GENERAL NOTES

1) S.E.O.R. REFERS TO THE STRUCTURAL ENGINEER OF RECORD, BLACK CANYON ENGINEERS (B.C.E.)
2) ALL NOTIFICATIONS REQUIRED & INFORMATION TO BE PROVIDED (E.G. PHOTOS, ETC.) TO THE S.E.O.R. SHALL BE IN WRITING VIA EMAIL TO INSPECTIONS@BLACKCANYONENGINEERS.COM. S.E.O.R. WILL RESPOND IN WRITING WHEN GIVING APPROVAL TO PROCEED (E.G. POURING CONCRETE AFTER REBAR/REINFORCEMENT INSPECTION), DO NOT COMMENCE WITHOUT WRITTEN APPROVAL.
3) OWNER/BUILDER/CONTRACTOR TO VERIFY ACCURACY OF FOUNDATIONS PLANS WITH ARCHITECT / DESIGNER OF RECORD (A.O.R.) (REF: KAREN FISCHER, DESIGN DATED: 08/07/2022), REVISED: 11/15/2022, CIVIL ENGINEER OF RECORD (C.E.O.R.), MECHANICAL/ELECTRICAL/PLUMBING ENGINEER OF RECORD (M.E.O.R.), O.W.T.S. ENGINEER OF RECORD (O.E.O.R.) ROOF, FLOOR, ETC. PLANS AND NOTIFY S.E.O.R. OF ANY DISCREPANCIES PRIOR TO FORM PLACEMENT, MAT. PURCHASE AND CONSTRUCTION
4) CRAWLSPACES MUST BE VENTILATED PER GOVERNING CODE. REFER TO ARCH. FOR CRAWLSPACE VENTING AND DESIGN.
5) THE S.E.O.R. SHALL BE NOTIFIED A MINIMUM OF 5 BUSINESS DAYS IN ADVANCE VIA EMAIL FOR INSPECTION OF BOTH THE FOUNDATION HOLE WHEN EXCAVATION HAS BEEN COMPLETED & ALL REBAR PLACEMENT PRIOR TO POURING. FURTHER INSPECTION PER LOCAL BUILDING CODES MAY BE REQUIRED
6) JOISTS, RAFTERS, TRUSSES, HEADERS & BEAMS BY OTHERS UNLESS SPECIFIED. IF APPLICABLE, TRUSS & FLOOR DESIGN BY-ALPINE LUMBER CO., DATED: 11/30/2022. WHEN ROOF & FLOOR DESIGNS BY OTHERS ARE USED BE S.E.O.R., THE DESIGN CONTAINED HEREIN IS BOUND TO THE REFERENCED DATED DESIGN; ANY CHANGE OR DEVIATION WILL WHOLLY INVALIDATE THIS DOCUMENT AND PROHIBIT IT'S USE. NOTIFY S.E.O.R. IF YOU SUSPECT OR KNOW THAT A CHANGE HAS BEEN MADE TO THE PROVIDED ROOF & FLOOR DESIGN.
7) THE S.E.O.R. SHALL BE NOTIFIED IF ADVERSE OR POOR SOIL CONDITIONS OR WATER ARE ENCOUNTERED UPON EXCAVATION. FURTHER ENGINEERING MAY BE REQUIRED
8) PROVIDE P.T. FLOOR FRAMING IF MIN. DISTANCE TO SOILS IS LESS THAN 12" FOR BEAMS & 18" FOR JOISTS
9) ANCHORS REQUIRED TO RESIST UPLIFT FORCES ON MANUFACTURED / PRE-ENGINEERED TRUSSES ARE DESIGNED BY OTHERS.
10) VALID, ORIGINAL DOCUMENT ONLY WITH SIGNED SEAL
11) SPECIFICATIONS APPLY TO ALL PAGES HEREIN
12) DO NOT SCALE, USE PRINTED DIMS. ONLY
13) TOTAL PAGES = 6, SIZE: ARCH-D, DO NOT SEPARATE SET (E.G. TO SUB-CONTRACTORS), SET IS DESIGNED TO BE VIEWED IN IT'S ENTIRETY.
14) ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF THE YEAR ADDITION OF THE INTERNATIONAL BUILDING CODE (IBC) OR INTERNATIONAL RESIDENTIAL CODE (IRC) ADOPTED BY THE AUTHORITY HAVING JURISDICTION (A.H.J.). ADDITIONALLY, ALL CONSTRUCTION SHALL COMPLY WITH ALL LOCAL BUILDING ORDINANCES, OR AS SPECIFICALLY NOTED ON THESE PLANS WITH THE MOST STRINGENT / CONSERVATIVE CONDITIONS GOVERNING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND/OR BUILDER TO BE FAMILIAR WITH AND COMPLY WITH THESE REQUIREMENTS.
15) DUE TO CHANGING BUILDING CODES AND THE EVOLVING NATURE OF ENGINEERING, THESE PLANS ARE VALID FOR ONE YEAR FROM DATE OF ISSUANCE. NOTIFY S.E.O.R. IF MORE TIME THAN THIS HAS ELAPSED FOR A REVIEW AND RE-ISSUANCE.
16) FOR ALL PROPRIETARY PRODUCTS (EG. FASTENERS, JOIST HANGERS, RAFTER HANGERS, COLUMN BASES, COLUMN CAPS, HURRICANE CLIPS, ETC.), FOLLOW ALL MANUFACTURER'S INSTRUCTIONS AND U.N.O., USE THE MOST CONSERVATIVE NAILING / SCREW QUANTITIES TO MAXIMIZE THAT ELEMENTS LOAD CAPACITY.
17) U.N.O., ALL PROPRIETARY HARDWARE (EG. FASTENERS, JOIST HANGERS, RAFTER HANGERS, COLUMN BASES, COLUMN CAPS, HURRICANE CLIPS, ETC.) SHALL BE MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY.

ADDITIONAL PROJECT SPECIFIC NOTES:

PROJECTS INVOLVING EXISTING STRUCTURES:

1. PROJECT & WORK SHALL COMPLY WITH THE INTERNATIONAL EXISTING BUILDING CODE, LATEST EDITION.

GEOTECHNICAL & FOUNDATION

1. SOIL BEARING DESIGN CAPACITY IF NO GEOTECHNICAL REPORT AVAILABLE / REFERENCED: 1,500 POUNDS PER SQ. FT.
2. REFERENCED GEOTECHNICAL REPORT & GEOTECHICAL ENGINEER OF RECORD (G.E.O.R.) (IF APPLICABLE): GOODRICH ENGINEERING, LLC., PROJECT 77-1, DATED SEPTEMBER 26, 2022. FOLLOW ALL RECOMMENDATIONS & INSTRUCTIONS IN REPORT, NOTIFY S.E.O.R. & G.E.O.R OF DISCREPANCIES. IF THESE RECOMMENDATIONS ARE NOT FOLLOWED, B.C.E. CANNOT BE HELD RESPONSIBLE.
3. FOUNDATION SHALL BEAR UPON THE BEARING SURFACE AT MINIMALLY THE FOLLOWING DEPTHS BELOW EXISTING GRADE: 26" (MONTROSE CNTY.), 36" (GUNNISON CNTY.), 40"+FOOTER THICK. (OURAY COUNTY), 24" (MESA COUNTY). CONTACT LOCAL JURISDICTION IF COUNTY NOT LISTED
4. THE FINISH GRADE SURROUNDING THE FOUNDATION SHALL BE AT A MINIMUM OF A 4% GRADE, AWAY FROM THE STRUCTURE SO AS TO DIVERT WATER
5. ROOF GUTTERS AND DOWNSPOUTS SHALL BE INSTALLED BY BUILDER ALONG ALL EVES. MINIMUM LENGTH THAT DOWNSPOUT SHALL EXIT WATER AWAY FROM FOUNDATION IS 10 FEET.
6. WHERE SPECIFIED OR REQUIRED, ALL FOUNDATION DRAINS SHALL NOT ACCEPT INPUTS FROM SURFACE OR ROOF DRAINAGE.
7. FOUNDATION HOLE SHALL BE FREE OF ALL DELETERIOUS MATERIAL
8. BOTTOMS OF FOUNDATION EXCAVATIONS SHALL BE SCARIFIED 6-8" DEEP, MOISTURE CONDITIONED AND RE-COMPACTED TO MIN. 95% STD. PROCTOR MAX. DRY DENSITY, WITHIN ±2% OF THE OPTIMUM MOISTURE CONTENT AS PER ASTM D698.
9. UNLESS NOTED OTHERWISE (E.G. REFERENCED GEOTECHINCAL REPORT/G.E.O.R.): STRUCTURAL FILL SHALL BE MOISTURE CONDITIONED, PLACED IN MAX. 6 IN LOOSE LIFTS, AND COMPACTED TO A MIN. 95% OF THE STD. PROCTOR MAX. DRY DENSITY FOR FINE GRAINED SOILS OR MOD. PROCTOR MAX. DRY DENSITY FOR COARSE GRAINED SOILS, WITHIN ±2% OF THE OPTIMUM MOISTURE CONTENT AS DET. IN ACCORDANCE WITH ASTM D698 OR D1557 RESPECTIVELY. STRUCTURAL FILL SHALL BE WITHIN 0.1' OF THE BOTTOM OF THE FOUNDATION; NO MORE THAN 0.1' GRAVEL SHALL BE PLACED BELOW FOUNDATION AS A LEVELING COURSE. STRUCTURAL FILL SHALL BE WRAPPED FULLY BY A SUITABLE GEO-TEXTILE FABRIC TO PREVENT MIXING WITH NATIVE MATERIALS DURING COMPACTION.
10. INSULATION TO MEET IECC AND A.H.J. CODE. VERIFY WITH A.O.R.
11. FOUNDATION CLEARANCES FROM SLOPES MUST BE AT LEAST THE SMALLER OF HALF THE HEIGHT OF THE SLOPE OR 15 FEET FROM THE TOE AND AT LEAST THE SMALLER OF ONE THIRD THE HEIGHT OF THE SLOPE OR 40 FEET FROM THE TOP OF A SLOPE.

MICROPILE & GRADE BEAM BASED FOUNDATION DESIGNS (IF APPLICABLE)

1. ALL FOUNDATIONS SHALL USE 4" NOMINAL DIAMETER GROUTED MICRO-PILINGS AS SHOWN; REFER TO REFERENCED GEOTECHNICAL REPORT FOR ADD'L DETAILS TO BE FOLLOWED.
2. 45 FOOT MINIMUM LENGTH UNLESS NOTED OTHERWISE. COMPETENT BEDROCK BEGINNING & END DEPTH SHALL BE VERIFIED BY GEOTECHNICAL ENGINEER OF RECORD DURING PILE TESTING
3. MINIMUM THREADED SOLID BAR SIZE SHALL BE #7 (22MM), GRADE 75. MINIMUM HOLLOW BAR SIZE SHALL BE 30MM, 85 KSI YIELD. ALL RODS SHALL BE CENTERED IN GRADE BEAMS UNLESS NOTED OTHERWISE.
4. PROVIDE CENTRALIZERS AS REQUIRED TO MAINTAIN CLEARANCE
5. PVC BOND BREAKER SLEEVE SHALL BE EXTENDED DOWN 35 FT. BELOW GRADE.
6. PROVIDE 4"x 10"x 1/2" A36 BEARING PLATE W/NUTS ABOVE AND BELOW AT EACH MICROPILE AS SHOWN ON DETAILS. SNUG NUTS TIGHT.
7. PROVIDE 6"x 6" x 1/2" A36 BEARING PLATE AT EACH COLUMN BEARING SUPPORT (PIER CAP) W/NUTS ABOVE AND BELOW AT SHOWN ON DETAILS. SNUG NUTS TIGHT.
8. GROUT MIX SHALL OBTAIN A COMPRESSIVE STRENGTH OF 4000 PSI @ 28 DAYS.
9. INSTALL MICROPILES PER MANUFACTURERS INSTRUCTIONS, RECOMMENDATIONS & PTI RECOMMENDATIONS.
10. PILE CONTRACTOR SHALL TEST PRODUCTION PILES (MIN. 10%) PER PTI STANDARDS.
11. PILE CONTRACTOR, UNLESS INSTRUCTED BY THE S.E.O.R. IN WRITING NOT TO, SHALL INSTALL A TEST PILE ON THE SITE TO FIND EMPIRICAL SKIN FRICTION VALUES AND REPORT THESE TO ALL ENGINEERS OF RECORD PRIOR TO COMMENCEMENT OF WORK OR MATERIALS PURCHASE.

PILE CONTRACTOR SHALL PROVIDE A LOG OF ALL PILE LENGTHS AND RESULTS OF ALL TESTING TO THE S.E.O.R.

STEEL

1. REBAR (REINFORCING STEEL) SHALL CONFORM TO ASTM A-615, GRADE 60, EXCEPT STIRRUPS, COLUMN TIES AND #3 BARS MAY BE GRADE 40. ALL STOCK SHALL BE NEW DEFORMED, AND SHALL BE FREE OF RUST, GREASE, MILL SCALE, DIRT OR ANY OTHER SUBSTANCE THAT MAY AFFECT IT'S BOND TO CONCRETE.
2. ALL BAR BENDS SHALL BE MADE COLD.
3. ALL LAP SPLICES SHALL BE A MINIMUM OF 40 BAR DIAMETERS AND SHALL BE CONTINUOUS AROUND CORNERS.
4. STRUCTURAL STEEL SHALL COMPLY WITH:
   - 4.1. PLATE: ASTM A-36
   - 4.2. HSS: ASTM A500 GR. B
   - 4.3. WIDE FLANGE SECTIONS: ASTM A992 Fy=50 ksi MIN.
   - 4.4. ANGLE: ASTM A-36
   - 4.5. C-CHANEL: ASTM A-36
5. ALL STRUCTURAL STEEL SHALL COMPLY WITH AISC 360-LATEST ED.
6. ALL WELDS SHALL COMPLY WITH AWS D1.1-LATEST EDITION
7. ALL WELD ELECTRODES, U.N.O., SHALL BE E70XX OR MIN. 70 KSI
8. ALL WELDERS SHALL HAVE CURRENT QUALIFICATIONS FOR THE WELDS, THICKNESSES, POSITIONS AND PROCESSES REQUIRED.
9. ALL BOLTS SHALL BE A325 U.N.O.
10. ALL WELDABLE REBAR SHALL BE ASTM A706 U.N.O.

CONCRETE

1. USE TYPE II PORTLAND CEMENT.
2. CONCRETE USED FOR FOOTINGS, STEM WALLS AND SLABS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI 28 DAYS FROM INITIAL POURING. CONCRETE SHALL BE AIR ENTRAINED, 5-7%. ALL CONCRETE WORK SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE (ACI) SPECIFICATION ACI 301-LATEST EDITION AND THE BUILDING CODE REQUIREMENTS ACI 318-LATEST EDITION. NO CONCRETE TO BE POURED ON FROZEN SOIL & ALL CONCRETE TO BE PROTECTED FROM FREEZING DURING & AFTER POURING.
3. ALL FOOTING SILLS SHALL PLACE THEIR FULL BEARING ON THE SLAB OR FOOTING WALL AND SHALL BE ATTACHED AS PER THE FOUNDATION PLAN DETAIL. SAID BOLTS SHALL BE SPACED NOT MORE THAN 48 INCHES O.C. AND NOT MORE THAN 12 INCHES FROM CUT ENDS OF THE SILLS
4. ALL FOUNDATION SILLS SHALL BE MINIMALLY 6 INCHES ABOVE GRADE AND SHALL BE PRESSURE TREATED WOOD
5. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE APPROVED FOR USE & PRESSURE TREATED (P.T.)
6. NON-LOAD BEARING INTERIOR WALLS MAY BE SECURED TO CONCRETE USING 3 INCH SHANK, 0.145 INCH SHANK DIAMETER WASHERED POWDER PINS PLACED 3 FEET O.C.
7. ALL ITEMS PLACED IN CONCRETE (BOLTS, ANCHORS, INSERTS, HOLDDOWNS, DOWELS, ETC.) SHALL BE SECURED FOR BOTH LOCATION AND ORIENTATION UNTIL CONCRETE HAS HARDENED
8. REINFORCEMENT PROTECTION SHALL BE AS FOLLOWS: FORMED CONCRETE NOT EXPOSED TO THE EARTH: 2", FORMED CONCRETE EXPOSED TO THE EARTH: 3"
9. CONCRETE SLABS SHALL BE SAWCUT AT 10 FOOT INTERVALS IN EACH DIRECTION. PLACE (3) 3' LONG PIECES OF #4 REBAR, 1' O/C, AT 45 DEG. ANGLE. TO REBAR GRID @ RE-ENTRANT CORNERS IN SLABS WITHIN 1' OF CORNER.
10. PIPES THAT NEED TO PASS THROUGH CONCRETE SHALL DO SO ONLY WITHIN SLEEVES
11. ALL CONCRETE WALL AND FOOTING POURS SHALL BE MECHANICALLY VIBRATED

MASONRY

1. ALL MASONRY CONSTRUCTION SHALL FOLLOW TMS 402/602, ACI 530, ASCE5, LATEST EDITION OF EACH.
2. MASONRY CONSTRUCTION SHALL ACHIEVE MINIMUM SPECIFIED MASONRY COMPRESSIVE STRENGTH (f'm) OF 2,000 PSI.

TIMBER

1. ALL SAWN JOISTS, RAFTERS, HEADERS, POSTS, BEAMS, AND LIGHT FRAMING MEMBERS SHALL BE DOUG-FIR LARCH GR. 2 OR BETTER U.N.O.
2. ALL SAWN 2x MEMBERS SHALL BE MFG. & USED @ 19% MAX. MOISTURE CONTENT AND SHALL BEAR THE LABEL "S.DRY" OR "MC-15" ON THE GRADING STAMP
3. ENGINEERED LUMBER AND "I-JOISTS" (TJI's & BCI FOR EX.) SHALL BE INSTALLED ACCORDING TO MFG.'S SPECIFICATIONS. FOLLOW THE LATEST EDITION OF THE WEYERHAUSER INSTALLATION GUIDE.
4. ALL LUMBER AND INSTALLATION OF SHALL CONFIRM WITH LOCAL APPLICABLE BUILDING CODES & THE N.D.S. (NATIONAL DESIGN SPECIFICATION FOR WOOD).
5. ALL LUMBER SHALL BE STAMPED PER AN APPROVED GRADING AGENCY
6. THE S.E.O.R. SHALL BE NOTIFIED FOR INSPECTION WHEN ALL STRUCTURAL FRAMING IS COMPLETE BUT PRIOR TO COVERING, MIN. 5 BUSINESS DAYS NOTICE.
7. "LVL" AS REFERENCED HEREIN SHALL REFER TO LAMINATED VENEER LUMBER (E.G. MICROLLAM 2.0E), NOM. WIDTH = 1.75", MFG. BY TRUSS JOIST. ALL LVL TO HAVE AT LEAST THE MINIMUM DESIGN STRESSES LISTED BELOW:
   - 7.1. Fb=2,600 PSI Fv= 285 PSI Fc(II)= 2,310 PSI Fc(Perp.) = 750 PSI E= 2,000,000 PSI
8. U.N.O., ALL LOAD BEARING WALLS SHALL BE FRAMED WITH 2x6 STUDS @ 16" O/C, DOUBLE TOP PLATES.

SHEATHING SCHEDULE U.N.O.

APPLICATION	MATERIAL	SPAN/INDEX	EDGE NAILING	FIELD NAILING
ROOF	5/8" OSB	32/16	8d @ 6" O.C.	8d @ 12" O.C.
FLOOR	3/4" T&G OSB	48/24	8d @ 6" O.C.	8d @ 12" O.C.
SHEAR WALL	7/16" OSB	24/0	8d @ 4" O.C.	8d @ 10" O.C.

STRUCTURAL ABBREVIATIONS

ABBREVIATION	DEFINITION	ABBREVIATION	DEFINITION
ALT	ALTERNATE	KLF	KIPS PER LINEAL FOOT
ARCH	ARCHITECTURAL	LBS	POUNDS
BOT	BOTTOM	LLH	LONG LEG HORIZONTAL
BLDG	BUILDING	LLV	LONG LEG VERTICAL
BM	BEAM	LSL	LAMINATED STRAND LUMBER
BTWN	BETWEEN	LVL	LAMINATED VENEER LUMBER
CIP	CAST-IN-PLACE	MAX	MAXIMUM
CLR	CLEAR	MECH	MECHANICAL
CMU	CONCRETE MASONRY UNIT	MIN	MINIMUM
COL	COLUMN	(N)	NEW CONSTRUCTION
CONC	CONCRETE	OC	ON CENTER
CONT	CONTINUOUS	OH	OPPOSITE HAND
DIA. Ø	DIAMETER	O.F.	OUTSIDE FACE
DIM	DIMENSION	PAF	POWDER ACTUATED FASTNER
DTL	DETAIL	PERP	PERPENDICULAR
DWGS	DRAWINGS	PJP	PARTIAL JOINT PENETRATION
DWL	DOWEL	PL	PLATE
EA	EACH	PLF	POUNDS PER LINEAL FOOT
EF	EACH FACE	REINF	REINFORCEMENT
ELEV	ELEVATION	REQD	REQUIRED
EW	EACH WAY	SOG	SLAB ON GRADE
EXIST. (E)	EXISTING CONSTRUCTION	SCHED	SCHEDULE
EXP	EXPANSION	SIP	STRUCTURAL INSULATING PANEL
FDN	FOUNDATION	STFNR	STIFFENER
FLR	FLOOR	STL	STEEL
FTG	FOOTING	THK	THICKNESS
GLB	GLULAM	TRAN	TRANSVERSE
HORIZ	HORIZONTAL	TYP	TYPICAL
ICF	INSULATED CONCRETE FORM	UNO	UNLESS NOTED OTHERWISE
I.F.	INSIDE FACE	VERT	VERTICAL
KIP	1000 LBF	VIF	VERIFY IN FIELD
		WWF	WELDED WIRE FABRIC

PLEASE NOTE: INSPECTION REQUESTS SHALL BE VIA EMAIL TO "INSPECTIONS@BLACKCANYONENGINEERS.COM", SEE ADDITIONAL NOTES HEREIN.

General Notes

BLACK CANYON ENGINEERS

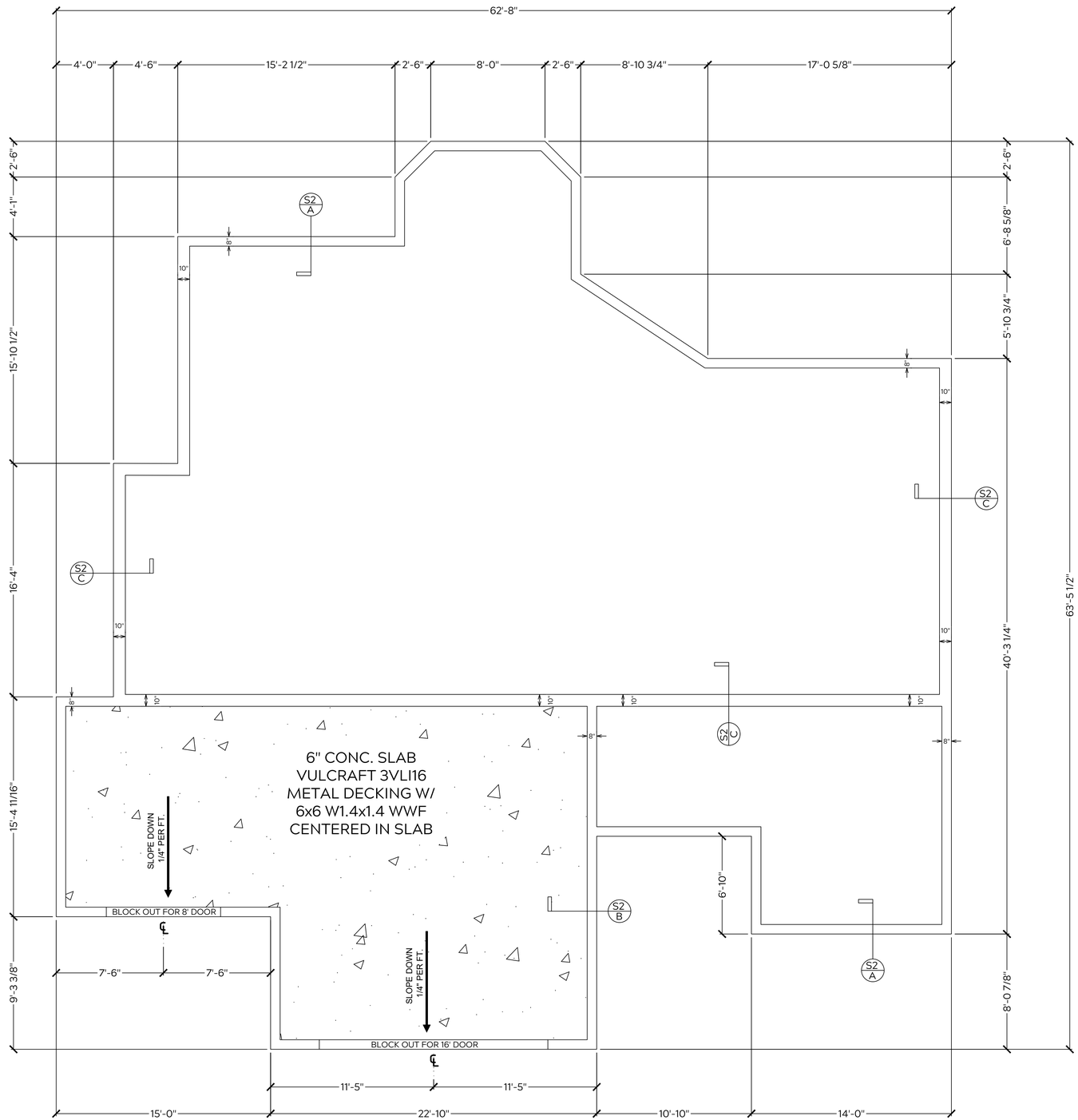
COLORADO LICENSED
DREW SMITH RUDY RMA
55066
PROFESSIONAL ENGINEER
12/16/2022

No.	Revision/Issue	Date
0	ISSUE	11/03/22
2	REVISION	12/16/22

Firm Name and Address
Black Canyon Engineers
447 E. Main St.
Montrose, CO 81401
970-568-5391
Support@BlackCanyonEngineers.com
www.BlackCanyonEngineers.com

Project Name and Address
Kelly Residence
183 River Ridge Ct.
Grand Junction, CO
Single Family Residence

Project: BCE102207
Date: 11/03/22
Scale: As Noted
Sheet: GS



1/4"=1'-0"

FOUNDATION PLAN

General Notes

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DREW SMITH RUDEMAN
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12/16/2022

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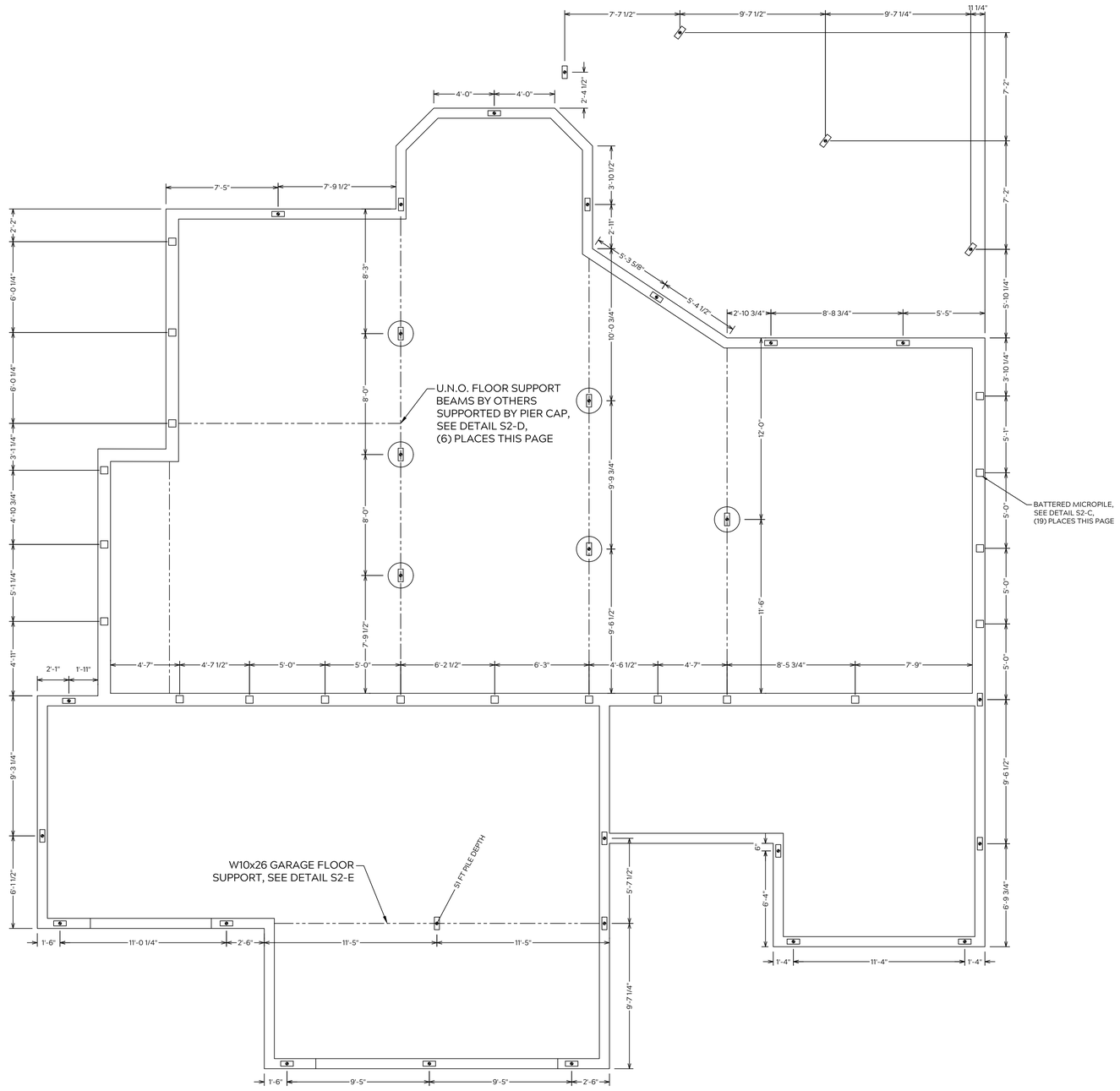

1/4" = 1'-0"

M.P. LOCATIONS

General Notes

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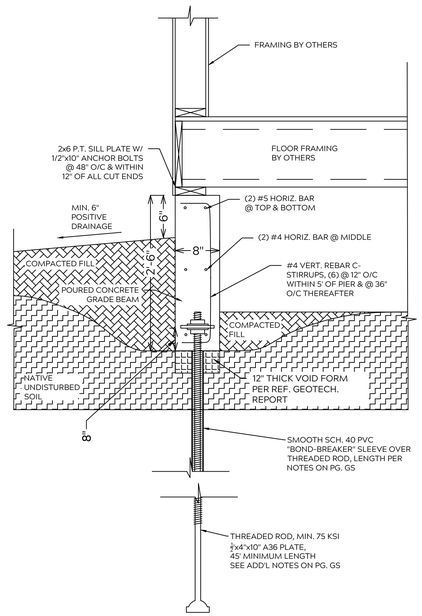
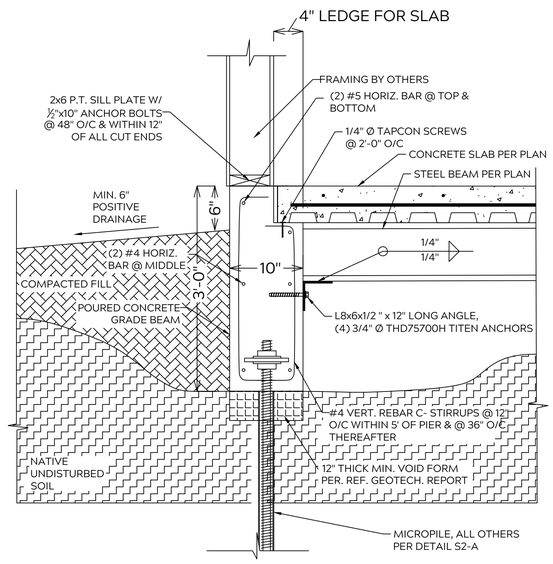
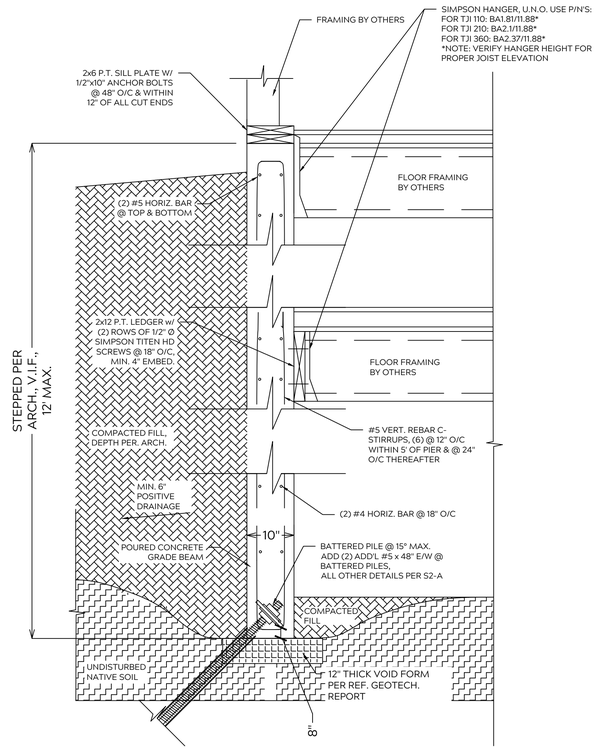


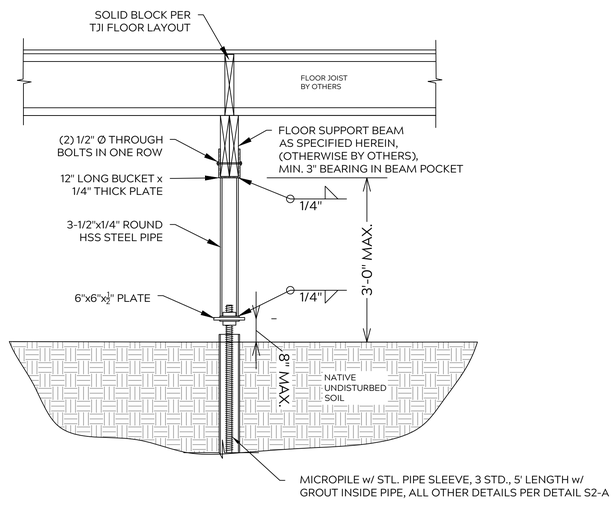
S2 A GRADE BEAM SECTION & MICROPILE DETAIL N.T.S.



S2 B GARAGE FOUNDATION DETAIL N.T.S.



S2 C GRADE BEAM, BASEMENT SECTION & MICROPILE DETAIL N.T.S



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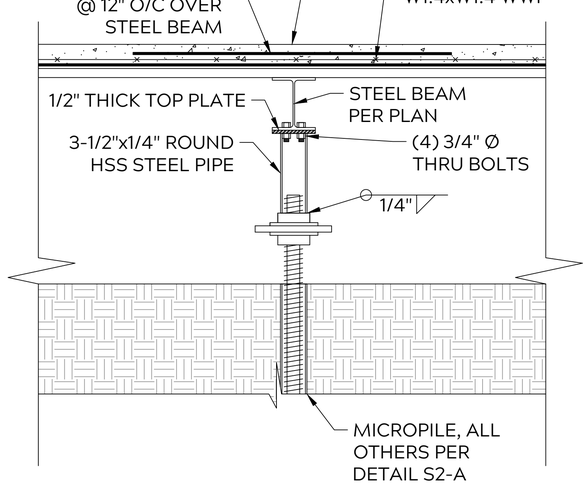

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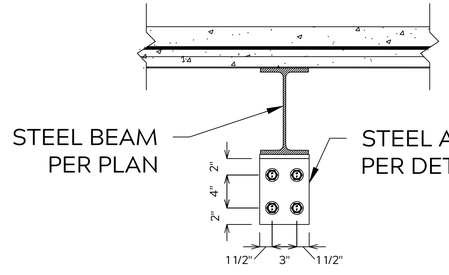

S2 F ANGLE BOLT PATTERN N.T.S.

N.T.S

DETAILS

General Notes

BLACK CANYON ENGINEERS

COLORADO LICENSED
JOHN W. SMITH RIDGE MAY
55066
PROFESSIONAL ENGINEER
12/16/2022

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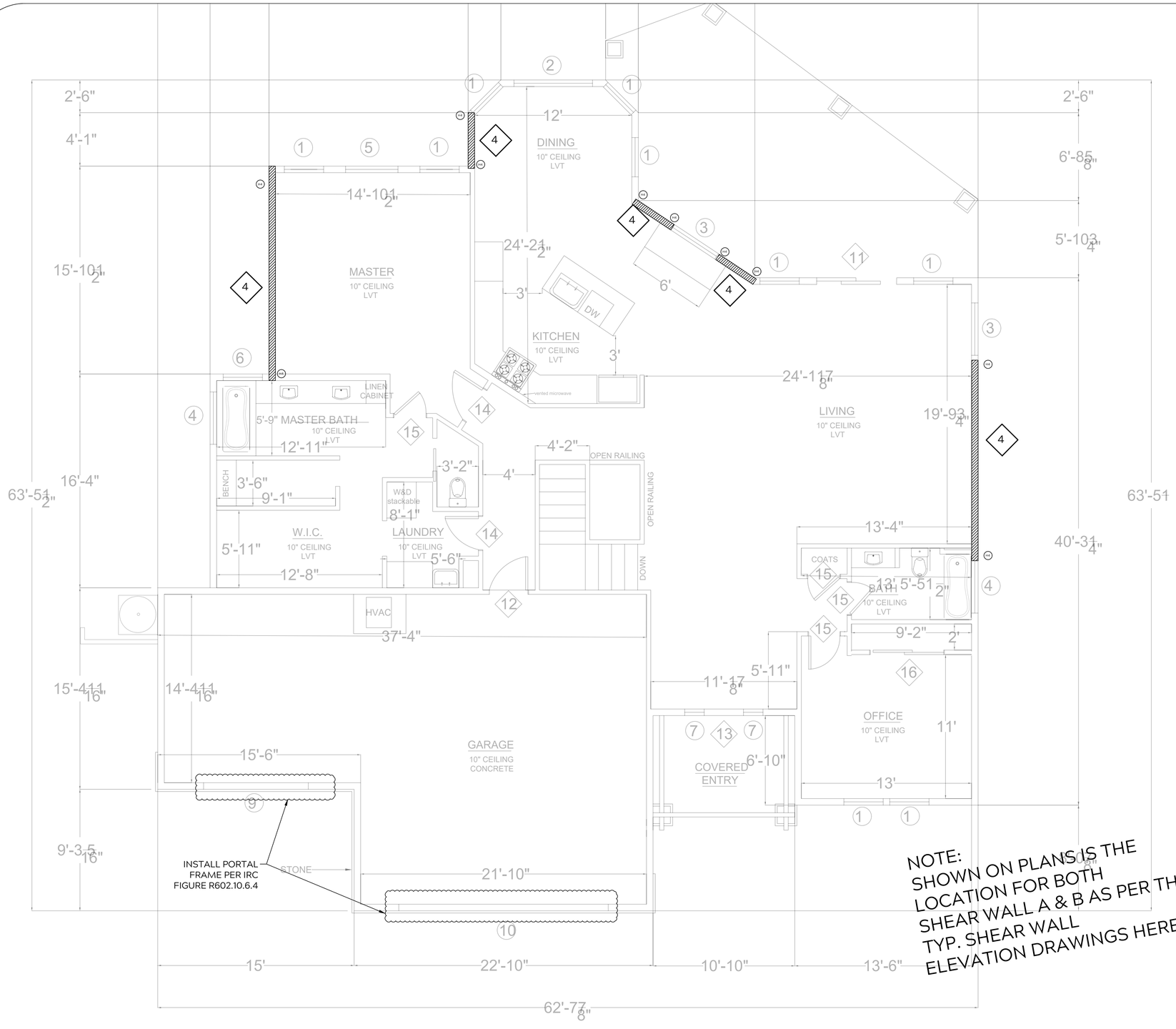

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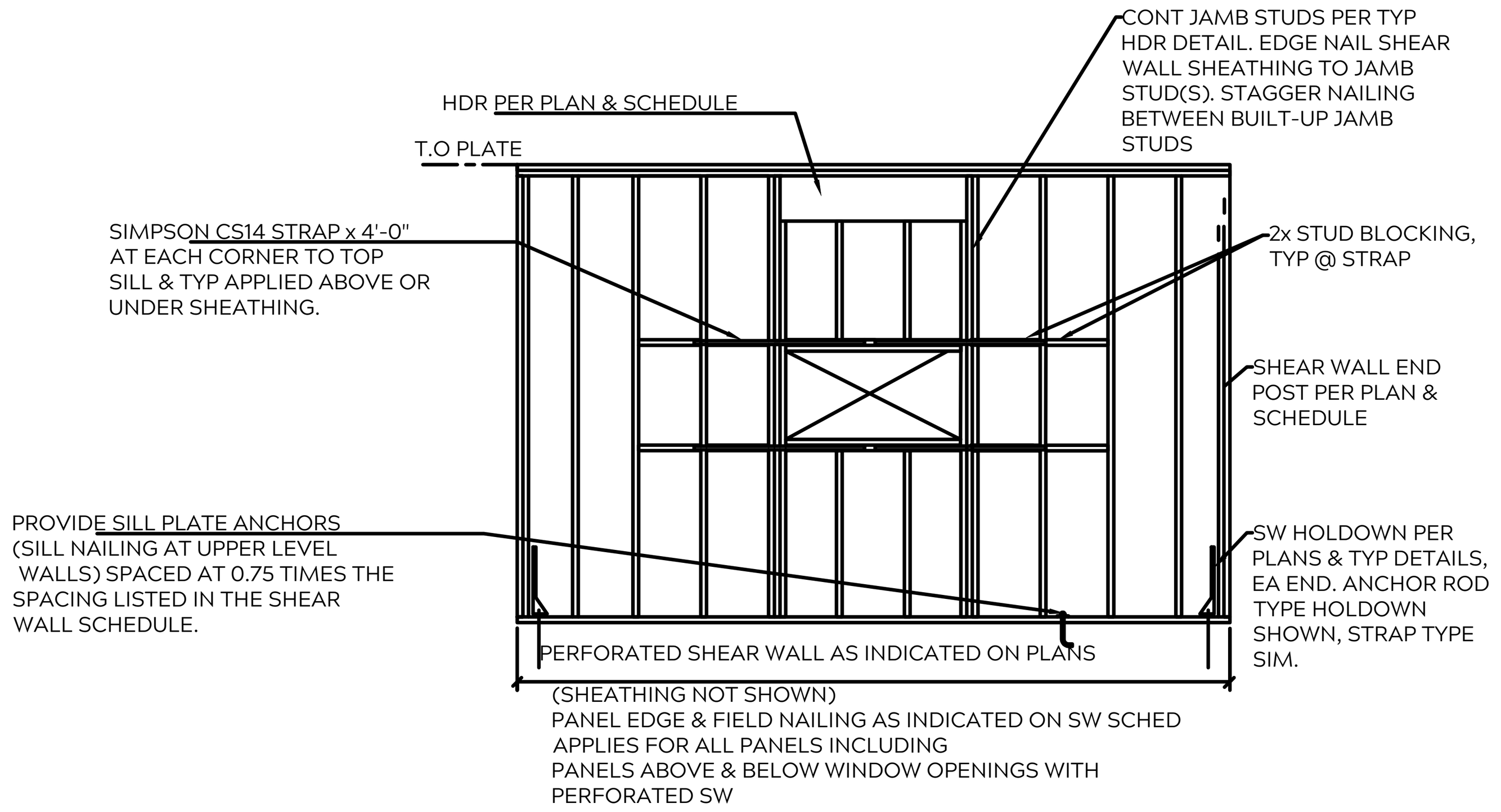
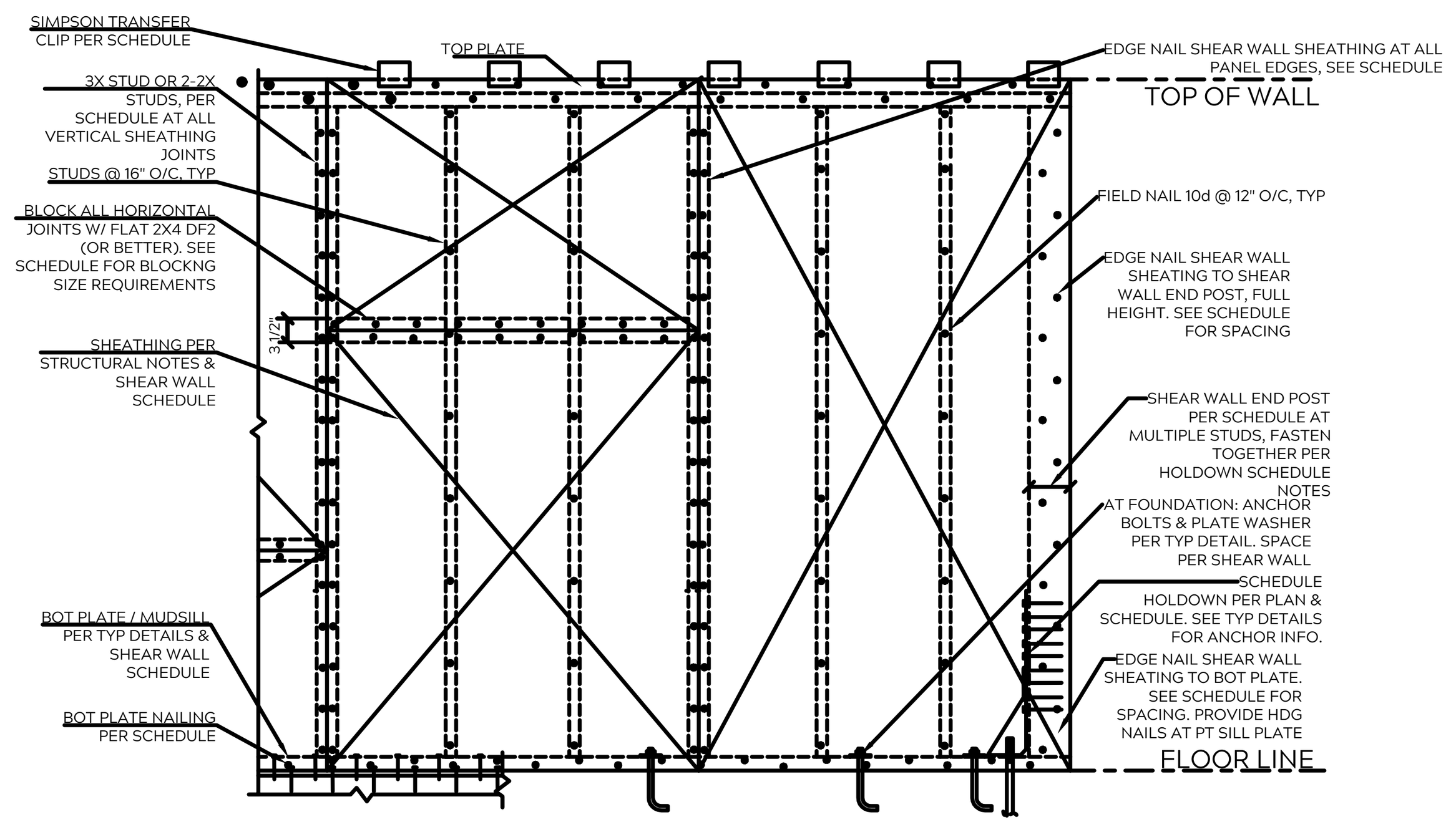


TYP PERFORATED SHEAR WALL FRAMING



TYP SHEAR WALL FRAMING

HOLDOWN SCHEDULE					
HD MARK (SEE PLAN)	SIMPSON HD'S				SIMPSON ANCHOR
	MODEL	ANCHOR SIZE	POST IN 4X WALL	POST IN 6X WALL	
H2	HDU2-SDS2.5	5/8"Ø	(2)2X4[5]	(2)2X6[5]	SB5/8x24
H4	HDU4-SDS2.5	5/8"Ø	(2)2X4[5]	(2)2X6[5]	SB5/8x24
H8	HDU8-SDS2.5	7/8"Ø	(3)2X4[5]	(3)2X6[5]	SB7/8x24
H&PAB	HDU8-SDS2.5	7/8"Ø	(3)2X4[5]	(3)2X6[5]	PAB7-12
H11	HDU11-SDS2.5	1"Ø	4X6	6X6	SB1x30
H14	HDU14-SDS2.5	1"Ø THREAD ROD	4X6	6X6	N/A
H19	HD19	1-1/4"Ø THREAD ROD	4X8	6X8	N/A
CNST14	CMST14	L = 6'-3" MIN	4X4	(2)2X6[5]	N/A
MSTC40	MSTC40 STRAP	STRAP	(2)2X4[5]	(2)2X6[5]	N/A

ALTERNATE TO SIMPSON ANCHOR

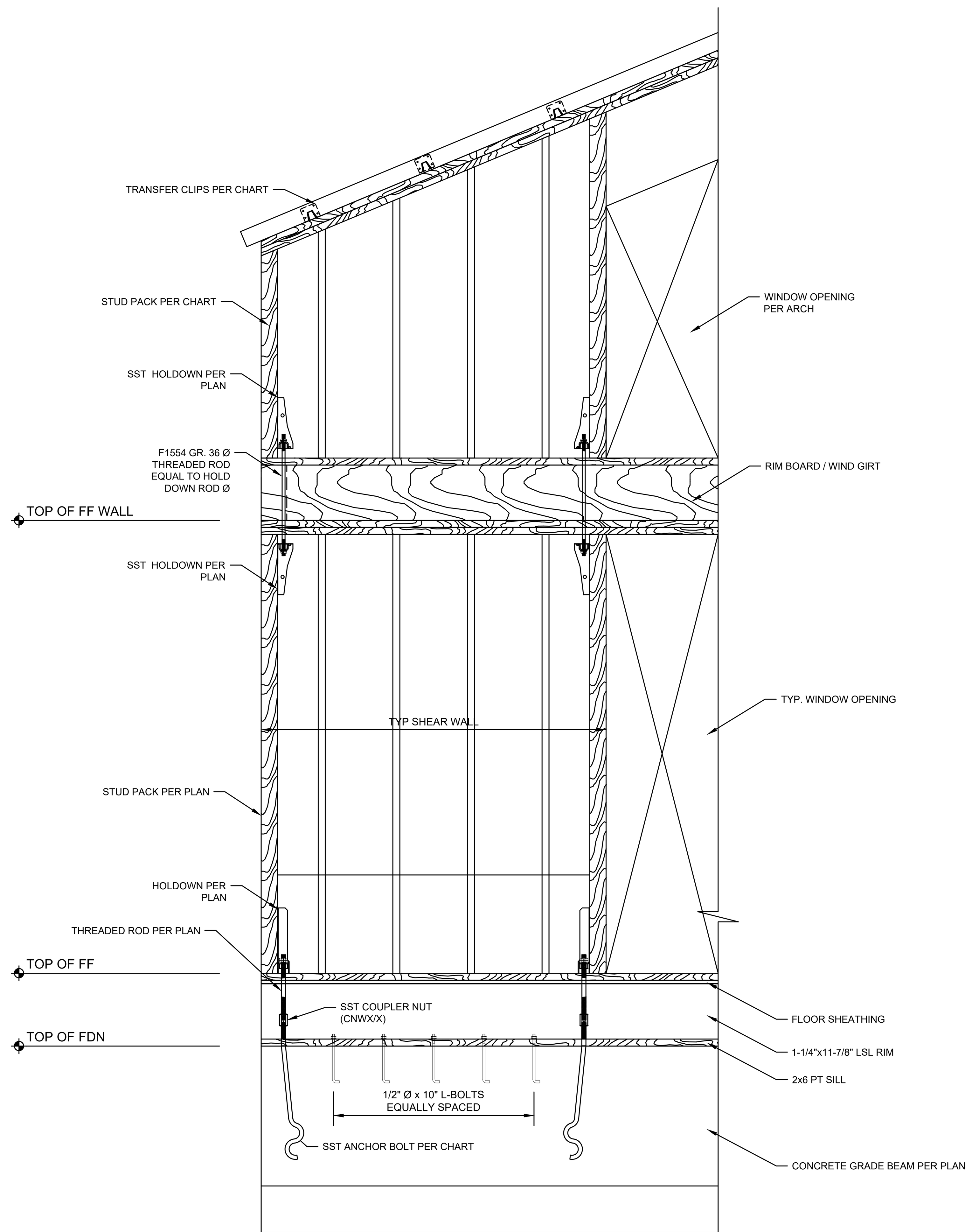
ANCHOR SIZE	EPOXY EMBEDED DEPTH
5/8"Ø	10"
5/8"Ø	10"
5/8"Ø	15"
7/8"Ø	15"
N/A	N/A
N/A	N/A

HOLDOWN SCHEDULE NOTES:
1. TYPICAL POST SIZE SHOWN IN SCHEDULE, UNLESS NOTED OTHERWISE ON PLAN.
2. REFER TO HOLDOWN DETAILS FOR ANCHOR PLACEMENT AND EMBEDMENT.
3. WHEN USINGS STRUCTURAL COMPOSITE LUMBER POSTS, SCREWS MUST BE APPLIED TO WIDE FACE.
4. SDS SCREWS INSTALL BEST WITH A LOW SPEED 1/2" RIGHT ANGLE DRILL WITH A 3/8" HEX HEAD DRIVER
5. FASTEN MULTIPLE STUD POSTS TOGETHER WITH 3" LONG NAILS WITH NAILS OF THE SAME DIAMETER AND SPACING AS THE SOLE PLATE NAILING SHOWN IN THE SHEARWALL SCHEDULE. STAGGER ROWS OF NAILS
6. NOTCHES ARE NOT ALLOWED IN SHEAR WALL END POSTS.
7. CENTER STRAP HOLDOWNS ON RIM JOIST. NO FASTNERS ARE REQUIRED TO RIM JOIST.
8. HOLDOWN ANCHORS SHALL BE SECURELY TIED TO FORMWORK AND CAST IN-PLACE.
9. EPOXY ANCHOR ALTERNATIVE: SIMPSON SET-XP EPOXY. DRILL & EPOXY PER SIMPSON RECOMMENDATIONS. USE A36 THREADED ROD ANCHORS.

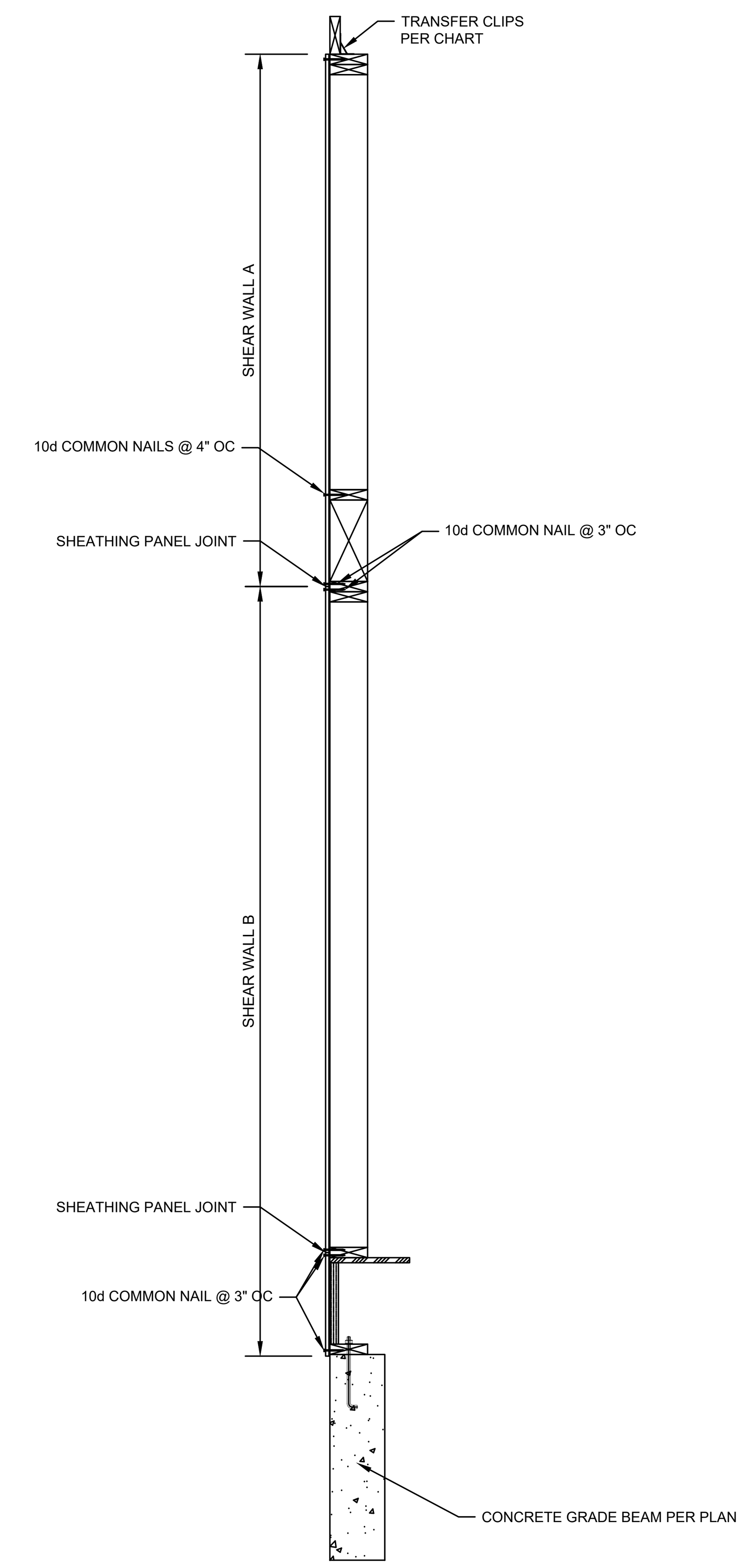
HOLDOWN SCHEDULE

SHEAR WALL SCHEDULE								
MARK	SHEATING	SIDES	NAILING		5/8" Ø SILL PIATE[4] ANCHOR	NAILING OF[6] 2X SOLE PLATES	SIMPSON TRANSFER CLIPS	
			PANEL EDGES	INTER SUPPORTS			LTP4	ALT, USE A35
6	15/32"	ONE	10d@6"	10d@12"	@48"O.C	16d@8"O.C	@30"O.C	@30"O.C
4	15/32"	ONE	10d@4"	10d@12"	@32"O.C	16d@6"O.C	@16"O.C	@16"O.C
3	15/32"	ONE	10d@3"	10d@12"	@24"O.C	16d@4"O.C	@12"O.C	@12"O.C
2	15/32"	ONE	10d@2"	10d@12"	@19.2"O.C	16d@3"O.C	@10"O.C	@10"O.C
42	15/32"	BOTH SIDES	10d@4"	10d@12"	@16"O.C	(2) ROWS OF 16d@4" O.C	@8"O.C	@8"O.C
32	15/32"	BOTH SIDES	10d@3"	10d@12"	@12"O.C	(2) ROWS OF 16d@3" O.C	@6"O.C	@6"O.C
22	15/32"	BOTH SIDES	10d@2"	10d@12"	@10"O.C	(2) ROWS OF 16d@2" O.C	@5"O.C	@5"O.C

SHEAR WALL SCH. NOTES:
1. APA RATED, STRUCTURAL SHEATHING,15/32 MIN. EXPOSURE 1.
2. ALL NAILS SHALL BE COMMON WIRE NAILS WITH 1 1/4" MIN PENETRATION INTO FRAMING.
3. PROVIDE 3X STUDS OR 3X BLKG. AT ADJOINING PANEL EDGES WHERE NAILS ARE SPACED 4" OR LESS



1 TYP. SHEAR WALL ELEVATION
Scale: N.T.S.



2 TYP. SHEAR WALL SECTION
Scale: N.T.S.

N.T.S.

SHEAR WALL DETAILS

General Notes

BLACK CANYON ENGINEERS

COLORADO LICENSED
DREW SMITH RUDERMAN
55066
PROFESSIONAL ENGINEER
12/16/2022

No.	Revision/Issue	Date
0	ISSUE	11/03/22
2	REVISION	12/16/22

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Single Family Residence

Project: BCE102207
Date: 11/03/22
Scale: As Noted
Sheet: S4