

CONCEPTUAL PLAN	MAY 16, 2012
DESIGN DEVELOPMENT	MAY 16, 2012
PERMISSIVE DRAWING	MAY 16, 2012
ADD ALL SHELL LOWER	MAY 21, 2012
REV. PER STRUCTURE	JUNE 25, 2012
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STRUCTURAL NOTES:

- PROVIDE SHOP DRAWINGS TO ARCHITECT FOR APPROVAL PRIOR TO FABRICATION OR ERECTION OF STEEL MEMBERS. CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR DEFICIENCIES IN THE WORK IF SHOP DRAWING REVIEW PROCEDURES ARE NOT STRICTLY ADHERED TO.
- STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL, EIGHTH EDITION (EXCLUDING SEC. 4.2.1 OF THE AISC CODE OF STANDARD PRACTICE).
- ALL STRUCTURAL STEEL SHALL BE A36 STEEL.
- ALL PIPE COLUMNS SHALL BE ASTM A53 TYPE E OR S.
- ALL PIPE COLUMN DESIGNATIONS ARE ARE NOMINAL.
- ALL TUBE COLUMNS SHALL BE ASTM A500 GR. B.
- FIELD CONNECTIONS SHALL BE BOLTED USING 3/4" DIA. ASTM A325 HIGH STRENGTH BOLTS EXCEPT AS INDICATED OTHERWISE ON THE DRAWINGS.
- ALL BEAM TO BEAM AND BEAM TO COLUMN CONNECTIONS SHALL BE DESIGNED FOR A REACTION OF W/2L PER AISC SPECIFICATION REFERENCE ABOVE.
- ALL WELDING SHALL BE PERFORMED BY A QUALIFIED WELDER AND SHALL CONFORM TO AWS D1.1-LATEST EDITION.
- ALL STRUCTURAL DIMENSION LUMBER SHALL BE SPF NO 2 OR BETTER.
- ALL FRAMING LUMBER SHALL MAINTAIN A MINIMUM FIBER STRESS GRADE RATING OF Fb = 1100 PSI.
- PROVIDE SOLID BRIDGING (BLOCKING) AT MIDSPAN OF ALL FLOOR JOISTS AND ROOF RAFTERS.
- PROVIDE SOLID BRIDGING (BLOCKING) AT MID-HEIGHT OF ALL STUD WALLS TALLER THAN 10'-0".
- INSTALL SOLID OR 1X3 X-BRACING DOUBLE NAILED EA. END @ 8'-0" O.C. ON ALL DIMENSION LUMBER FLOOR FRAMING.
- PROVIDE AND INSTALL PROPERLY SIZED STEEL JOIST HANGERS AT ALL FLUSH FRAMING. SPECIAL HANGERS (IE HEAVY DUTY HANGERS) ARE SHOWN ON THE DRAWINGS.
- PROVIDE SIMPSON JOIST HANGERS AT ALL FLUSH FRAMING.
- ALL LUMBER IN CONTACT WITH CONCRETE OR USED FOR ROOF CURBS, GAVES, ETC. SHALL BE PRESSURE TREATED #50 IMPREGNATION RATINGS.
- ALL PLYWOOD SHALL BE EXTERIOR GRADE. APA RATED. INSTALL ALL ROOF PANELS WITH ADHESIVE, PERPENDICULAR TO FRAMING WITH BUGLE HEAD SCREWS AT 8" OC MAX ON PANEL EDGES AND 10" OC MAX ON PANEL INTERIORS.

GENERAL NOTES:

- Structural drawings shall be used in conjunction with job specifications and architectural, mechanical, electrical, plumbing, and site drawings. Consult these drawings for locations and dimensions of openings, chases, inserts, reglets, sleeves, depressions, and other details not shown on structural drawings.
- All dimensions and conditions must be verified in the field. Any discrepancies shall be brought to the attention of the engineer before proceeding with the affected part of the work.
- Do not scale plans.
- Sections and details shown on any structural drawings shall be considered typical for similar conditions.
- All proprietary products shall be installed in accordance with the manufacturers written instructions.
- The structure is designed to be self supporting and stable after the erection is complete. It is the contractor's sole responsibility to determine erection procedures and sequencing to ensure the safety of the building and its components during erection. This includes the addition of necessary shoring, sheeting temporary bracing, guys or tie-downs. Such material shall remain the property of the contractor after completion of the project.
- All applicable federal, state, and municipal regulations shall be followed, including the federal department of labor occupational safety and health act.

CONCRETE NOTES:

- All concrete work shall conform to ACI 318-Latest Edition.
- Concrete strength at 28 days shall be: See specification manual.
 - 3000 psi for footings, frost walls & exterior piers.
 - 3000 psi for all interior slabs-on-grade.
 - 3500 psi w/ 65 air entrainment for all exterior slabs-on-grade.
- All concrete shall be air entrained 4% to 6%.
- Concrete shall not be placed in water or on frozen ground.
- Provide PVC sleeves where pipes pass through concrete walls or slabs.
- Reinforcing bars shall conform to ASTM A615 Grade 60 deformed bars, and shall be detailed, fabricated and erected in accordance with ACI 318-Latest edition.
- Welded wire fabric shall be provided in flat slabs.
- Fiber reinforced concrete shall conform to ASTM C-1116.
- GC reviewed Submittals (shop drawings) and schedules of all reinforcing steel shall be prepared by the contractor and submitted to the Architect for review and approval prior to commencement of that portion of the work. All accessories must be indicated on the Submittals which shall be submitted as (4) copies to the Architect.
- Splices of reinforcing bars shall be in accordance with ACI 318. Splices of WWF shall be 6" minimum.
- Concrete finishes: See Architectural Drawings.
 - Interior slabs: Rotary polished
 - Exterior slabs: Wood float w/ Broom finish
- Anchor bolts shall conform to ASTM A307 unless noted otherwise on plan. Anchor bolts at all bracing locations shall conform to ASTM A36.

DESIGN LOADS:

- Building code: IBC-2009 - International Building Code (2009)
- Design Live Loads:

Roof	49 psf
New landing & Stair	100 psf
- Design wind loads are based on 100 mph basic wind speed.
- Seismic Design conforms to IBC-2009 & ASCE-2005.

FOUNDATION NOTES:

- Foundations have been designed to conform with the requirements provided in IBC-2009.
- Exterior footings shall be founded on compacted structural fill or native soil. Provide soil compaction testing prior to placement of footings. See specification manual.
- Exterior strip and spread footings shall be founded a minimum of 4'-6" below finished grade.
- Slabs on grade shall bear on a minimum of 12" of compacted structural fill overlaid with 4" sand. If loose or undesirable fills are encountered at the slab subgrade level, they shall be over excavated to the surface of the natural soil and replaced with structural fill. Refer to drawings and specifications for vapor barrier requirements.
- Structural fill shall be used at all locations below footings and slabs adjacent to the foundation walls. Prior to placement of structural fill, remove all topsoil and other unsuitable material. Compacted structural fill shall consist of clean granular material free of organics, loam, trash, snow, ice, frozen soil or any other objectionable material. It shall be well graded within the following limits:

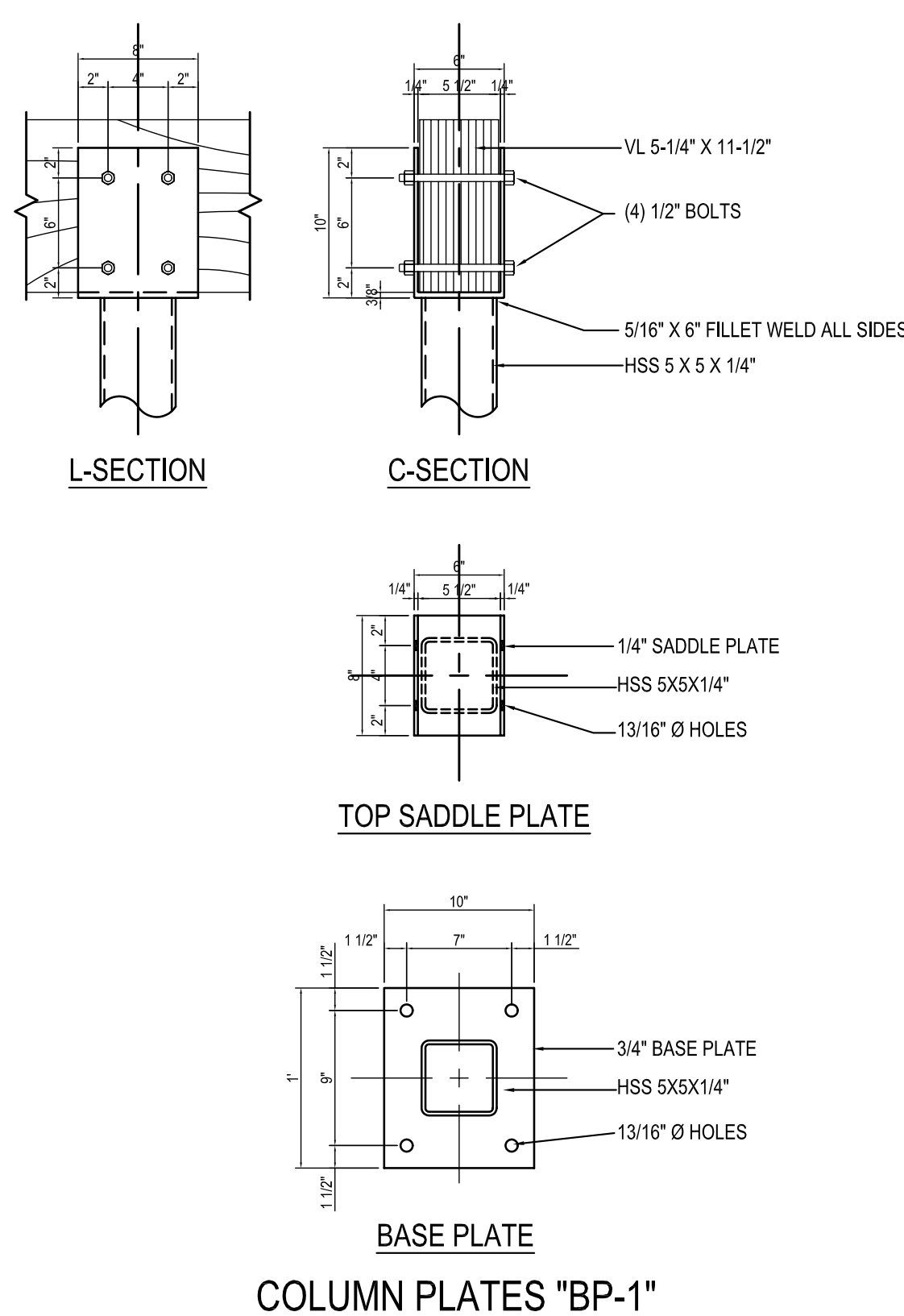
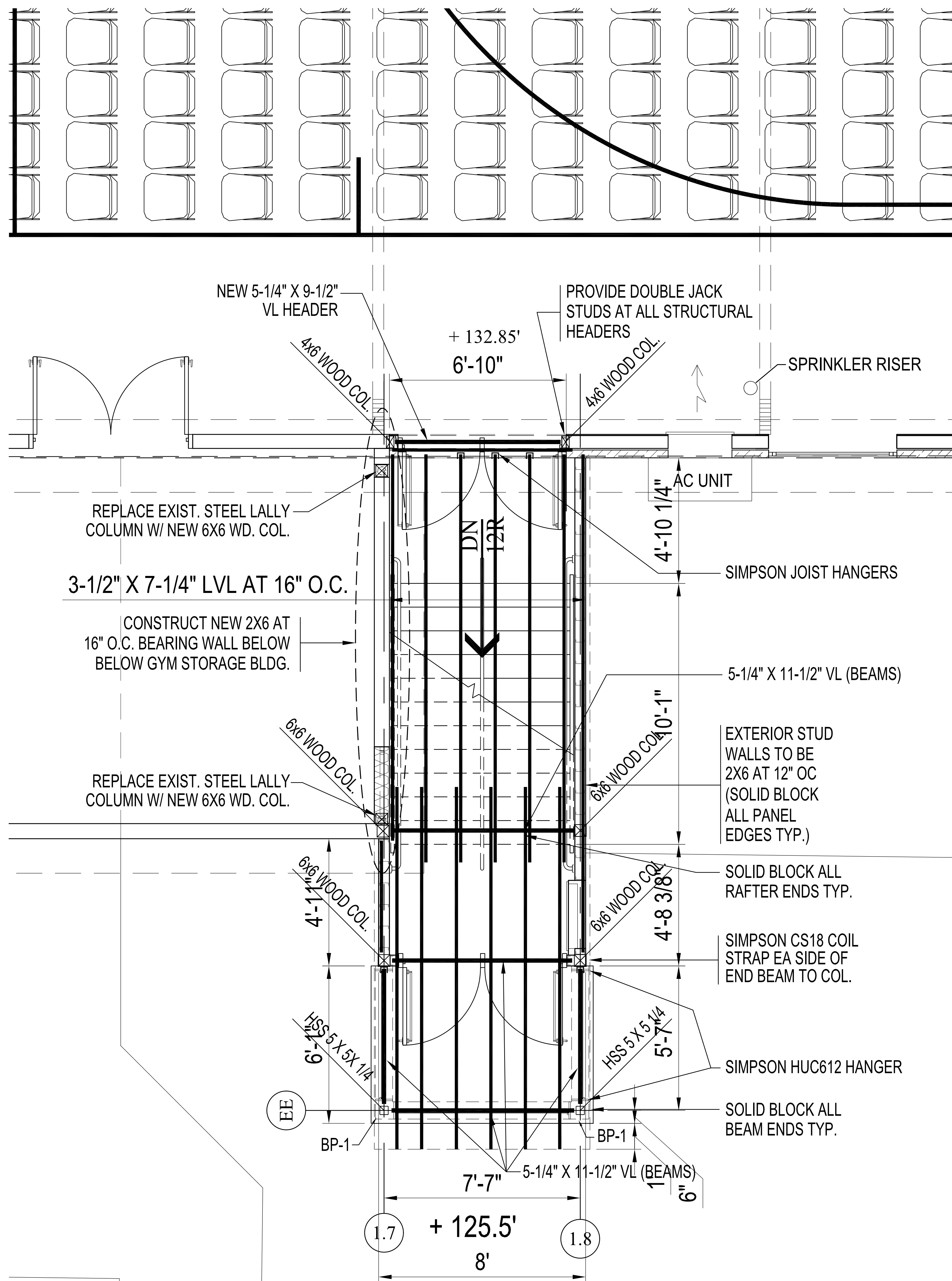
SCREEN OR SIEVE SIZE	PERCENT FINER BY WEIGHT
6 inch	100
3 inch	70-100
NO. 4	35-70
NO. 40	5-35
No. 200	0-5
- Structural fill beneath slabs shall be placed in layers not exceeding 6 inches in loose measure and compacted by self-propelled compaction equipment at approximate optimum moisture content to a dry density of at least 95% of the maximum in place dry density as determined by the modified proctor test (ASTM D-1557).
- Exterior concrete slabs on grade, shall be underlain by at least 4 feet of structural fill meeting gradation and compaction requirements noted above. Reinforce top of slabs with 6X6 - W1.4xW1.4 WWF.
- Backfill both sides of foundation walls simultaneously.

STRUCTURAL STEEL NOTES:

- Structural steel fabrication, erection, and connection design shall conform to AISC "Specification for the design, fabrication, and erection of structural steel", Ninth edition.
- Structural steel:
 - Structural steel shall conform to ASTM A-36.
 - Structural tubing shall conform to ASTM A-500 GR-B.
- Design connections for the reactions shown on the drawings or the maximum end reaction that can be produced by a laterally supported uniformly loaded beam for each given beam size and span.
- Field connections shall be bolted using 3/4" diameter ASTM A325 high strength bolts except where field welding is indicated on the drawings.
- All welding shall conform to AWS D1.1-Latest edition. Welding electrodes shall be E70XX.

METAL DECK NOTES:

- Steel floor deck shall be as indicated on plan by Vulcraft or approved alternate. Steel deck units shall conform with the latest edition of the "Design Manual for floor and roof decks" by the steel deck institute. Steel floor deck shall be galvanized in accordance with ASTM A525 G60 coating.
- Fasten steel decking to all steel supports with 5/8" diameter puddle welds at 12" o.c. unless otherwise indicated on plan. Provide welding washers on all deck units 24 gage and lighter.
- All welding shall conform to AWS D1.3-Latest edition. Welding electrodes shall be E70XX.



FR. HAYES STAIR - ROOF FRAMING PLAN

1/2" = 1'-0"



REL. FOR PRICING & PERMITTING - JUNE 25, 2012
NOT FOR CONSTRUCTION

FR. HAYES STAIR RETROFIT PROJECT
695 STEVENS AVENUE
PORTLAND, MAINE 04103

FH-ST-200 R1

DAVID D. LEASURE - ARCHITECTURAL ASSOCIATES INC.
1344 WASHINGTON AVENUE PORTLAND, MAINE PH. (207) 797-8661 FAX (207) 797-8333
PROJECT NO. 080111 PROJECT TITLE: ST. BRIGID SCHOOL RENOVATION
SCALE: 1/2" = 1'-0" SHEET TITLE: STRUCTURAL FRAMING PLAN - FR. HAYES STAIR

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