

SHEET INDEX:

S-0	COVER SHEET	
S-0.1	GENERAL STRUCTURAL NOTES	
S-1	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 1
S-1.1	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 1 w/ OPT. 1 CAR GARAGE
S-1.2	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 1 w/ OPT. 2 CAR GARAGE
S-1.3	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 2
S-1.4	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 2 w/ OPT. 1 CAR GARAGE
S-1.5	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 2 w/ OPT. 2 CAR GARAGE
S-1.6	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 3
S-1.7	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 3 w/ OPT. 1 CAR GARAGE
S-1.8	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 3 w/ OPT. 2 CAR GARAGE
S-1.9	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 4
S-1.10	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 4 w/ OPT. 1 CAR GARAGE
S-1.11	MONOLITHIC SLAB FOUNDATION PLAN	ELEVATION 4 w/ OPT. 2 CAR GARAGE
S-2	ROOF FRAMING PLAN	ELEVATION 1
S-2.1	ROOF FRAMING PLAN	ELEVATION 1 w/ OPT. 1 CAR GARAGE
S-2.2	ROOF FRAMING PLAN	ELEVATION 1 w/ OPT. 2 CAR GARAGE
S-2.3	ROOF FRAMING PLAN	ELEVATION 2
S-2.4	ROOF FRAMING PLAN	ELEVATION 2 w/ OPT. 1 CAR GARAGE
S-2.5	ROOF FRAMING PLAN	ELEVATION 2 w/ OPT. 2 CAR GARAGE
S-2.6	ROOF FRAMING PLAN	ELEVATION 3
S-2.7	ROOF FRAMING PLAN	ELEVATION 3 w/ OPT. 1 CAR GARAGE
S-2.8	ROOF FRAMING PLAN	ELEVATION 3 w/ OPT. 2 CAR GARAGE
S-2.9	ROOF FRAMING PLAN	ELEVATION 4
S-2.10	ROOF FRAMING PLAN	ELEVATION 4 w/ OPT. 1 CAR GARAGE
S-2.11	ROOF FRAMING PLAN	ELEVATION 4 w/ OPT. 2 CAR GARAGE
SD-1	BRACED WALL DETAILS	
SD-2	HOLD DOWN DETAILS	
SD-3	BRACED WALL NOTES & DETAILS	
SD-4	PORTAL FRAME DETAILS	
SD-5	MISCELLANEOUS FRAMING DETAILS	
SD-6	MISCELLANEOUS FRAMING DETAILS	
SD-7	MONOLITHIC SLAB FOUNDATION DETAILS	
SD-8	NOT USED	
SD-9	NOT USED	
SD-10	NOT USED	
SD-11	NOT USED	



KSE ENGINEERING

1900 AM DRIVE, SUITE 201, QUAKERTOWN, PA 18951
www.kse-eng.com (215) 804-4449

PINECREST

RALEIGH, NORTH CAROLINA

THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH AND COORDINATED WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. THIS COORDINATION IS NOT THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD (SER). SHOULD ANY DISCREPANCIES BECOME APPARENT, THE CONTRACTOR SHALL NOTIFY KSE ENGINEERING, P.C. BEFORE CONSTRUCTION BEGINS. IT IS THE INTENT OF THE ENGINEER LISTED ON THESE DOCUMENTS THAT THESE DOCUMENTS BE ACCURATE, PROVIDING LICENSED PROFESSIONALS CLEAR INFORMATION. EVERY ATTEMPT HAS BEEN MADE TO PREVENT ERROR. THE BUILDER AND ALL SUBCONTRACTORS ARE REQUIRED TO REVIEW ALL OF THE INFORMATION CONTAINED IN THESE DOCUMENTS PRIOR TO THE COMMENCEMENT OF ANY WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ANY PLAN ERRORS, OMISSIONS, OR MISINTERPRETATIONS UNDETECTED AND NOT REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION. ALL CONSTRUCTION MUST BE IN ACCORDANCE TO THE INFORMATION FOUND IN THESE DOCUMENTS.

DESIGN S

DESIGN BUIL
• 2018
CODE

DESIGN LIVE
• ROOF
• UNIN
• HABIT
• FLOO
• FLOO
• DECK
• STAIR

DESIGN DEAF
• ROOF
• FLOO
• FLOO
• STAN
• QUEE

*NOTE:
OTHER
PLANS.

DESIGN WING
• ULTIA
• EXPC

ASSUMED SC

ASSUMED LA

FROST DEPTI

SEISMIC DES

ENGINEERED
• BOISI
• LSL:
• LVL:
• PSL:

1. THE DESIGN PROFESSIONAL WHOSE SEAL APPEARS ON THESE DRAWINGS IS THE STRUCTURAL ENGINEER OF RECORD (SER) FOR THIS PROJECT. THE SER BEARS THE RESPONSIBILITY OF THE PRIMARY STRUCTURAL ELEMENTS AND THE PERFORMANCE OF THIS STRUCTURE. NO PARTY MAY RELY ON ANY OTHER PARTY FOR THE STRUCTURAL ASPECTS OF THESE CONSTRUCTION DOCUMENTS WITHOUT WRITTEN CONSENT OF KSE ENGINEERING, P.C. OR THE SER. FOR THE PURPOSES OF THESE CONSTRUCTION DOCUMENTS, THE SER AND KSE ENGINEERING SHALL BE CONSIDERED TO BE THE SAME PARTY.
2. THE STRUCTURE IS ONLY STABLE IN ITS COMPLETED FORM. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY BRACING DURING CONSTRUCTION TO STABILIZE THE STRUCTURE.
3. THE SER IS NOT RESPONSIBLE FOR CONSTRUCTION SEQUENCES, CONSTRUCTION METHODS OR CONSTRUCTION TECHNIQUES. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CONFORM TO THE CONTRACT DOCUMENTS, SHOULD ANY NON-CONFORMITIES OCCUR.
4. THE SER DOES NOT GUARANTEE THE ACCURACY OF ANY ARCHITECTURAL LAYOUT INCLUDING ROOF GEOMETRY. THE SER ASSUMES NO LIABILITY FOR CHANGES MADE TO THESE PLANS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THE PLANS. THE SER SHALL BE NOTIFIED FOR ANY DISCREPANCY OR AMBIGUITY IN THE CONSTRUCTION OF THE PLANS. ANY STRUCTURAL ELEMENTS OR DETAILS NOT FULLY DEVELOPED ON THE CONSTRUCTION DRAWINGS SHALL BE COMPLETED UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. THESE SHOP DRAWINGS SHALL BE SUBMITTED TO THE SER FOR REVIEW BEFORE ANY CONSTRUCTION BEGINS. THE SHOP DRAWINGS WILL BE REVIEWED FOR OVERALL COMPLIANCE AS IT RELATES TO THE STRUCTURAL DESIGN OF THIS PROJECT. VERIFICATION OF THE SHOP DRAWINGS FOR DIMENSIONS, OR FOR ACTUAL FIELD CONDITIONS, IS THE RESPONSIBILITY OF THE CONTRACTOR AND KSE ENGINEERING, P.C. VERIFICATION OF ASSUMED FIELD CONDITIONS IS NOT THE RESPONSIBILITY OF THE SER. THE CONTRACTOR SHALL VERIFY THE FIELD CONDITIONS FOR ACCURACY AND REPORT ANY DISCREPANCIES TO KSE ENGINEERING, P.C. IMMEDIATELY.
5. THE SER IS NOT RESPONSIBLE FOR ANY SECONDARY STRUCTURAL ELEMENTS OR NON-STRUCTURAL ELEMENTS, EXCEPT FOR THE ELEMENTS SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS.
6. THIS STRUCTURE AND ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE BUILDING CODE AND ANY LOCAL CODES OR RESTRICTIONS.
7. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. ALL DIMENSIONS ARE BY FACE OF STUD OR FACE OF FRAMING UNLESS OTHERWISE NOTED.
8. WATERPROOFING AND FLASHING BY OTHERS.

1. FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE BUILDING CODE.
2. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY OF THE SOIL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE BUILDER SHALL FURNISH ANY AND ALL REPORTS RECEIVED FROM THE GEOTECHNICAL ENGINEER ON THE STUDY OF THE PROPOSED SITE TO THE DESIGNER, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.
3. MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS IS TO BE AS SPECIFIED IN THE BUILDING CODE.
4. THE SER HAS NOT PERFORMED A SURFACE INVESTIGATION. VERIFICATION OF THE ADEQUACY OF THE RESPONSIBILITY OF THE OWNER OR THE CONTRACTOR. SHOULD ANY ADVERSE SOIL CONDITION BE ENCOUNTERED, THE SER MUST BE CONTACTED BEFORE PROCEEDING.
5. THE BOTTOM OF ALL FOOTINGS SHALL EXTEND BELOW THE FROST LINE FOR THE REGION IN WHICH THE STRUCTURE IS TO BE CONSTRUCTED, BUT NOT LESS THAN A MINIMUM OF 12" BELOW GRADE. ALL FOOTINGS TO HAVE A MINIMUM PROJECTION OF 2" ON EACH SIDE OF FOUNDATION. MINIMUM PROJECTION SHALL NOT EXCEED THE THICKNESS OF THE FOOTING.
6. WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH "A" ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT, SPACED A MAXIMUM OF 48" ON C.C. INSTALLED IN THE FOUNDATION SECTION, 12" MAXIMUM FROM CORNERS. "A" DIAMETER X 8" LONG SIMPSON TIE END OR USP SCREW-BOLT* SCREWS MAY BE SUBSTITUTED ON A 1 FOR 1 BASIS.
7. ANY WALL SHALL BE PLACED UNDER THE DIRECTION OR RECOMMENDATION OF A LICENSED PROFESSIONAL ENGINEER. THE RESULTING SOIL SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY.
8. FOUNDATION OF FOIIGS SHALL BE LINED TEMPORARILY WITH A 6-MIL POLYETHYLENE MEMBRANE IF PLACEMENT OF CONCRETE DOES NOT OCCUR WITHIN 24 HOURS OF EXCAVATION.
9. ANY CONCRETE SHALL BE PLACED AGAINST ANY SUBGRADE CONTAINING WATER, ICE, FROST, LOOSE MATERIAL.
10. PROVIDE FOUNDATION WATERPROOFING AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS (SEE ARCHITECTURAL PLANS AND DETAILS).
11. NOTIFY THE FOUNDATION ENGINEER IF THESE DOCUMENTS ARE SUITABLE FOR INSTALLATION IN SHRINK/SWELL CONDITIONS, REFER TO GEOTECHNICAL ENGINEER FOR APPROPRIATE DESIGN.
12. LOTS SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM FOUNDATIONS. SHALL BE GRADED SHALL HAVE A MINIMUM OF 6 INCHES WITHIN THE FIRST TEN FEET.
13. CRAWL SPACE TO BE GRADED LEVEL AND CLEAR OF ALL DEBRIS.
14. DRAINAGE DITCHES TO BE COVERED BY A PROTECTIVE BARRIER. ALL Joints TO BE LAPPEED MINIMUM 12" AND SEALED.

1. CONCRETE DESIGN BASED ON ACI 318 AND ACI 318.1 OR ACI 332. CONCRETE SHALL HAVE A NORMAL WEIGHT AGGREGATE AND A MINIMUM COMPRESSIVE STRENGTH (f'_c) = 3,000 PSI MINIMUM AT 28 DAYS PER CODE (VARIES w/ WEATHER), UNLESS OTHERWISE NOTED ON THE PLAN.
2. CONCRETE SHALL BE PROPORTIONED, MIXED, AND PLACED IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 318: "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND ACI 301: "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
3. AIR ENTRAINED CONCRETE MUST BE USED FOR ALL STRUCTURAL ELEMENTS EXPOSED TO FREEZE/THAW CYCLES AND DEICING CHEMICALS. AIR ENTRAINMENT AMOUNTS FOR CONCRETE SHALL BE WITHIN -1% TO +2% OF 6% FOR FOOTINGS AND EXTERIOR SLABS.
4. NO ADMIXTURES SHALL BE ADDED TO ANY STRUCTURAL CONCRETE WITHOUT WRITTEN PERMISSION OF THE SER. WATER ADDED TO CONCRETE ON SITE SHALL NOT EXCEED THAT ALLOWED BY THE MIX DESIGN.
5. CONCRETE SLABS-ON-GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 302.1R: "GUIDE FOR CONCRETE SLAB AND SLAB CONSTRUCTION".
6. CONTROL OR SAW CUT JOINTS (CUT OR TOOLED) SHALL BE SPACED IN INTERIOR SLABS-ON-GRADE AT A MAXIMUM OF 15'-0" O.C. AND IN EXTERIOR SLABS-ON-GRADE AT A MAXIMUM OF 12'-0" O.C. UNLESS OTHERWISE NOTED. CARE SHALL BE TAKEN TO AVOID RE-ENTRANT CORNERS.
7. CONTROL OR SAW CUT JOINTS SHALL BE PRODUCED USING CONVENTIONAL, CUT TOOLED PROCESSES WITHIN 4 TO 12 HOURS AFTER SLAB HAS BEEN PLACED.
8. REINFORCING STEEL MAY ENTER THROUGH A SAW CUT JOINT.
9. ALL WELDED WIRE FABRIC (W.W.F.) FOR CONCRETE SLABS-ON-GRADE SHALL BE PLACED AT MID-DEPTH OF SLAB. THE W.W.F. SHALL BE SUPPORTED BY CHAIRS OR A MINIMUM OF TWO #4 REINFORCING CONCRETE REINFORCEMENT, OR POLYPROPYLENE FIBERS MAY BE USED IN LIEU OF W.W.F. APPLICATION OF POLYPROPYLENE FIBERS PER CUBIC YARD OF CONCRETE SHALL BE PER MANUFACTURER AND COMPLY WITH ASTM 11116, ANY LOCAL BUILDING CODE REQUIREMENTS AND SHALL MEET THE FOLLOWING CRITERIA:
 - a. POLYPROPYLENE REINFORING TO BE 100% VIRGIN, CONTAINING NO REPROCESSED OLEFIN MATERIALS AND SPECIFICALLY MANUFACTURED FOR USE AS CONCRETE SECONDARY REINFORCEMENT.
 - b. STEEL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.
10. DETAILING, FABRICATION, AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 318: "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES".

14. THE SAME SIZE/SPACING AS THE HORIZONTAL REINFORCEMENT. PROVIDE REINFORCEMENT LAP AS NOTED BELOW, UNLESS NOTED OTHERWISE:
 - #4 BARS - 30" LENGTH
 - #5 BARS - 38" LENGTH
 - #6 BARS - 45" LENGTH
15. WHERE REINFORCING DOWNELS ARE REQUIRED, THEY SHALL BE EQUIVALENT IN SIZE AND SPACING TO THE VERTICAL REINFORCEMENT. THE DOWNEL SHALL EXTEND 48 BAR DIAMETERS VERTICALLY AND 20 BAR DIAMETERS INTO THE FOOTING. SEE K&E FOUNDATION DETAILS.
16. WHERE THE BOTTOM BAR IS TO BE STEPPED AT SLOPING GRADE CONDITIONS, PROVIDE CONTINUOUS REINFORCING WITH Z BARS (TO MATCH FOOTING REINFORCING) AS REQUIRED.
17. BAR SUPPORT ACCESSORIES SHALL BE PROVIDED IN ACCORDANCE WITH THE K&E FOUNDATION STANDARD PRACTICES FOR DETAILING REINFORCED CONCRETE STRUCTURES, EXCEPT THAT REINFORCING SHALL BE CHAINED ON THE BOTTOM AND/OR THE SIDES ON BOLSTERS SPACED NOT MORE THAN 4 FEET ON CENTER. NO ROCKS, COAL, CLAY OR OTHER ROCK SHALL BE USED AS BOLSTERS.
18. FOR GRADE SUPPORTED SLABS, SLAB REINFORCING SHALL BE HELD IN PLACE BY BAR SUPPORTS AND ACCESSORIES AS DESCRIBED IN THE CRSI MANUAL OF STANDARD PRACTICE. BAR SUPPORTS SHALL BE SPACED AT A MAXIMUM OF 4'-0" O.C. BOTH WAYS IN STRAIGHT LINES TO THE MESH GRID.

1. ALL MASONRY SHALL CONFORM TO ASTM C-90, F=1500 PSI, ALL BRICK SHALL CONFORM TO ASTM C-216, F=1500 PSI. ALL MORTAR SHALL BE TYPE "S" (TYPE "M" BELOW GRADE) AND CONFORM TO ASTM C-270. COURSE SHOWN SHALL CONFORM TO ASTM C-476 WITH A MAXIMUM AGGREGATE SIZE OF $\frac{3}{8}$ " AND A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
2. ALL MASONRY WORK SHALL BE IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" ACI 530/ASCE 5/MSJ 402 AND "SPECIFICATIONS FOR MASONRY STRUCTURES" ACI 530.1/ASCE 6/MSJ 602.
3. THE UNSUPPORTED HEIGHT OF SOLID MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THE PIER'S THICKNESS. UNLESS OTHERWISE SPECIFIED, HOLLOW PIERS MAY BE USED IF THE UNSUPPORTED HEIGHT IS NOT MORE THAN FOUR TIMES THEIR LEAST DIMENSION.
4. EACH CRAWL SPACE PIER SHALL BEAR IN THE MIDDLE THIRD OF ITS SPAN. FOOTING SHALL BE ORDERED SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS. PLASTERS TO BE BONDED TO PERIMETER FOUNDATION WALL.
5. TOP COURSE OF MASONRY SHALL BE GROUTED SOLID.
6. FOUNDATION WALL JOINT REINFORCEMENT SHALL BE STANDARD 9 GALVANIZED LADDER OR TRUSS TYPE SPACED AT 16" O.C., UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
7. SPLICED WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 6" AND CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT WITHIN THE LAP. ALL REINFORCEMENT SHALL BE STANDARD "T" AND "L" SHAPED PIES AT INTERSECTIONS AND CORNERS.

1. SOLID SAWN WOOD FRAMING MEMBERS SHALL CONFORM TO THE SPECIFICATIONS LISTED IN THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION": (NDS). UNLESS OTHERWISE NOTED, ALL WOOD FRAMING MEMBERS ARE DESIGNED TO BE:

SPRUCE-PINE-FIR (SPF) WITH THE FOLLOWING MINIMUM DESIGN VALUES:

E=1,400,000 PSI, $F_v=875$ PSI, $F_x=135$ PSI

1.1. FRAMING: SPF #2

1.2. STUDS: SPF #2

1.3. STUDS: SPF STUD GRADE.

2. ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE TREATED SOUTHERN YELLOW PINE #2 OR BETTER.

3. ANCHOR SILL PLATES IN ACCORDANCE w/ GENERAL STRUCTURAL NOTES.

4. ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY. LARGER MEMBERS MAY BE SUBSTITUTED AS LONG AS THEY ARE OF THE SAME OR GREATER MATERIAL.

5. NAILS SHALL BE COMMON NAIL NAILS UNLESS OTHERWISE NOTED.

6. BOLT HOLES AND LEAD HOLES FOR LAG SCREWS SHALL BE IN ACCORDANCE WITH NDS SPECIFICATIONS.

7. NUMBER OF STUDS PER JOINT SHALL BE ATTACHED WITH (2) ROWS 16" NAILS @ 6" O.C. STAGGERED. THE STUD COLUMN SHALL BE FULLY BLOCKED AT ALL FLOOR LEVELS TO ENSURE PROPER LOAD TRANSFER. WALL SHEATHING SHALL BE NAILED TO EDGE OF EACH STUD.

8. FACE NAIL, ALL MULTI-PLY BEAMS AND HEADERS WITH (2) ROWS 16G NAILS @ 6" O.C. STAGGERED, OR PER MANUFACTURER'S SPECIFICATIONS FOR ENGINEERED LUMBER, APPLY NAILING FROM BOTH FACES FOR (3) OR MORE PLYS.

9. FASTEN 4" PLY BEAMS WITH (1) 3/4" DIA. THROUGH BOLT W/ NUT WASHERS AT 12" O.C. STAGGERED TOP AND BOTTOM, 12" MINIMUM EDGE DISTANCE UNLESS OTHERWISE NOTED.

10. ALL BEAMS AND HEADERS SHALL HAVE (1)2x JACK STUD & (1)2x KING STUD UNLESS OTHERWISE NOTED. THE NUMBER OF STUDS INDICATED ON PLANS ARE THE TOTAL NUMBER OF JACK STUDS REQUIRED, UNLESS OTHERWISE NOTED.

11. PROVIDE KING STUDS AT EACH END OF HEADERS AS BELOW.

16" O.C. STUD SPACING:	24" O.C. STUD SPACING:
(1) STUD UP TO 3" OPENING	(1) STUD UP TO 4" OPENING
(2) STUDS UP TO 4" OPENING	(2) STUDS UP TO 8" OPENING
(3) STUDS UP TO 8" OPENING	(3) STUDS UP TO 12" OPENING
(5) STUDS UP TO 12" OPENING	(4) STUDS UP TO 16" OPENING
(6) STUDS UP TO 16" OPENING	

12. ALL BEAMS TO BE CONTINUOUSLY SUPPORTED LaterALLY AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED. MINIMUM OF 4" BEARING DRAWINGS UNLESS OTHERWISE NOTED. ALL BEAM SPLICES SHALL OCCUR OVER SUPPORTS.

13. SOLID BLOCKING TO BE PROVIDED AT ALL POINT LOADS THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO OTHER STRUCTURAL COMPONENTS.

14. ALL BEAM SPLICES SHALL BE IN THE INTENDED FLOOR JOIST USE ONLY (MOISTURE CONTENT <19%) UNLESS OTHERWISE NOTED.

15. ALL WATERPROOFING AND FIRE SAFETY SYSTEMS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE DESIGNED AND DETAILED BY OTHERS.

16. ANY WOOD FRAME INTERIOR BEARING WALL STUDS THAT HAVE HOLES IN THE CENTER OF THE STUD UP TO 1" DIAMETER SHALL HAVE STUD PROTECTION SHIELDS. ALL HOLES OVER 1" IN DIAMETER FOR PLUMBING SHALL BE BEARING SHIELDS. ALL HOLES FOR PRESS OR USP ST/ STUD SHOES, TYPICAL, UNLESS OTHERWISE NOTED.

17. BEARING WALLS SHALL BE SHEATHED ON NOT LESS THAN ONE SIDE WITH STRUCTURAL WALL SHEATHING OR GYPSUM BOARD. BRIDGING SHALL BE PROVIDED NOT GREATER THAN 4" UNLESS AFTER THE VERTICAL FROM EITHER END OF THE STUD IN LIEU OF SHEATHING.

1. DECKS ARE TO BE FRAMED IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND AS REFERENCED ON THE STRUCTURAL PLANS, EITHER THROUGH CODE REFERENCES OR CONSTRUCTION DETAILS.
2. PRESERVATIVE TREATED WOOD FRAMING TO BE SOUTHERN YELLOW PINE #2 OR BETTER.
3. GUARD RAILS AND LATERAL BRACING IS REQUIRED AT DECKS. DESIGN BY OTHERS.
4. PROVIDE DECK LATERAL LOAD CONNECTIONS PER BUILDING CODE.

1. PROVIDE 2x4x4 "0" RAFTER TIES AT 48" O.C.
2. RAFTERS SHALL BE SUPPORTED BY PURLINs AND PURLIN BRACES AS SHOWN ON THE PLAN. PURLIN BRACES SHALL NOT BEAR ON ANY CEILING JOIST, STRONGBACK OR HEADER UNLESS SPECIFICALLY NOTED ON THE PLAN. PURLIN BRACES SHALL BE FASTENED TO CEILING JOISTS WITH 1/4" PLAT. CEILING JOISTS SHALL HAVE LATERAL SUPPORT $\geq 1/4$ PLAT BRACING ON TOP EDGE OF JOIST AT LOOSE JOIST ENDS (WHERE JOISTS NOT FASTENED TO RAFTERS) OR FULL DEPTH BLOCKING. FASTEN END OF BRACING TO RAFTER OR FULL END FRAMING.
3. FASTEN RAFTER AND CEILING JOIST WITH (6) 12d NAILS UNLESS OTHERWISE NOTED.
5. PROVIDE VERTICAL 2x6 STRONGBACKS AT CEILING JOISTS @ 8'-0" O.C. THE STRONGBACK ENDS TO GABLE STUDS OR RAFTERS WHERE POSSIBLE. PROVIDE BLOCKING BETWEEN TOP PLATES AND STRONGBACKS. PROVIDE 2x4 PLAT FASTENED TO EACH JOIST WITH 12d NAILS. FASTEN STRONGBACKS WITH 12d NAILS @ 12" O.C. AND FASTENED TO EACH JOIST WITH (1) 12d NAIL.

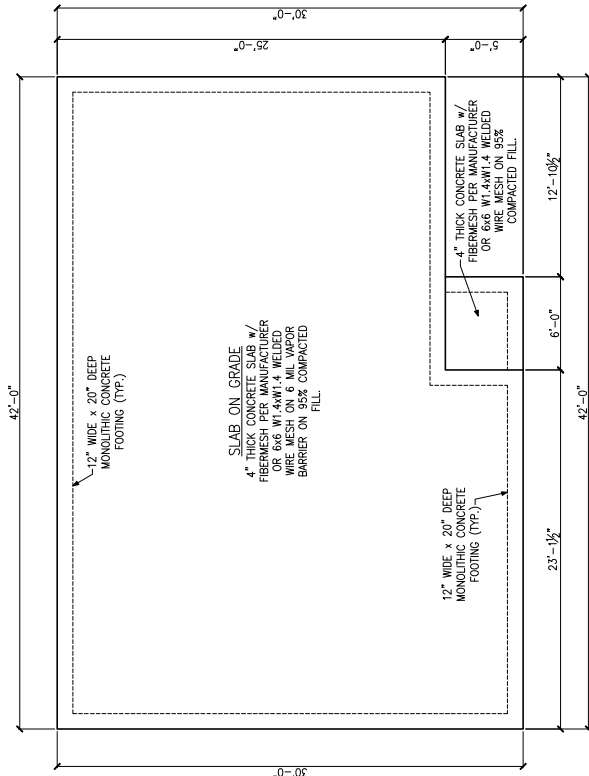
1. THE WOOD TRUSS MANUFACTURER/DESIGN OF THE WOOD TRUSSES, S/H SUPPORTING CALCULATIONS TO THE FABRICATION. THE SER SHALL HAVE REVIEWED THE REVIEW OF THE DESIGN DOCUMENTS, THE RESPONSIBILITY FOR THE CORRECT FOR THE WOOD TRUSSES.
2. THE WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE "MINIMUM DESIGN LOADS FOR BUILD (ASCE 7), AND THE LOADING REQUIRE SPECIFICATIONS. THE TRUSS DRAWING SHALL SHOW THE CONSTRUCTION LOADS SHOWN ON THESE DRAWINGS HVAC EQUIPMENT, PIPING, AND ARC THE TRUSSES.
3. THE TRUSSES SHALL BE DESIGNED, ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN STANDARD FOR METAL PLATE CONSTRUCTION".
4. THE TRUSS MANUFACTURER SHALL PROVIDE INFORMATION IN ACCORDANCE WITH THE INFORMATION GUIDE TO GOOD PRAC REFRAINING & BRACING OF METAL (BCSI). THIS BRACING, BOTH AS SHOWN ON THE SHOP DRAWINGS, & AS REQUIRED FOR THE TRUSS. THE CONTRACTOR IS RESPONSIBLE AND SHORING FOR THE FLOOR AND DURING CONSTRUCTION. AT A MINIMUM REQUIREMENTS OF THE TRUSS, A COPY OF THE BCSI SUMMARY SHEET.
6. THE CONTRACTOR IS RESPONSIBLE FOR THE TRUSS BRACING SHOWN IN THE SHOP DRAWINGS. ALL TRUSS BRACING SHALL REFER TO BCSI SUMMARY BRACES TO PREVENT AT EACH CORNER. DIAGONAL BRACES SHALL NOT BE S. DIAGONAL BRACES SHALL BE FASTENED WITH MINIMUM OF TWO 10d NAILS. BRACING CANNOT BE INSTALLED, DU ADJACENT TRUSSES NOT BEING IDE COORDINATE WITH THE TRUSS SPEC DETERMINE WHAT TYPE OF ALTERNATIVE IS REQUIRED.
7. ANY CHORDS OR TRUSS WEBS SHOWN AS A REFERENCE ONLY. TH SHALL BE PER THE TRUSS SPEC.
8. TRUSS LAYOUT AND PLACEMENT BY THE SUPPORT LOCATIONS SHOWN ON DRAWINGS. TRUSS PROFILES TO BE MANUFACTURED. TRUSS PLANS TO BE STRUCTURAL, TRUSS PROFILES.

1. FABRICATION AND PLACEMENT OF SHALL BE IN ACCORDANCE WITH GUIDE "RESIDENTIAL AND COMMERCIAL APAs STANDARDS."
2. ALL REQUIRED WOOD SHEATHING APA.
3. ROOF SHEATHING SHALL BE APA 2. ROOF SHEATHING SHALL BE O MINIMUM AND ATTACHED TO STUDS @ 8 BA NAILS AT 6" O.C. PANEL FIELD UNLESS OTHERWISE NOTED BE APPLIED WITH THE LONG DIRECTION SHEATHING SHALL HAVE A SPAN FRAMING SPACING, PROVIDE SUEA PLYWOOD CLIPS OR LUMBER BLOC PANEL END JOINTS SHALL OCCUR TO BE 7/16" OS MINIMUM.
4. EXPOSED ROOF SHEATHING SHALL EXPOSURE 1) 20. ATTACH SHEZ FRAMING WITH (1) 10d NAIL AT 12" O.C. IN PANEL FIELD UNLESS PANES, SHEATHING SHALL BE AFF SHEATHING SHALL BE AFF SHEATHING FRAMING SPACING, PROVIDE SUEA T&O PLYWOOD OR LUMBER BLOC PANEL END JOINTS SHALL OCCUR SHEATHING SHALL BE AFF SHEATHING RECOMMENDED IN ACCORDANCE W



LEGEND

- ★ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
- BEARING WALL ABOVE
- INTERIOR BEARING WALL
- BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)
- 48" WSP (SEE KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS)



MONOLITHIC SLAB FOUNDATION PLAN
ELEVATION 1

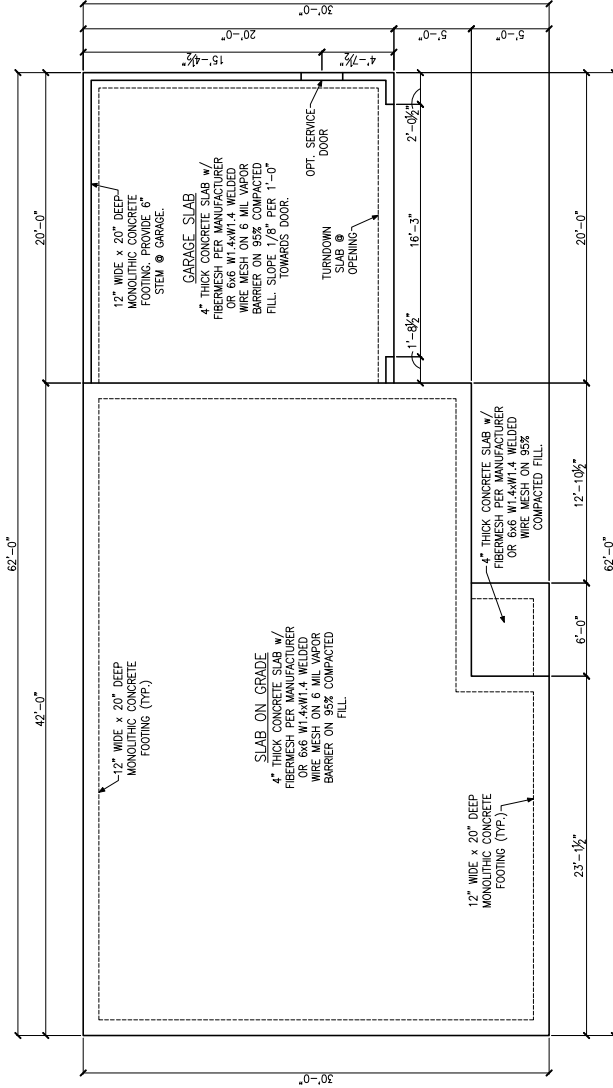
FOUNDATION DIMENSIONS
ARE TO EXTERIOR FACE
OF WALLS, EXCEPT WHERE
EDGE OF FRAMING ABOVE

FOUNDATION DIMENSIONS
ARE TO EXTERIOR FACE
OF WALL SHEATHING, NOT
EDGE OF FRAMING ABOVE



LEGEND

- ★ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
- BEARING WALL ABOVE
- INTERIOR BEARING WALL
- BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEARING FASTENING & BLOCKING DETAILS)
- 48" WSP (SEE KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS)



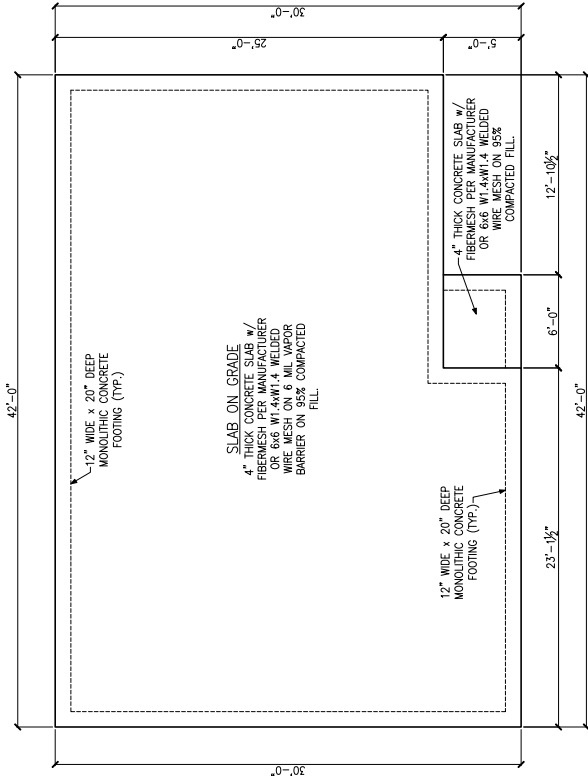
MONOLITHIC SLAB FOUNDATION PLAN
ELEVATION 1
OPT. 2 CAR GARAGE

FOUNDATION DIMENSIONS
ARE TO EXTERIOR FACE
OF WALLS, EXCEPT AT
EDGE OF FRAMING ABOVE



LEGEND

- ★ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
- BEARING WALL ABOVE
- INTERIOR BEARING WALL
- BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)
- 48" WSP (SEE KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS)



MONOLITHIC SLAB FOUNDATION PLAN
ELEVATION 2

FOUNDATION DIMENSIONS
ARE TO EXTERIOR FACE
OF WALLS EXCEPT NOTED
EDGE OF FRAMING ABOVE

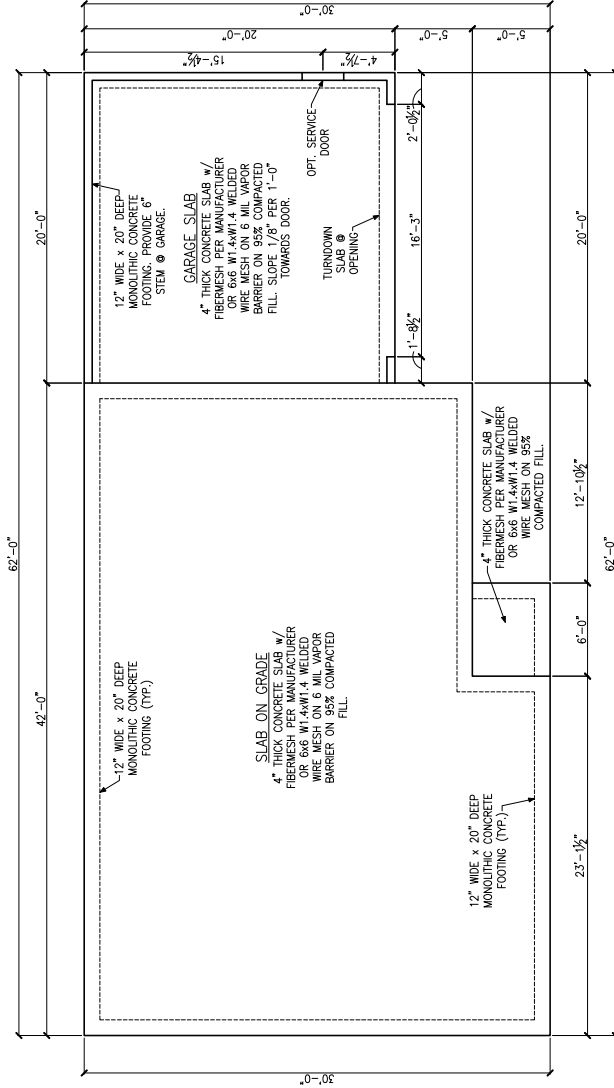
FOUNDATION DIMENSIONS
ARE TO EXTERIOR FACE
OF WALL SHEATHING, NOT
EDGE OF FRAMING ABOVE



LEGEND

- ★ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
- BEARING WALL ABOVE
- INTERIOR BEARING WALL
- BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEARING FASTENING & BLOCKING DETAILS)
- 48" MSP

REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS



MONOLITHIC SLAB FOUNDATION PLAN
ELEVATION 2
OPT. 2 CAR GARAGE

FOUNDATION DIMENSIONS
ARE TO EXTERIOR FACE
OF WALLS, EXCEPT WHERE
EDGE OF FRAMING ABOVE



LEGEND

★ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.

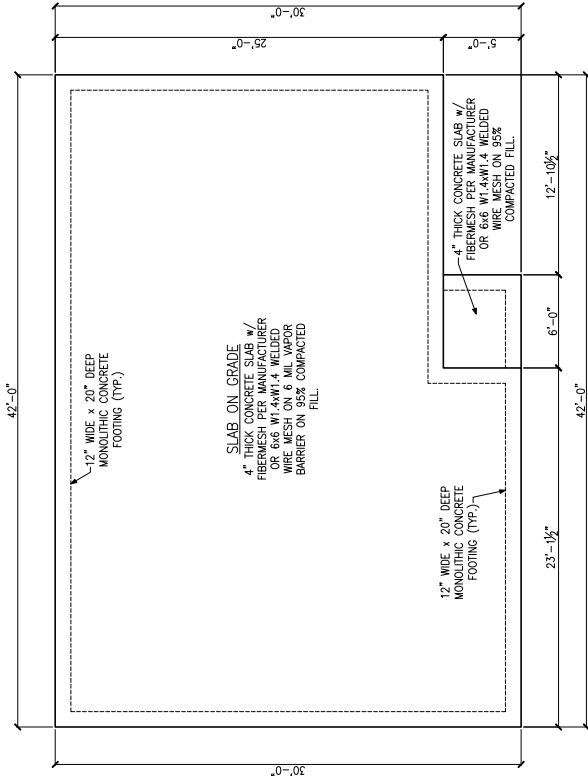
→ BEARING WALL ABOVE

→ INTERIOR BEARING WALL

→ BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)

48" WSP

REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS



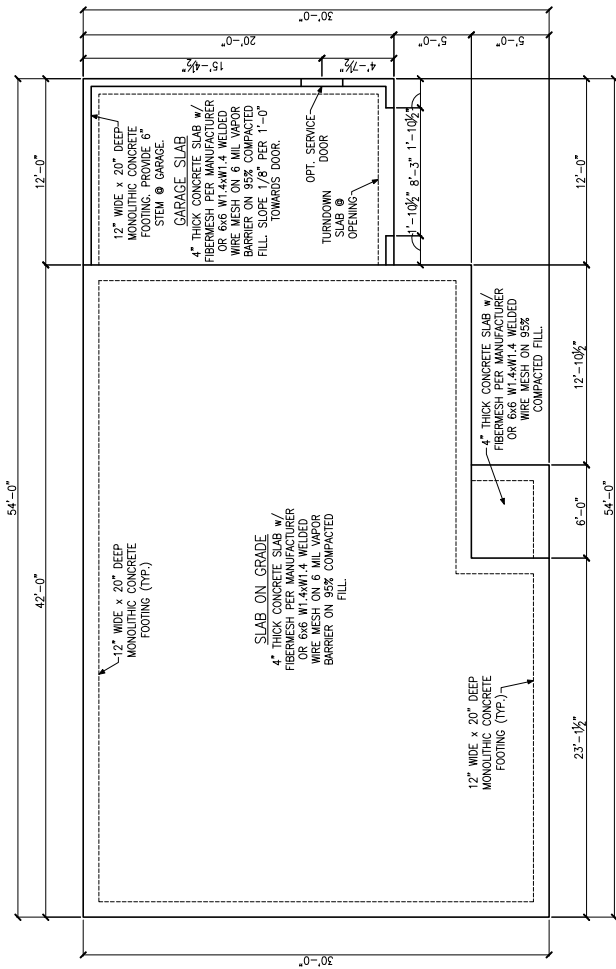
MONOLITHIC SLAB FOUNDATION PLAN
ELEVATION 3

FOUNDATION DIMENSIONS
ARE TO EXTERIOR FACE
OF WALLS EXCEPT WHERE
EDGE OF FRAMING ABOVE



LEGEND

- ★ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
- BEARING WALL ABOVE
- INTERIOR BEARING WALL
- BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEARING FASTENING & BLOCKING DETAILS)
- 48" MSP (SEE KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS)



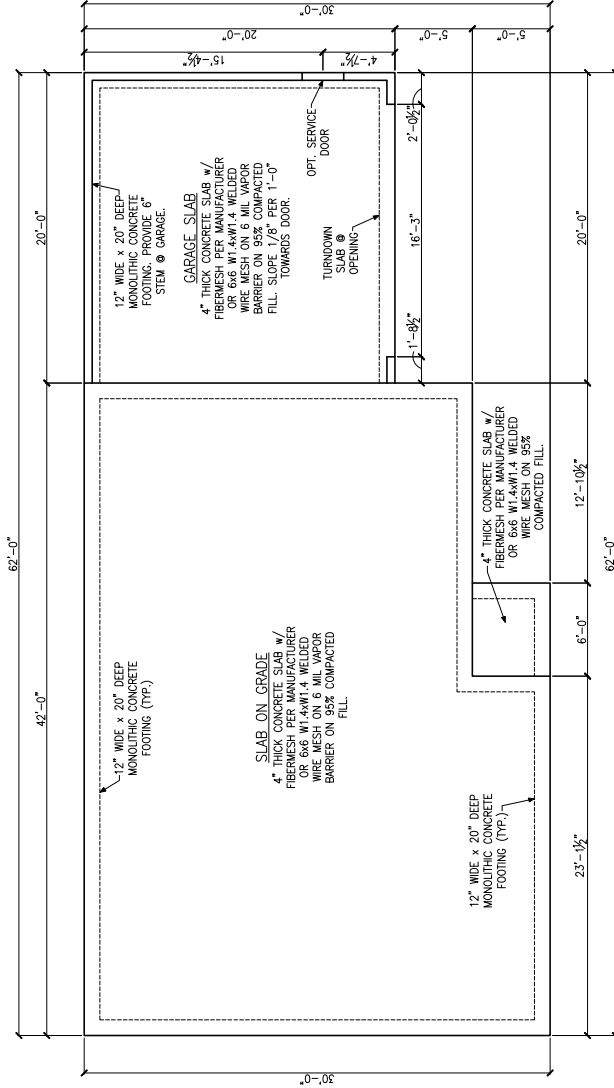
MONOLITHIC SLAB FOUNDATION PLAN
ELEVATION 3
OPT. 1 CAR GARAGE

FOUNDATION DIMENSIONS
ARE TO EXTERIOR FACE
OF WALLS, EXCEPT NOTED
EDGE OF FRAMING ABOVE



LEGEND

- ★ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
- BEARING WALL ABOVE
- INTERIOR BEARING WALL
- BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEARING FASTENING & BLOCKING DETAILS)
- 48" WSP (SEE KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS)

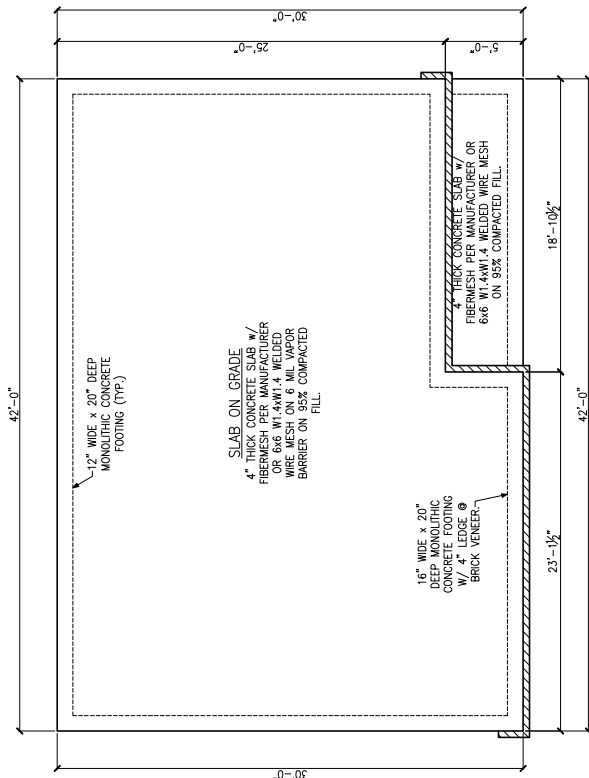


MONOLITHIC SLAB FOUNDATION PLAN
ELEVATION 3
OPT. 2 CAR GARAGE



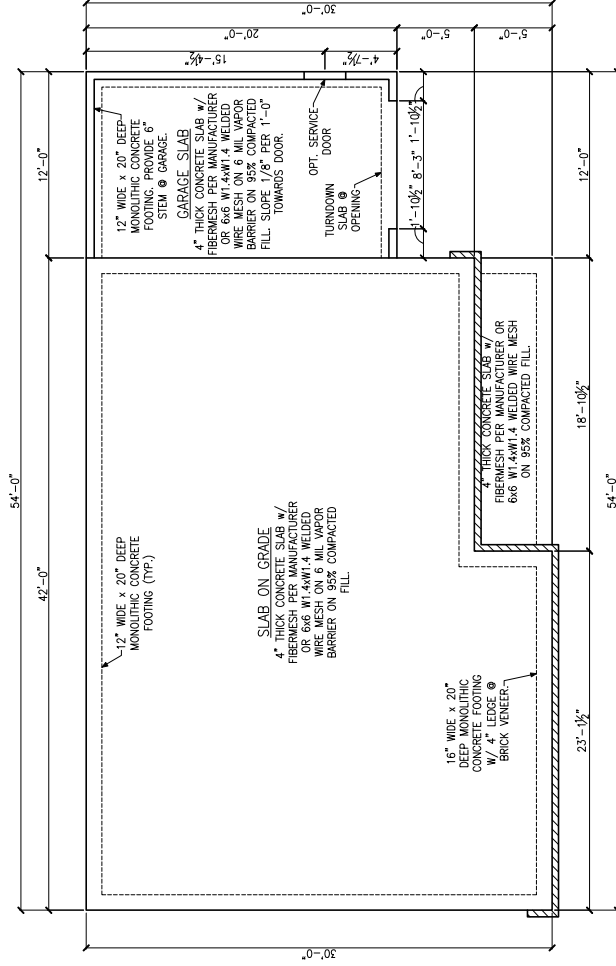
LEGEND

- ★ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
- BEARING WALL ABOVE
- INTERIOR BEARING WALL
- BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)
- 48" WSP (SEE KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS)



MONOLITHIC SLAB FOUNDATION PLAN
ELEVATION 4

FOUNDATION DIMENSIONS
ARE TO EXTERIOR FACE
OF WALLS, EXCEPT WHERE
NOTED OTHERWISE
EDGE OF FRAMING ABOVE



LEGEND

- ★ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
- BEARING WALL ABOVE
- INTERIOR BEARING WALL
- BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL SHEATHING FASTENING & BLOCKING DETAILS)
- 48" WSP (SEE KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS)

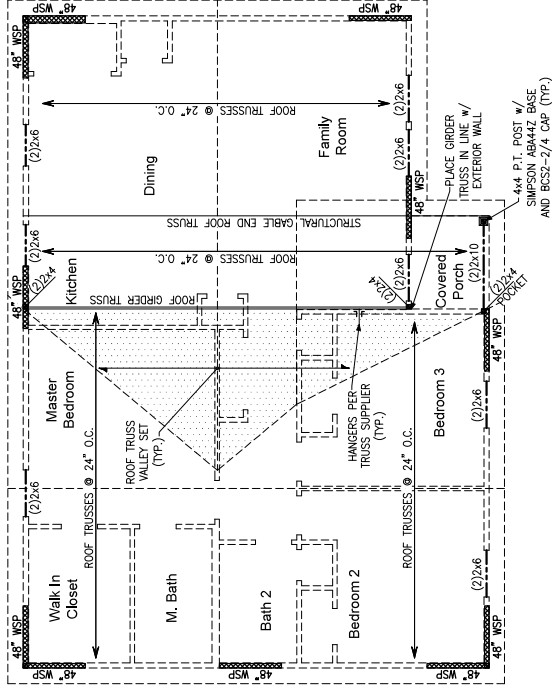
MONOLITHIC SLAB FOUNDATION PLAN
ELEVATION 4
OPT. 1 CAR GARAGE

FOUNDATION DIMENSIONS
ARE TO EXTERIOR FACE
OF WALLS, EXCEPT WHERE
EDGE OF FRAMING ABOVE

FOUNDATION DIMENSIONS
ARE TO EXTERIOR FACE
OF WALL SHEATHING, NOT
EDGE OF FRAMING ABOVE



LEGEND 	
PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE. BEARING WALL ABOVE INTERIOR BEARING WALL BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS FOR BRACED WALL PANEL SHEAR FRAMING & BLOCKING DETAILS)	
REFER TO KSE STRUCTURAL DETAILS SET FOR ALL OTHER TYPICAL NOTES AND TYPICAL DETAILS. PLANT DESIGNED WITH 8" NOMINAL WALL PLATE HEIGHT.	
KEYNOTES: ④ INSTALL ONE PANEL OS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.	



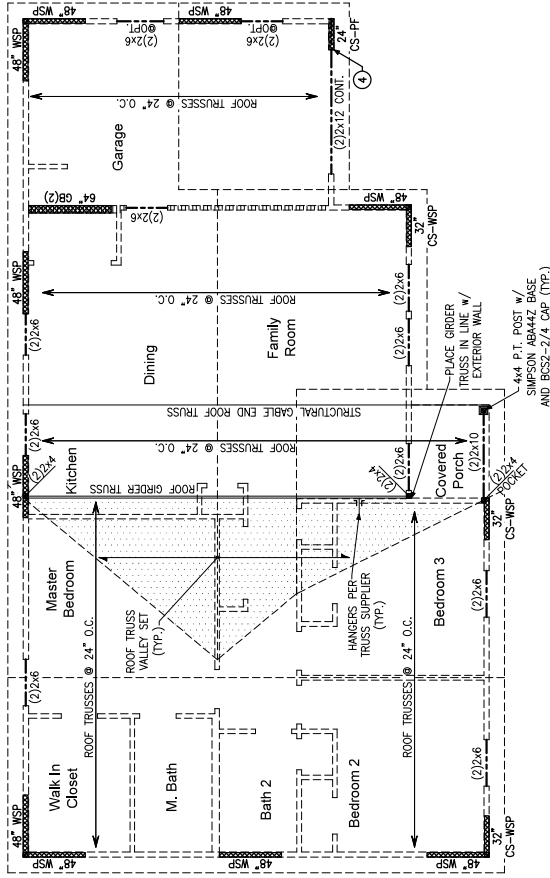
ROOF FRAMING PLAN
 ELEVATION 1



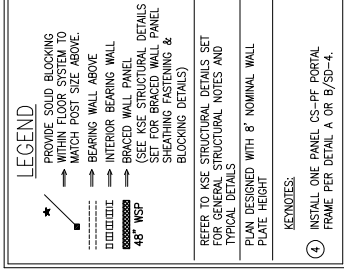
LEGEND

 PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
 BEARING WALL ABOVE
 INTERIOR BEARING WALL
 BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS FOR BRACED WALL PANEL SHEAR FRAMING & BLOCKING DETAILS)
 48" WSP
 CS-WSP

REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL NOTES AND TYPICAL DETAILS
 PLAN DESIGNED WITH 8" NOMINAL WALL PLATE HEIGHT
KEYNOTES:
 ④ INSTALL ONE PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.



ROOF FRAMING PLAN
 ELEVATION 1
 OPT. 1 CAR GARAGE



Roof Framing Plan
Elevation 1 w/ Opt. 2 Car Garage
Pinecrest
120 M.P.H.
Raleigh, North Carolina
Project #: 172-19002

Project #:	172-19002
Designed By:	JPS
Checked By:	
Issue Date:	8/7/19
Re-Issue:	4/24/25
Scale:	1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

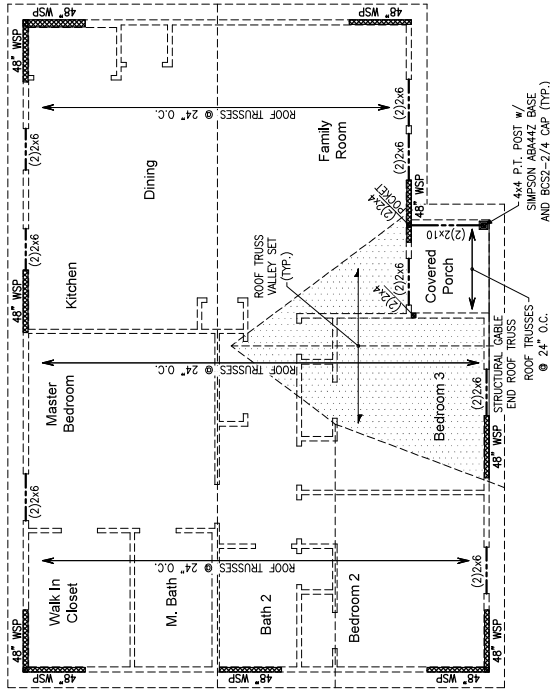


LEGEND

- ★ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
- BEARING WALL ABOVE
- INTERIOR BEARING WALL
- BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS FOR BRACED WALL PANEL SHEAR FRAMING & BLOCKING DETAILS)
- 48" WSP

REFER TO KSE STRUCTURAL DETAILS SET FOR ALL OTHERS. SEE TYPICAL DETAILS FOR BRACED WALL PANEL SHEAR FRAMING & BLOCKING DETAILS.

KEYNOTES:
④ INSTALL ONE PANEL OS-FF PORTAL FRAME PER DETAIL A OR B/SD-4.



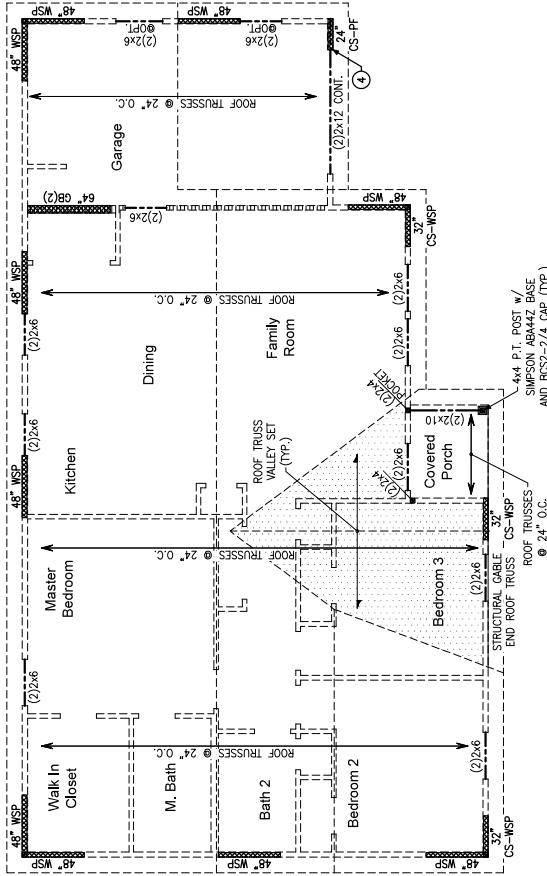
ROOF FRAMING PLAN
ELEVATION 2



LEGEND

 PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
 BEARING WALL ABOVE
 INTERIOR BEARING WALL
 BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS FOR BRACED WALL PANEL SHEAR FRAMING & BLOCKING DETAILS)
 48" WSP

REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL REQUIREMENTS, TYPICAL DETAILS, PLANS DESIGNED WITH 8" NOMINAL WALL PLATE HEIGHT.
 KEYNOTES:
 ④ INSTALL ONE PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.



ROOT FRAMING PLAN
 ELEVATION 2
 OPT. 1 CAR GARAGE

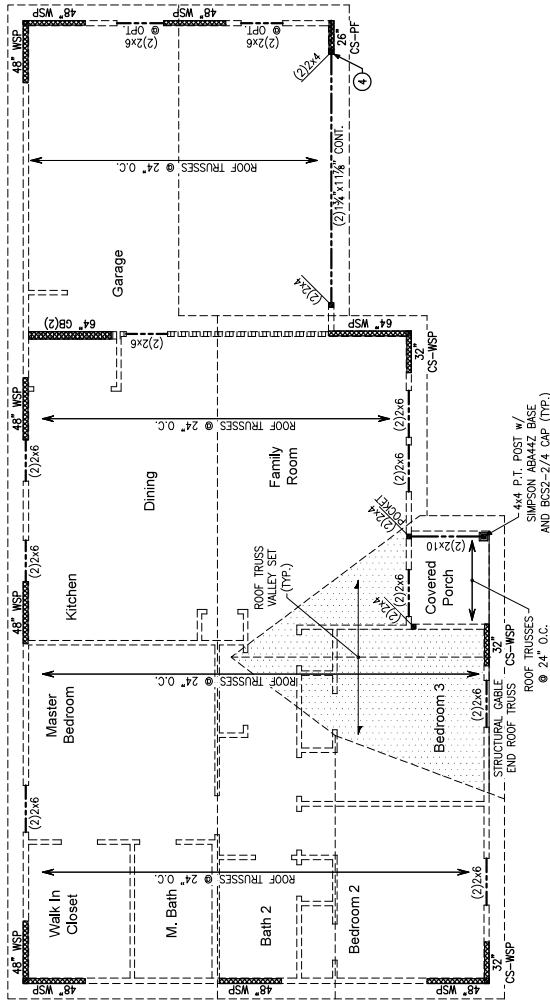


LEGEND

 PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
 BEARING WALL ABOVE
 INTERIOR BEARING WALL
 BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS FOR BRACED WALL PANEL SHEAR FRAMING & BLOCKING DETAILS)
 REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS
 PLAYS DESIGNED WITH 8" NOMINAL WALL PLATE HEIGHT

KEYNOTES:

④ INSTALL ONE PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.



ROOF FRAMING PLAN
 ELEVATION 2
 OPT. 2 CAR GARAGE



LEGEND

★ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.

→ BEARING WALL ABOVE

→ INTERIOR BEARING WALL

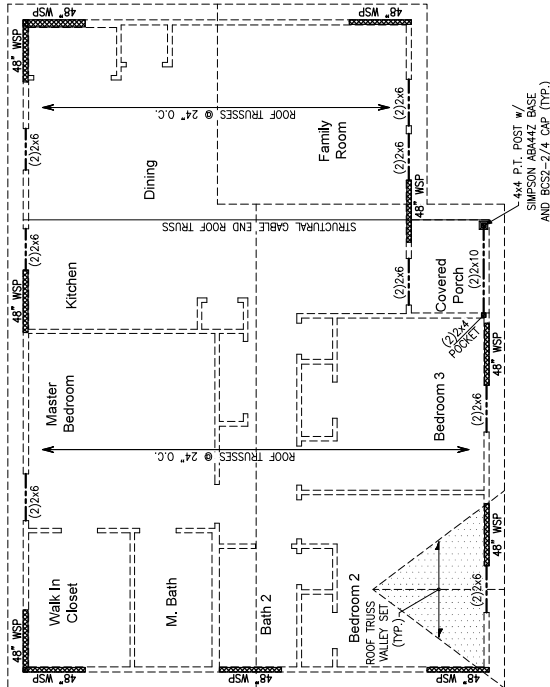
→ BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS FOR BEACED WALL PANEL SHEAR FRAMING & BLOCKING DETAILS)

48" WSP

REFER TO KSE STRUCTURAL DETAILS SET FOR BEARING WALL PANEL TYPICAL DETAILS AND PLATE HEIGHT

KEYNOTES:

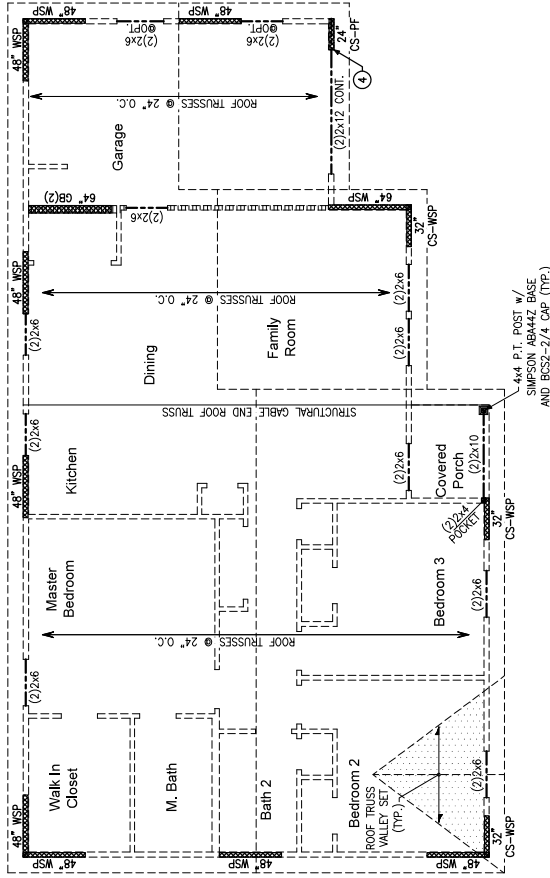
④ INSTALL ONE PANEL OS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.



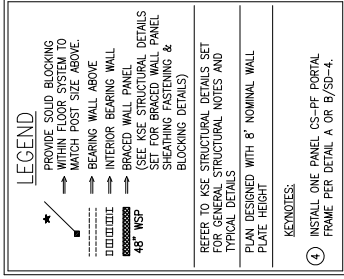
ROOF FRAMING PLAN
ELEVATION 3



LEGEND PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE. → BEARING WALL ABOVE → INTERIOR BEARING WALL → BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS FOR BEACED WALL PANEL SHEAR FRAMING & BLOCKING DETAILS)	
48" WSP CS-WSP	REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL PROGRAMS AND TYPICAL DETAILS. PLAYS DESIGNED WITH 8" NOMINAL WALL PLATE HEIGHT. KEYNOTES: ④ INSTALL ONE PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/50-4.



ROOF FRAMING PLAN
 ELEVATION 3
 OPT. 1 CAR GARAGE



Project #:	172-19002
Designed By:	JPS
Checked By:	
Issue Date:	8/7/19
Re-Issue:	4/24/25
Scale:	1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34



LEGEND

 PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
 BEARING WALL ABOVE
 INTERIOR BEARING WALL
 BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS FOR BRACED WALL PANEL SHEAR FRAMING & BLOCKING DETAILS)

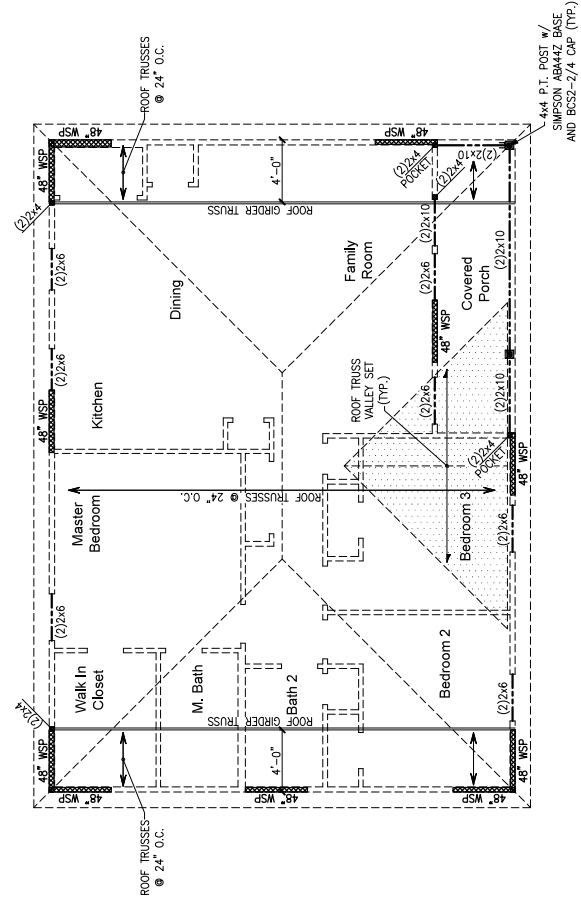
 48" WSP
 (2)x6
 (2)x10
 (2)x4
 4x4 P.T. POST w/ SIMPSON ABA407 BASE AND BC52-2/4 CAP (TP-)

REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL NOTES AND TYPICAL DETAILS.

FRAMING DESIGNED WITH 8" NOMINAL WALL PLATE HEIGHT.

KEYNOTES:

④ INSTALL ONE PANEL OS-FF PORTAL FRAME PER DETAIL A OR B/50-4.



ROOF FRAMING PLAN
 ELEVATION 4

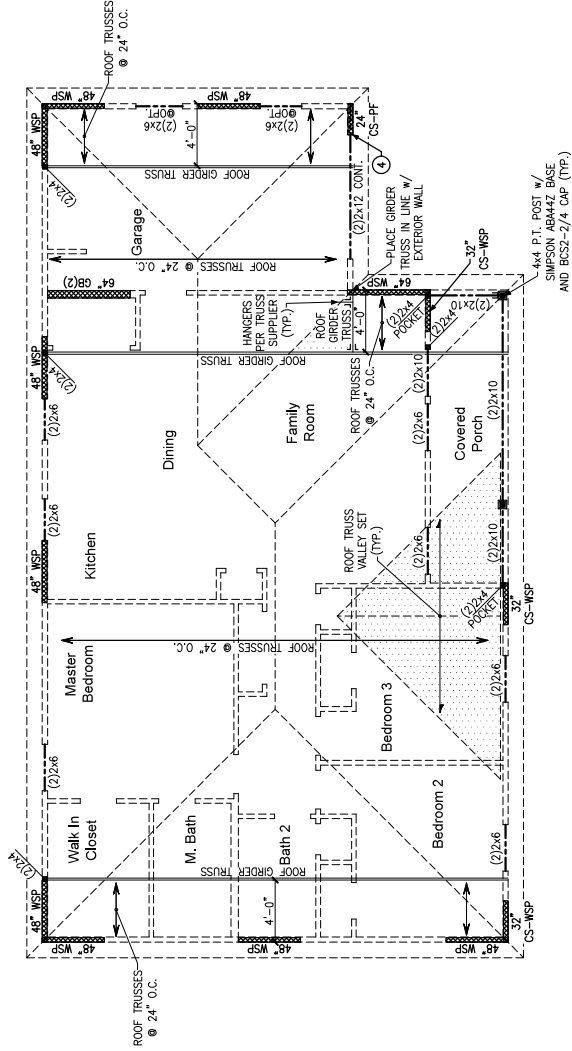


LEGEND

 PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.
 BEARING WALL ABOVE
 INTERIOR BEARING WALL
 BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS FOR BRACED WALL PANEL SHEAR FRAMING & BLOCKING DETAILS)

 REFER TO KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL TYPICAL DETAILS
 PLATE HEIGHT

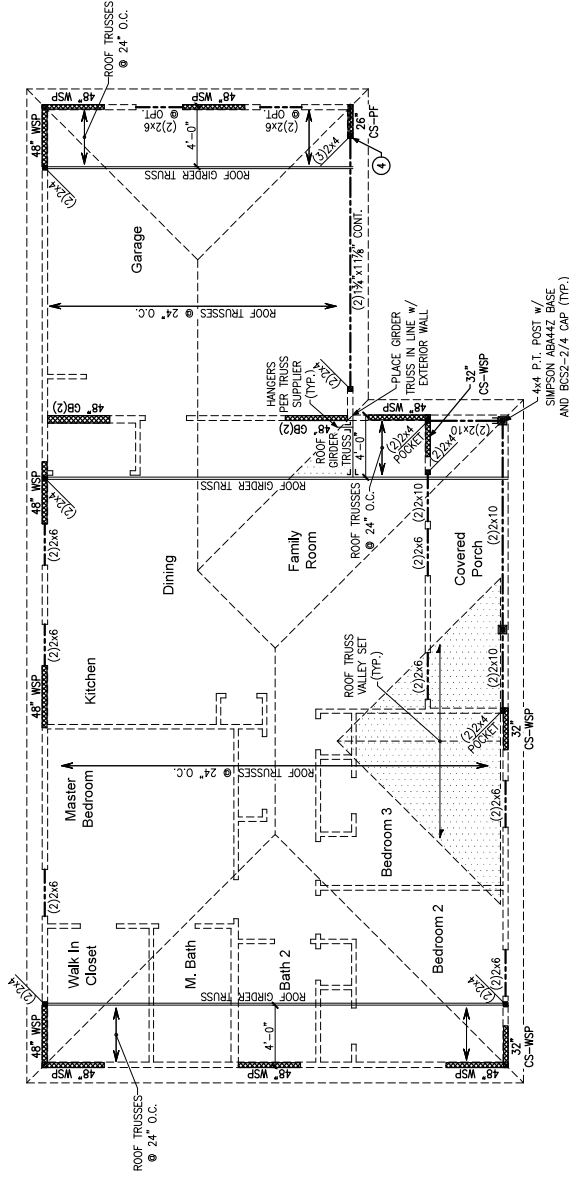
KEYNOTES:
 ④ INSTALL ONE PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.



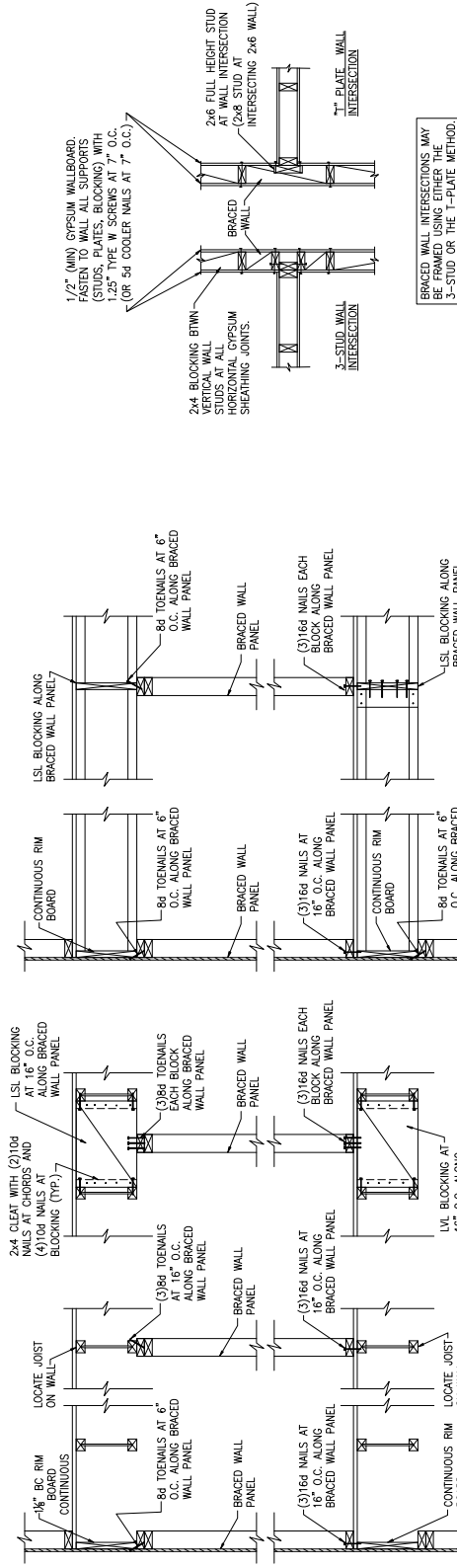
ROOF FRAMING PLAN
 ELEVATION 4
 OPT. 1 CAR GARAGE



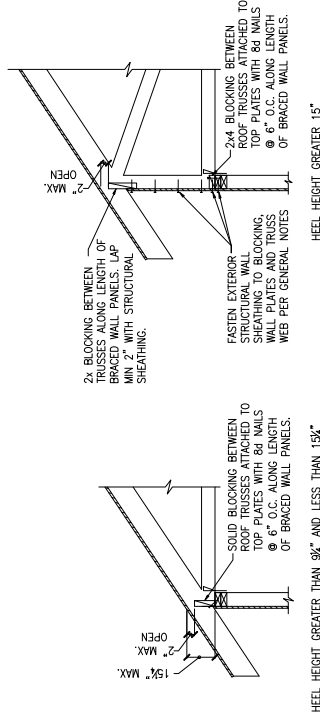
LEGEND PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE. BEARING WALL INTERIOR BEARING WALL BRACED WALL PANEL (SEE KSE STRUCTURAL DETAILS FOR BRACED WALL PANEL SHEAR FRAMING & BLOCKING DETAILS) 48" WSP CS-PF	
REFER TO KSE STRUCTURAL DETAILS SET FOR BRACED WALL PANEL TYPICAL DETAILS PLAN DESIGNED WITH 8" NOMINAL WALL PLATE HEIGHT KEYNOTES: ④ INSTALL ONE PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.	



ROOF FRAMING PLAN
 ELEVATION 4
 OPT. 2 CAR GARAGE



C METHOD GB(1) AND GB(2) INTERSECTION DETAILS

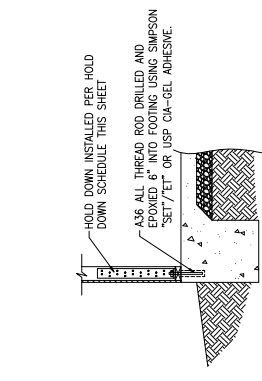


E ROOF TRUSS BEARING/BLOCKING AT BRACED WALL PANELS

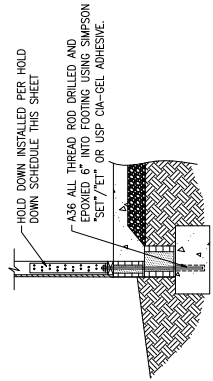
D TYPICAL EXTERIOR CORNER WALL FRAMING



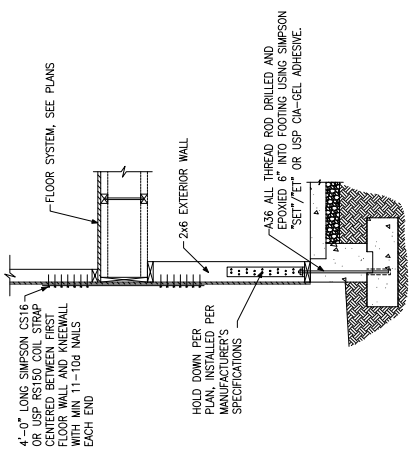
HOLD DOWN SCHEDULE			
SIMPSON	HOLD DOWN USP	ALL TREAD ROD	FASTENERS
LTP2	LTS20B	1/2" DIA.	(10)10d NAILS
HTT4	HTT16	5/8" DIA.	(18)16dX2 1/2" LONG NAILS
HTT5	HTT45	5/8" DIA.	(26)16dX2 1/2" LONG NAILS



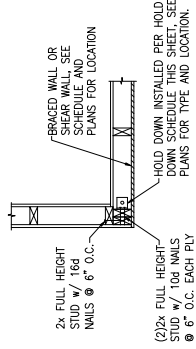
D HOLD DOWN AT MONOLITHIC SLAB



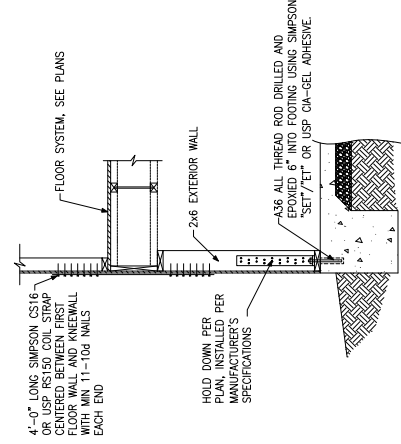
C HOLD DOWN AT STEM WALL SLAB



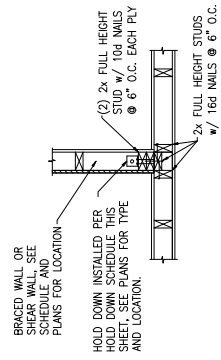
G HOLD DOWN AT BASEMENT STEM WALL



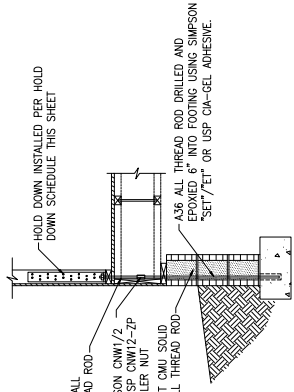
B TYPICAL HOLD DOWN DETAIL



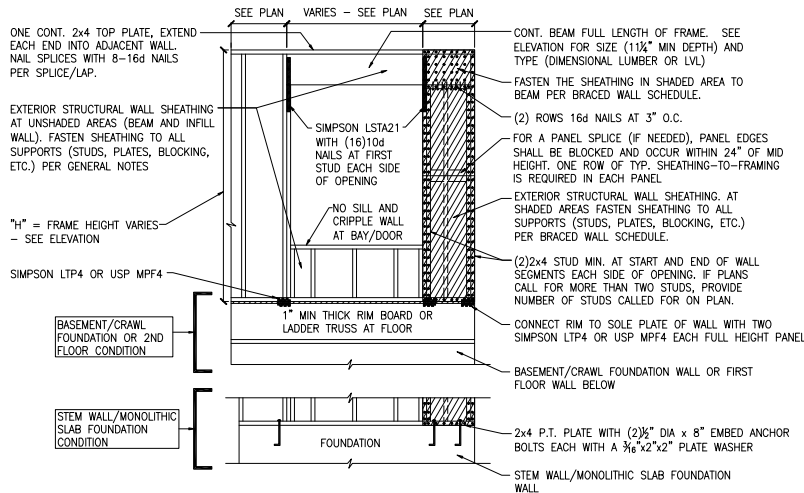
F HOLD DOWN AT BASEMENT MONOLITHIC TURN-DOWN



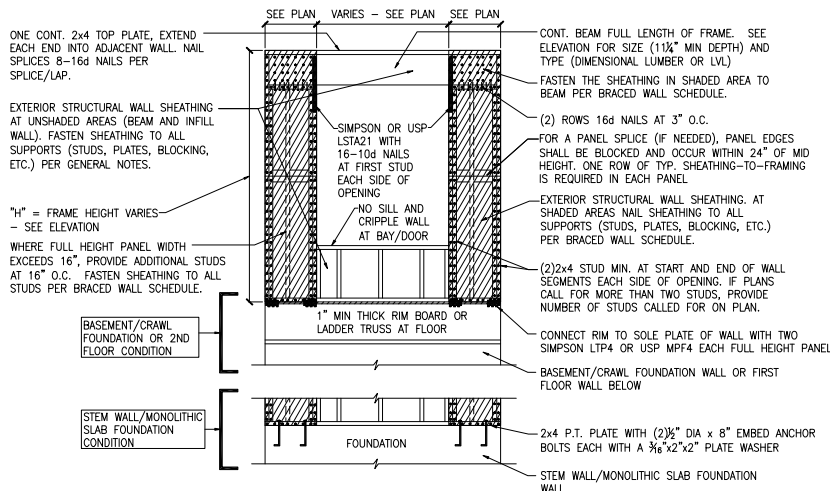
A TYPICAL HOLD DOWN DETAIL



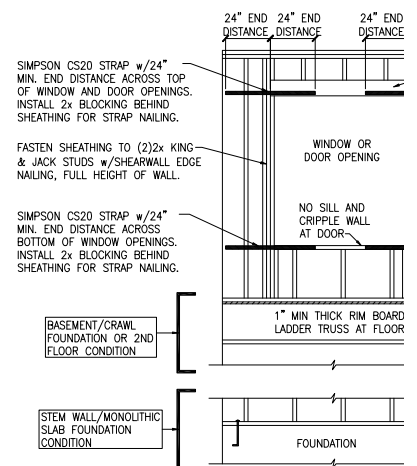
E HOLD DOWN AT CRAWL FOUNDATION



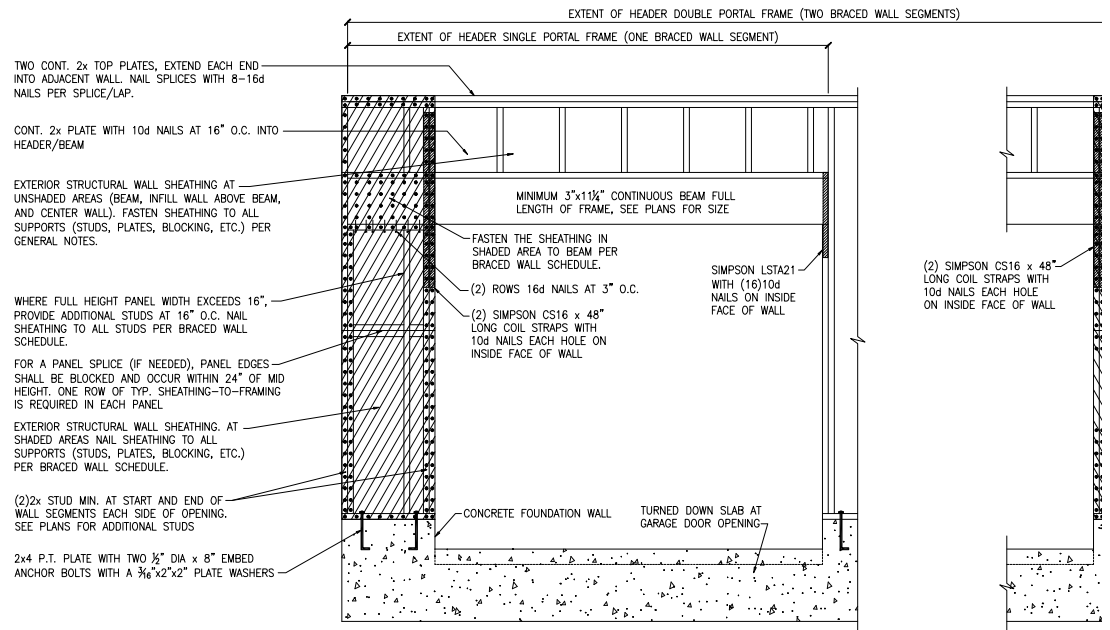
(A) METHOD CS-PF: CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION
ONE BRACED WALL SEGMENT



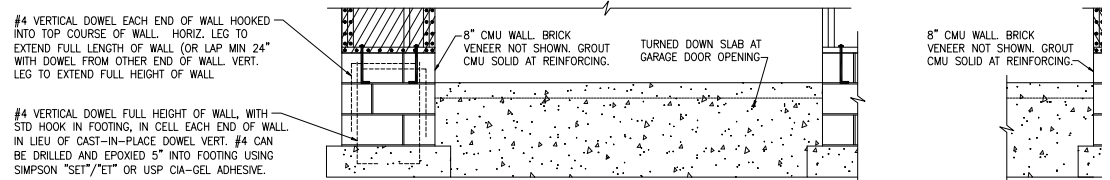
(B) METHOD CS-PF: CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION
TWO BRACED WALL SEGMENTS



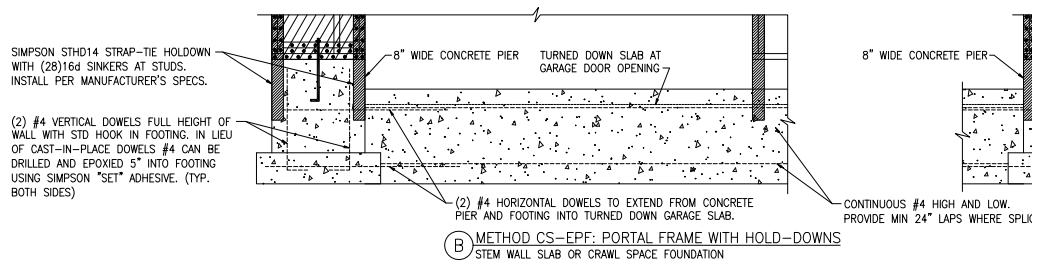
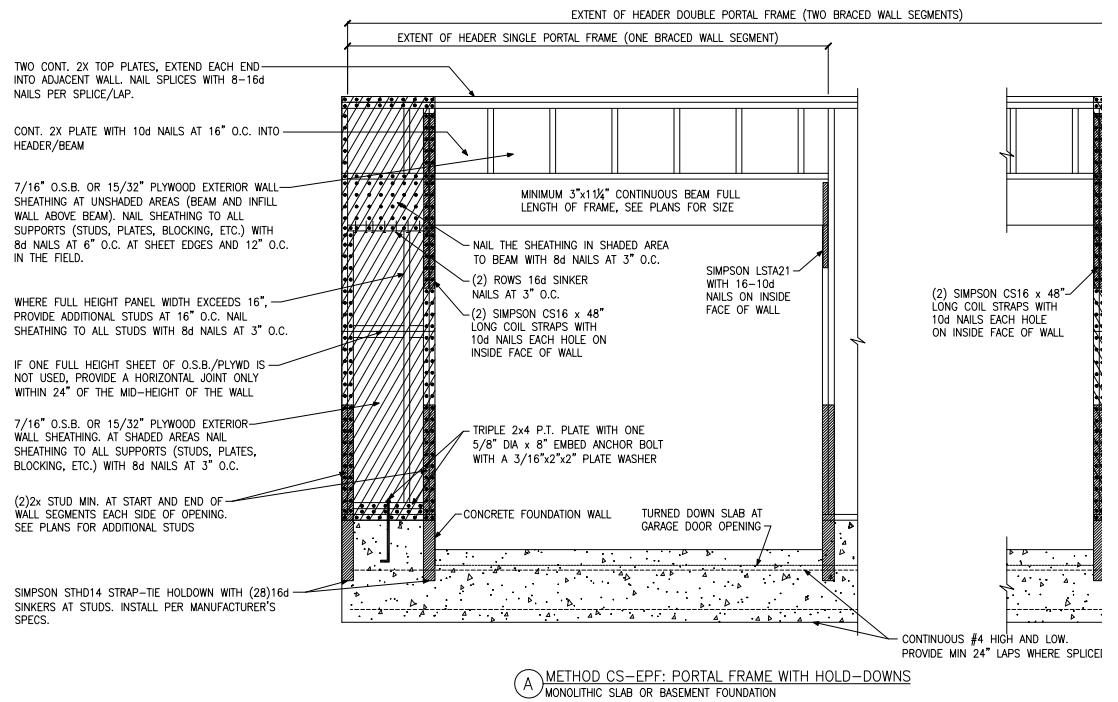
(C) WINDOW OR DOOR REINFORCEMENT IN E
ONLY REQUIRED WHERE SPECIFIED ON PLANS

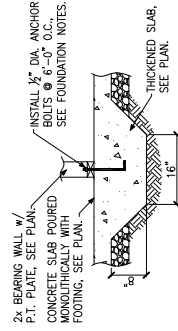


(A) METHOD CS-PF: CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION
MONOLITHIC SLAB OR BASEMENT FOUNDATION

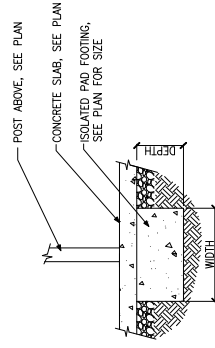


(B) METHOD CS-PF: CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION
STEM WALL SLAB OR CRAWL SPACE FOUNDATION

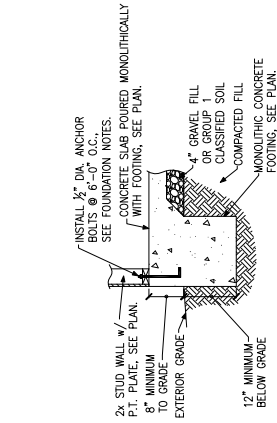




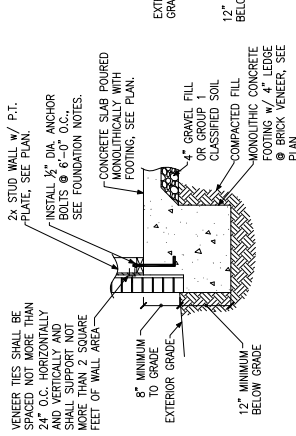
J THICKENED SLAB SECTION
INTERIOR BEARING WALL



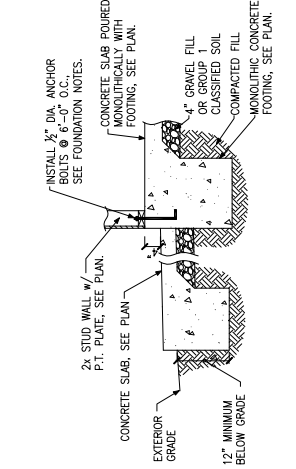
K ISOLATED PAD FOOTING
INTERIOR COLUMN



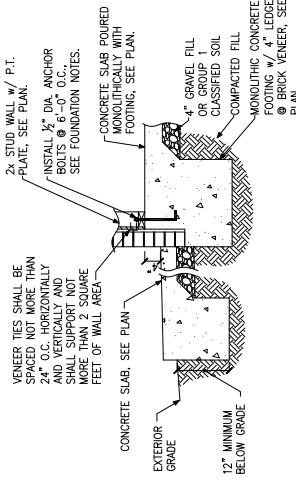
A FOUNDATION SECTION
EXTERIOR WALL



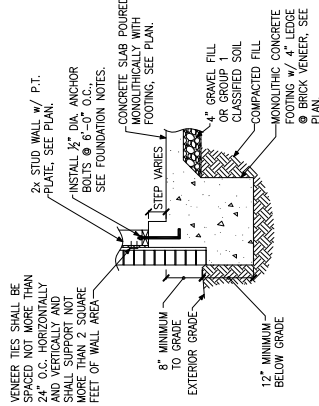
B FOUNDATION SECTION
EXTERIOR WALL @ BRICK VENEER



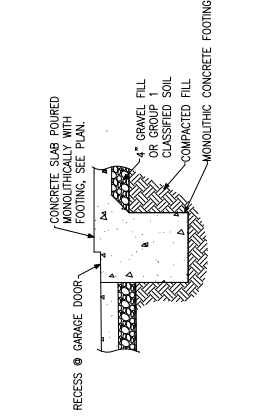
C FOUNDATION SECTION
EXTERIOR WALL AT PORCH



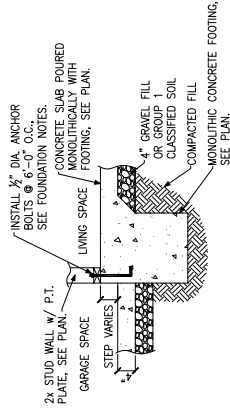
D FOUNDATION SECTION
EXTERIOR WALL AT PORCH w/ BRICK VENEER



E FOUNDATION SECTION
EXTERIOR GARAGE WALL



F FOUNDATION SECTION
EXTERIOR GARAGE WALL @ BRICK VENEER



G GARAGE DOOR SECTION
GARAGE DOOR

H THICKENED SLAB
AT GARAGE

