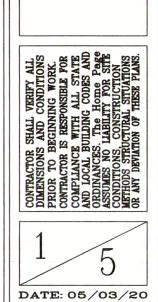


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Jose Moreno



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



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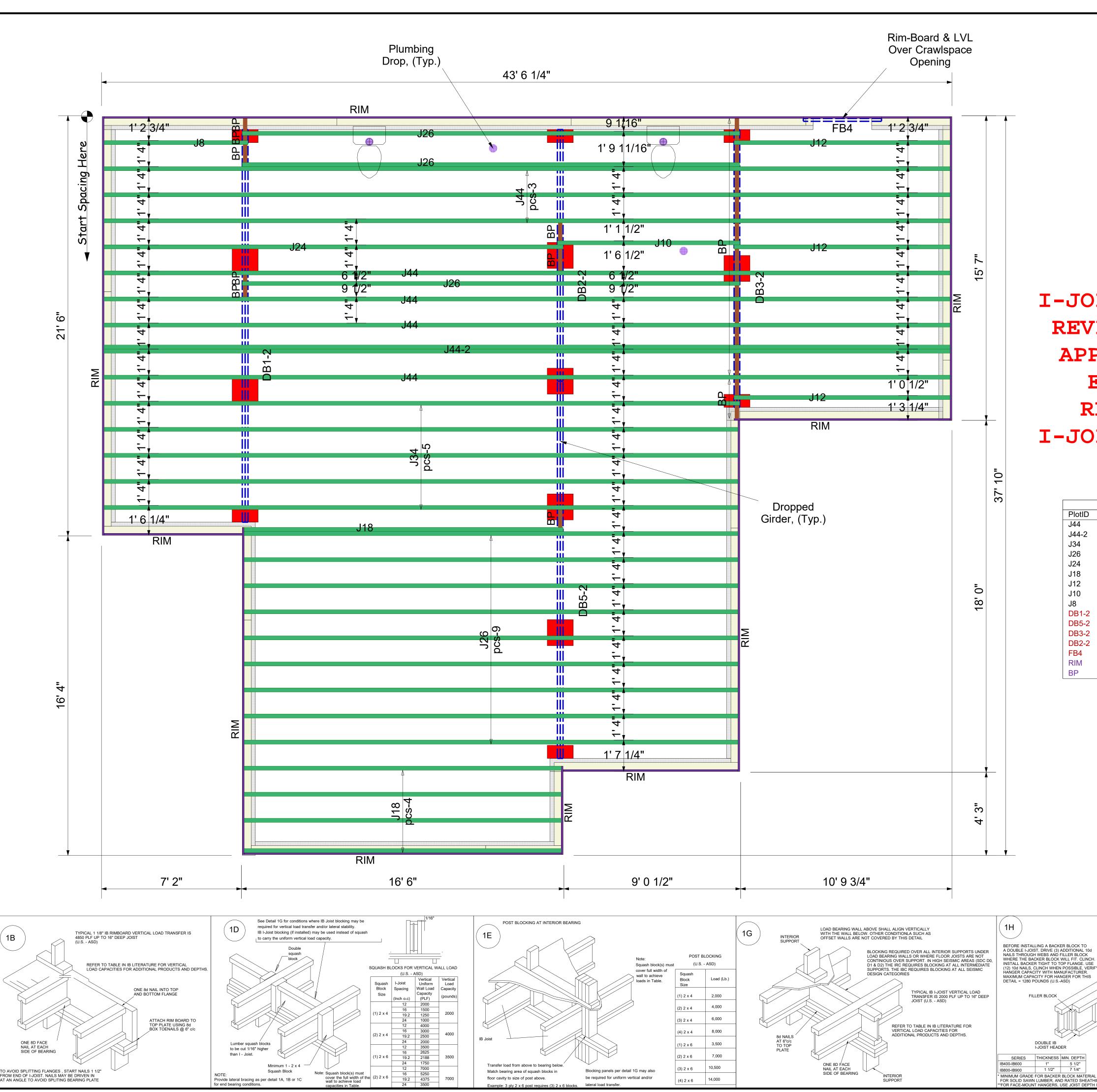
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Moreno Duplex N 14th St. Erwin, NC

Job Number: 1348-22

S1



Transfer load from above to bearing below.

be required for uniform vertical and/or

Match bearing area of squash blocks in

floor cavity to size of post above.

3,500

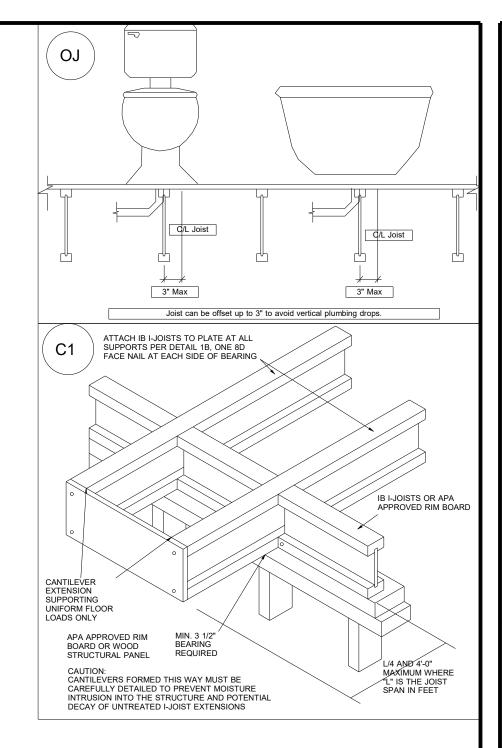
ONE 8D FACE NAIL AT EACH SIDE OF BEARING

to be cut 1/16" higher

Provide lateral bracing as per detail 1A, 1B or 1C

Squash Block

cover the full width of the wall to achieve load (2) 2 x 6



I-JOIST LAYOUT REVIEWED AND APPROVED BY EOR. S1 REFLECTS I-JOIST LAYOUT

		Products			
PlotID	Length	Product	Plies	Net Qty	Fab Type
J44	44' 0"	11 7/8" PJI-40	1	7	MFD
J44-2	44' 0"	11 7/8" PJI-40	2	2	MFD
J34	34' 0"	11 7/8" PJI-40	1	5	MFD
J26	26' 0"	11 7/8" PJI-40	1	12	MFD
J24	24' 0"	11 7/8" PJI-40	1	1	MFD
J18	18' 0"	11 7/8" PJI-40	1	5	MFD
J12	12' 0"	11 7/8" PJI-40	1	3	MFD
J10	10' 0"	11 7/8" PJI-40	1	1	MFD
J8	8' 0"	11 7/8" PJI-40	1	1	MFD
DB1-2	22' 0"	2.0 RigidLam DF LVL 1-3/4 x 9-1/4	2	2	FF
DB5-2	20' 0"	2.0 RigidLam DF LVL 1-3/4 x 9-1/4	2	2	FF
DB3-2	16' 0"	2.0 RigidLam DF LVL 1-3/4 x 9-1/4	2	2	FF
DB2-2	14' 0"	2.0 RigidLam DF LVL 1-3/4 x 9-1/4	2	2	FF
FB4	4' 0"	2.0 RigidLam DF LVL 1-3/4 x 11-7/8	1	1	FF
RIM	12' 0"	1 1/8" x 11 7/8" APA Rim Board	1	14	FF
BP	2' 0"	11 7/8" PJI-40	1	9	FF

FOR HANGER CAPACITY SEE HANGER MAUNFACTURES RECOMMENDATIONS. VERIFY DOUBLE IB I-JOIST CAPACITY TO SUPPORT CONCENTRATED LOADS.

* MINIMUM GRADE FOR BACKER BLOCK MATERIAL SHALL BE UTILITY GRADE SPF OR BETTER

UNLESS TOP-MOUNT HANGER SIDES LATERALLY SUPPORT THE TOP FLANGE, BEARING WEB STIFFENERS SHALL BE USED. BACKER BLOCKS ARE NOT REQUIRED FOR TOP MOUNT HANGERS WITH REACTIONS LESS THAN 250 POUNDS (U.S.-ASI

JOIST DEPTH SHALL HAVE FULL DEPTH BEARING WEB STIFFENERS AND SHALL HAVE SIDE FLANGES AT LEAST 60% OF THE JOIST DEPTH.

BACKER BLOCK REQUIRED BOTH SIDES FOR FACE MOUNT HANGERS SEE HANGER MANUFATURED INSTALL DETAILS

ALL NAILS SHOWN IN THESE DETAILS TO BE COMMON NAILS UNLESS OTHERWISE NOTED. 10d BOX MAILS MAY BE SUBSTITUTED FOR

/POINT LOADS FROM L LOCATIONS

1rst Floor I-Joist

DRAWING SCALE: NTS

BBO = Beam by Others

PBO = Post by Others **GBO** = Girder by Others

J = I-Joist

FB = Flush Beam

DB = Dropped Beam

BP = Blocking Panels

SB = Squash Blocks

PROJECT NUMBER SHEET NUMBER

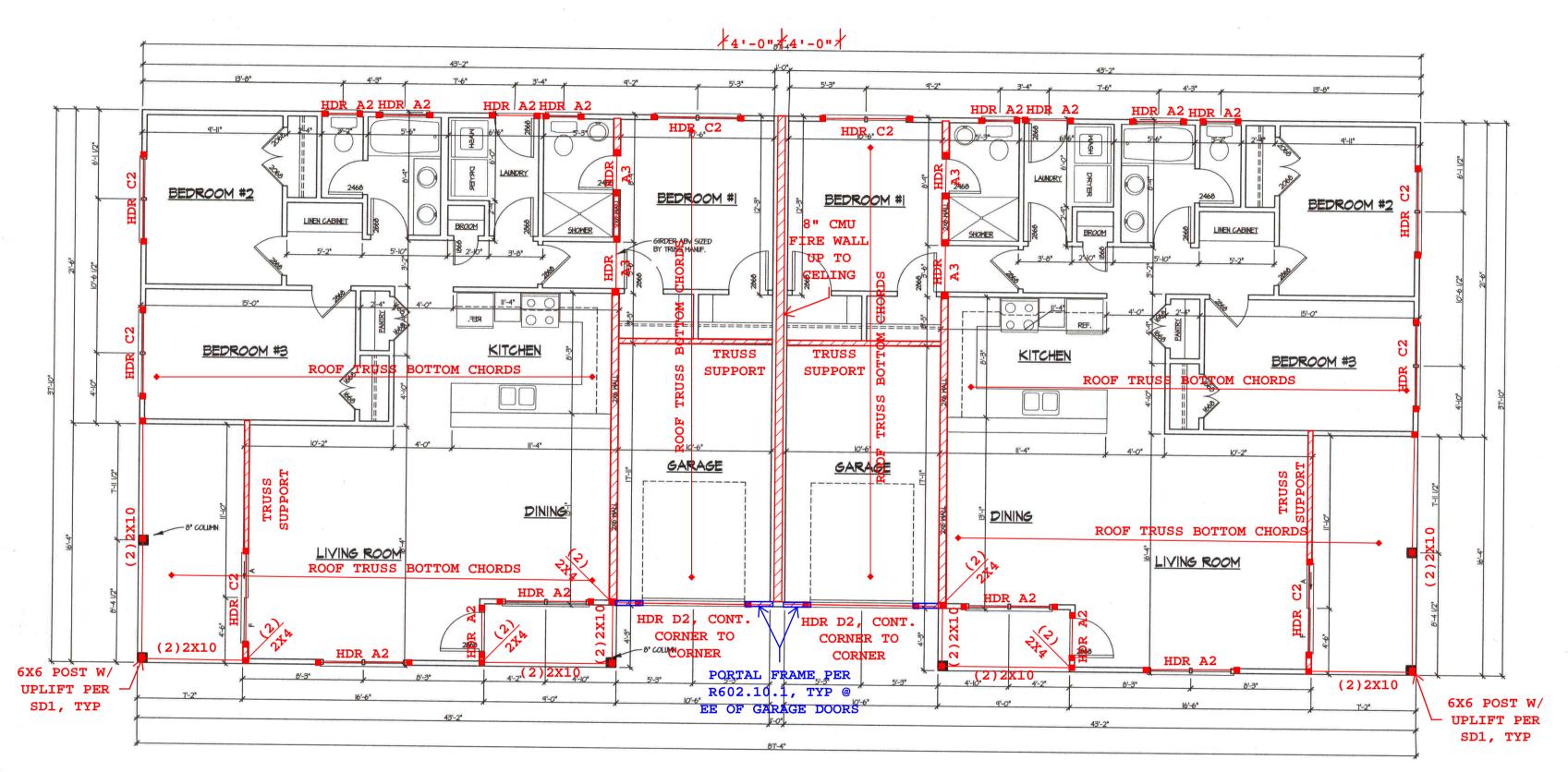
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PL JNO EMENT plex Moreno

Dn of Side eft 4 Mingo rst

oe



FLOOR PLAN SCALE: 14" = 1'-0" INTERIOR FOOTINGS MAY BE NEEDED DEPENDING ON TRUSS DRAWINGS TO BE PROVIDED BY TRUSS MANUFACTURE. BUILDER IS RESPONSIBLE FOR COORDINATIONG PRIOR TO CONSTRUCTION.



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Job Number: 1348-22

INTERIOR FOOTINGS MAY BE NEEDED DEPENDING ON TRUSS DRAWINGS TO BE PROVIDED BY TRUSS MANUFACTURE. BUILDER IS RESPONSIBLE FOR COORDINATIONG PRIOR TO CONSTRUCTION.

ROOF PLAN SCALE: 14" = 1'-0"



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Job Number: 1348-22

General Plan Reading Notes:

- 1. Engineer's notes are in red, blue or green ink for clarity and are in Courier type font.
- 2. With regards to structural information, these notes shall take precedence over any other structural information.
- 3. Red check marks(), if present, indicate structural information which as been reviewed and approved by engineer.
- 4. Noted dimensions shall take precedence.

General Construction Notes:

- 1. All temporary shoring, means and methods are the responsibility of the
- 2. All dimensions to be verified by the contractor in the field.
- 3. Engineer assumes no responsibility for safety of project delivery.
- 4. Any questions pertaining to structural components should be immediately brought to the attention of engineer.
- 5. Limitations: Services provided are in accordance with the standard of practice for structural engineering and within the limits imposed by scope, schedule and budget.
- 6. Sequencing, shoring, means and methods of construction are considered beyond the scope of this design.

Design Loads								
Meet/exceeds minimum per NCRC 2018								
	Live	Dead	Deflection					
All Indoor Floors	40	10	L/360					
Attic Platforms	25	10	L/360					
Construction Live	20		L/360					
Decks/Porches	50	10	L/240					
Roof	20	10	L/240					
Windload	115(MP	Н)	L/240					

Foundation Notes:

- 1. Assumed soil load bearing capacity = 2000 PSF
- 2. Minimum 28 day f'c of concrete = 3000 PSI
- 3. Foundations to be built in accordance with NCRC 2018, CH 4
- 4. "Tie-In"s shall be (2) 16" long #4 epoxy bonded dowels half embedded mid-depth into existing footings. If no footing exists, omit Tie-in
- 5. Install anchor bolts per R403.1.6.
- 6. All slabs shall be minimum 4" thick, 3000 psi concrete slab on 4" of #57 sub-base. If slab is used in an interior or garage application, install 6 mil vapor retarder and 10/10 6x6 welded wire fabric.
- 7. All slabs shall be on compacted fill or full depth self consolidated structural fill (stone) (at porches, garages and stem wall slabs).
- 8. Max unreinforced, unbalanced condition of any CMU wall shall be 36".
- 9. Top course of all foundation walls and piers shall have solid caps. Any slab stem walls shall be filled solid.
- 10. All piers shall be in the middle 1/3rd of the footing. Min 2" footing projection at each side. Max projection shall be the depth of the footing.

Footing Schedule:

- A = 16"x16"x8"
- B = 20"x20"x8"
- C = 24"x24"x10"
- D = 30"x30"x12"E = 36"x36"x12"
- F = 40"x40"x12" w/ (3) #4 EW
- G = 48"x48"x12" w/ (4) #4 EW

*All rebar in footings to have 3" cover from sides, bottoms and other parallel rebar.

Header Schedule:

- A2 = (2)2x6 w/(1)2x4 Jack @ EE UON
- B2 = (2)2x8 w/(2)2x4 Jack @ EE UON
- C2 = (2)2x10 w/(2)2x4 Jack @ EE UON
- D2 = (2)2x12 w/(3)2x4 Jack @ EE UON
- $E2 = (2)9 \frac{1}{4}$ " LVL w/ (3)2x4 Js @ EE UON
- F2 = (2)11 7/8" LVL w/ (3)2x4 Js @ EE UON
- A3 = (3)2x6 w/(1)2x6 Jack @ EE UON
- B3 = (3)2x8 w/(2)2x6 Jack @ EE UONC3 = (3)2x10 w/(3)2x6 Jack @ EE UON
- D3 = (3)2x12 w/(3)2x6 Jack @ EE UON
- $E3 = (3)9 \frac{1}{4}$ " LVL w/ (3)2x6 Js @ EE UON
- F3 = (3)11 7/8" LVL w/ (3)2x6 Js @ EE UON

King Stud Schedule (R602.7.5):

- 0'-3' wide = 1 @ EE UON
- 3'-6' wide = 2 @ EE UON
- 6'-9' wide = 3 @ EE UON
- 9'-12' wide = 4 @ EE UON 12'15' wide = 5 @ EE UON
- *Stud size shall match width of wall.

Roof Framing Notes:

Lintel Schedule for

Lenth (ft) | Size

Up to 4

Over 8

Notes:

4-8

Brick/Natural Stone Veneer

brick at each end.

o.c. staggered.

- 1. All roof framing shall comply with NCRC 2018 CH 9.
- 2. All dimensional lumber to be SYP No.2 or better.
- 3. Sheath with 7/16" OSB w/ 8d nails at 6" o.c. edge and 12" o.c. field.
- 4. All rafter ties to be installed no higher than 1/3rd height eave to ridge up from eave nailed with (5) 10d nails at each end, UON.
- 5. Roof trusses per others; installation per supplier guidelines.
- 6. When structural ridge is used, collar ties may be omitted with 24" long ridge strapping (CS22) is applied at 32" O.C
- 7. Where dormers are applicable, build dormer walls atop double/triple rafters.
- 8. Areas noted as "Post Down" shall be supported by minimum (2)2x4 to the next load bearing component downward. studs may be skewed as required not to exceed 15 degrees.

L 3.5 x 3.5 x 1/2

L 6 x 4x 5/16 LLV

1. Provide at least 3" bearing on

2. Headers 8' or longer, attach to

header w/ 1/2" lag screws @ 12"

3. For all brick support @ roof lines,

fasten (2)2x10 blocking between

studs w/(4) 12d nails per ply.

(2)2x10 blocking w/ (2) 1/2" lag screws @ 12" o.c. staggered. See Section R703.8.2.1 (NCRC 2018) for

Fasten A 6"x4"x5/16" angle to

additional reference.

L 5 x 3.5 x 5/16 LLV

1. Unless otherwise noted, lateral bracing is found sufficient and compliant with minimum requirements set forth in NCRC 2018 Table R602.10.2 provided all exterior walls are sheathed at the exterior per CS-WSP, R602.10.3 which includes 2x4 (min) studs at 16" o.c. sheathed with 7/16" OSB w/ (1)8d nail at 6" o.c. edge and (1)8d nail at 12" o.c. field. Any additional requirements will be specifically dictated on the plans by indicating required length of CS-WSP at each designated braced wall lines.

- 2. All noted Portal Frame (P-F) shall be compliant with R602.10.1. Code reference can be found on this page.
- 3. All locations noted with "800# HD" shall be 800 lbs min capacity. Many specific holddowns are available, builder may select a model that fits the geometry of the application. Builder also install CS16 straps fully populated with 10d nails extending no less than 12" above and below the interface intended to hold down; Most commonly this be at the bottom of studs; strap should be centered on the bottom plate and extend to the band below; Builder may install straps on either exterior or interior face of wall.
- 4. Walls noted as GB shall be framed in accordance with R602.10.2

Framing Notes:

Lateral Bracing:

- 1. Floor joists, ceiling joists and rafters sized for SYP #2 or better except exterior wood deck joists. Wall framing maybe SPF #2 or SYP #2.
- 2. (X) = Number of 2x4/2x6 studs supporting beams. Size of studs to match stud schedule in remainder of wall UNO. Strap all stud columns of 4 or more with (3) horz. CS22
- 3. LVL Beams shall be 1.75" wide per ply; (Fb) = 2600 psi.
- 4 All floor framing per NCRC 2018 CH 5.
- 5. All wall framing per NCRC 2018 CH6.
- 6. If applicable I-joists and floor truss framing per supplier's specifications and layout.
- 7. If applicable, all structural steel shall be ASTM A-36; Fy= 36 KSI. All weld material shall be 70 KSI material.
- 8. All welds to be installed by a certified AWS welder.
- 9. All side loaded steel beams should be packed out with dbl 2x material and bolted thru to web with ½" dia thru bolts at 24" o.c. staggered.
- 10. Install double joist under all walls parallel with joists.
- 11. Typically, interior load bearing walls (LBW) are shown hatched in red. Nearby girders and beams should be assumed to be directly supporting these LBWs.
- 12. Beams of 3 ply or more with any side loaded members shall be fastened with $\frac{1}{2}$ " dia bolts at 16" o.c. staggered w/ 2" min edge distance from top/bottom edge UON. 2 ply LVLs shall be fastened with (4) #9 3" wood screws at 16" o.c. 13. All beam bearings shall be no less than 3". All other
- bearing to be 2" min. 14 All hangers shall be standard, appropriately sized face mounted UON. High capacity hangers will be load rated on

hardware per manufacturer quidelines.

plans; Consult Simpson catalog or local supplier. Install

PORTAL FRAME METHOD:

4' MAX PONY WALL HEIGHT

EXTENT OF HEADER WITH SINGLE PORTAL FRAME
(ONE BRACED WALL PANEL)

2'-18' ROUGH FRAMED WIDTH OF OPENING FOR SINGLE OR DOUBLE PORTAL

MIN. 3" X 11-1/4" NET HEADER (STEEL HEADER PROHIBITED ONLY WITH PF)

D. D. D. D. D. D.

PORCH AND DECK SPECIFIC

Foundation Notes:

- .. Assumed soil load bearing capacity = 2000 PSF
- 2.Minimum 28 day f'c of concrete = 3000 PSI
- 3. Foundations to be built in accordance with NCRC 2018, CH 4

Wood Deck Notes:

- All lumber to be pressure treated SYP No.2 or better.
- Band attachments to be installed per NCRC 2018, Appendix M (AM 104.1(1)) OR %" x 3 %" LedgerLoks @ spacing noted on plans.
- 3. Install lateral bracing or embed posts per AM109.1
- 4. Install handrails per AM111.1 5. Max Post Heights per AM 108.1
- 6. Stair Stringers per AM 110.1
- . Footings that do not directly support roof posts may be solid-precast concrete or CMU provided size complies with plans and is embeded at least 12" into suitable soil. Posts supporting roof structures shall be cast in place.

Screened-In/Covered Porch Notes: Posts to be attached to footings, slab or CMU piers using ABU44 or ABU66 post base (or applicable size) OR (2) Simpson GA1 clips OR

- Attach all rafters to headers w/ H2.5a clips.
- Uplift for posts to headers, posts to bands and bands to lower posts may be either (2) Simpson LCE4, (2) Simpson GA1 clips or (2) 1/4" diameter, 5" long LedgerLoks driven at a 45" degree angle, 1 to each side of posts or notched 50% width w/ (2) ½" diameter thru or lag bolts.

Roof Framing Notes:

Simpson MAB15.

- . All roof framing shall be in accordance with NCRC 2018 CH 9. All lumber to be SPF OR SYP No.2 or better.
- . Sheath with 7/16" OSB w/ 8d nails at 6" o.c. edge and 12" o.c.
- .field. Collar ties may be omitted with either 24" long CS22 ridge strapping or (2) L30 clips at 32" o.c.
- . Where no structural ridge is provided, install 2x6 rafter ties spaced at 32" o.c. at bottom 1/3rd of rafters, attach w/ (4) 10 @ EE.

Consulting Design. Efficiency

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PE SEAL APPLIES TO STRUCTURAL NOTES ONLY

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FASTEN TOP PLATE TO HEADER WITH TWO ROWS OF 16D SINKER NAILS AT 3" O.C. TYP.

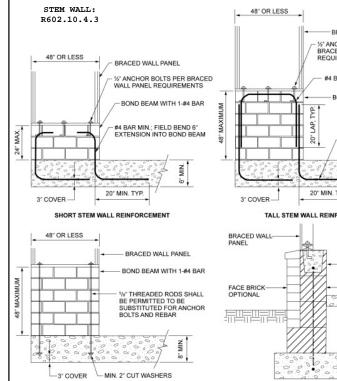
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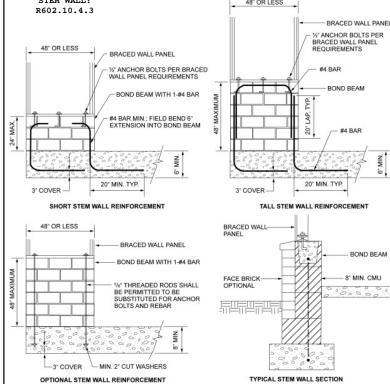
TYPICAL PORTAL

Duk Moreno

Job Number: 1348-22

SD1





NOTE: GROUT BOND BEAMS AND ALL CELLS THAT CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS.