

15 - 271474 DF3 01 CO



City of Portland, Oregon - Bureau of Development Services

1900 SW Fourth Avenue • Portland, Oregon 97201 | 503-823-7300 | www.portlandoregon.gov/bds



Deferred Submittal Requirements and Application

Applicants will provide:

- ☐ A copy of this application
 - ☐ Three (3) sets of plans
 - ☐ Two (2) set of calculations
 - ☐ Two (2) sets of product information
- Drawings and calculations must be stamped and signed by an Engineer registered in Oregon and approved by the Architect/Engineer of record for the building.

- ☐ Permit fee (paid at time of submittal)
- ☐ If the DFS includes exterior elements, plan views and elevations identifying the location(s) as approved by the Architect and Engineer of Record must be submitted.
- ☐ One (1) copy of your main building permit approved plans (NOTE: Approved plans do not need to be submitted if your project has a development liaison assigned.)

Contractor submittal information:

Contact name Mike Coyle/Faster Permits

Address 14334 NW Eagleridge Ln

City Portland State OR Zip Code 97229

Phone 503 680-5497 E-mail mike@fasterpermits.com

Value of deferred submittal \$7500 Issued main building permit # 15-271474-CO

Job site address 7525 NE Ambassador Pl

Description/Scope of work Attachment of Equipment - Roof Top Mechanical Units

Fees

Deferred submittal (DFS) fees are collected in addition to the standard building review fee paid on the main building permit. DFS fees cover the cost of the additional processing and review time associated with the design build element.

The DFS fee for processing and reviewing deferred plan submittals is 10 percent of the building permit fee calculated using the value of the particular deferred portion of the project.,

Minimum fee: Residential, one and two family dwelling ...\$123 for DFS with valuation of less than or equal to \$222,000

Commercial and all other projects\$307 for DFS with valuation of less than or equal to \$680,000

The Bureau of Development Services (BDS) fee schedule is also available on the BDS web site at www.portlandoregon.gov/bds | select the Fees tab.

Helpful Information

Bureau of Development Services
1900 SW 4th Avenue, Portland, OR 97201

Submit your plans to:
Development Services Center (DSC), First
Floor, For Hours Call 503-823-7310
**DEFERRED SUBMITTAL REQUIREMENTS AND
APPLICATION**

Important Telephone Numbers

BDS main number 503-823-7300
DSC automated information line 503-823-7310
Building code information 503-823-1456
BDS 24 hour inspection request line 503-823-7000
Residential information for
one and two family dwellings 503-823-7388
City of Portland TTY 503-823-6868

Information is subject to change.

STRUCTURAL GENERAL NOTES

CODE: THE STRUCTURAL DESIGN IS INTENDED TO CONFORM TO THE REQUIREMENTS OF THE 2012 INTERNATIONAL BUILDING CODE (IBC) AND THE 2014 OREGON STRUCTURAL SPECIALTY CODE (OSSC).

REFERENCED STANDARDS: ASCE 7-10
LOADS ACI 318-11
CONCRETE ACI 318-11
LIGHT GAUGE METAL AISI S100-07/S2-10
WOOD AF&PA NDS-12

CONSTRUCTION: THESE STRUCTURAL DRAWINGS ARE INTENDED TO BE USED IN CONJUNCTION WITH THE OTHER PROJECT DRAWINGS, SUCH AS ARCHITECTURAL AND MECHANICAL. NON-STRUCTURAL FEATURES NOT FULLY SHOWN OR NOTED IN THE STRUCTURAL DRAWINGS MAY INCLUDE, BUT ARE NOT LIMITED TO ARCHITECTURAL FEATURES SUCH AS SIZE AND LOCATION OF DOOR AND WINDOW OPENINGS, NON-BEARING PARTITIONS, CONCRETE CURBS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, FLOOR AND ROOF OPENINGS AND MECHANICAL, PLUMBING, AND ELECTRICAL FEATURES SUCH AS PIPE RUNS, SLEEVES, TRENCHES, AND CONDUIT BOXES. THE CONTRACTOR SHALL COORDINATE ALL DRAWINGS IN THEIR WORK, AND INFORM THE A/E OF ANY DISCREPANCIES. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION. THESE NOTES TAKE PRECEDENCE OVER INFORMATION SHOWN IN THE PROJECT SPECIFICATIONS; ALSO, NOTES CONTAINED IN THE PROJECT DRAWINGS AND DETAILS TAKE PRECEDENCE OVER THESE GENERAL NOTES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR STRUCTURAL STABILITY DURING CONSTRUCTION (MEETING THE GUIDELINES OF ASCE 37) AND FOR PROJECT SAFETY (MEETING THE GUIDELINES OF OSHA). THE STRUCTURE SHOWN ON THE DRAWINGS HAS BEEN DESIGNED FOR THE COMPLETED CONFIGURATION ONLY, AND NOT FOR THE VARIOUS STRUCTURAL CONFIGURATIONS POSSIBLE DUE TO THE CONTRACTOR'S SELECTED SEQUENCE, AS WELL AS MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE BRACING, SHORING, ETC. AS NEEDED TO TEMPORARILY SUPPORT THE STRUCTURE. IN ADDITION, THE CONTRACTOR SHALL PROVIDE A CONSTRUCTION SEQUENCE WHICH LIMITS THE DEFLECTION, TEMPERATURE AND SHRINKAGE EFFECTS TO AN ACCEPTABLE LEVEL TO THE OWNER.

THE CONTRACTOR SHALL COORDINATE CODE-REQUIRED SEISMIC RESTRAINT FOR ARCHITECTURAL ELEMENTS (CEILINGS, NON-LOAD BEARING WALLS, ETC) AND MECHANICAL AND ELECTRICAL EQUIPMENT (PIPING, UNITS, DUCTS, ETC). THIS BRACING MAY CONFORM TO "SMACNA", "NWCB" OR ANY CODE-COMPLIANT STANDARD. ALTERNATIVELY, THE BRACING MAY BE ENGINEERED BY OTHERS.

WORK SHOWN IS NEW UNLESS NOTED AS EXISTING. EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS HAS BEEN OBTAINED FROM EXISTING DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS AND ALL EXISTING JOB CONDITIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE A/E OF ANY DISCREPANCIES AND EXCEPTIONS FROM CONDITIONS SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH THE WORK IN ORDER FOR THE A/E TO DETERMINE WHICH SHALL GOVERN. SHOULD ANY DISCREPANCIES BE FOUND IN THE CONTRACT DOCUMENTS, IT WILL BE ASSUMED THAT THE CONTRACTOR HAS INCLUDED THE HIGHEST PRICE ALTERNATIVE FOR COMPLETING THE WORK, UNLESS THE DISCREPANCY WAS POINTED OUT PRIOR TO THE BID, IN ORDER FOR THE A/E TO DETERMINE WHICH GOVERNS. CONFLICTS IN THE CONSTRUCTION DRAWINGS WILL NOT BE A BASIS FOR AN ADJUSTMENT IN THE PROJECT PRICE. THE REMOVAL, CUTTING, DRILLING ETC. OF EXISTING WORK SHALL BE PERFORMED WITH CARE IN ORDER TO NOT JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. IF STRUCTURAL MEMBERS OR MECHANICAL, ELECTRICAL OR ARCHITECTURAL FEATURES NOT INDICATED FOR REMOVAL INTERFERES WITH THE NEW WORK, THE A/E SHALL BE NOTIFIED IMMEDIATELY AND APPROVAL SHALL BE OBTAINED BEFORE REMOVAL OF MEMBERS. THE CONTRACTOR SHALL REPAIR ALL DAMAGE CAUSED DURING CONSTRUCTION USING MATERIALS AND WORKMANSHIP SIMILAR TO THAT WHICH HAS NOT BEEN DAMAGED.

DESIGN LOADING CRITERIA: THE STRUCTURAL DESIGN IS BASED ON THE STRENGTH AND DEFLECTION CRITERIA OF THE INTERNATIONAL BUILDING CODE WITH CONCENTRATED LOADS AND LIVE LOAD REDUCTIONS AS DEFINED IN THE CODE. IN ADDITION TO THE DEAD LOAD OF THE STRUCTURE AND EQUIPMENT, THE FOLLOWING LOADS ARE USED FOR DESIGN:

GRAVITY:

SNOW:

GROUND SNOW LOAD, P_g = 10 PSF
FLAT-ROOF SNOW LOAD, P_f = 25 PSF
SNOW EXPOSURE FACTOR, C_e = 1.0
SNOW IMPORTANCE FACTOR, I = 1.0
THERMAL FACTOR, C_t = 1.0

LATERAL:

SEISMIC CRITERIA - FOR RTU ANCHORAGE:

SITE CLASS = D
RISK CATEGORY = II
SEISMIC DESIGN CATEGORY = D
COMPONENT IMPORTANCE FACTOR, I_p = 1.0
COMPONENT AMPLIFICATION FACTOR: a_p = 2.5
SPECTRAL RESPONSE COEFFICIENTS: S_{DS} = 0.716g
SEISMIC MODIFICATION FACTOR, R_p = 6

WIND CRITERIA:

BASIC WIND SPEED = 120 MPH (3 SECOND GUST)
WIND IMPORTANCE FACTOR = 1.0
SURFACE ROUGHNESS CATEGORY = C
EXPOSURE CATEGORY = C
WIND DIRECTIONALITY FACTOR, K_d = 0.85
INTERNAL PRESSURE COEFFICIENT, GC_{pi} = ±0.18
DESIGN OF EXTERIOR COMPONENTS AND CLADDING SHALL BE BASED UPON A BASIC WIND SPEED OF 120 MPH.

SPECIAL INSPECTION AND TESTING

ALL CONSTRUCTION IS SUBJECT TO INSPECTION BY THE SPECIAL INSPECTOR AND THE BUILDING OFFICIAL IN ACCORDANCE WITH THE 2012 IBC SECTION 110 AND CHAPTER 17. THE CONTRACTOR SHALL COORDINATE THE REQUIRED INSPECTIONS WITH THE SPECIAL INSPECTOR AND THE LOCAL JURISDICTION.

SPECIAL INSPECTIONS ARE AS FOLLOWS:

- ANCHOR BOLTS INSTALLED IN HARDENED CONCRETE - PERIODIC

POST-INSTALLED CONCRETE AND MASONRY ANCHORS:

POST INSTALLED ANCHORS SHALL BE AS SHOWN IN THE DRAWINGS AND SHALL BE INSTALLED PER THE CURRENT ICC APPROVAL AND THE MANUFACTURER'S GUIDELINES. EMBEDMENT REQUIREMENTS AND CAPACITIES ARE BASED UPON THE ICC-EC REPORT AND ALL SUBSTITUTIONS SHALL MEET THESE VALUES. SPECIAL INSPECTION IS REQUIRED. UNLESS NOTED OTHERWISE, ANCHORS SHALL BE ASTM F1554 GRADE 36. EXPOSED ANCHORS SHALL BE STAINLESS STEEL, ASTM F593. APPROVED ANCHORS ARE AS FOLLOWS:

ANCHOR TYPE	APPROVED PRODUCTS	REPORT #
CONCRETE	HILTI KWIK HUS - EZ	ICC ESR 3027
SCREW ANCHOR	SIMPSON TITEN-ND POWERS WEDGE BOLT+	ICC ESR 1056 ICC ESR 2526

LOCATE ALL REINFORCING WITHIN 12" OF ANY PROPOSED HOLE PRIOR TO FABRICATION OF ANY STEEL AND PRIOR TO ANY HOLE DRILLING. DO NOT DISTURB, CUT OR OTHERWISE HARM REINFORCING BARS DURING THE INSTALLATION OF POST INSTALLED ANCHORS. NOTIFY A/E IF ANY REINFORCING CONFLICTS WITH THE PROPOSED HOLE LOCATIONS PRIOR TO PROCEEDING WITH ANY WORK. DEFECTIVE OR ABANDONED HOLES SHALL BE FILLED WITH NON-SHRINK GROUT.

COLD-FORMED STEEL:

COLD-FORMED STEEL MEMBERS SHALL BE S-SECTIONS WITH A MINIMUM YIELD OF 33 KSI FOR 33 AND 45 MIL MATERIAL, AND 50 KSI FOR 54 MIL AND THICKER MATERIAL. STUDS SHALL BE OF THE SIZE, GAUGE, AND SPACING SHOWN ON THE DRAWINGS. STUDS IN SHEAR WALL CONSTRUCTION SHALL CONFORM TO ASTM A1003 TYPE H. MINIMUM SECTION PROPERTIES SHALL CONFORM TO SSMA GUIDELINES. ONLY MANUFACTURERS WHO ARE MEMBERS OF SSMA WILL BE ACCEPTED OR AS APPROVED BY ARCHITECT. FOR STUDS, TRACK SHALL BE OVERSIZED WITH 1.5" MINIMUM FLANGE TO PROVIDE FULL STUD BEARING. TRACKS SHALL BE OF THE SAME GAGE AND MINIMUM YIELD STRENGTH AS THE STUDS.

SCREWS SHALL BE ELCO DRIL-FLEX, HILTI KWIK-FLEX, OR AS APPROVED. A MINIMUM OF 1.5D EDGE DISTANCE AND A 3.0D SPACING SHALL ALWAYS BE MAINTAINED. SCREWS SHALL BE INSTALLED THROUGH THE THINNER STEEL PART FIRST (SCREW HEAD AGAINST THINNER GAUGE STEEL), UNLESS OTHERWISE NOTED.

CONNECT ALL DOUBLE STUDS AND BUILT-UP MEMBERS WITH A MINIMUM OF (2) ROWS OF NO. 10 SCREWS AT 12" O.C. SECURE ALL STUD FLANGES TO TRACKS WITH A NO. 10 SCREW EACH FLANGE. COLD-FORMED MEMBERS SHALL NOT BE SPLICED UNLESS CLEARLY SHOWN IN THE DRAWINGS.

CONNECTIONS OF NON-STRUCTURAL WALLS TO CONCRETE SLABS SHALL BE MADE WITH HILTI X-U OR SIMPSON PDPA FASTENERS (0.157" DIAM.) WITH 1-1/2" EMBEDMENT AT 6" ON CENTER SPACING WITH A 2" MINIMUM EDGE DISTANCE, UNLESS NOTED OTHERWISE. AT P/T SLABS, MAX EMBEDMENT OF FASTENERS SHALL BE 3/4" AND SPACING SHALL BE 3" ON CENTER.

SAWN LUMBER:

LUMBER SHALL CONFORM TO WEST COAST LUMBER INSPECTION BUREAU OR WESTERN WOOD PRODUCTS ASSOCIATION GRADING RULES. LUMBER SHALL BE MARKED AND SHALL BE THE SPECIES AND GRADE NOTED BELOW, UNLESS NOTED OTHERWISE IN THE DRAWINGS.

USE	GRADE	Fb(Psi) (BASE VALUE)
JOISTS, PLANKING, AND BLOCKING		
2" TO 4" THICK, 2" AND WIDER	DOUGLAS FIR-LARCH NO. 2	900

MAXIMUM MOISTURE CONTENT OF WOOD SHALL BE 19% OR LESS FOR FRAMING MEMBERS 2" TO 4" THICK UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS. ALL WOOD FRAMING SHALL BE TREATED WHEN IN CONTACT WITH CONCRETE OR MASONRY UNLESS AN APPROVED BARRIER IS PROVIDED. IN ADDITION, TREAT ALL WOOD FRAMING EXPOSED TO SOIL, MOISTURE OR WEATHER. SAWN ENDS AND DRILLED HOLES OF ALL LUMBER SUBJECT TO DETERIORATION SHALL BE TREATED WITH WOOD PRESERVATIVE. CUTTING AND NOTCHING OF JOISTS AND STUDS SHALL CONFORM TO THE IBC. PROVIDE DOUBLE TRIMMER AND HEADER JOISTS AT OPENINGS THAT CUT JOISTS. PROVIDE JOIST HANGERS WHERE JOISTS FRAME INTO HEADER AND HEADERS INTO TRIMMERS.

AT EXPOSED AND INTERIOR CONDITIONS WITH TREATED WOOD, CONNECTORS SHALL BE GALVANIZED AS PER THE MANUFACTURER'S RECOMMENDATIONS AND SHALL TAKE INTO ACCOUNT THE CHEMICAL TREATMENT USED IN THE WOOD. AS A MINIMUM, 16 GAGE OR THINNER CONNECTORS SHALL RECEIVE A G-185 ZINC COATING, AND 14 GAGE OR THICKER CONNECTORS SHALL RECEIVE A POST HOT-DIP GALVANIZING OF G-185. ALL FASTENER MATERIAL USED SHALL MATCH THE MATERIAL USED IN THE CONNECTOR. AT INTERIOR CONDITIONS WITH NON-TREATED WOOD, CONNECTORS SHALL BE GALVANIZED WITH A MINIMUM OF G-90.

BOLTS SHALL BE ASTM A307. BOLT HEADS AND NUTS SHALL BEAR ON STANDARD MELEABLE IRON (M.I.) WASHERS. ANCHOR BOLTS (AT SILLS, LEDGERS, TOP OF WALLS, ETC) SHALL BE TYPE GALVANIZED A307 (MIN.) AND SHALL HAVE A STANDARD HEX NUT AND A 3" SQUARE x 1/4" PLATE WASHER. BOLT HOLES SHALL BE A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. NUTS SHALL BE SNUG TIGHTENED AND THEN TURNED AN ADDITIONAL 1/2 TURN.

LAG SCREWS SHALL BE ASTM A307. LAG SCREWS SHALL BE PRE-BORED WITH THE LEAD HOLE FOR THE SHANK EQUAL TO THE DIAMETER AND LENGTH OF THE UNTHREADED PORTION IN THE MAIN MEMBER AND THE LEAD HOLE FOR THE THREADED PORTION EQUAL TO 80% OF THE SHANK DIAMETER. LUBRICATE WITH SOAP AS NECESSARY TO EASE INSTALLATION. LAG SCREWS SHALL BE SCREWED IN PLACE AND NOT DRIVEN INTO PLACE.

WOOD SCREW LEAD HOLES SHALL BE PRE-BORED WITH A DIAMETER OF 70% OF THE ROOT DIAMETER OF THE SCREW. LUBRICATE WITH SOAP AS NECESSARY TO EASE INSTALLATION. SCREWS SHALL BE SCREWED IN PLACE AND NOT DRIVEN INTO PLACE.

ALL FRAMING NAILS SHALL BE COMMON NAILS AND SHALL BE OF THE SIZE AND NUMBER INDICATED ON THE DRAWINGS (BOX NAILS SHALL NOT BE USED). NAILING NOT SHOWN SHALL BE AS INDICATED ON IBC TABLE 2304.9.1. NAILS TO PRESURE TREATED WOOD SHALL BE GALVANIZED. PREDRILL NAIL HOLES TO 75% OF THE NAIL SHANK DIAMETER WHERE NAILS TEND TO SPLIT WOOD.

FRAMING ACCESSORIES AND STRUCTURAL FASTENERS SHALL BE MANUFACTURED BY SIMPSON COMPANY (OR APPROVED EQUAL) AND OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS. INSTALL ALL FASTENERS CALLED OUT BY THE PRODUCT MANUFACTURER UNLESS NOTED OTHERWISE ON THE DRAWINGS. HANGERS NOT SHOWN SHALL BE SIMPSON HU OR SIZE RECOMMENDED FOR MEMBER.

DEFERRED STRUCTURAL SUBMITTALS:

STRUCTURAL SYSTEMS THAT HAVE BEEN DEFINED AS VENDOR-DESIGNED OR DESIGN-BUILD COMPONENTS PER THE DRAWINGS AND/OR PROJECT SPECIFICATIONS ARE DEFERRED SUBMITTAL COMPONENTS THAT HAVE NOT BEEN PERMITTED UNDER THE BASE BUILDING APPLICATION. SUBMITTALS SHALL INCLUDE SHOP DRAWINGS AND CALCULATIONS FOR THE DESIGN AND FABRICATION OF ITEMS, AND THEY SHALL BE STAMPED BY A LICENSED ENGINEER REGISTERED IN THE STATE OF OREGON AND SUBMITTED TO THE A/E FOR APPROVAL. SUBMITTALS SHALL BE MADE TO THE A/E FOR APPROVAL A MINIMUM OF 14 DAYS PRIOR TO FABRICATION. THE CONTRACTOR SHALL SUBMIT THESE REVIEWED DEFERRED SUBMITTAL DOCUMENTS TO THE BUILDING OFFICIAL. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

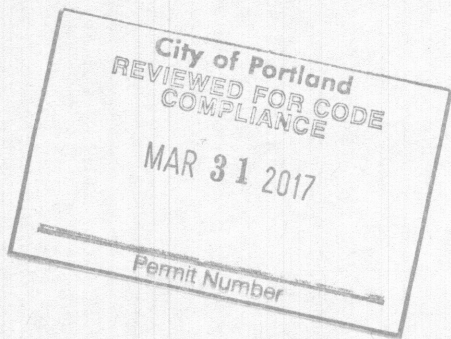
DESIGN-BUILD ITEMS SHALL BE DESIGNED FOR ALL LOADS LISTED IN THESE DRAWINGS AND CODE-DEFINED LOADS PLUS INDUSTRY STANDARD LOADS, INCLUDING GRAVITY, WIND, SEISMIC AND ERECTION LOADS. CALCULATIONS SHALL INCLUDE REVIEW OF LOCAL STRESSES ON STRUCTURAL ELEMENTS DUE TO THE SELECTED CONNECTION METHOD. ADDITIONALLY, CALCULATIONS AND DRAWINGS SHALL CLEARLY INDICATE THE LOADS IMPOSED UPON THE STRUCTURAL SUPPORT FRAMING.

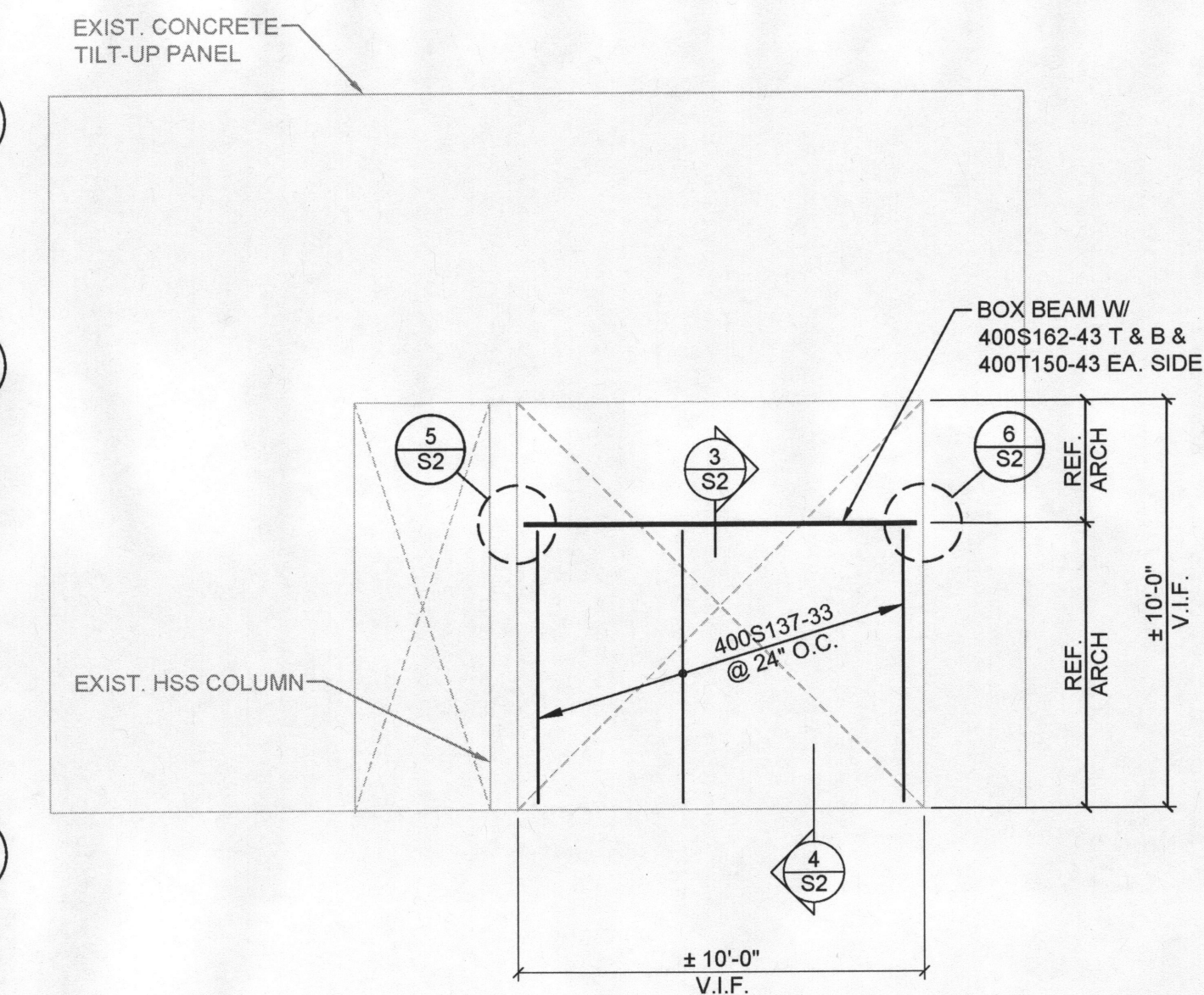
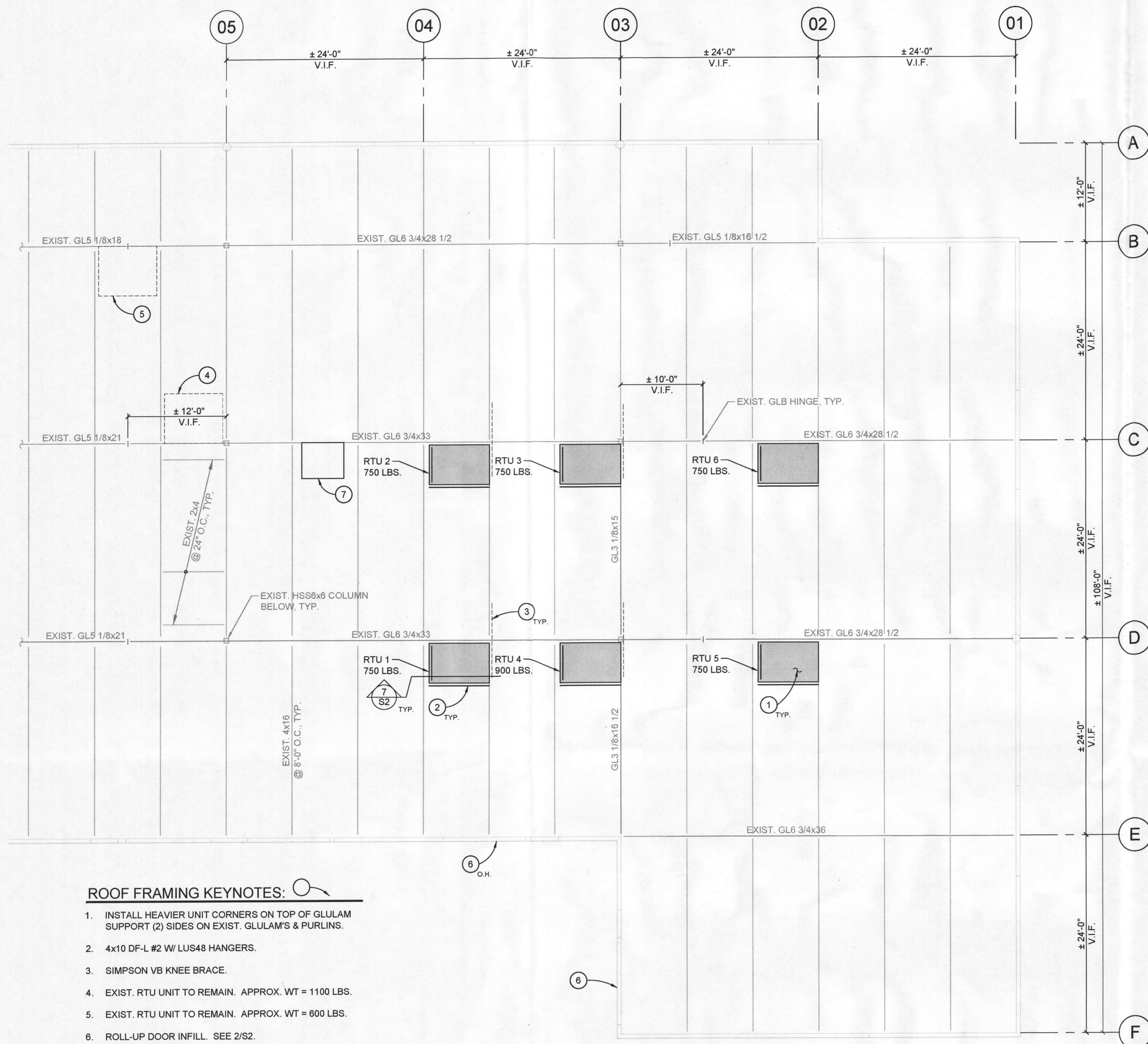
THE FOLLOWING LIST INCLUDES ITEMS THAT ARE DEFINED AS DEFERRED STRUCTURAL SUBMITTAL COMPONENTS. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL AND CIVIL DRAWINGS FOR ADDITIONAL DEFERRED SUBMITTAL COMPONENTS.

- RTU ATTACHMENT TO CURB

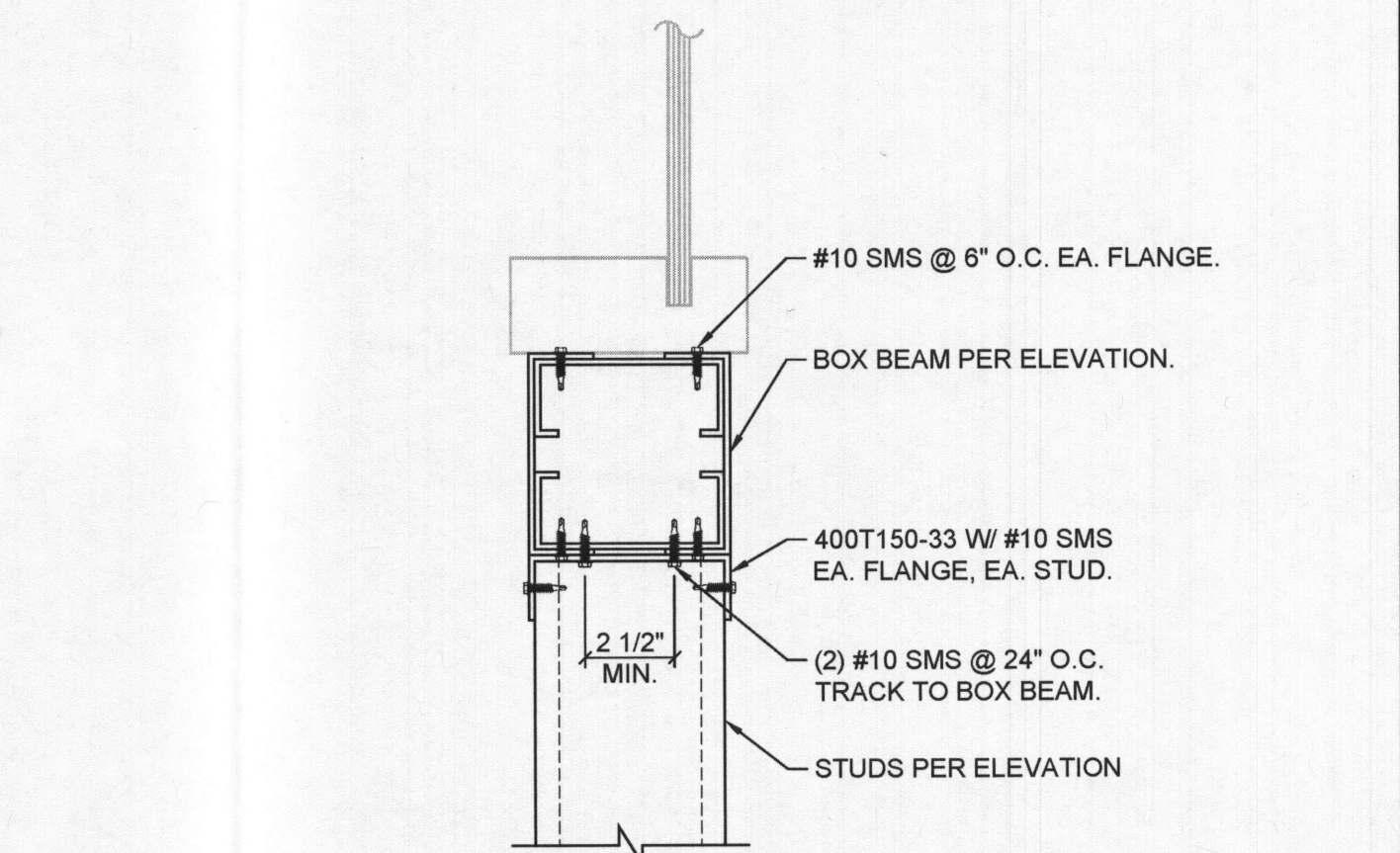
ABBREVIATIONS

@	OR ANG	AT	ANGLE	IBC	INTERNATIONAL BUILDING CODE
L	OR ANG	ICC	INTERNATIONAL CODE COUNCIL	ID	INSIDE DIAMETER
#	POUND/NUMBER	IN	INCH	INT	INFORMATION
⊥	PERPENDICULAR	INT	INTERIOR		
(A)	ABOVE	JST	JOIST		
AB	ANCHOR BOLT	K	KIPS		
ACI	AMERICAN CONCRETE INSTITUTE	KSI	KIPS PER SQUARE INCH		
ADD'L	ADDITIONAL	LBS	POUNDS		
ADJ	ADJACENT	LL	LIVE LOAD		
AFF	ABOVE FINISHED FLOOR	LLH	LONG LEG HORIZONTAL		
AISC	AMERICAN INSTITUTE OF STEEL	LLV	LONG LEG VERTICAL		
ALT	ALTERNATE	LONG	LONGITUDINAL		
APPROX	APPROXIMATE	LSH	LONG SLOTTED HOLE		
ARCH	ARCHITECTURAL	LSL	TIMBERSTRAND		
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	LVL	MICROLAM		
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MANUF.	MANUFACTURE		
AWS	AMERICAN WELDING SOCIETY	MAX.	MAXIMUM		
(B)	BELOW	M.B.	MACHINE BOLT		
BC	BOTTOM CHORD	M.B.S.	METAL BUILDING SUPPLIER		
B OR BM	BEAM	MECH.	MECHANICAL		
B.N.	BOUNDARY NAIL	MEZZ	MEZZANINE		
BLDG	BUILDING	M.F.R.	MANUFACTURER		
BLK	BLOCK	MIN.	MINIMUM		
BLKG	BLOCKING	MISC	MISCELLANEOUS		
BRD OR BD	BOARD	MTL	METAL		
BOT OR BOTT	BOTTOM	NO OR #	NUMBER		
BRG	BEARING	NTS	NOT TO SCALE		
BTWN	BETWEEN	O.C.	ON CENTER		
CIP	CAST IN PLACE	O.D.	OUTSIDE DIAMETER		
CJ	CONTROL/CONSTRUCTION JOINT	OPNG	OPENING		
CJP	COMPLETE JOINT PENETRATION	OPP	OPPOSITE		
CMU	CONCRETE MASONRY UNITS	OVS	OVERSIZED HOLE		
CL	CENTERLINE	P.A.F.	POWER ACTUATED FASTENER		
CLR	CLEAR	PL	PLATE OR PROPERTY LINE		
COL	COLUMN	P/C	PRECAST		
CONC	CONCRETE	P/T	POST TENSIONED		
CONN	CONNECTION	PA	POWDER ACTUATED		
CONST	CONSTRUCTION	PERF.	PERFORATED		
CONT	CONTINUOUS	PERP.	PERPENDICULAR		
COORD	COORDINATE	PLYWD	PLYWOOD		
CTR	CENTER	P.P.	PARTIAL PENETRATION		
d	PENNY SIZE	PROP.	PROPERTY		
DBA	DEFORMED BAR ANCHOR	PSF	POUNDS PER SQUARE FOOT		
DBL	DOUBLE	PSI	POUNDS PER SQUARE INCH		
DC	DEMAND CRITICAL	PSL	PARALLAM		
DF-L	DOUGLAS FIR-LARCH	P.T.	PRESSURE TREADED		
DIA OR Ø	DIAMETER	R	RISER/RADIUS		
DIAG	DIAGONAL	RBS	REDUCED BEAM SECTION		
DIM	DIMENSION	REF. OR RE.	REFERENCE		
DL	DEAD LOAD	REINF.	REINFORCING		
DP	DEEP	REQ'D	REQUIRED		
DWG	DRAWING	REV.	REVISION		
DWL	DOWEL	R.O.	ROUGH OPENING		
EA	EACH	SCHED.	SCHEDULE		
EB	ERECTION BOLT	SHT	SHEET		
EF	EACH FACE	SHTHG	SHEATHING		
EJ	EXPANSION JOINT	SIM.	SIMILAR		
ELEV., EL	ELEVATION	SL	SNOW LOAD		
EMBED	EMBEDMENT	SMS	SHEET METAL SCREW		
EN	EDGE NAIL	SOG	SLAB-ON-GRADE		
ENG	ENGINEER	SPEC	SPECIFICATION		
EQ	EQUAL	SQ	SQUARE		
ES	EACH SIDE	SSTL	STAINLESS STEEL		
ETC	ETCETERA	SSH	SHORT SLOTTED HOLE		
EXIST	EXISTING	STIFF	STIFFENER		
EXP	EXPANSION	STD	STANDARD		
EXT	EXTERIOR	STL	STEEL		
EW	EACH WAY	STRUCT	STRUCTURAL		
EXP. BOLT	EXPANSION BOLT	T&B	TOP AND BOTTOM		
FIN	FINISHED	TC	TOP CHORD		
FLG	FLANGE	TF	TOP FLANGE		
FLR	FLOOR	THK	THICKNESS		
FND	FOUNDATION	THRD	THREADED		
FOB	FACE OF BUILDING	TJ	TRUSS JOIST		
FOM	FACE OF MASONRY	T.O.	TOP OF		
FOP	FACE OF PLATE	TOC	TOP OF CONCRETE		
FOS	FACE OF STUD	TOF	TOP OF FOOTING		
FOV	FACE OF WALL	TOJ	TOP OF JOIST		
FS	FAR SIDE	TOP	TOP OF PARAPET		
FT	FEET/FOOT	TOS	TOP OF STEEL		
FTG	FOOTING	TOW	TOP OF WALL		
GA	GAGE, GAUGE	TYP.	TYPICAL		
GALV	GALVANIZED	UNO	UNLESS NOTED OTHERWISE		
GB/GYP	GYP/BOARD	URM	UNREINFORCED MASONRY		
GEN	GENERAL	V.B.	VAPOR BARRIER		
GL	GLUE-LAMINATED	VERT	VERTICAL		
GL	GRIDLINE	V.I.F., ±	VERIFY IN FIELD		
GRD	GRADE	W/	WITH		
HD	HOLDOWN	W/O	WITHOUT		
HD'D	HEADED	WF	WIDE FLANGE STEEL BEAM		
HOG	HOT-DIPPED GALVANIZED	WP	WEATHERPROOF/WORK POINT		
HDR	HEADER	WT	WEIGHT		
HGR	HANGER	WWF	WELDED WIRE FABRIC		
HORIZ	HORIZONTAL				
HSA	HEADED STUD ANCHORS				
HSB	HIGH STRENGTH BOLTS				
HSS	HOLLOW STRUCTURAL STEEL				
HT/HGT	HEIGHT				

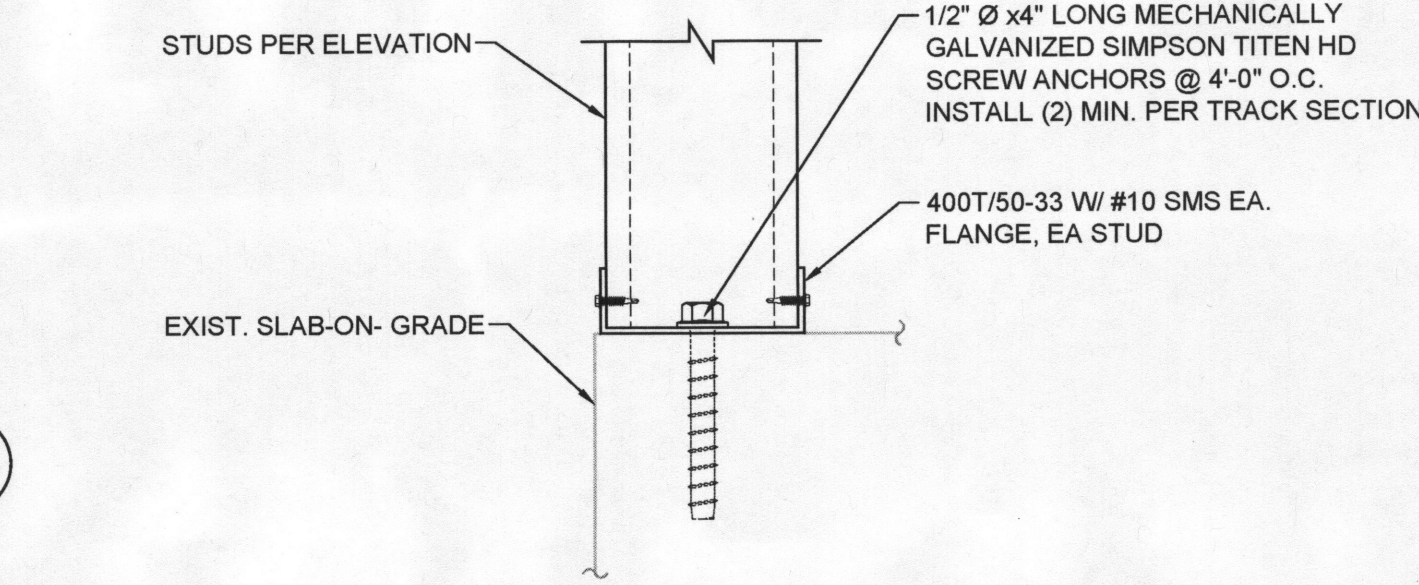




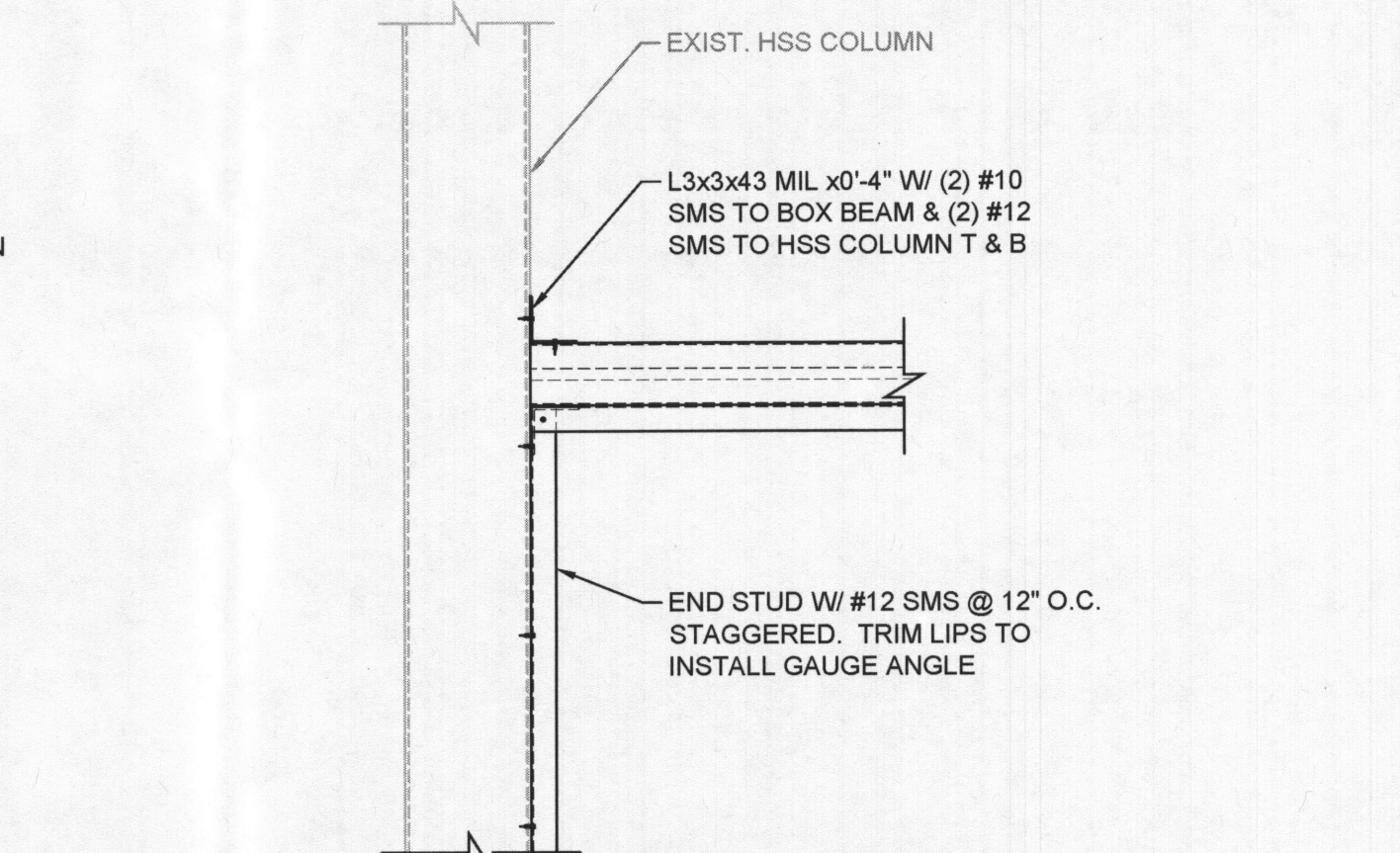
2 ROLL-UP DOOR INFILL ELEVATION
A15152 / 15220002 EMO SCALE: 1/4" = 1'-0"



3 WALL INFILL AT BOX BEAM
A15152 / 15220003 EMO SCALE: 3" = 1'-0"

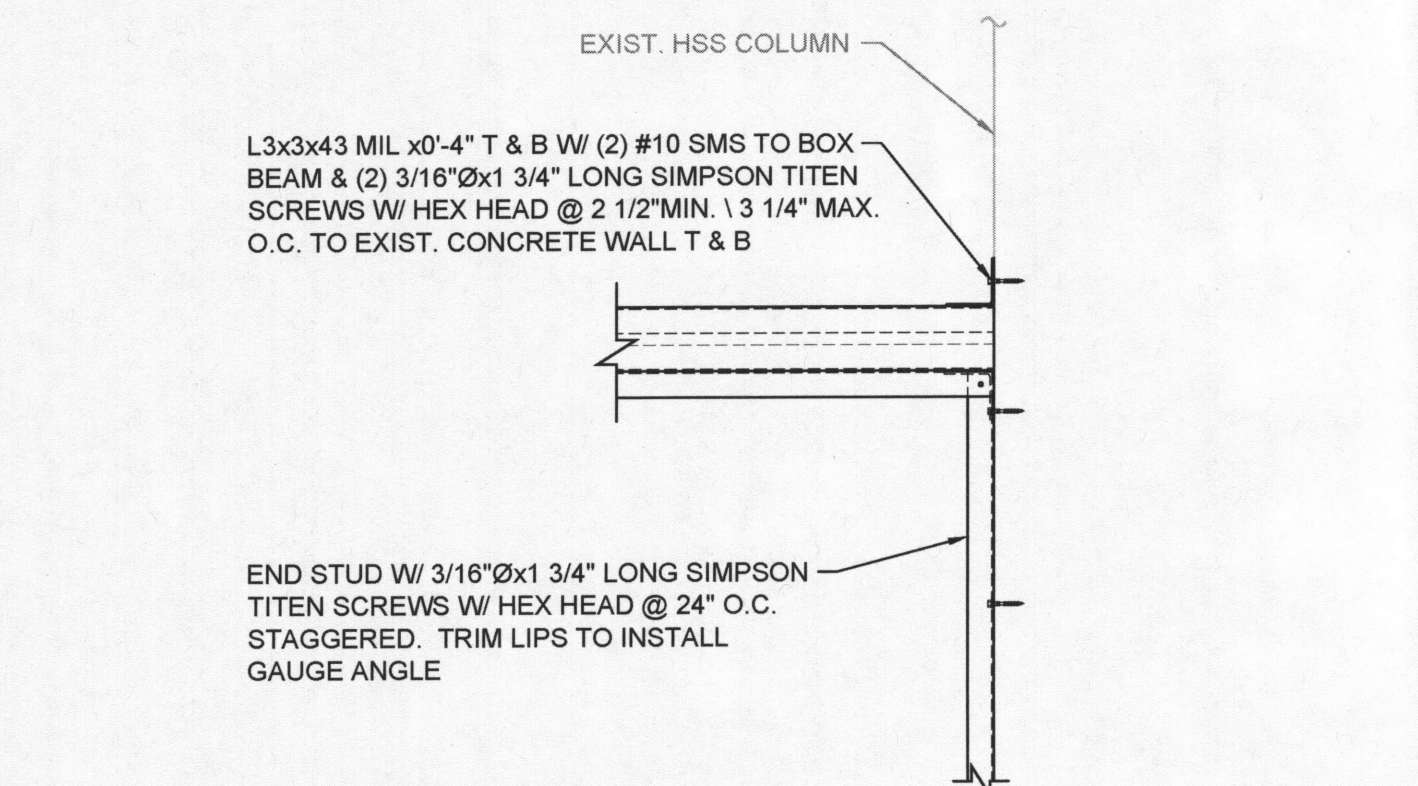


4 WALL INFILL AT BASE
A15152 / 15220004 EMO SCALE: 3" = 1'-0"

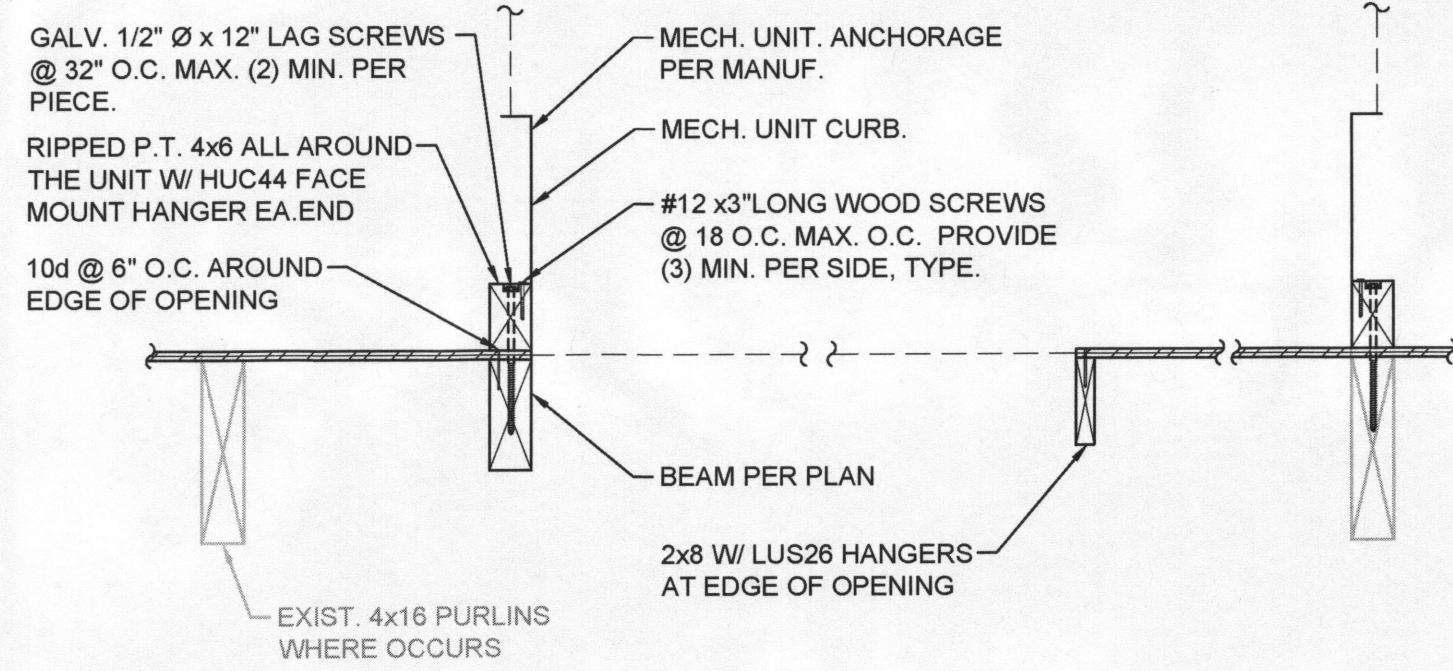


5 BOX BEAM TO EXIST. HSS CONNECTION
A15152 / 15220005 EMO SCALE: 1" = 1'-0"

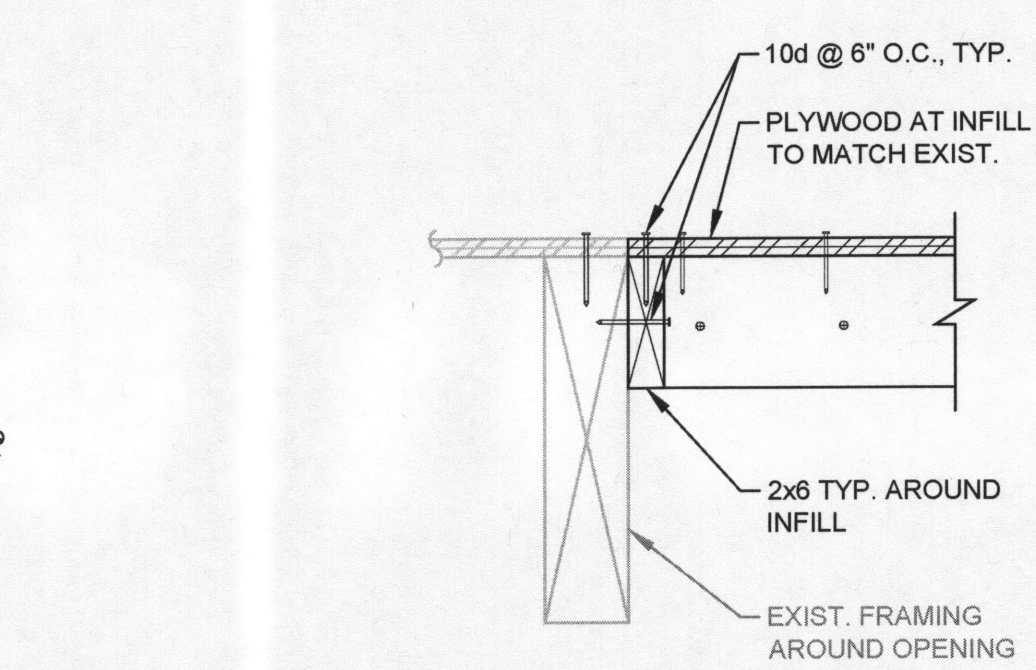
1 ROOF FRAMING PLAN
FILE NAME SCALE: 1/8" = 1'-0"



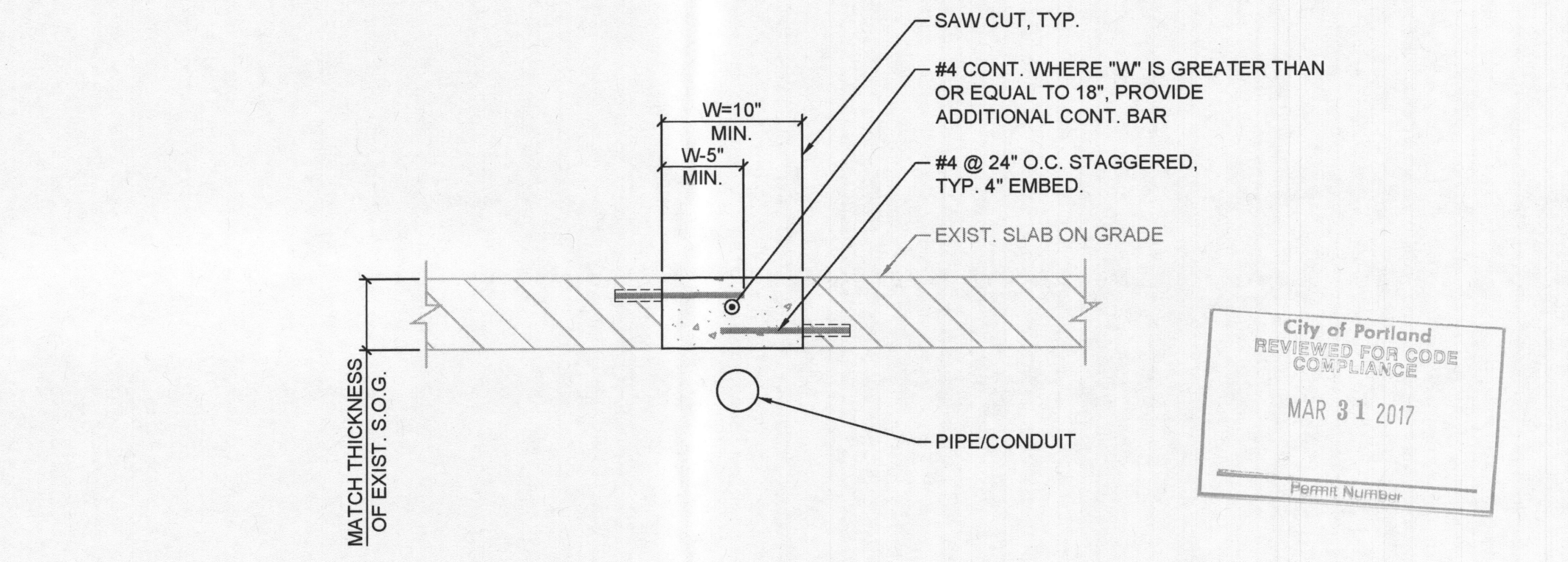
6 BOX BEAM TO EXIST. CONCRETE TILT-UP WALL
A15152 / 15220006 EMO SCALE: 1" = 1'-0"



7 MECHANICAL RTU CURB
A15152 / 15220007 EMO SCALE: 3/4" = 1'-0"



8 INFILL OF EXIST. ROOF OPENINGS
A15152 / 15220008 EMO SCALE: 1 1/2" = 1'-0"



9 TYP. SLAB ON GRADE SAWCUT/INFILL
A15152 / 15220009 EMO SCALE: 1" = 1'-0"