A.S.D.) METHOD.

3. BRACE OFFSET DIMENSIONS ARE MEASURED FROM INTERSECTION OF CENTER OF BEAMS AND BRACES TO GRID LINES.

4. REFER TO PLANS FOR BEAM SIZES, COLUMN SIZES, AND BRACING LOCATIONS.

5. TOP CONNECTION OF EACH BRACING MEMBER SHALL REMAIN LOOSE AND ACCESSIBLE UNTIL THE BUILDING HAS BEEN PLUMBED.

6. BOLTED BRACE CONNECTIONS SHALL BE SLIP-CRITICAL (SC) TYPE.

7. ALL WELDS IN BRACING CONNECTIONS SHALL HAVE A MINIMUM LENGTH OF THREE INCHES.

LAVALLEE BRENSINGER ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101

**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

**WOLFEBORO PUBLIC LIBRARY**

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|
| | | |

CONTENT:
BRACE ELEVATIONS AND DETAILS

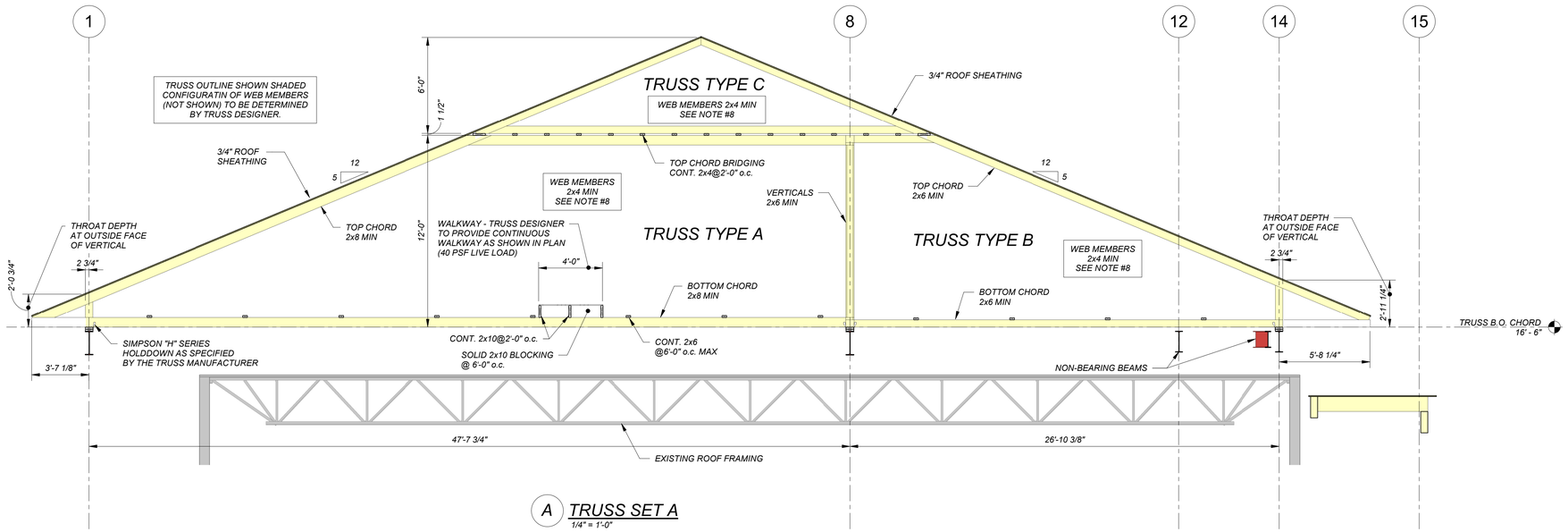
| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S2.1

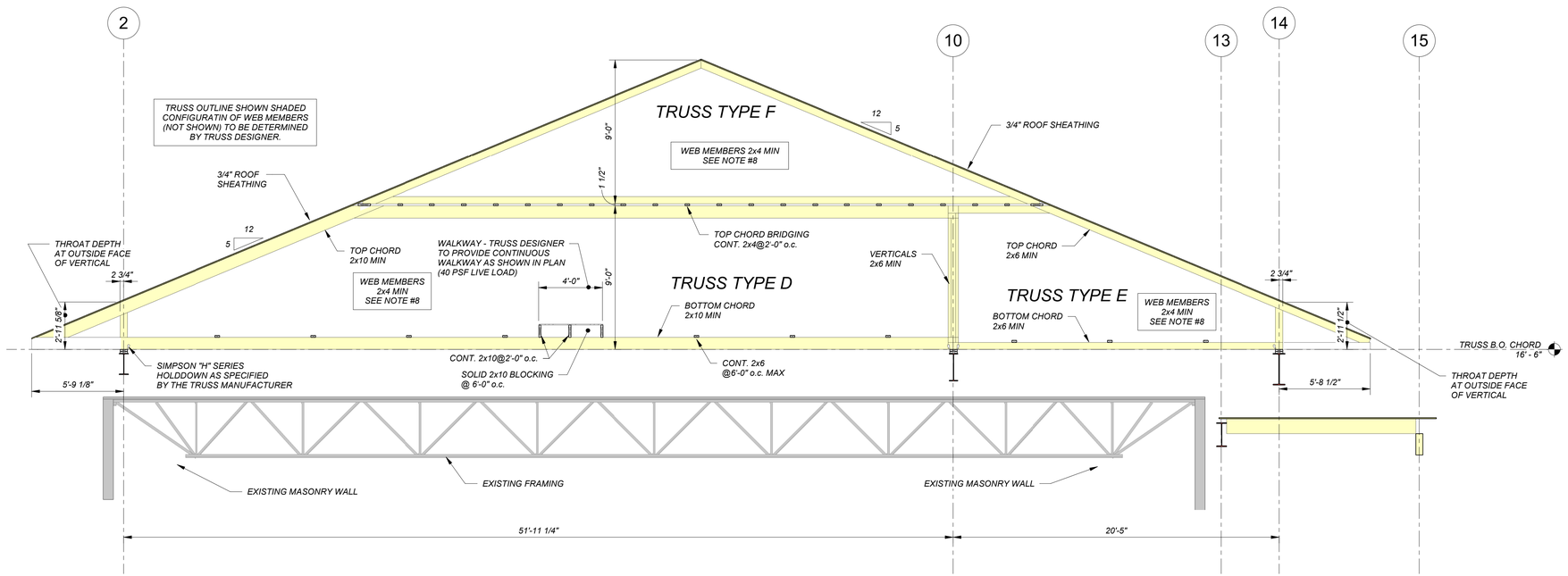
Project Phase
**BID DOCUMENTS**



10/12/2018 11:18:56 AM G:\2016\141-10 Wolfeboro Library\RVT\Wolfeboro Libs Str 1 R18.rvt




A TRUSS SET A
1/4" = 1'-0"




B TRUSS SET B
1/4" = 1'-0"


LAVALLEE BRENSINGER
ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101


**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

# WOLFEBORO PUBLIC LIBRARY

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|
| | | |

CONTENT:
TRUSS ELEVATIONS

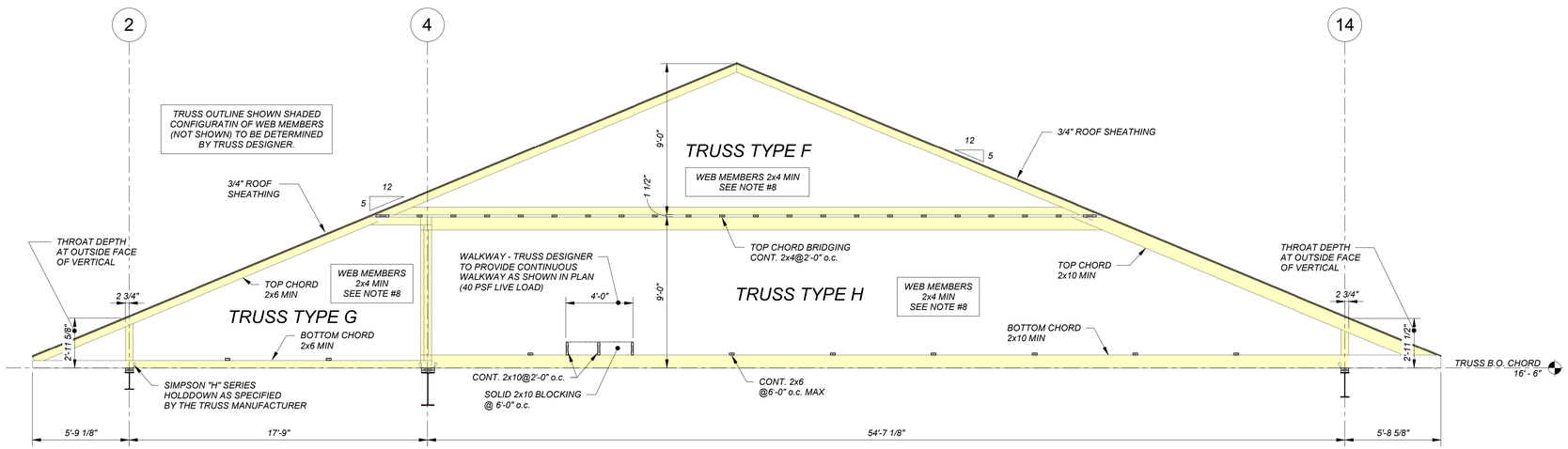
| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S2.2

Project Phase
**BID DOCUMENTS**

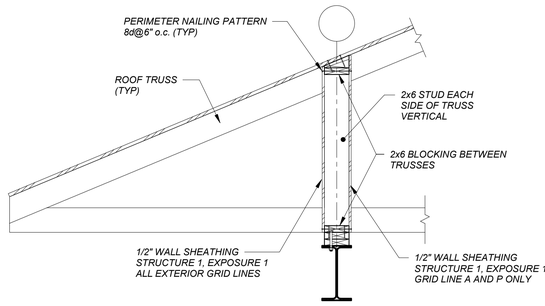



10/12/2018 11:18:55 AM
G:\2016141-10 Wolfeboro Library\RVT\Wolfeboro Libe Str 1 R18.rvt

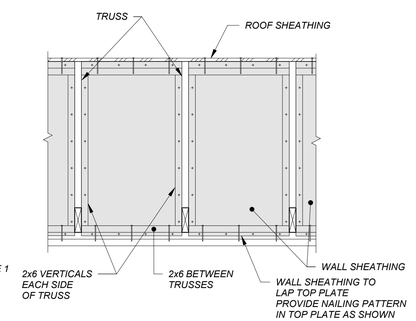



C TRUSS SET C

1/4" = 1'-0"



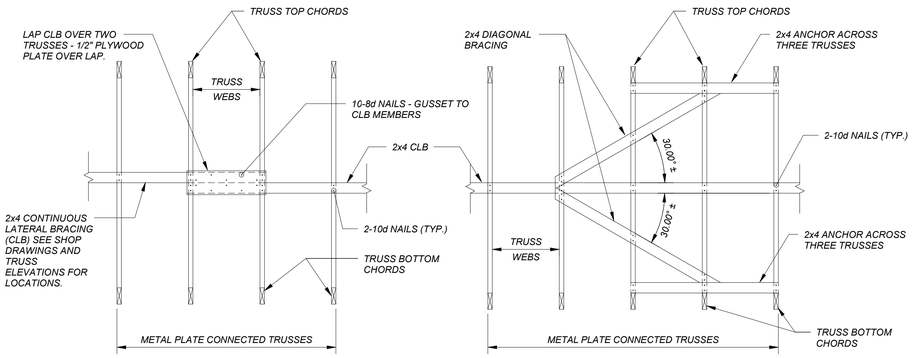

ELEVATION




SECTION

TRUSS BEARING TYPICAL DETAIL

3/4" = 1'-0"




SPLICE DETAIL

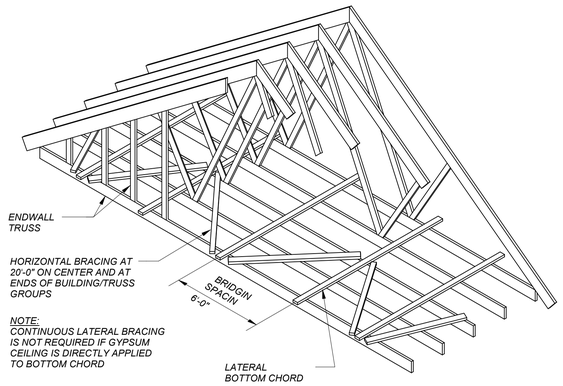



DIAGONAL BRACING

1. PROVIDE 1/2" PLYWOOD PLATE OVER LAP SPLICES IN CONTINUOUS LATERAL BRACING (CLB) LINES AS SHOWN.
2. PROVIDE DIAGONAL BRACES AND ANCHORS AS SHOWN AT 20'-0" MAXIMUM SPACING ALONG CLB LINES AND AT ENDS OF BUILDING OR TRUSS GROUPS.
3. TRUSS WEB MEMBERS TO RECEIVE CONTINOUS LATERAL BRACING SHALL BE DESIGNATED ON THE SHOP DRAWINGS BY THE TRUSS DESIGN ENGINEER AND TAGGED ON THE WEB MEMBERS BY THE TRUSS MANUFACTURER.

CONTINUOUS LATERAL BRACING DETAIL

1/2" = 1'-0"




NOTE:
CONTINUOUS LATERAL BRACING IS NOT REQUIRED IF GYPSUM CEILING IS DIRECTLY APPLIED TO BOTTOM CHORD

TRUSS BOTTOM CHORD BRACING

1/4" = 1'-0"

*METAL PLATE CONNECTED TRUSS NOTES:*

1. ALL ROOF TRUSSES SHALL CONFORM TO THE LATEST EDITION OF THE TRUSS PLATE INSTITUTE'S "DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES" AND SHALL BE DESIGNED FOR THE LOADINGS INDICATED ON THE DRAWINGS OR IN THESE NOTES. TOTAL AND LIVE LOAD DEFLECTIONS SHALL BE LIMITED AS FOLLOWS (UNLESS OTHERWISE INDICATED ON THE DRAWINGS):

   LIVE LOAD DEFLECTION: < L/480
   TOTAL LOAD DEFLECTION: < L/360

2. FINAL DESIGN OF TRUSSES SHALL BE PROVIDED BY THE DESIGNER/FABRICATOR. SUBMIT COMPLETE SHOP DRAWINGS, CALCULATIONS AND ERECTION PLANS FOR ROOF TRUSSES FOR REVIEW BY THE ARCHITECT. CALCULATIONS SHALL BE PREPARED BY AND BEAR THE STAMP OF A PROFESSIONAL STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF NEW HAMPSHIRE.
3. ROOF DESIGN LOADS: BASE GROUND SNOW LOAD Pg = 90 PSF APPLIED PER IBC 2009 CODE. MINIMUM TRUSS BASIC DESIGN LOADS: TCLL/TCDL/BCLL/BCDL = 76/25/20/10 POUNDS PER SQUARE FOOT (UNLESS NOTED OTHERWISE IN TRUSS ELEVATIONS). GENERATE ADDITIONAL LOAD COMBINATIONS AND DESIGN TRUSSES FOR UNBALANCED LOADING (DRIFTING ON ONE SIDE) PER IBC 2009/ASCE 7-05. INCLUDE DETAILED LOAD COMBINATIONS FOR ALL TRUSS CALCULATIONS.
4. WIND DESIGN LOADS ARE AS NOTED IN THE GENERAL NOTES ON S0.1.
5. ALL ROOF TRUSSES MUST BE SECURELY BRACED BOTH DURING ERECTION AND AS REQUIRED AFTER PERMANENT INSTALLATION. INSTALL ALL REQUIRED OR RECOMMENDED TRUSS BRACING SHOWN ON THE STRUCTURAL CONTRACT DRAWINGS, THE TRUSS SHOP DRAWINGS, TPI/WTCA PUBLICATION BCSI 2013 OR AS DIRECTED IN THE FIELD BY THE ARCHITECT/ENGINEER.
6. MINIMUM CHORD SIZES SHALL BE AS SHOWN ON THE TRUSS ELEVATIONS ON THIS DRAWING. MINIMUM WEB MEMBER SIZES SHALL BE 2x4.
7. TRUSS CHORDS AND TRUSS WEB MEMBERS SHALL BE SOUTHERN PINE NO. 2 OR BETTER. ALL LUMBER SHALL BE 19% MAXIMUM MOISTURE CONTENT.
8. TRUSS WEB CONFIGURATIONS ARE NOT SHOWN, OR ARE SHOWN SCHEMATICALLY ON THE TRUSS ELEVATIONS. FINAL WEB CONFIGURATIONS SHALL BE DETERMINED BY THE TRUSS DESIGNER/FABRICATOR.
9. PROVIDE SIMPSON "H" SERIES HOLDDOWN CONNECTORS (OR EQUAL) AT ALL ROOF TRUSS BEARINGS (INTERIOR AND EXTERIOR BEARING POINTS). TRUSS DESIGNER SHALL SELECT AND SPECIFY ON THE TRUSS ERECTION DRAWINGS A HOLDDOWN THAT EXCEEDS THE UPLIFT FORCE PROVIDED IN THE TRUSS SHOP DRAWINGS.
10. ALL TRUSSES SHALL BE SPACED AT 2'-0" ON CENTER. TRUSSES SHALL BE ALIGNED FLOOR TO FLOOR WITH WALL STUDS.
11. FIELD MODIFICATION OF TRUSSES TO FACILITATE THE INSTALLATION OF MECHANICAL UNITS OR PIPING IS NOT PERMITTED.
12. CONTINUOUS LATERAL BRACING REQUIREMENTS:
    a) TOP CHORD: SEE BOTH STRUCTURAL DRAWINGS AND SHOP DRAWINGS FOR UNSHEATHED PORTIONS OF TOP CHORD. USE THE MORE STRINGENT REQUIREMENT.
    b) BOTTOM CHORD: PROVIDE CONTINUOUS LATERAL BRACING OF THE BOTTOM CHORDS OF ALL TRUSSES WITH 2x4 (MIN.) AT 6'-0" o.c. MAX. SPACING. IF GYPSUM SHEATHING IS APPLIED DIRECTLY TO THE BOTTOM CHORD, BOTTOM CHORD CONTINUOUS LATERAL BRACING MAY BE OMITTED.
    c) WEB MEMBERS: SEE THE SHOP DRAWINGS TO IDENTIFY WEB MEMBERS THAT REQUIRE BRACING.
13. DESIGN ALL WEB MEMBERS WITH A LENGTH LESS THAN 8'-0" (FROM WORKING POINT TO WORKING POINT) SO THAT THE WEB MEMBER DOES NOT REQUIRE LATERAL RESTRAINT OR BRACING.
14. WEB TRUSS-TO-TRUSS CONTINUOUS LATERAL BRACING (CLB) SHALL BE DETERMINED BY THE TRUSS DESIGNER. SEE TRUSS SHOPS TO DETERMINE FINAL WEB LAYOUT (SEE NOTE #9) AND PROVIDE CLB AS REQUIRED AND SHOWN ON THE TRUSS SHOPS.
15. CONTINUOUS LATERAL BRACING LINES (CLB) SHALL BE RESTRAINED WITH DIAGONAL, ARROWHEAD OR 'X' BRACING AT EACH END OF CLB LINE AND AT 20'-0" O.C. MAX. PER BCSI 2013 AND THE TYPICAL DETAILS ON THE CONTRACT DRAWINGS. SEE TYPICAL DETAIL ON THIS DRAWING. ALL WEB MEMBERS REQUIRING CLB AS SHOWN ON THE TRUSS SHOPS SHALL RECIEVE ARROWHEAD OR 'X' BRACING.

LAVALLEE BRENSINGER ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101

**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

**WOLFEBORO PUBLIC LIBRARY**

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|
| | | |
| | | |
| | | |

CONTENT: TRUSS ELEVATIONS

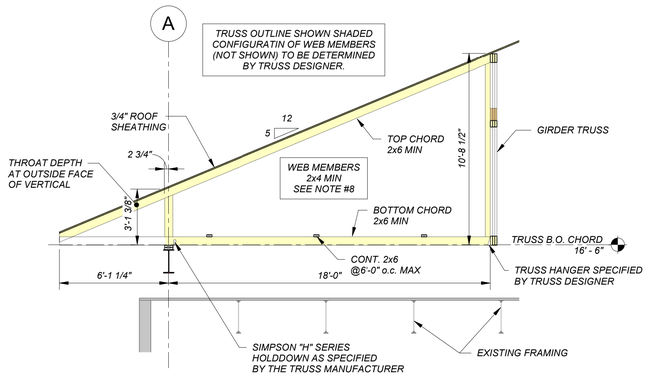
| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S2.3

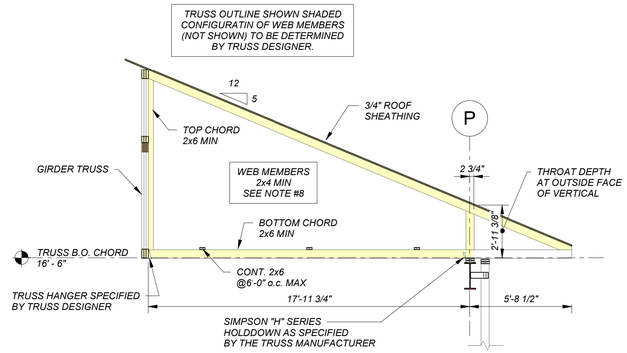
Project Phase
**BID DOCUMENTS**



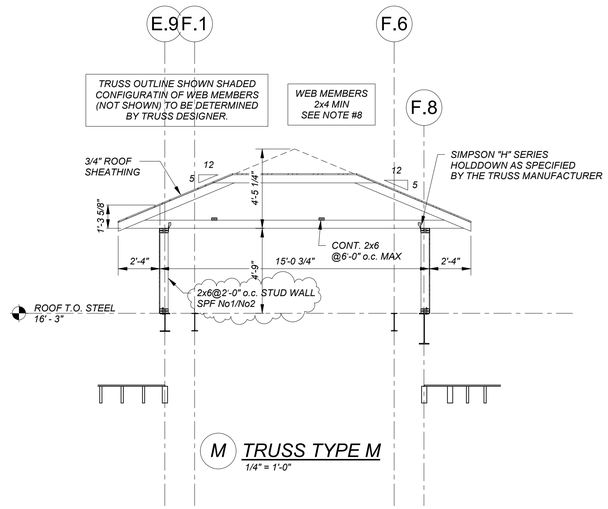
10/12/2018 11:19:00 AM
G:\2016141-10 Wolfeboro Library\RVT\Wolfeboro Libe Str 1 R18.rvt



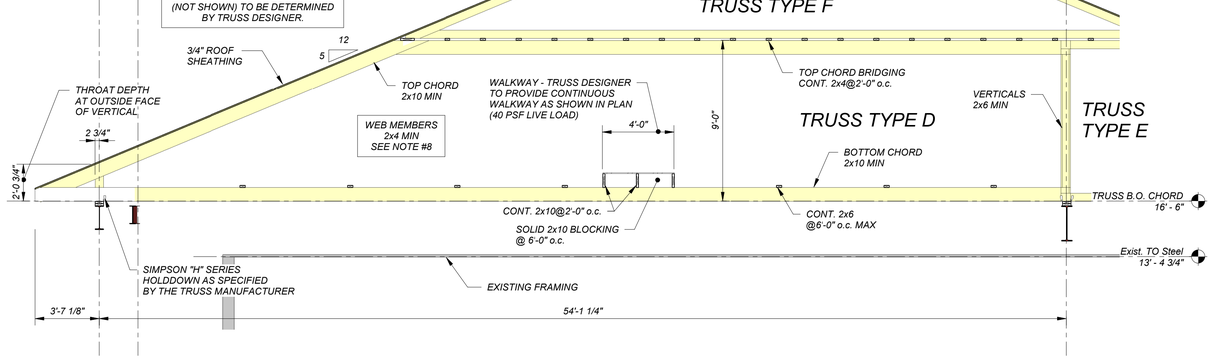

J TRUSS TYPE J
1/4" = 1'-0"




K TRUSS TYPE K
1/4" = 1'-0"




M TRUSS TYPE M
1/4" = 1'-0"




L TRUSS TYPE L
1/4" = 1'-0"

LAVALLEE BRENSINGER ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101

**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

**WOLFEBORO PUBLIC LIBRARY**

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|
| 1 | Conformance Set | 10/10/18 |

CONTENT:
TRUSS ELEVATIONS

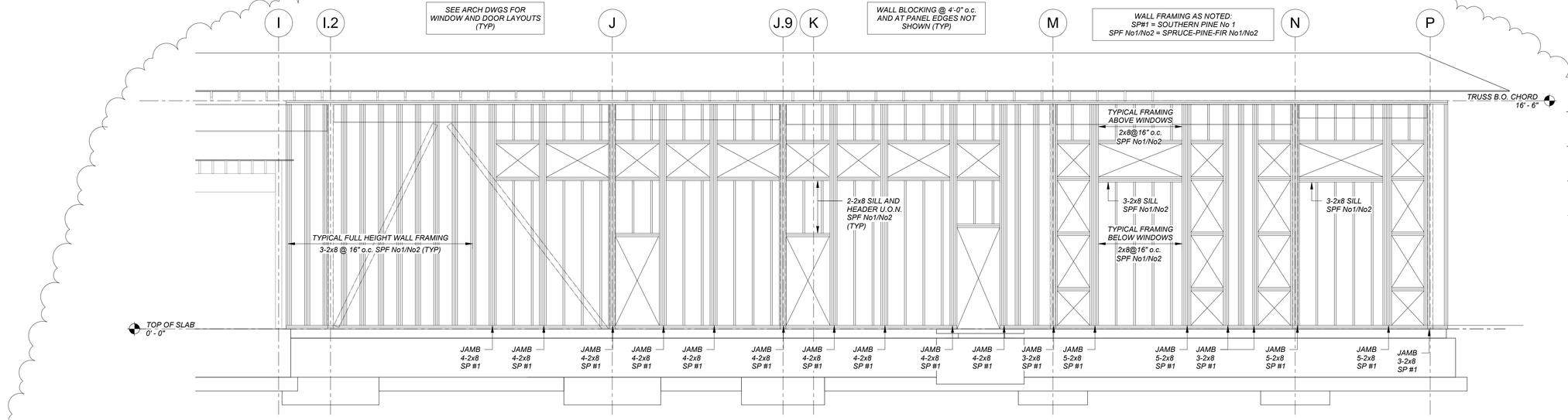
| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S2.4

Project Phase
**BID DOCUMENTS**

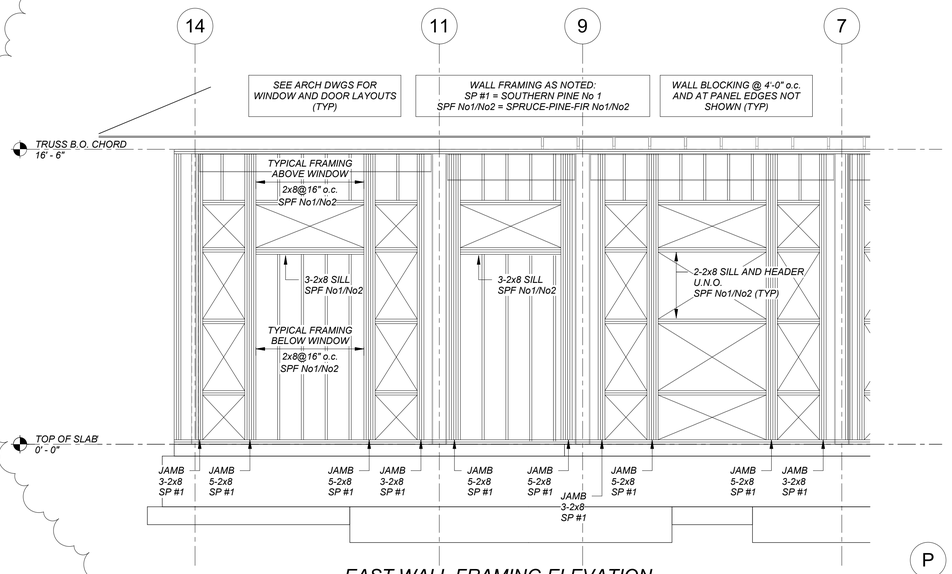


10/12/2018 11:19:02 AM G:\2016141-10 Wolfeboro Library\RVT\Wolfeboro Libe Str 1 R18.rvt




## SOUTH WALL FRAMING ELEVATION

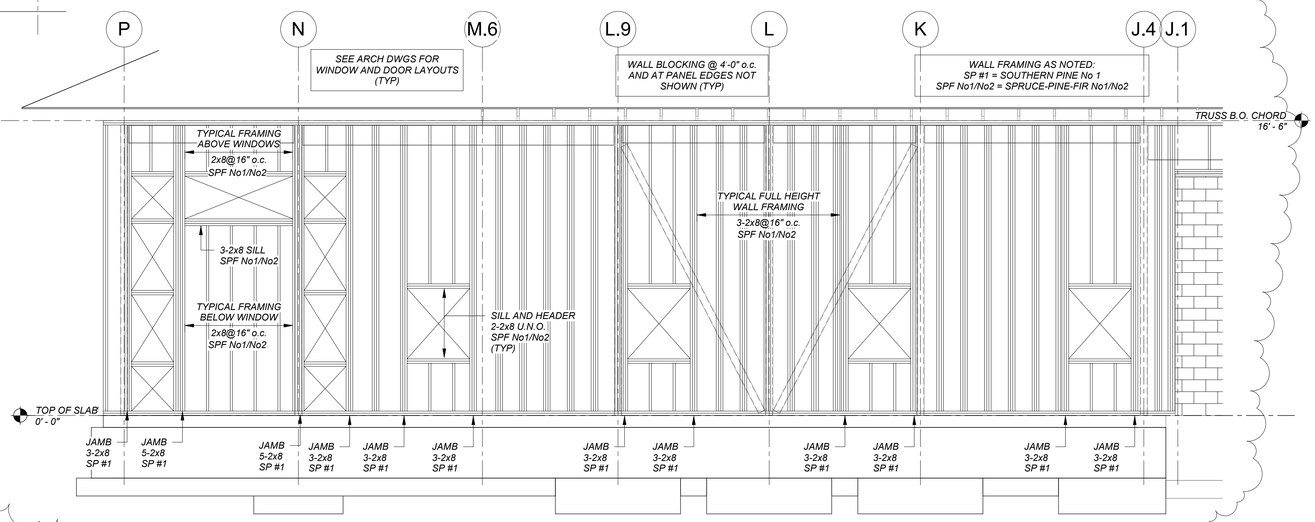
1/4" = 1'-0"




## EAST WALL FRAMING ELEVATION

1/4" = 1'-0"

SOUTHERN PINE No1 LUMBER MUST HAVE GRADE STAMPS VISIBLE AFTER ERECTION FOR GRADE VERIFICATION AT EACH JAMB.




## NORTH WALL FRAMING PLAN

1/4" = 1'-0"


LAVALLEE BRENSINGER
ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101


**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

# WOLFEBORO PUBLIC LIBRARY

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|
| 1 | Conformance Set | 10/10/18 |

CONTENT:
WALL ELEVATIONS

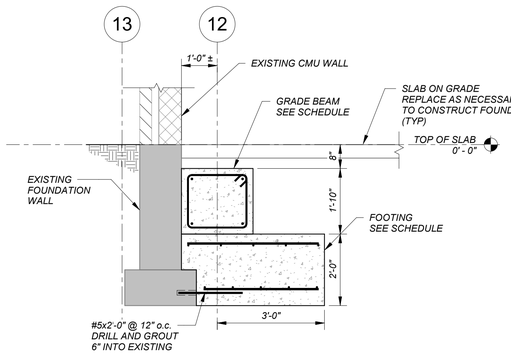
| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S2.5

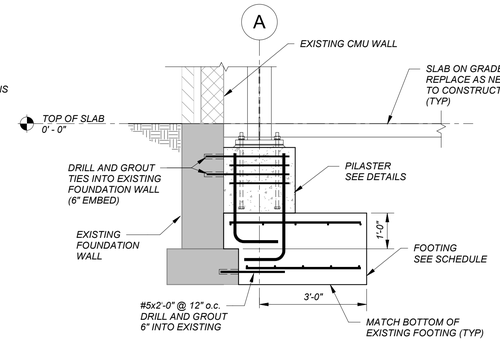
Project Phase
**BID DOCUMENTS**



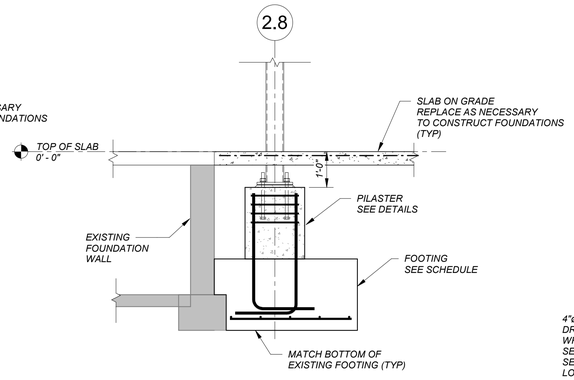
10/12/2018 11:19:03 AM
G:\2016141-10 Wolfeboro Library\RVT\Wolfeboro Libe Str t R18.rvt



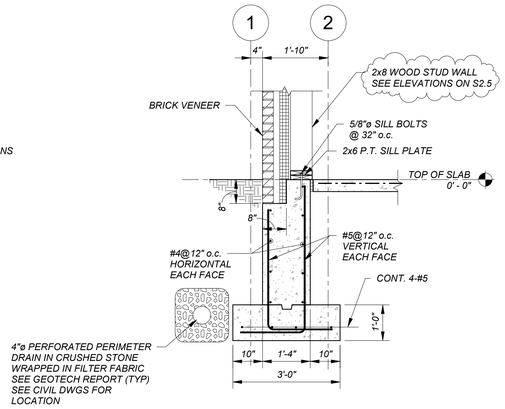

1 FOUNDATION SECTION 1
1/2" = 1'-0"



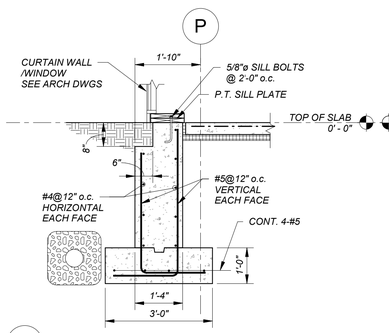

2 FOUNDATION SECTION 2
1/2" = 1'-0"



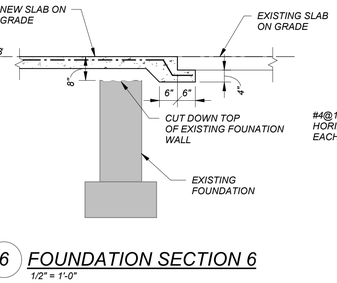

3 FOUNDATION SECTION 3
1/2" = 1'-0"



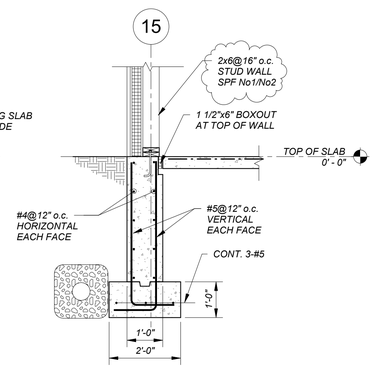

4 FOUNDATION SECTION 4
1/2" = 1'-0"



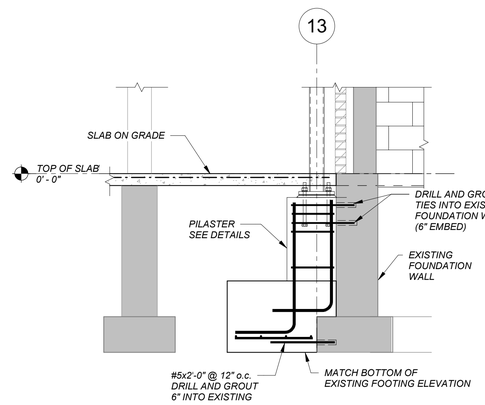

5 FOUNDATION AT CURTAINWALL
1/2" = 1'-0"



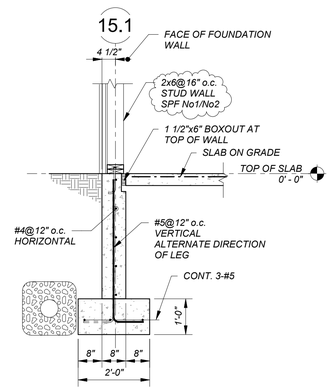

6 FOUNDATION SECTION 6
1/2" = 1'-0"



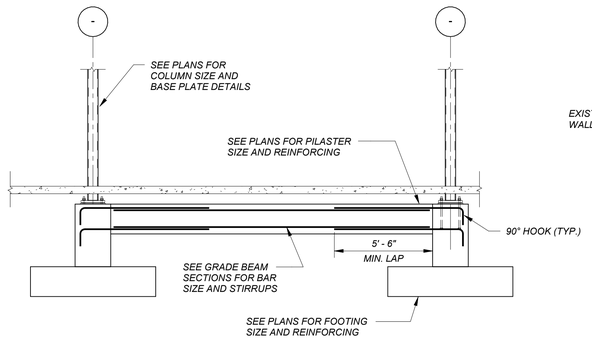

7 FOUNDATION SECTION 7
1/2" = 1'-0"



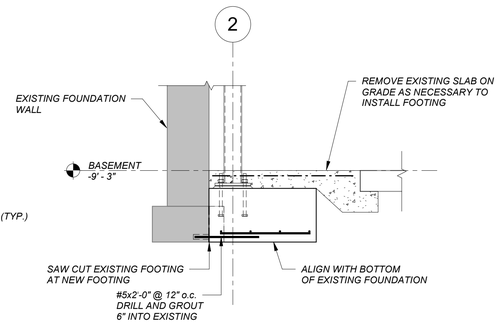

8 FOUNDATION SECTION 8
1/2" = 1'-0"



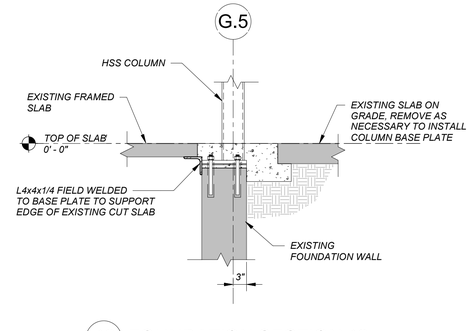

9 FOUNDATION SECTION 9
1/2" = 1'-0"



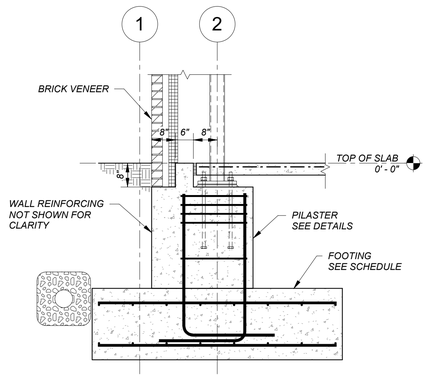

10 GRADE BEAM ELEVATION
1/4" = 1'-0"



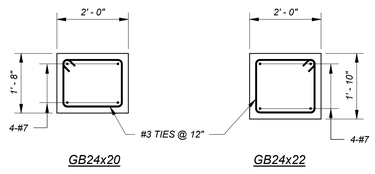

12 FOUNDATION SECTION 12
1/2" = 1'-0"




13 FOUNDATION SECTION 13
3/4" = 1'-0"

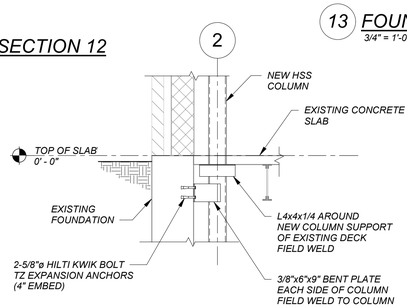



14 FOUNDATION AT COLUMN
1/2" = 1'-0"




SEE PLANS FOR LOCATION OF GRADE BEAMS

11 GRADE BEAM SECTIONS
1/2" = 1'-0"




15 FOUNDATION SECTION 15
1/2" = 1'-0"


LAVALLEE BRENSINGER
ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101


**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

**WOLFEBORO PUBLIC LIBRARY**

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|
| 1 | Conformance Set | 10/10/18 |

CONTENT:
FOUNDATION DETAILS

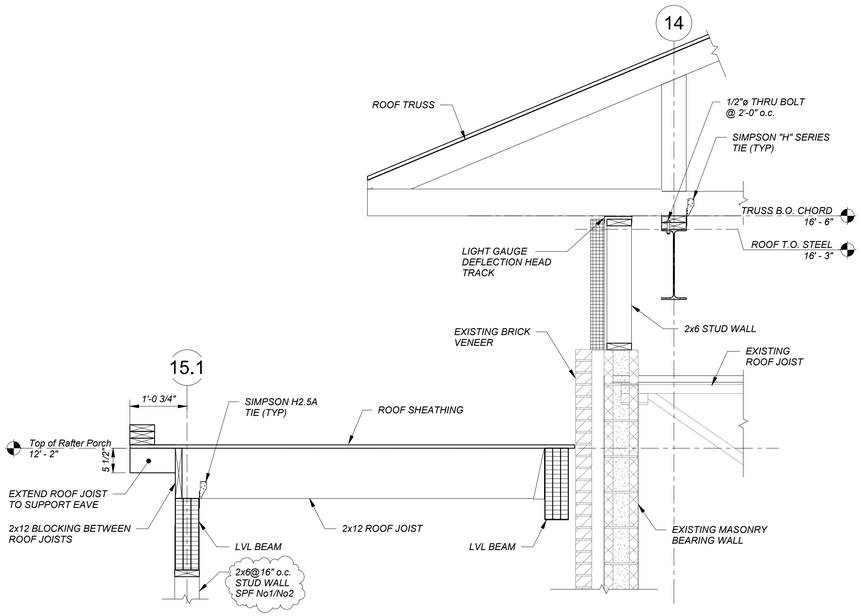
| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S3.1

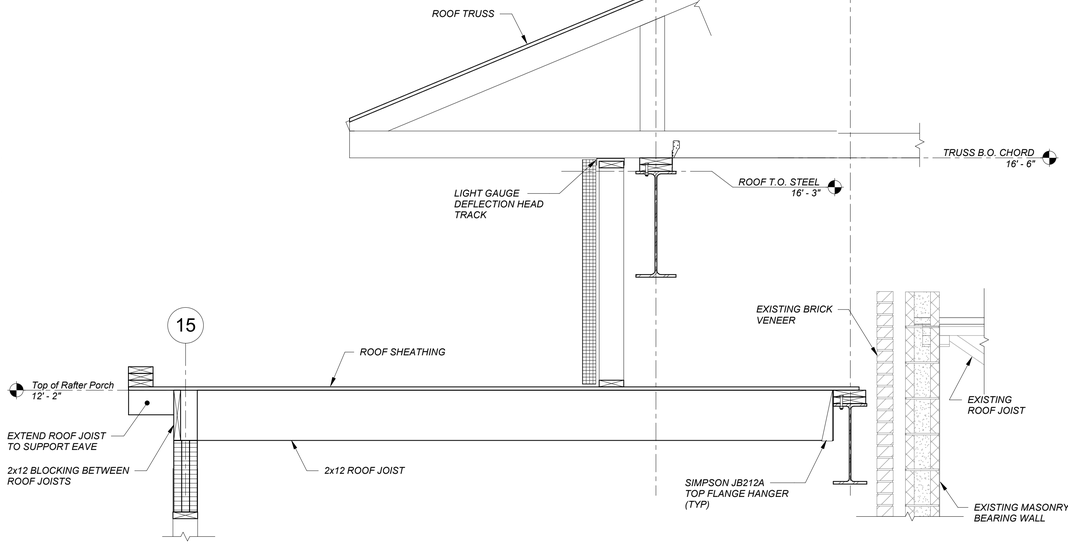
Project Phase
**BID DOCUMENTS**



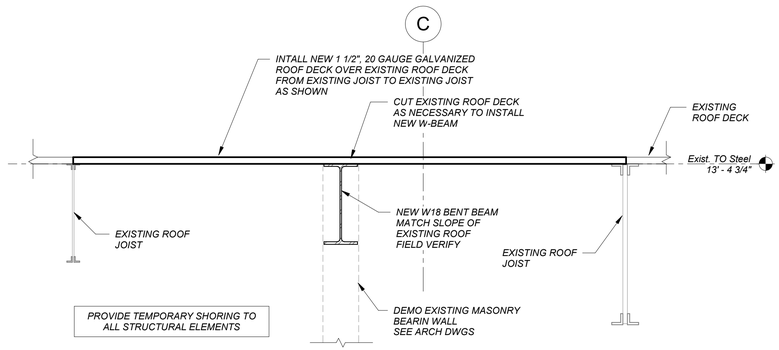

10/23/2018 11:19:03 AM G:\2016141-10 Wolfeboro Library\RVT\Wolfeboro Libe Str 1 R18.rvt



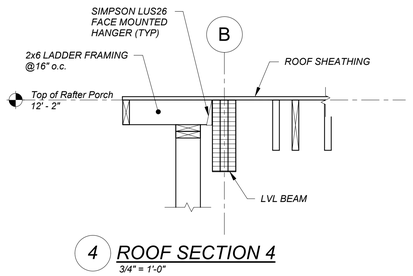

1 ROOF SECTION 1
3/4" = 1'-0"



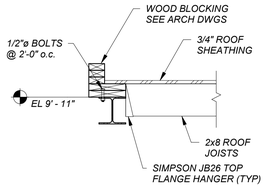

2 ROOF SECTION 2
3/4" = 1'-0"




3 EXISTING ROOF SECTION
3/4" = 1'-0"




4 ROOF SECTION 4
3/4" = 1'-0"




5 ROOF SECTION 5
3/4" = 1'-0"




6 THERMAL BREAK DETAILS
3/4" = 1'-0"

LAVALLEE BRENSINGER ARCHITECTS
Boston | Manchester | Portland
155 Dow Street, Suite 400, Manchester, NH 03101
w603.622.5450n

Foley Buhl Roberts & ASSOCIATES INC
structural engineers
T 603-622-4578
F 603-622-4593
www.fbra.com
500 Commercial Street
Manchester NH 03101

**CONFORMED SET**
FOLEY BUHL ROBERTS & ASSOCIATES, INC.
10/10/18

TOWN OF WOLFEBORO

**WOLFEBORO PUBLIC LIBRARY**

259 SOUTH MAIN STREET
WOLFEBORO, NH 03894

| NO. | DESCRIPTION | DATE |
|---|---|---|
| 1 | Conformance Set | 10/10/18 |

CONTENT:
FRAMING DETAILS

| | |
|---|---|
| DRAWN BY: | SJB |
| PROJECT NO: | 2016141 |
| DATE: | 8/1/18 |
| REVISED: | |
| SCALE: | As indicated |

S4.1

Project Phase
**BID DOCUMENTS**



10/12/2018 11:19:03 AM G:\2016141-10 Wolfeboro Library\RVT\Wolfeboro Libe Str 1 R18.rvt