

GOVERNING CODE	2017 PIKES PEAK REGIONAL BUILDING (2015 IBC)
SEISMIC	CATEGORY= B
	I = 1.00
	R = 6.5
ULT. WIND SPEED (3-SECOND GUST)	130MPH
	EXPOSURE C
ROOF LOADS	DEAD 20 PSF
	SNOW 40 PSF
FLOOR LOADS	DEFLECTION LL=L/360 TL=L/240
	DEAD 12 PSF
DECK LOADS	LIVE 40 PSF
	DEAD 12 PSF
	LIVE 40 PSF
MAX. SOIL BEARING PRESSURE	1500 PSF
EQUIVALENT FLUID PRESSURE	45 PCF

NOTE: THIS ENGINEERING DESIGN ASSUMES THE LOADS AND CRITERIA LISTED ABOVE. CONTRACTOR SHALL REVIEW THE LOADS & GEOTECHNICAL REPORT AND CONTACT YORK ENGINEERING PRIOR TO CONSTRUCTION IF ANY ADJUSTMENTS ARE REQUIRED. THE LOADS ABOVE ASSUME NO RADIANT HEAT FLOORING. FOUNDATION DESIGN IS IN ACCORDANCE WITH GEOQUEST, LLC SUBSURFACE INVESTIGATION FOUNDATION RECOMMENDATIONS, PROJECT NUMBER 20-0397, DATED MAY, 19, 2020. DESIGN IS SUBJECT TO REVISION BASED ON RESULTS OF OPEN HOLE OBSERVATION.

FOOTING, FOUNDATION AND CONCRETE

- FOOTING DESIGN IS BASED ON ALLOWABLE SOIL BEARING PRESSURE AS PER GEOTECHNICAL REPORT, SEE PLAN. IF A PROJECT SOILS REPORT HAS BEEN COMPLETED, FOLLOW ALL REPORT RECOMMENDATIONS. FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY. NO FOOTINGS SHALL BE PLACED IN WATER OR ON FROZEN GROUND. ALL FOOTINGS TO BE PLACED AT MIN. BELOW LOCAL FROST DEPTH, AND BE CONTINUOUS AND MONOLITHIC POUR.
- CHANGES IN ELEV. SHALL BE STEPPED WITH STEP HEIGHT NOT HIGHER THAN 1/2 THE STEP LENGTH AND NOT GREATER THAN 5'. NOTIFY ENGINEER IF GRADE DROPS OVER 8' IN 24' (GREATER THAN 1/3 SLOPE) SO THAT APPROPRIATE DESIGN CHANGES MAY BE MADE TO FOUNDATION AND FOOTINGS.
- ALL FOOTINGS, FOUNDATIONS, AND INTERIOR SLABS SHALL BE NORMAL WT. CONCRETE WITH A COMPRESSIVE STRENGTH OF 2,500 PSI MIN. U.N.O. TO MEET STRENGTH REQUIREMENTS (SEE CALCS., NO SPECIAL INSPECTIONS REQUIRED U.N.O., SEE PLAN) HOWEVER, PER IRC 402.2 USE 3000 PSI CONCRETE FOR DURABILITY PURPOSES. THE WATER/CEMENT RATIO SHALL BE NO GREATER THAN .50 WITH A MINIMUM CEMENT CONTENT OF 504 LBS. PER CUBIC YARD.
- ALL CONC. WORK SHALL BE PLACED, CURED, STRIPPED, AND PROTECTED AS REQUIRED BY ACI STANDARDS AND PRACTICES.
- ALL REINFORCING SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI STANDARD 318. REINFORCING SHALL BE FREE FROM MUD AND OIL AND OTHER NON-METALLIC COATINGS THAT HAMPER BONDING CAPACITY.
- OWNER/CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS LISTED ON THE DRAWING. VERIFICATION OF ALL SITE CONDITIONS INCLUDING SITE STABILITY IS THE RESPONSIBILITY OF OTHERS.
- ALLOW 14 DAYS FOR CONCRETE TO CURE PRIOR TO BACKFILL.
- STRUCTURAL CONCRETE EXPOSED TO FREEZE THAW CYCLES SHALL HAVE 5% AIR ENTRAINMENT, MIN.
- RUN FOOTINGS CONTINUOUS UNDER ALL DOOR OPENINGS, SEE PLAN.
- SILL PLATE J-BOLTS SHALL BE A307 WITH 7" MIN. EMBEDMENT IN CONCRETE U.N.O., SEE PLAN.
- TITEN HD BOLTS OR EPOXY THREADED RODS MAY BE USED AS SUBSTITUTION FOR SILL PLATE J-BOLTS AT SAME SIZE AND SPACING AS J-BOLTS. USE 6" TITEN HD OR WEDGE ANCHOR WITH MIN 1" EDGE DISTANCE FOR SINGLE SILL PLATE AND 8" BOLTS FOR DBL PLATE.
- ALL FOUNDATION HOLDOWN STRAPS/ANCHORS SHALL BE ALIGNED WITH END OF SHEAR WALL ABOVE AND SHALL ATTACH TO FULL HEIGHT KING STUDS U.N.O., SEE PLAN. PROVIDE WOOD POST AT EACH HOLDOWN PER THE HOLDOWN SCHEDULE. DIMENSIONS TO HOLDOWN LOCATIONS MUST BE FIELD VERIFIED.
- FOOTINGS TO BE CENTERED ON WALLS AND COLUMNS/POSTS U.N.O., SEE PLAN.
- USE SIMPSON SET EPOXY FOR CONCRETE ANCHORS U.N.O., SEE PLAN. CONTINUOUS SPECIAL INSPECTIONS REQUIRED ON ALL EPOXY OPERATIONS UNLESS WAIVED BY ENGINEER AND THE BUILDING OFFICIAL.
- LAP REBAR 48 BAR DIAMETERS U.N.O., SEE PLAN. REINFORCING IN SLABS ON GRADE MAY BE LAPPED 24". SPLICES IN BOTTOM STEEL IN CONCRETE BEAMS AND CAST IN PLACE SUSPENDED SLABS SHALL BE STAGGERED 48 BAR DIAMETERS.
- LINTELS IN CONCRETE WALLS MAY BE AS FOLLOWS U.N.O., SEE PLAN; FOR 3'-0" MAX SPAN, 8" DEEP WITH (2) #4 BOTT. BARS, FOR 6'-0" MAX SPAN, 12" DEEP WITH (2) #4 BOTT. BARS.
- PROVIDE (2) EDGE BARS ABOVE CONCRETE WALL OPENINGS AND (1) BAR EACH SIDE AND BELOW OPENINGS U.N.O., SEE PLAN. MATCH SIZE OF EDGE BARS WITH TYPICAL WALL REINFORCING AND PLACE WITHIN 4" OF OPENING EDGE. EXTEND BARS 48 BAR DIAMETERS PAST EDGE OF OPENING OR EXTEND AS FAR AS POSSIBLE AND PROVIDE 90° STANDARD HOOK AT END.
- PROVIDE HORIZONTAL BAR WITHIN 3" OF TOP AND BOTT. OF WALL AND PROVIDE VERTICAL BAR AT ALL WALL CORNERS AND ENDS.

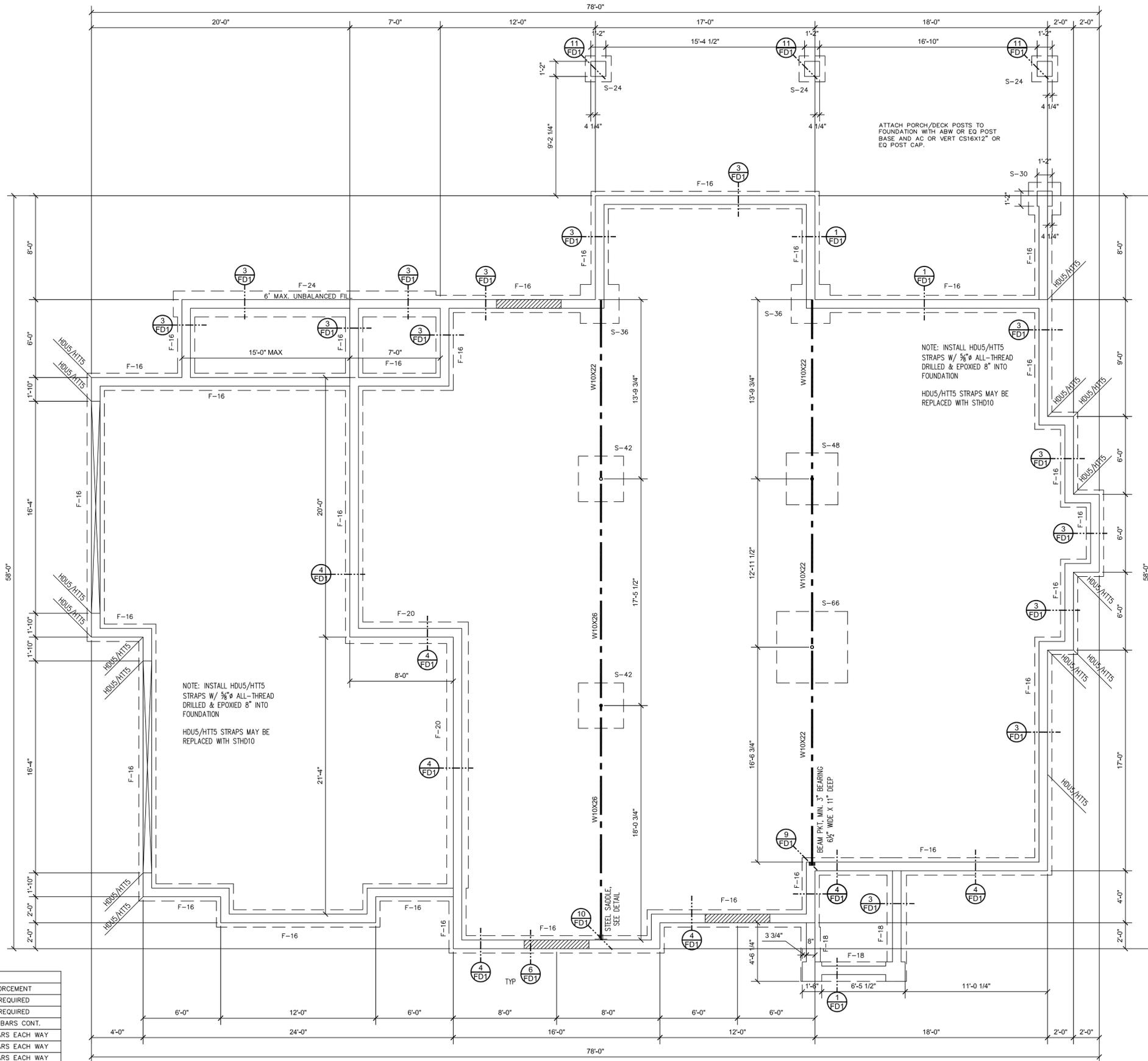
YORK ENGINEERING INC. SPECIFICATIONS IS LIMITED TO THE STRUCTURAL DESIGN OF THE MAIN SUPPORTING ELEMENTS OF THIS STRUCTURE. NO OTHER DISCIPLINES OF THIS STRUCTURE INCLUDING BUT NOT LIMITED TO ARCHITECTURAL, ELECTRICAL, PLUMBING, MECHANICAL WERE NOT REVIEWED FOR CODE COMPLIANCE OR COMPATIBILITY WITH THE DESIGN. THE PURPOSE OF THIS ENGINEERING IS TO HELP REDUCE STRUCTURAL DAMAGE AND LOSS OF LIFE DUE TO SEISMIC ACTIVITY AND/OR HIGH WIND CONDITIONS.

NOTE: THIS ENGINEERING ASSUMES THAT THE CLEARANCE & SETBACK REQUIREMENTS LISTED IN IRC SECTION R403.1.7 ARE MET. IF THESE PROVISIONS ARE NOT MET, CONTACT THE ENGINEER FOR FURTHER DESIGN.

NOTE: THIS ENGINEERING ASSUMES THAT THE SITE IS STABLE HAVING NO GLOBAL STABILITY CONCERNS OR HAZARDS. IF THIS IS NOT TRUE, CONTACT SOILS ENGINEER AND PROVIDE SOILS/SLOPE STABILITY REPORT TO YORK ENGINEERING FOR REVIEW AND FURTHER DESIGN.

FOOTING SCHEDULE:				
TYPE	WIDTH	LENGTH	THICK	REINFORCEMENT
F-16	16"	CONT.	8"	NOT REQUIRED
F-18	18"	CONT.	8"	NOT REQUIRED
F-20	20"	CONT.	8"	(2) # 4 BARS CONT.
S-24	24"	24"	10"	(3) # 4 BARS EACH WAY
S-30	30"	30"	10"	(3) # 4 BARS EACH WAY
S-36	36"	36"	10"	(4) # 4 BARS EACH WAY
S-42	42"	42"	12"	(5) # 4 BARS EACH WAY
S-48	48"	48"	12"	(6) # 4 BARS EACH WAY
S-66	66"	66"	12"	(8) # 4 BARS EACH WAY

NOTE: FOOTING REINFORCEMENT IN THIS SCHEDULE AND NOTED ON PLANS IS BOTTOM REINFORCING U.N.O. AND SHALL BE PLACED IN BOTTOM 1/2 OF FOOTING THICKNESS, WITH 3" CONCRETE CLEAR COVER, MIN.



FOOTING/FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

Released for Permit
11/19/2020 9:15 AM
CONSTRUCTION



Structural Design and Analysis
7955 E Arapahoe Ct
Centennial, Colorado 80112
(720) 990-5900

York Engineering

GJ GARDNER HOMES - MONUMENT
LCHAT RESIDENCE
19089 MALMSBURY COURT
MONUMENT, CO

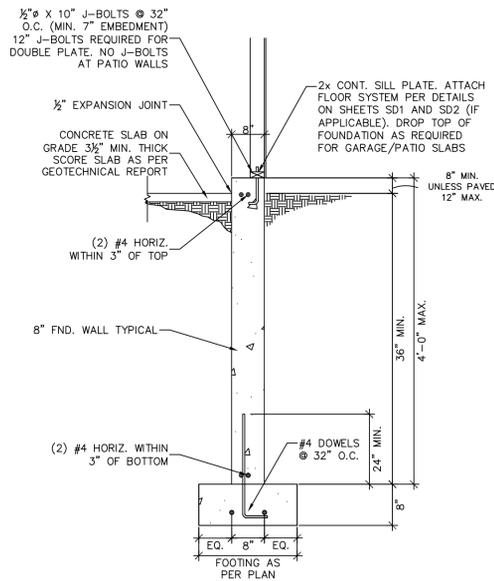
S1

NOTE: WALL MUST BE BACKFILLED ON BOTH SIDES ONLY

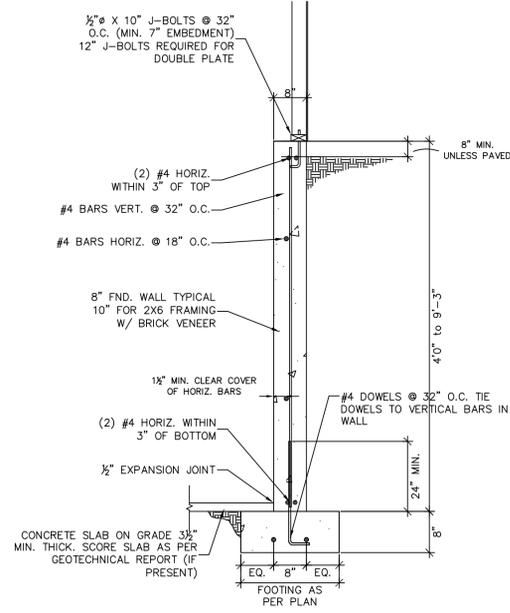
NOTE: ALL FOUNDATION STEPS SHALL BE 2'0" MINIMUM.

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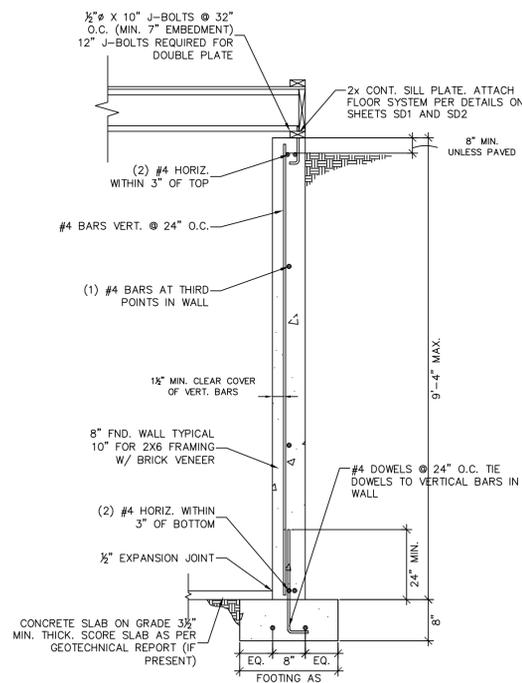
NOTE: BARS SHALL BE PLACED WITHIN 2" OF THE OPENING AND EXTEND 24" BEYOND THE EDGE OF THE OPENING



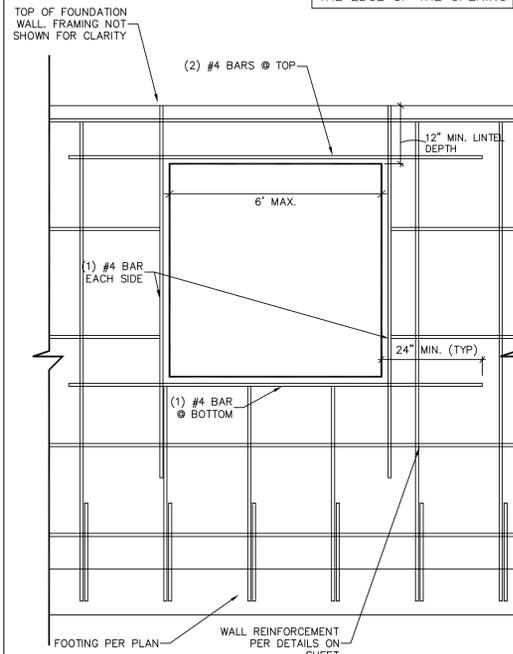
1 4' FOUNDATION WALL BACKFILLED
NTS
TYPICAL DETAIL, USE WHEN APPLIES



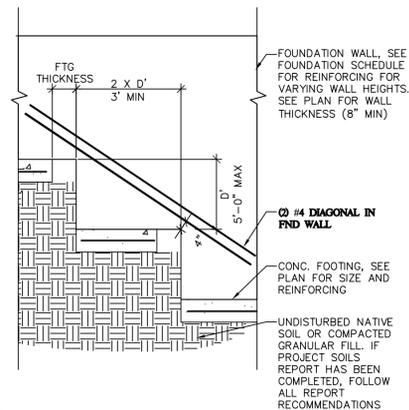
3 STEPPED FOUNDATION WALL
NTS
TYPICAL DETAIL, USE WHEN APPLIES



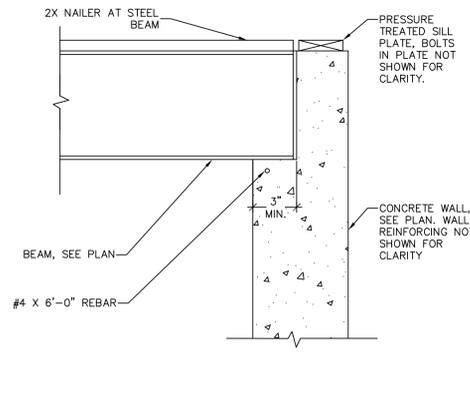
4 FULL-HEIGHT FOUNDATION WALL
NTS
USE ONLY IF CALLED OUT ON PLANS



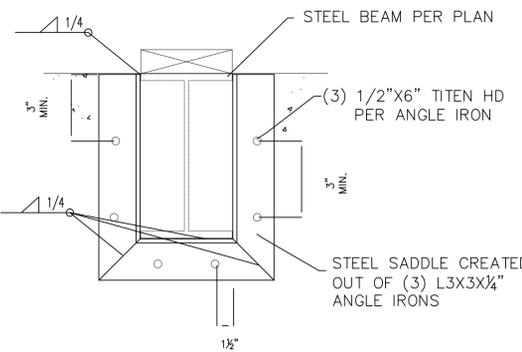
6 REINFORCEMENT AROUND OPENINGS
NTS
TYPICAL DETAIL, USE WHEN APPLIES



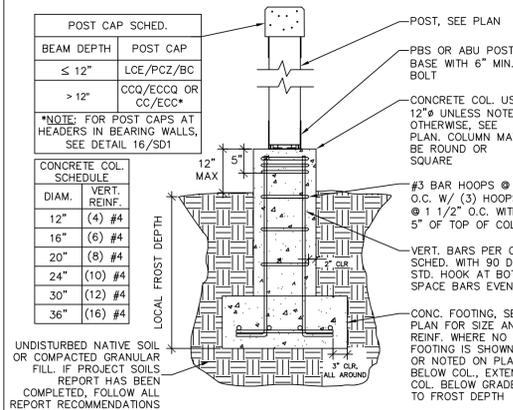
7 FOOTING STEP
NTS
TYPICAL DETAIL, USE WHEN APPLIES



9 BEAM POCKET IN CONCRETE WALL
NTS
TYPICAL DETAIL, USE WHEN APPLIES



10 STEEL BEAM SADDLE
NTS



11 ISOLATED WOOD POST AT CONCRETE COLUMN
NTS
TYPICAL DETAIL, USE WHEN APPLIES

CONTRACTOR AND ALL SUB-CONTRACTORS SHALL FOLLOW ALL STANDARD BUILDING CODES, PRACTICES, AND REQUIREMENTS AS LISTED IN THE IRC. CONTRACTOR TO VERIFY ALL DIMENSIONS, SPANS, & CONDITIONS AND NOTIFY ENGINEER OF ANY ERRORS, OMISSIONS, OR DISCREPANCIES PRIOR TO CONSTRUCTION. IF DISCREPANCIES ARE FOUND, THE MORE STRINGENT SPECIFICATION SHALL BE FOLLOWED. DIMENSIONS SHOWN ARE BASED ON ARCHITECTURAL DRAWINGS PROVIDED TO YORK ENGINEERING. IF DISCREPANCIES EXIST, DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS SHALL BE FOLLOWED. CONTRACTOR SHALL ASSURE THAT ALL MATERIALS ARE USED PER MANUFACTURER RECOMMENDATIONS.

SHEATHING NOTES

1. STAGGER ROOF AND FLOOR SHEATHING JOINTS, SEE ROOF SHEATHING LAYOUT DETAIL.
2. INSTALL ROOF AND FLOOR SHEATHING WITH LONG DIMENSION PERPENDICULAR TO TRUSSES/JOISTS U.N.O., SEE PLAN. SHEATHING INSTALLED WITH LONG DIMENSION PARALLEL TO JOISTS/TRUSSES SHALL BE 5 PLY PLYWOOD CONFORMING TO APA STANDARD PS-1.
3. NAILS SHALL BE 1/2" MIN FROM SHEATHING EDGE.
4. ALL FLOOR AND ROOF SHEATHING PIECES SHALL BE 48" X 48" MIN.
5. PROVIDE EDGE NAILING AT ALL SUPPORTED AND BLOCKED PANEL EDGES AND PER DETAILS.

WALL SHEATHING: 7/16" APA RATED 24/16 MIN. U.N.O., SEE PLAN. ALL EXTERIOR WALLS AND VERTICAL SURFACES SHALL BE SHEATHED WITH SHEATHING MANUFACTURED WITH EXTERIOR GLUE. SEE PLANS AND SHEAR WALL SCHEDULE FOR NAILING REQUIREMENTS.

ROOF SHEATHING: 7/16" APA RATED 24/16 MIN. WITH 8d NAILS AT 6" O.C. EDGE NAILING AND 12" O.C. FIELD NAILING FOR ROOF SNOW LOAD LESS THAN OR EQUAL TO 40 PSF. FOR ROOF SNOW LOAD GREATER THAN 40 PSF USE 5/8" APA RATED 40/20 MIN. WITH 10d NAILS AT 6" O.C. EDGE NAILING AND 12" O.C. FIELD NAILING U.N.O. SEE PLAN.

FLOOR SHEATHING: 3/4" T&G APA RATED 40/20 MIN. (48/24 WHEN FLOOR TRUSSES/JOISTS ARE AT 24" O.C.) WITH 8d NAILS AT 6" O.C. EDGE NAILING AND 12" O.C. FIELD NAILING U.N.O., SEE PLAN. GLUE SHEATHING TO JOISTS/TRUSSES WITH ADHESIVE CONFORMING TO APA SPECIFICATIONS.

EXTERIOR WALL SHEATHING NOTES

UNLESS NOTED OTHERWISE, SHEET ALL EXTERIOR WALLS WITH 5/8" OSB SHEETING. FASTEN TO STUDS WITH 8d NAILS @ 4" O.C. EDGE 12" O.C. FIELD OR 16g STAPLES AT HALF SPACING. BLOCK ALL PANEL EDGES

FRAMING NOTES

1. SILL PLATE J-BOLTS SHALL HAVE A 1" STANDARD WASHER AT EACH BOLT. IF SLOTTED WASHER IS USED, ADD CUT WASHER.
2. ALL FOUNDATION HOLDOWN STRAPS/ANCHORS SHALL BE ALIGNED WITH END OF SHEAR WALL AND/OR INTER LEVEL STRAP ABOVE (WHERE OCCURS) AND SHALL ATTACH TO FULL HEIGHT KING STUDS U.N.O., SEE PLAN. PROVIDE WOOD POST AT EACH HOLDOWN PER THE HOLDOWN SCHEDULE.
3. STRAPS CALLED OUT ON FLOOR AND FLOOR FRAMING PLANS ARE VERTICAL INTER LEVEL STRAPS AND SHALL BE CENTERED ON RIM BOARD AND ALIGNED WITH END OF SHEAR WALL ABOVE AND ATTACHED TO FULL HEIGHT KING STUDS UNLESS NOTED OR SHOWN OTHERWISE, SEE PLANS.
4. WALL DBL TOP PLATES SHALL BE 2X MIN. AND SHALL LAP 36" AT ALL SPLICES WITH (12) 16d NAILS STAGGERED EACH SIDE OF SPLICE U.N.O. SEE PLAN. WHERE PLATES DO NOT LAP, PROVIDE CS16X32" STRAP TO SPLICE PLATES. ALIGN WALL STUD WITH PLATE JOINTS.
5. PROVIDE DBL CANTILEVER FLOOR JOISTS BELOW (2) PLY (OR MORE) TRIMMERS/POSTS AND WHERE SHEAR WALL HOLDOWN STRAPS ARE INDICATED.
6. ATTACH (2) PLY HEADERS TOGETHER WITH (3) 16d AT 12" O.C. [(2) 16d OK FOR 2X6 HEADERS] USE (3) 16d AT 12" O.C. EACH SIDE FOR (3) PLY HEADERS. USE (4) 16d AT (2) AND (3) PLY HEADERS WHEN HEADER HEIGHT IS GREATER THAN 11". ATTACH (4) PLY HEADERS TOGETHER WITH (2) 1/2" THROUGH BOLTS AT 16" O.C. OR (2) SDS 1/4" X 6" SCREWS AT 16" O.C. EACH SIDE OF HEADER U.N.O., SEE PLAN.
7. SEE BEARING WALL CONSTRUCTION TABLE FOR WALL FRAMING REQUIREMENTS.
8. NAIL STUDS OF INTERSECTING WALLS W/16d NAILS @ 6" O.C.
9. EDGE NAIL SHEATHING TO ALL DRAG MEMBERS.
10. WHEN CHIMNEY IS SUPPORTED BY ROOF/FLOOR FRAMING, TRUSS/JOIST MFR TO DESIGN TRUSSES/JOISTS TO SUPPORT CHIMNEY WEIGHT INCLUDING VENEER WHERE OCCURS. CHIMNEYS CANTILEVERING MORE THAN 4' ABOVE ROOF SHALL BE FRAMED WITH 2X6 @ 12" O.C., USE LSL 2X6 @ 12" O.C. FOR CHIMNEYS EXTENDING MORE THAN 8' ABOVE THE ROOF. CHIMNEYS EXTENDING MORE THAN 10' ABOVE THE ROOF SHALL BE LATERALLY BRACED (WITHIN 4' OF CHIMNEY TOP) TO THE ROOF FRAMING WITH CABLES OR RODS ANCHORED TO RESIST SEISMIC AND WIND LOADS. CHIMNEYS THAT EXTEND MORE THAN 6' ABOVE THE ROOF AND ARE SUPPORTED BY ROOF FRAMING (FRAMING DOES NOT EXTEND CONTINUOUS THROUGH ROOF) SHALL HAVE A MSTC48B3 ANCHOR AT EACH CORNER (HOOKED UNDER ROOF JOIST OR TRUSS TOP CHORD).
11. ATTACH STEEL BEAMS TO WOOD POSTS PER BEAM POCKET IN WOOD WALL DETAIL.
12. ALL HARDWARE SHOWN ON PLANS TO BE AS SPECIFIED OR EQUIVALENT

CS16 FLOOR TIE STRAPS

LAP UPPER LEVEL WALL SHEATHING TO CENTER OF RIM OR WALL DBL TOP PLATE BELOW OR INSTALL VERTICAL CS16X36" STRAPS AT 32" O.C. (CENTERED ON RIM).

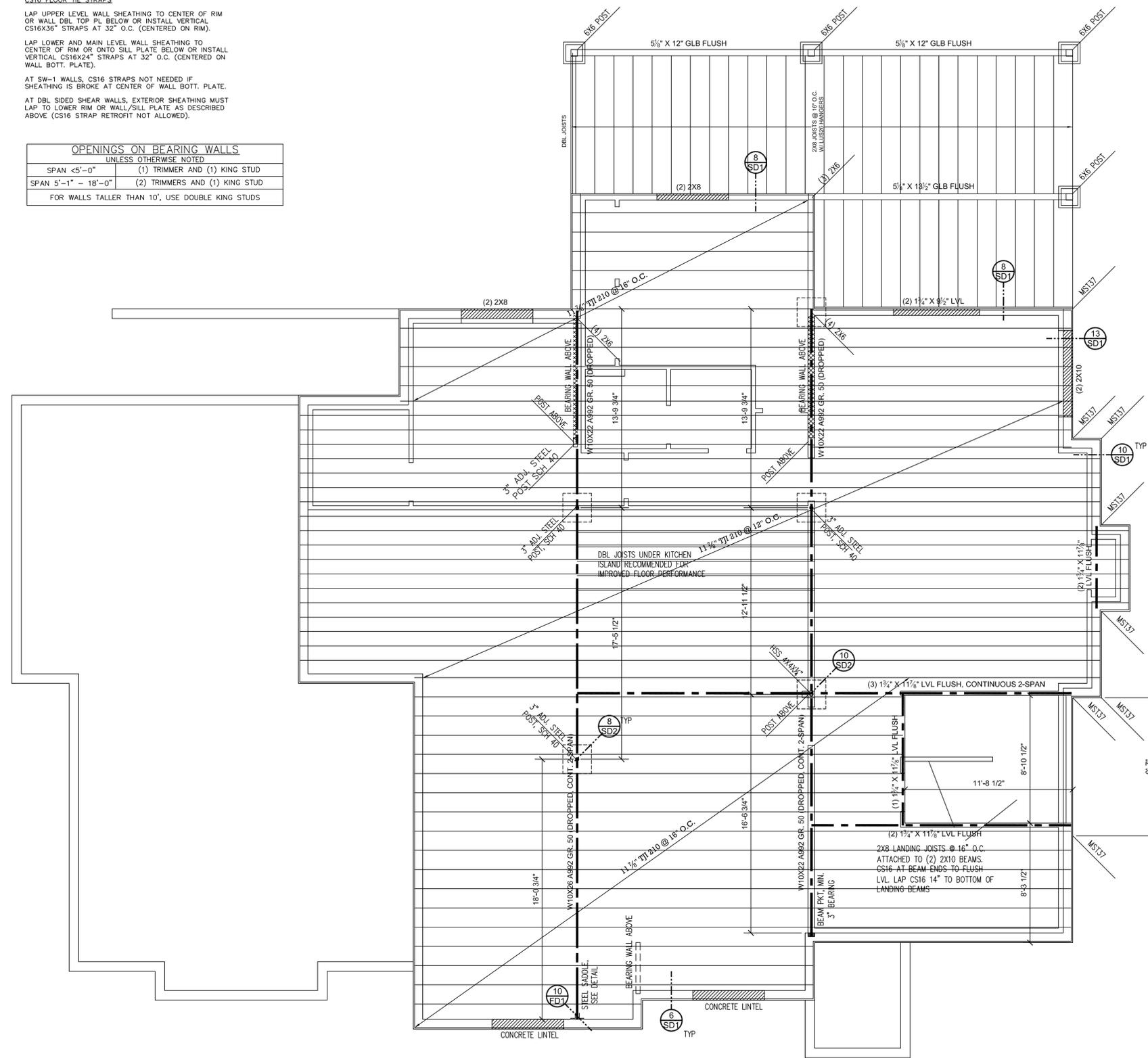
LAP LOWER AND MAIN LEVEL WALL SHEATHING TO CENTER OF RIM OR ONTO SILL PLATE BELOW OR INSTALL VERTICAL CS16X24" STRAPS AT 32" O.C. (CENTERED ON WALL BOTTL. PLATE).

AT SW-1 WALLS, CS16 STRAPS NOT NEEDED IF SHEATHING IS BROKE AT CENTER OF WALL BOTTL. PLATE.

AT DBL SIDED SHEAR WALLS, EXTERIOR SHEATHING MUST LAP TO LOWER RIM OR WALL/SILL PLATE AS DESCRIBED ABOVE (CS16 STRAP RETROFIT NOT ALLOWED).

OPENINGS ON BEARING WALLS	
UNLESS OTHERWISE NOTED	
SPAN <5'-0"	(1) TRIMMER AND (1) KING STUD
SPAN 5'-1" - 18'-0"	(2) TRIMMERS AND (1) KING STUD
FOR WALLS TALLER THAN 10', USE DOUBLE KING STUDS	

FRAMING HANGER TABLE		
(UNLESS OTHERWISE NOTED)		
JOIST/BEAM	TOP FLANGE HANGER	FACE MOUNT HANGER
1 1/8" TJI 210	ITS2.06/11.88	IUS2.06/11.88
(2) 1 1/8" TJI 210	MIT4.28/11.88	MIU4.28/11
1 1/8" LVL BEAM	MIT11.88	HU11
(2) 1 1/8" LVL BEAM	MIT411.88	HUS412



MAIN FLOOR FRAMING PLAN

SCALE: 1/4" = 1'-0"

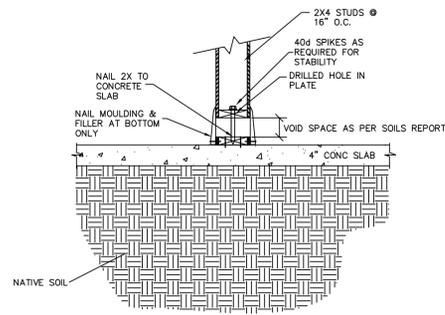


Structural Design and Analysis
7955 E. Arapahoe Ct
Centennial, Colorado 80112
(720) 990-5900

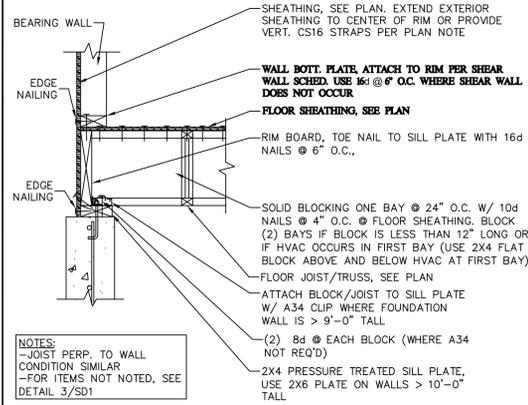


GJ GARDNER HOMES - MONUMENT
LAGHAT RESIDENCE
19089 MALMSBURY COURT
MONUMENT, CO

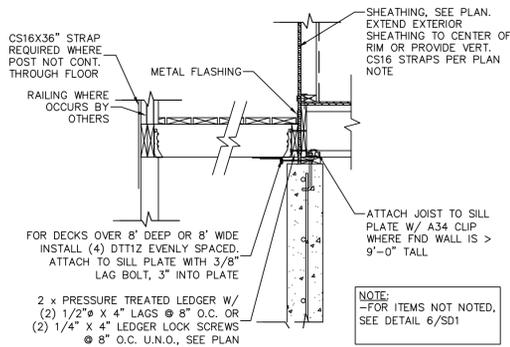
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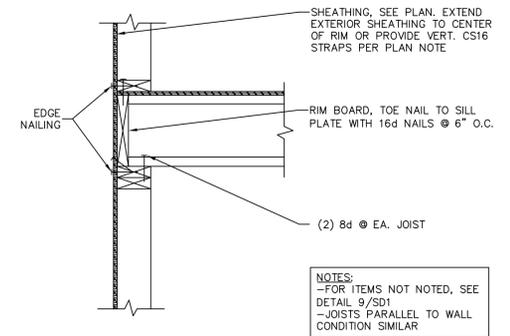
2 INTERIOR WALL ON SLAB
NTS
TYPICAL DETAIL, USE WHEN APPLIES



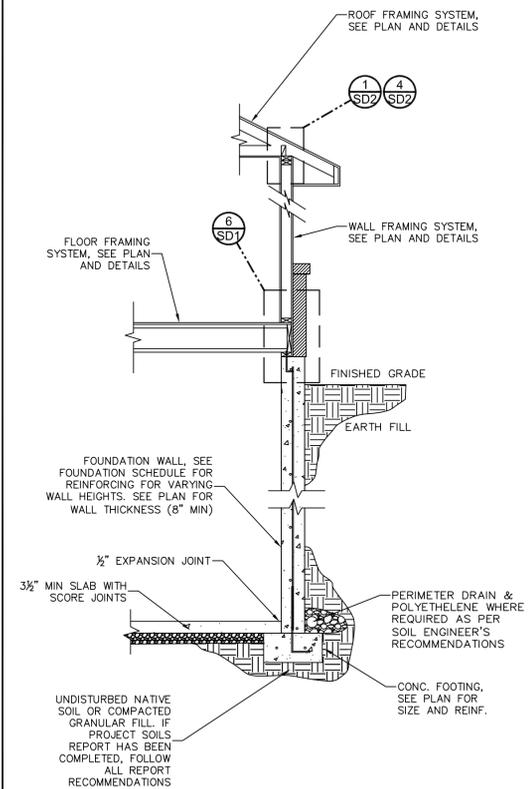
6 FLOOR JOIST AT FOUNDATION WALL
NTS
TYPICAL DETAIL, USE WHEN APPLIES



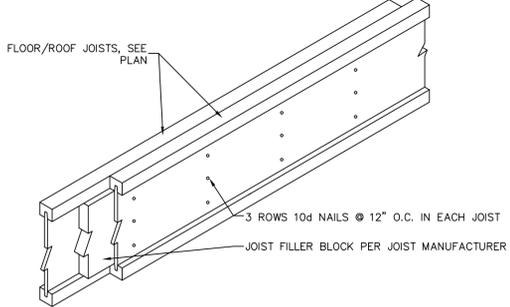
8 DECK ATTACHMENT TO WOOD FLOOR
NTS
TYPICAL DETAIL, USE WHEN APPLIES



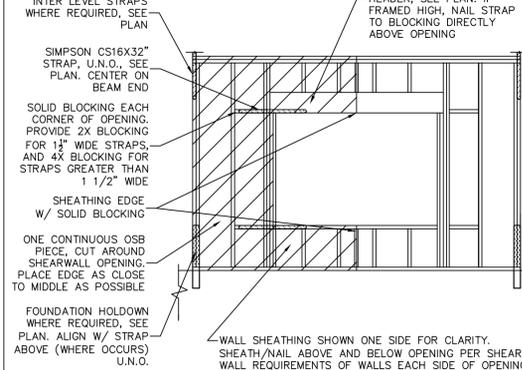
10 FLOOR JOIST AT WOOD WALL
NTS
TYPICAL DETAIL, USE WHEN APPLIES



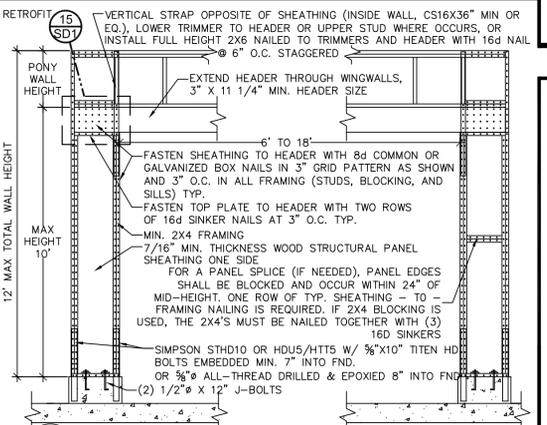
TYP. WALL SECTION
NTS



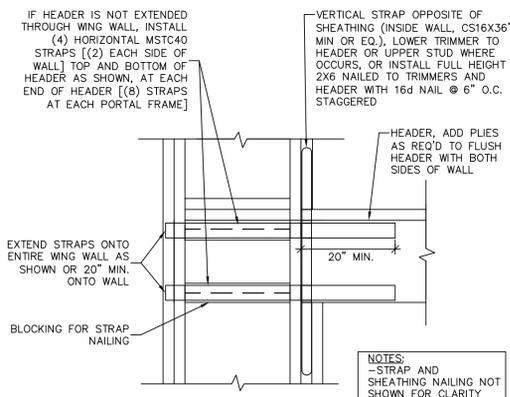
12 DOUBLE JOIST CONNECTION
NTS
TYPICAL DETAIL, USE WHEN APPLIES



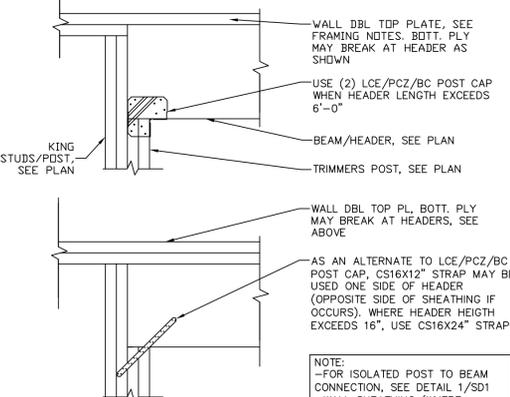
13 FORCE TRANSFER SHEAR WALL (FTW)
NTS
USE ONLY IF CALLED OUT ON PLANS



14 PORTAL FRAME 1ST STORY
NTS
USE ONLY IF CALLED OUT ON PLANS



15 PORTAL FRAME RETROFIT
NTS
TYPICAL DETAIL, USE WHEN APPLIES



16 HEADER TO TRIMMER CONN.
NTS
TYPICAL DETAIL, USE WHEN APPLIES

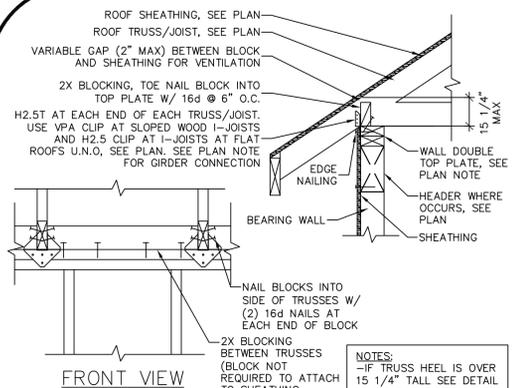
BEARING WALL CONSTRUCTION TABLE	
WALL HEIGHT	STUD FRAMING
0'-10'	2X4's @ 16" O.C. ²
10'-1" - 12'	2X4's @ 12" O.C. ²
0'-12'	2X6's @ 16" O.C.
12'-1" - 14'	2X6's @ 16" O.C.
14'-1" - 16'	2X6's @ 12" O.C.
16'-1" - 20'	2X6's @ 8" O.C.

NOTES:
1. FOR WALLS TALLER THAN 20' AND/OR OPENINGS GREATER THAN 18" WIDE, SEE PLAN.
2. USE 2X6 STUDS FOR ALL WALLS SUPPORTING 3 OR MORE FLOOR/ROOF LOADS.
3. KING STUDS/TRIMMERS NOTED REQUIRED AT EACH END OF WALL OPENING.
4. NAIL KING/TRIMMER PLYS TOGETHER W/ (2) 16d NAILS @ 9" O.C.

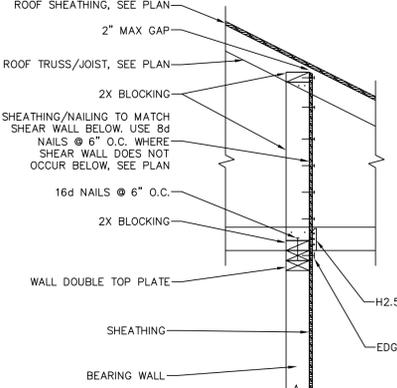
17 BEARING WALL CONSTRUCTION TABLE
NTS
TYPICAL DETAIL, USE WHEN APPLIES

ALL DETAILS MAY NOT BE APPLICABLE TO YOUR PLANS IF MARKED TYPICAL, USE AT ALL APPLICABLE LOCATIONS

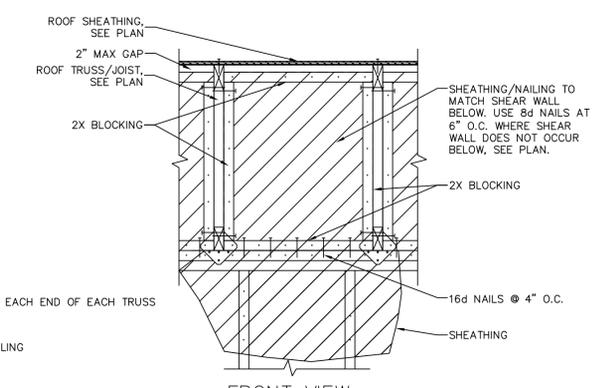




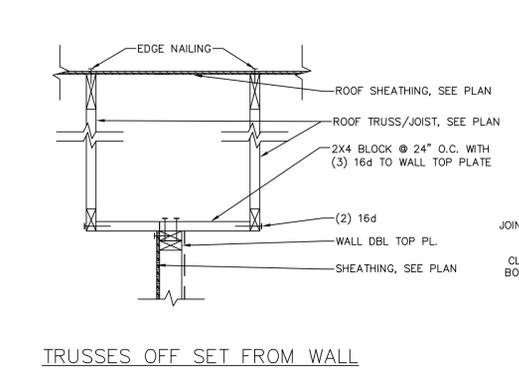
1 ROOF TRUSS AT WOOD WALL
NTS TYPICAL DETAIL, USE WHEN APPLIES



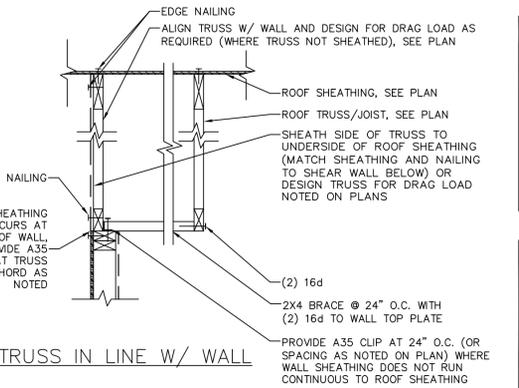
2 TRUSS DEPTH BLOCKING
NTS TYPICAL DETAIL, USE WHEN APPLIES



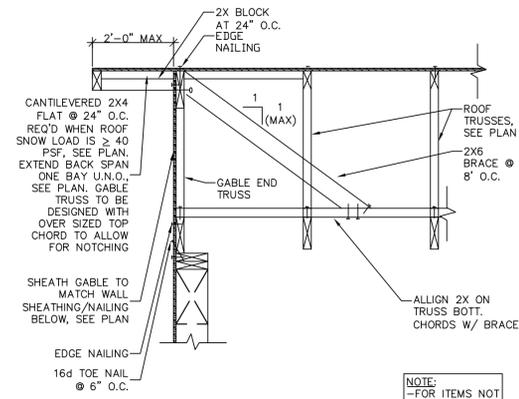
3 TRUSS PARALLEL TO INTERIOR SHEAR WALL
NTS TYPICAL DETAIL, USE ONLY WHEN CALLED OUT ON PLANS



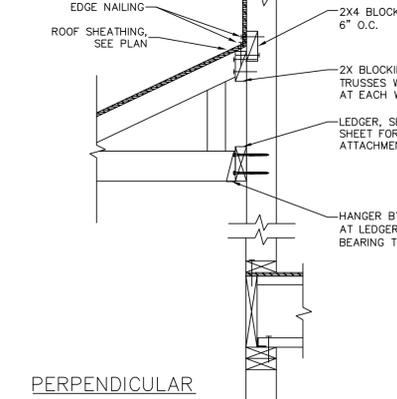
4 ROOF TRUSS AT WOOD WALL
NTS TYPICAL DETAIL, USE WHEN APPLIES



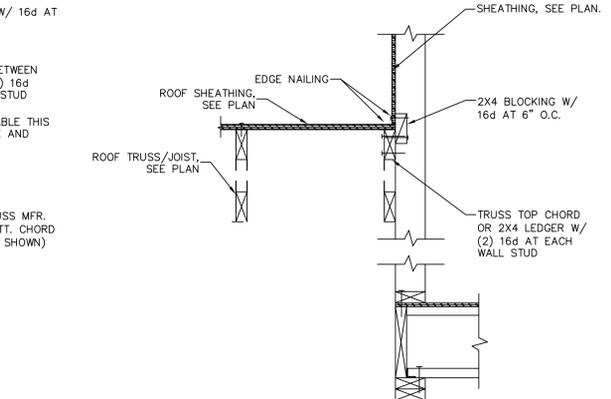
5 LOW ROOF SHEAR WALL
NTS TYPICAL DETAIL, USE WHEN APPLIES



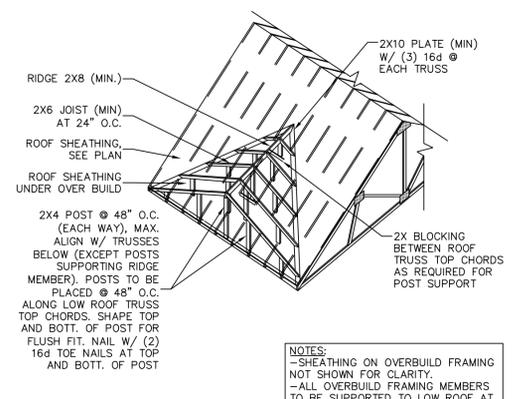
6 ROOF OVERBUILD
NTS TYPICAL DETAIL, USE WHEN APPLIES



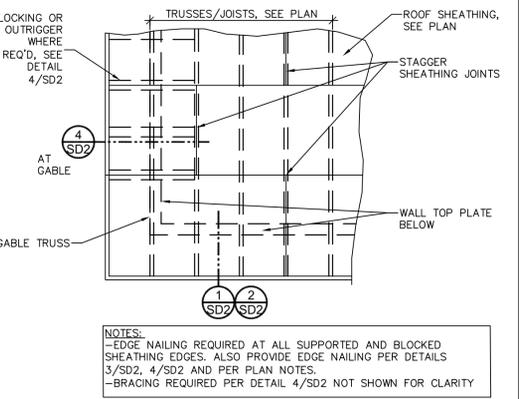
7 ROOF SHEATHING LAYOUT
NTS TYPICAL DETAIL, USE WHEN APPLIES



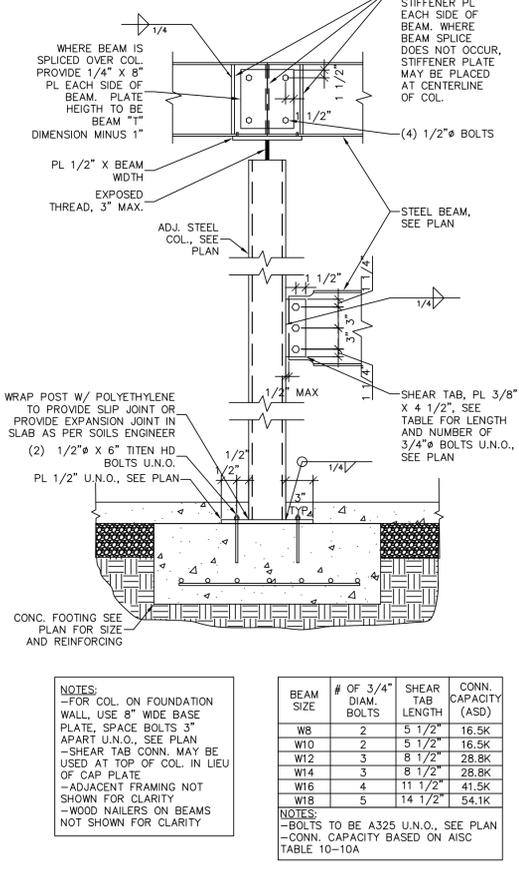
8 STEEL BEAM TO COLUMN CONNECTION
NTS TYPICAL DETAIL, USE WHEN APPLIES



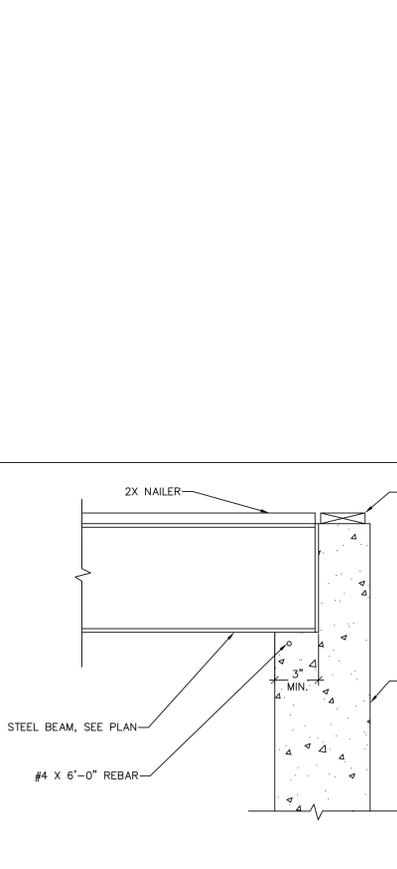
9 STEEL CONNECTION DETAILS
NTS TYP DETAIL, USE WHEN APPLIES



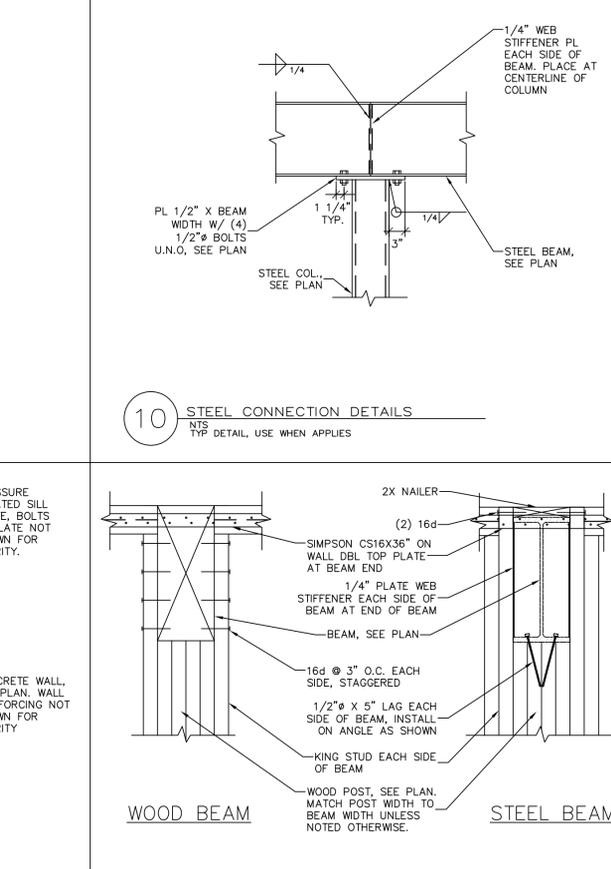
10 STEEL BEAM POCKET IN CONCRETE WALL
NTS TYPICAL DETAIL, USE WHEN APPLIES



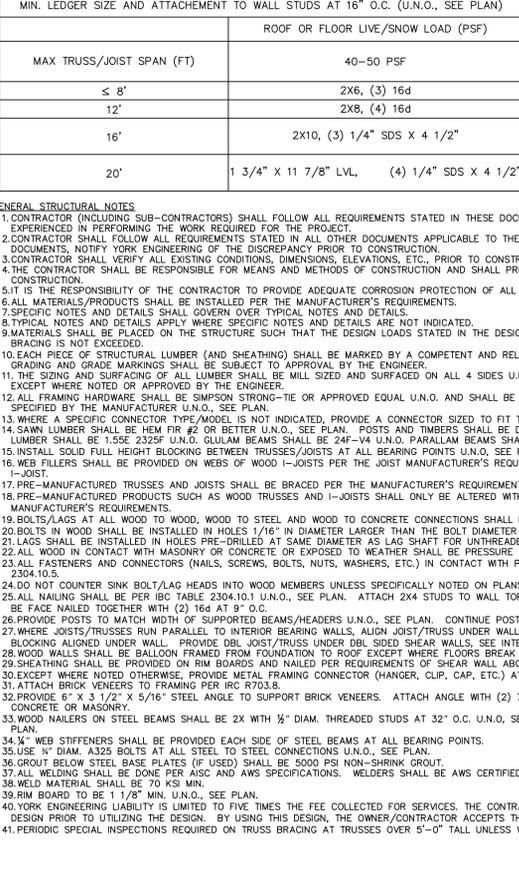
11 BEAM POCKET IN WOOD WALL
NTS TYPICAL DETAIL, USE WHEN APPLIES



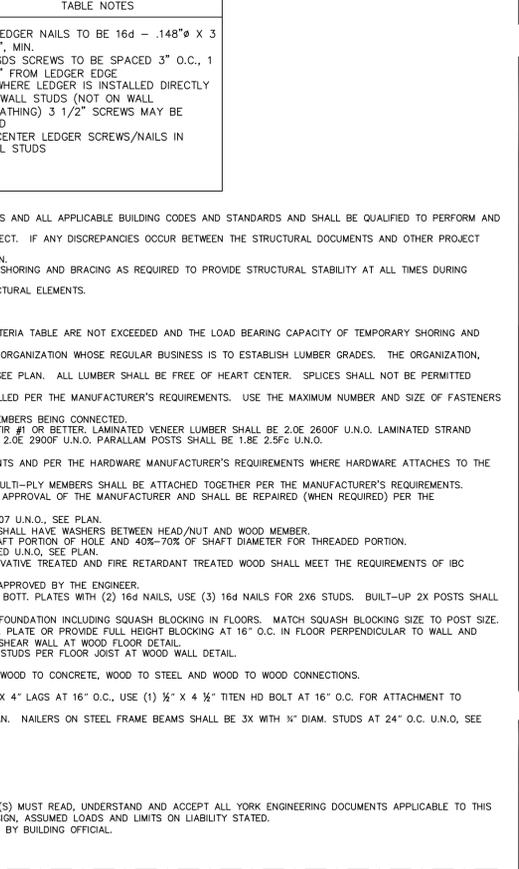
12 STEEL BEAM POCKET IN WOOD WALL
NTS TYPICAL DETAIL, USE WHEN APPLIES



13 STEEL BEAM POCKET IN WOOD WALL
NTS TYPICAL DETAIL, USE WHEN APPLIES



14 STEEL BEAM POCKET IN WOOD WALL
NTS TYPICAL DETAIL, USE WHEN APPLIES



15 STEEL BEAM POCKET IN WOOD WALL
NTS TYPICAL DETAIL, USE WHEN APPLIES

MIN. LEDGER SIZE AND ATTACHMENT TO WALL STUDS AT 16" O.C. (U.N.O., SEE PLAN)	ROOF OR FLOOR LIVE/SNOW LOAD (PSF)	TABLE NOTES
	40-50 PSF	1. LEDGER NAILS TO BE 16d - .148" x 3 1/2", MIN.
MAX TRUSS/JOIST SPAN (FT)		2. SDS SCREWS TO BE SPACED 3" O.C., 1 1/2" FROM LEDGER EDGE
≤ 8'	2X6, (3) 16d	3. WHERE LEDGER IS INSTALLED DIRECTLY ON WALL STUDS (NOT ON WALL SHEATHING) 3 1/2" SCREWS MAY BE USED
12'	2X8, (4) 16d	4. CENTER LEDGER SCREWS/NAILS IN WALL STUDS
16'	2X10, (3) 1/4" SDS X 4 1/2"	
20'	1 3/4" X 11 7/8" LVL, (4) 1/4" SDS X 4 1/2"	

GENERAL STRUCTURAL NOTES

- CONTRACTOR (INCLUDING SUB-CONTRACTORS) SHALL FOLLOW ALL REQUIREMENTS STATED IN THESE DOCUMENTS AND ALL APPLICABLE BUILDING CODES AND STANDARDS AND SHALL BE QUALIFIED TO PERFORM AND EXPERIENCED IN PERFORMING THE WORK REQUIRED FOR THE PROJECT.
- CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS STATED IN ALL OTHER DOCUMENTS APPLICABLE TO THE PROJECT. IF ANY DISCREPANCIES OCCUR BETWEEN THE STRUCTURAL DOCUMENTS AND OTHER PROJECT DOCUMENTS, NOTIFY YORK ENGINEERING OF THE DISCREPANCY PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, ELEVATIONS, ETC., PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AND SHALL PROVIDE SHORING AND BRACING AS REQUIRED TO PROVIDE STRUCTURAL STABILITY AT ALL TIMES DURING CONSTRUCTION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE CORROSION PROTECTION OF ALL STRUCTURAL ELEMENTS.
- ALL MATERIALS/PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURER'S REQUIREMENTS.
- SPECIFIC NOTES AND DETAILS SHALL GOVERN OVER TYPICAL NOTES AND DETAILS.
- TYPICAL NOTES AND DETAILS APPLY WHERE SPECIFIC NOTES AND DETAILS ARE NOT INDICATED.
- MATERIALS SHALL BE PLACED ON THE STRUCTURE SUCH THAT THE DESIGN LOADS STATED IN THE DESIGN CRITERIA TABLE ARE NOT EXCEEDED AND THE LOAD BEARING CAPACITY OF TEMPORARY SHORING AND BRACING IS NOT EXCEEDED.
- EACH PIECE OF STRUCTURAL LUMBER (AND SHEATHING) SHALL BE MARKED BY A COMPETENT AND RELIABLE ORGANIZATION WHOSE REGULAR BUSINESS IS TO ESTABLISH LUMBER GRADES. THE ORGANIZATION, GRADING AND GRADE MARKINGS SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.
- THE SINGING AND SURFACING OF ALL LUMBER SHALL BE MILL SIZED AND SURFACED ON ALL 4 SIDES U.N.O., SEE PLAN. ALL LUMBER SHALL BE FREE OF HEART CENTER. SPLICES SHALL NOT BE PERMITTED EXCEPT WHERE NOTED OR APPROVED BY THE ENGINEER.
- ALL FRAMING HARDWARE SHALL BE SIMPSON STRONG-TIE OR APPROVED EQUAL U.N.O. AND SHALL BE INSTALLED PER THE MANUFACTURER'S REQUIREMENTS. USE THE MAXIMUM NUMBER AND SIZE OF FASTENERS SPECIFIED BY THE MANUFACTURER U.N.O., SEE PLAN.
- WHERE A SPECIFIC CONNECTOR TYPE/MODEL IS NOT INDICATED, PROVIDE A CONNECTOR SIZED TO FIT THE MEMBERS BEING CONNECTED.
- SAW LUMBER SHALL BE HEM FIR #2 OR BETTER U.N.O., SEE PLAN. POSTS AND TIMBERS SHALL BE DOUG FIR #1 OR BETTER. LAMINATED VENEER LUMBER SHALL BE 2.0E, 2600F U.N.O. LAMINATED STRAND LUMBER SHALL BE 1.5E, 2325F U.N.O. GULLAM BEAMS SHALL BE 24E-U.N.O. PARALLAM BEAMS SHALL BE 2.0E, 2900F U.N.O. PARALLAM POSTS SHALL BE 1.8E, 2.5FC U.N.O.
- INSTALL SOLID FULL HEIGHT BLOCKING BETWEEN TRUSSES/JOISTS AT ALL BEARING POINTS U.N.O., SEE PLAN.
- WEB FILLERS SHALL BE PROVIDED ON WEBS OF WOOD I-JOISTS PER THE JOIST MANUFACTURER'S REQUIREMENTS AND PER THE HARDWARE MANUFACTURER'S REQUIREMENTS WHERE HARDWARE ATTACHES TO THE I-JOIST.
- PRE-MANUFACTURED TRUSSES AND JOISTS SHALL BE BRACED PER THE MANUFACTURER'S REQUIREMENTS. MULTI-PLY MEMBERS SHALL BE ATTACHED TOGETHER PER THE MANUFACTURER'S REQUIREMENTS.
- PRE-MANUFACTURED PRODUCTS SUCH AS WOOD TRUSSES AND I-JOISTS SHALL ONLY BE ALTERED WITH THE APPROVAL OF THE MANUFACTURER AND SHALL BE REPAIRED (WHEN REQUIRED) PER THE MANUFACTURER'S REQUIREMENTS.
- BOLTS/LAGS AT ALL WOOD TO WOOD, WOOD TO STEEL AND WOOD TO CONCRETE CONNECTIONS SHALL BE A307 U.N.O., SEE PLAN.
- BOLTS IN WOOD SHALL BE INSTALLED IN HOLES 1/16" IN DIAMETER LARGER THAN THE BOLT DIAMETER AND SHALL HAVE WASHERS BETWEEN HEAD/NUT AND WOOD MEMBER.
- LAGS SHALL BE INSTALLED IN HOLES PRE-DRILLED AT SAME DIAMETER AS LAG SHAFT FOR UNTHREADED SHAFT PORTION OF HOLE AND 40%-70% OF SHAFT DIAMETER FOR THREADED PORTION.
- ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED U.N.O., SEE PLAN.
- ALL FASTENERS AND CONNECTORS (NAILS, SCREWS, BOLTS, NUTS, WASHERS, ETC.) IN CONTACT WITH PRESERVATIVE TREATED AND FIRE RETARDANT TREATED WOOD SHALL MEET THE REQUIREMENTS OF IBC 2304.10.5.
- DO NOT COUNTER SINK BOLT/LAG HEADS INTO WOOD MEMBERS UNLESS SPECIFICALLY NOTED ON PLANS OR APPROVED BY THE ENGINEER.
- ALL NAILING SHALL BE PER IBC TABLE 2304.10.1 U.N.O., SEE PLAN. ATTACH 2X4 STUDS TO WALL TOP AND BOT. PLATES WITH (2) 16d NAILS, USE (3) 16d NAILS FOR 2X6 STUDS. BUILD-UP 2X POSTS SHALL BE FACE NAILED TOGETHER WITH (2) 16d AT 9" O.C.
- PROVIDE POSTS TO MATCH WIDTH OF SUPPORTED BEAMS/HEADERS U.N.O., SEE PLAN. CONTINUE POSTS TO FOUNDATION INCLUDING SQUASH BLOCKING IN FLOORS. MATCH SQUASH BLOCKING SIZE TO POST SIZE.
- WHERE JOISTS/TRUSSES RUN PARALLEL TO INTERIOR BEARING WALLS, ALIGN JOIST/TRUSS UNDER WALL BOT. PLATE OR PROVIDE FULL HEIGHT BLOCKING AT 16" O.C. IN FLOOR PERPENDICULAR TO WALL AND BLOCKING ALIGNED UNDER WALL. PROVIDE DBL JOIST/TRUSS UNDER DBL SHEAR WALLS. SEE INTERIOR SHEAR WALL AT WOOD FLOOR DETAIL.
- WOOD WALLS SHALL BE BALLOON FRAMED FROM FOUNDATION TO ROOF EXCEPT WHERE FLOORS BREAK WALL STUDS PER FLOOR JOIST AT WOOD WALL DETAIL.
- SHEATHING SHALL BE PROVIDED ON RIM BOARDS AND NAILED PER REQUIREMENTS OF SHEAR WALL ABOVE.
- EXCEPT WHERE NOTED OTHERWISE, PROVIDE METAL FRAMING CONNECTOR (HANGER, CLIP, CAP, ETC.) AT ALL WOOD TO CONCRETE, WOOD TO STEEL AND WOOD TO WOOD CONNECTIONS.
- ATTACH BRICK VENEERS TO FRAMING PER IRC R703.8.
- PROVIDE 6" X 5 1/2" X 5/16" STEEL ANGLE TO SUPPORT BRICK VENEERS. ATTACH ANGLE WITH (2) 7/16" X 4" LAGS AT 16" O.C., USE (1) 1/2" X 4 1/2" TITEN HD BOLT AT 16" O.C. FOR ATTACHMENT TO CONCRETE OR MASONRY.
- WOOD NAILERS ON STEEL BEAMS SHALL BE 2X WITH 1/2" DIAM. THREADED STUDS AT 32" O.C. U.N.O., SEE PLAN. NAILERS ON STEEL FRAME BEAMS SHALL BE 3X WITH 1/2" DIAM. STUDS AT 24" O.C. U.N.O. SEE PLAN.
- 1/2" WEB STIFFENERS SHALL BE PROVIDED EACH SIDE OF STEEL BEAMS AT ALL BEARING POINTS.
- USE 1/2" DIAM. A325 BOLTS AT ALL STEEL TO STEEL CONNECTIONS U.N.O., SEE PLAN.
- GROUT BELOW STEEL BASE PLATES (IF USED) SHALL BE 5000 PSI NON-SHRINK GROUT.
- ALL WELDING SHALL BE DONE PER AISC AND AWS SPECIFICATIONS. WELDERS SHALL BE AWS CERTIFIED.
- WELD MATERIAL SHALL BE 70 KSI MIN.
- RIM BOARD TO BE 1 1/8" MIN. U.N.O., SEE PLAN.
- YORK ENGINEERING LIABILITY IS LIMITED TO FIVE TIMES THE FEE COLLECTED FOR SERVICES. THE CONTRACTOR(S) MUST READ, UNDERSTAND AND ACCEPT ALL YORK ENGINEERING DOCUMENTS APPLICABLE TO THIS DESIGN PRIOR TO UTILIZING THE DESIGN. BY USING THIS DESIGN, THE OWNER/CONTRACTOR ACCEPTS THE DESIGN, ASSUMED LOADS AND LIMITS ON LIABILITY STATED.
- PERIODIC SPECIAL INSPECTIONS REQUIRED ON TRUSS BRACING AT TRUSSES OVER 5'-0" TALL UNLESS WAIVED BY BUILDING OFFICIAL.

ALL DETAILS MAY NOT BE APPLICABLE TO YOUR PLANS IF MARKED TYPICAL, USE AT ALL APPLICABLE LOCATIONS

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