

217 N. STANWOOD RD. - FRONT & REAR PORCH MODIFICATIONS

SITE NAME: 217 N. STANWOOD RD.

PROJECT: FRONT & REAR PORCH MODIFICATIONS

SITE LOCATION: 217 N. STANDWOOD RD.
BEXLEY, OH
FRANKLIN COUNTY

PROJECT CONTACTS:

1. ENGINEER OF RECORD
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DRAWINGS INCLUDED

SHEET NUMBER	DESCRIPTION
S-0	TITLE PAGE
S-1	STRUCTURAL NOTES
S-2	PARTIAL FRONT PORCH FRAMING PLANS
S-3	PARTIAL REAR PORCH FRAMING PLANS
S-4	SECTIONS & DETAILS



NO.	DATE	DESCRIPTION
REVISIONS		



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TITLE PAGE

S-0

STRUCTURAL NOTES

GENERAL NOTES

1. THIS STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE INSTALLATION OF THE STRUCTURE HAS BEEN PROPERLY AND ADEQUATELY COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO INSURE THE SAFETY AND STABILITY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING FIELD ERECTION. THIS INCLUDES, BUT IT NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
2. CODE REQUIREMENTS: 2019 OHIO RESIDENTIAL CODE
 - a. ROOF LIVE LOAD = 20 PSF
 - b. ROOF SNOW LOAD
 - i. GROUND SNOW LOAD = 20 PSF
 - ii. SNOW EXPOSURE FACTOR, Ce = 0.9
 - iii. SNOW LOAD IMPORTANCE FACTOR, Is = 1.0
 - c. WIND DESIGN DATA
 - i. BASIC WIND SPEED = 115 MPH
 - ii. RISK CATEGORY = II
 - iii. WIND EXPOSURE CATEGORY = B
 - d. FLOOR LOAD = 40 PSF
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS, INFORMATION, AND DIMENSIONS PRIOR TO FABRICATION AND CONSTRUCTION. THESE DRAWINGS WERE PREPARED FROM INFORMATION AND DOCUMENTS PROVIDED TO CARPENTER & CROSS BY THE OWNER. DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS SHOULD BE ANTICIPATED. ANY DISCREPANCIES AND/OR CHANGES BETWEEN THE INFORMATION CONTAINED IN THESE DRAWINGS AND THE ACTUAL VERIFIED SITE CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND CARPENTER & CROSS SO THAT ANY CHANGES AND/OR ADJUSTMENTS, IF NECESSARY, CAN BE MADE TO THE DESIGN AND DRAWINGS.
4. IF MATERIALS, QUANTITIES, STRENGTHS OR SIZES INDICATED BY THE DRAWINGS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH OR SIZE INDICATED, SPECIFIED OR NOTED SHALL BE PROVIDED.
5. THE STRUCTURAL CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR ENGINEER SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES.
6. ANY SUPPORT SERVICES PERFORMED BY THE ENGINEER DURING CONSTRUCTION SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES, WHICH ARE FURNISHED BY THE INSPECTION/TESTING AGENCY. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER ARE SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DOCUMENTS. THEY DO NOT GUARANTEE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.
7. ALL MATERIALS AND EQUIPMENT FURNISHED WILL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT THIS PROJECT AND THE RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK AS WELL AS THE OWNER'S SAFETY GUIDELINES.

FOUNDATION WORK

1. THE FOUNDATIONS WAS BASED ON ASSUMED GEOTECHNICAL PARAMETERS ASSUMING A 1500 PSF ALLOWABLE SOIL BEARING PRESSURE. THE ASSUMED GEOTECHNICAL PARAMETERS SHALL BE VERIFIED BY A GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF OHIO PRIOR TO START OF WORK.
2. THE CONTRACTOR SHALL PROTECT ANY NEARBY EXISTING FOUNDATIONS OR OTHER STRUCTURES OR EQUIPMENT, FROM LOSS OF SOIL AROUND AND/OR BENEATH FOOTINGS DURING ANY REQUIRED EXCAVATION. THE CONTRACTOR SHALL BRACE THE SIDES OF THE OPEN EXCAVATION AS REQUIRED.
3. THE FOUNDATION EXCAVATION MAY HAVE AN IMPACT ON THE EXISTING EQUIPMENT AND/OR OTHER EXISTING STRUCTURES NEAR THE EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE IMPACT OR EFFECT THAT ANY REQUIRED EXCAVATION HAS ON ANY EXISTING NEARBY EQUIPMENT AND/OR STRUCTURES. CONTRACTOR SHALL COORDINATE THE SITE-SPECIFIC INFORMATION WITH THE OWNER AND TESTING AGENCY PRIOR TO THE CONSTRUCTION AND FOUNDATION WORK. THE CONTRACTOR SHALL ADEQUATELY BRACE, SHORE, AND/OR RELOCATE (AFTER OBTAINING PRIOR WRITTEN PERMISSION OF THE OWNER), AS NECESSARY, THE INTERFERING EXISTING NEARBY EQUIPMENT AND/OR STRUCTURES.

4. THE GEOTECHNICAL ENGINEER SHALL DETERMINE THE BACKFILL REQUIREMENTS. AT A MINIMUM, ANY FILL OR BACKFILL REQUIRED SHALL BE PLACED IN MAXIMUM 8" LOOSE LIFTS AND SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR LABORATORY TEST (ASTM D-698).
5. CARE SHOULD BE TAKEN TO NOT DISTURB THE SIDES AND BOTTOM OF THE EXCAVATION DURING CONSTRUCTION. THE BOTTOM OF THE EXCAVATION SHOULD BE FREE FROM LOOSE MATERIAL BEFORE CONCRETE PLACEMENT. CONCRETE SHOULD BE PLACED AS SOON AS POSSIBLE AFTER THE EXCAVATION IS COMPLETED, AND COMPLETED EXCAVATIONS SHOULD NOT BE LEFT UNFILLED OVERNIGHT.

REINFORCED CAST-IN-PLACE CONCRETE

1. MATERIALS
 - a. SPECIFICATIONS: IN GENERAL, COMPLY WITH ACI 301-02 "SPECIFICATIONS FOR STRUCTURAL CONCRETE
 - b. STRUCTURAL CONCRETE

CLASS	LOCATION	F _c (PSI)
I	FOOTINGS	3,000
II	EXTERIOR SLABS ON GRADE AND ALL EXTERIOR CONCRETE NOT OTHERWISE IDENTIFIED	4,000
III	BACKFILL BELOW FOOTINGS	1,500

- c. ALL DEFORMED REINFORCING BARS: FY = 60,000
2. FIELD MANUAL:
 - a. PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, SP-15, IN THE FIELD OFFICE AT ALL TIMES.
3. CONTINGENCIES:
 - a. INCLUDE AN ALLOWANCE IN THE BID TO PROVIDE AND INSTALL 10 ADDITIONAL POUNDS OF REINFORCING BARS. MATERIAL TO BE USED AND ITS APPLICATION SHALL BE DETERMINED BY THE ARCHITECT. BENT BARS, REQUIRED, SHALL BE BENT IN THE SHOP, UNLESS OTHERWISE APPROVED.
 - b. PROVIDE SUPPORTS AS REQUIRED TO MAINTAIN ALIGNMENT OF SCHEDULED REINFORCING. SUCH SUPPORTS ARE TO BE REFLECTED IN THE BID, AND ARE NOT PART OF THE CONTINGENCY LISTED ABOVE.
4. FOOTINGS:
 - a. DOWELS IN FOOTINGS TO MATCH VERTICAL WALL REINFORCING AS APPLICABLE.
 - b. PROVIDE CORNER BARS AT WALL AND FOOTING CORNERS TO MATCH HORIZONTAL REINFORCING. MINIMUM LAP LENGTH WITH HORIZONTAL REINFORCEMENT IS 45 BAR DIAMETERS.
 - c. BACKFILL AGAINST BOTH SIDE OF WALLS EQUALLY UNTIL THE LOWER ELEVATION IS ATTAINED.
 - d. PROVIDE LEAN CONCRETE (CLASS IV) UNDER FOUNDATIONS FOR ACCIDENTAL OVER EXCAVATION, SOFT SPOTS AND TRENCHES.
6. SPLICES: UNLESS NOTED OTHERWISE, MINIMUM LAP SPLICE LENGTHS TO BE AS FOLLOWS:
 - a. HORIZONTAL BARS IN SLABS & FOOTINGS 35 DIAMETERS
 - b. HORIZONTAL BARS IN WALLS 45 DIAMETERS

7. CONSTRUCTION JOINTS:
 - a. CONSTRUCTION JOINTS PERMITTED ONLY WHERE SHOWN OR AS APPROVED BY THE STRUCTURAL ENGINEER. ALL CONSTRUCTION JOINTS ARE TO BE KEYED. KEYWAYS SHALL BE 1-1/2 NCHES DEEP x 1/3 MEMBER THICKNESS.
8. CONCRETE COVER: UNLESS NOTED OTHERWISE, DETAIL REINFORCING TO PROVIDE CONCRETE COVER AS FOLLOWS:
 - a. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 INCHES
 - b. CONCRETE EXPOSED TO EARTH OR WEATHER:

#5 BARS AND SMALLER	1-1/2 INCHES
OTHERS	2 INCHES
 - c. CONCRETE NOT EXPOSED TO EARTH OR WEATHER:

SLABS, WALLS, JOISTS, #11 BARS AND SMALLER	1 INCH
ALL OTHERS	1-1/2 INCHES

MASONRY

1. SPECIFICATIONS: MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO ALL REQUIREMENTS OF "SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-13), "PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE, DETROIT, MICHIGAN EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THESE CONTRACT DOCUMENTS.
2. MATERIALS:
 - a. MORTAR: ASTM C270 (USING THE UNIT STRENGTH METHOD), TYPE S, MINIMUM COMPRESSIVE STRENGTH = 1800 PSI.
 - b. CORE FILL: ASTM C476, COARSE OR FINE TYPE, PLACED PER ACI 530.1, TABLE 1.20.1, MINIMUM 28 COMPRESSIVE STRENGTH = 2,500 PSI, SLUMP 8" TO 11"
2. MISCELLANEOUS:
 - a. PROVIDE 100% SOLID BLOCKS OR SOLIDLY FILLED HOLLOW BLOCKS FOR AT LEAST 4" ALL AROUND ALL POST INSTALLED ANCHORS SUCH AS SCREW ANCHORS, EXPANSION BOLTS, AND ADHESIVE ANCHORS.
 - b. MAXIMUM HEIGHT OF GROUT LIFT = 5'-0"

STRUCTURAL LUMBER

1. MATERIALS:
 - a. STRUCTURAL LUMBER: NO. 2 OR BETTER SPRUCE-PINE-FIR, ALLOWABLE STRESSES PER THE NATIONAL DESIGN SPECIFICATION SUPPLEMENT, 2005 EDITION: 19% MAX. MOISTURE CONTENT. OTHER ACCEPTABLE SPECIES INCLUDE SOUTHERN PINE, DOUGLAS FIR-LARCH, AND HEM-FIR.
 - b. OSB SHEATHING:
 1. ROOFS AND WALLS: STRUCTURAL I, EXPOSURE I, 5 PLY, WITH PANEL INDEX OF 24/0; 5/8 INCH THICK (WITH PLYWOOD CLIPS FOR ROOF SHEATHING).
 2. FLOORS: STURD-I-FLOOR, EXPOSURE I, 5 PLY, WITH PANEL INDEX OF 24 INCHES O.C.; 3/4 INCH THICK, TOUNGE AND GROOVE.
 2. SPECIFICATIONS: UNLESS SPECIFICALLY SHOWN OTHERWISE, DESIGN, FABRICATION AND ERECTION SHALL BE GOVERNED BY THE LATEST EDITION OF:
 - a. NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.
 - b. U.S. PRODUCT STANDARD PS1
3. CONNECTIONS:
 - a. JOISTS TO SIDES OF BEAMS: 16 GA. GALVANIZED STD. JOIST HANGERS, UNLESS SHOWN OTHERWISE.
 - b. RAFTERS AND TRUSSES TO TOPS OF WALLS AND BEAMS: SIMPSON H3 HURRUCANE TIES OR EQUAL, UNLESS SHOWN OTHERWISE.
 - c. SHEATHING TO FLOOR JOISTS: GLUED AND NAILED - USE 8d RING SHANK NAILS AT 6 INCHES O.C. AT PANEL EDGES AND 12 INCHES O.C. AT INTERMEDIATE SUPPORTS. USE ADHESIVES MEETING APA SPECIFICATION APG-01 AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - d. SHEATHING TO ROOF RAFTERS: NAILED - USE 10d x 2 1/2 INCH LONG RING SHANK NAILS AT 6 INCHES O.C. AT PANEL EDGES, AND 12 INCHES O.C. AT INTERMEDIATE SUPPORTS. PROVIDE SHEATHING CLIPS AT MID-SPAN OF SHEATHING BETWEEN SUPPORTS.
 - e. WALL SHEATHING TO WOOD STUDS: NAILED - USE 8d NAILS AT 6 INCHES O.C. AT PANEL EDGES AND 12 INCHES O.C. AT INTERMEDIATE SUPPORTS.
4. MISCELLANEOUS:
 - a. USE ONE LINE OF SOLID BLOCKING OR CROSS BRIDGING AT 8'-0" O.C. MAX. FOR ALL JOISTS AND RAFTERS, USE SOLID BLOCKING AT JOIST AND RAFTER BEARING.
 - b. USE SOLID BLOCKING AT MID-HEIGHT FOR ALL EXTERIOR STUD WALLS AND INTERIOR BEARING PARTITIONS.
 - c. USE DOUBLE JOIST UNDER INTERIOR PARTITIONS, UNLESS SHOWN OTHERWISE.
 - d. USE DOUBLE STUDS UNDER BEAM AND LINTEL BEARING, UNLESS SHOWN OTHERWISE.
 - e. APPLY CONTINUOUS BEAD OF ADHESIVE ON JOISTS AND GROOVE OF TONGUE-AND-GROOVE PANELS.
 - f. BEFORE APPLYING FINISH FLOORING, SET NAILS 1/8 INCH BUT DO NOT FILL, AND LIGHTLY SAND ANY SUFRACE ROUGHNESS, PARTICULARLY AT JOINTS AND AROUND NAILS.

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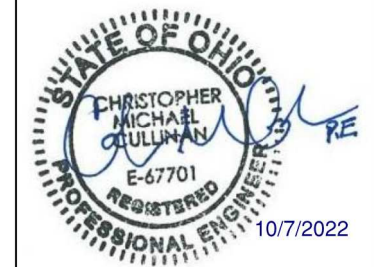
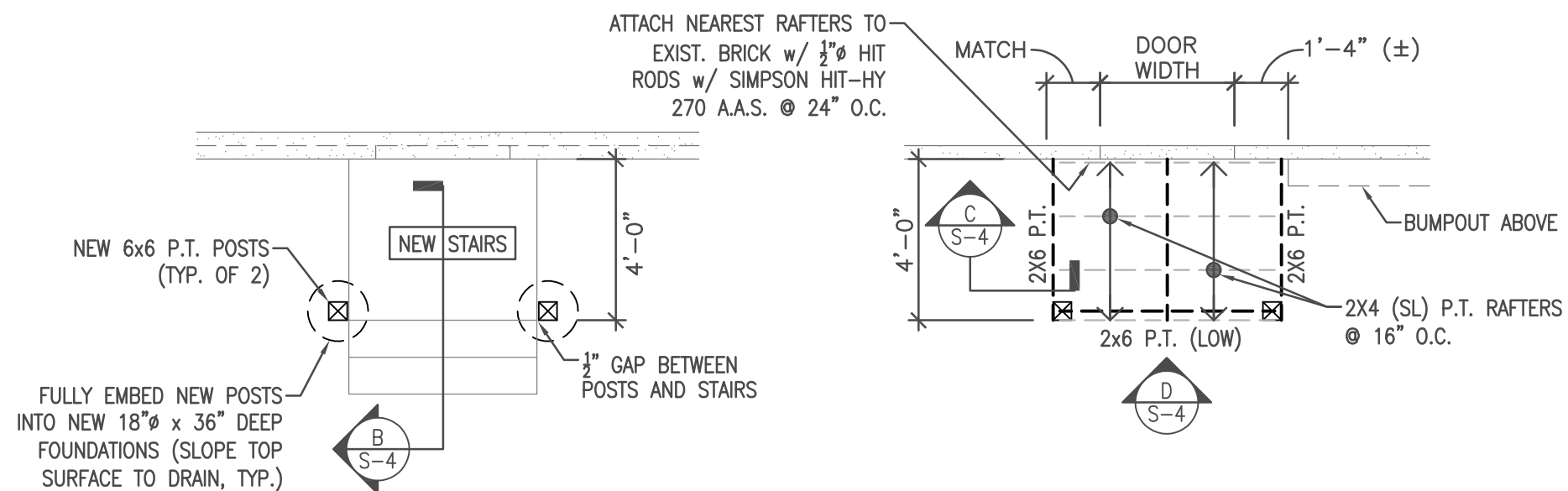
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**PARTIAL FRONT
PORCH FRAMING
PLANS**

S-2

PARTIAL FRONT PORCH FRAMING PLANS

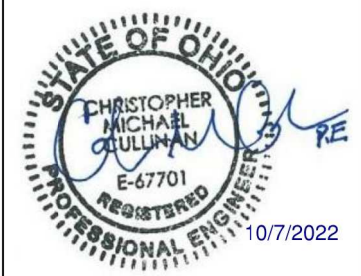
1/4"=1'-0"

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1
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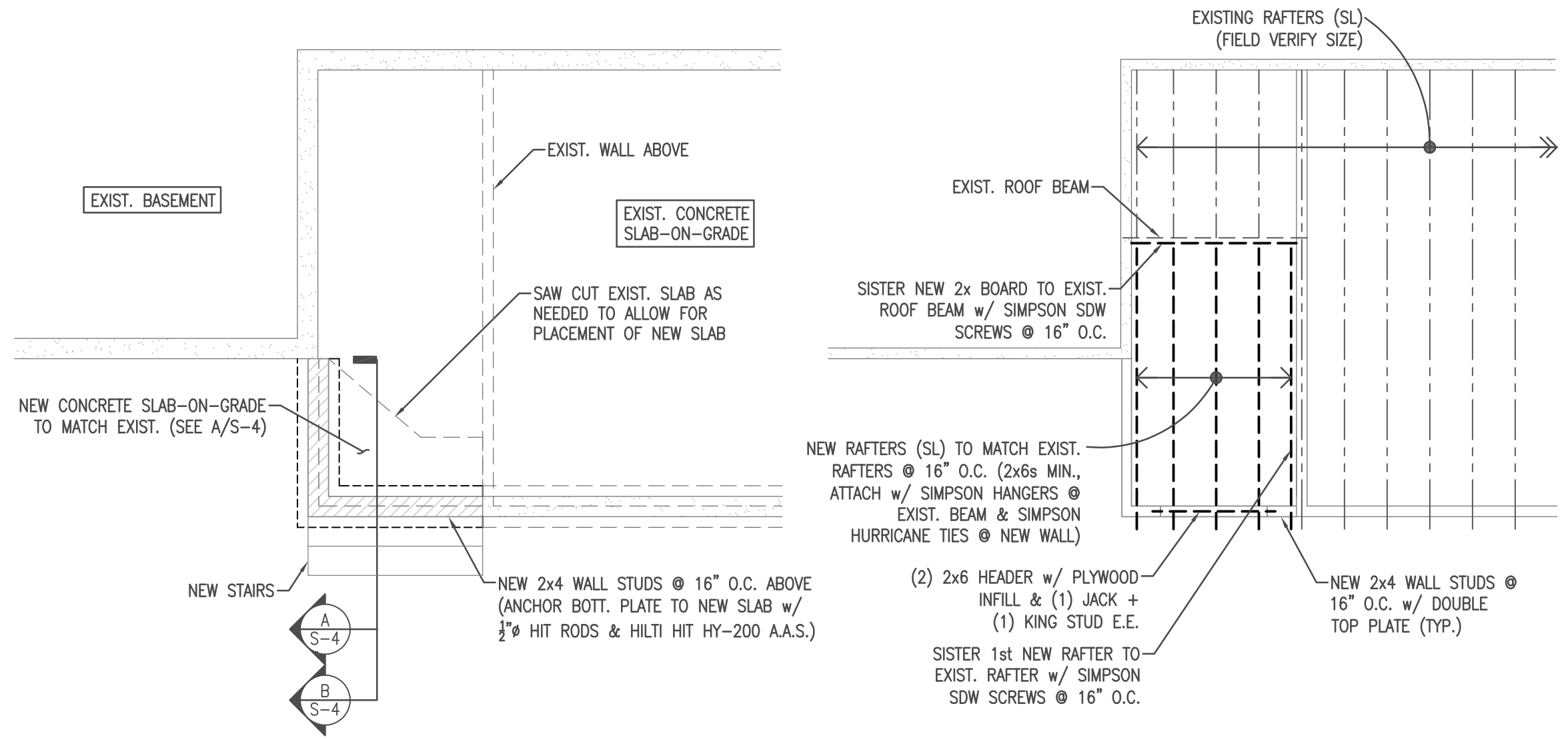
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PARTIAL REAR PORCH FRAMING PLANS

S-3

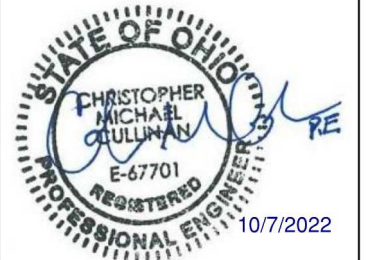


PARTIAL REAR PORCH FRAMING PLANS

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1
S-3



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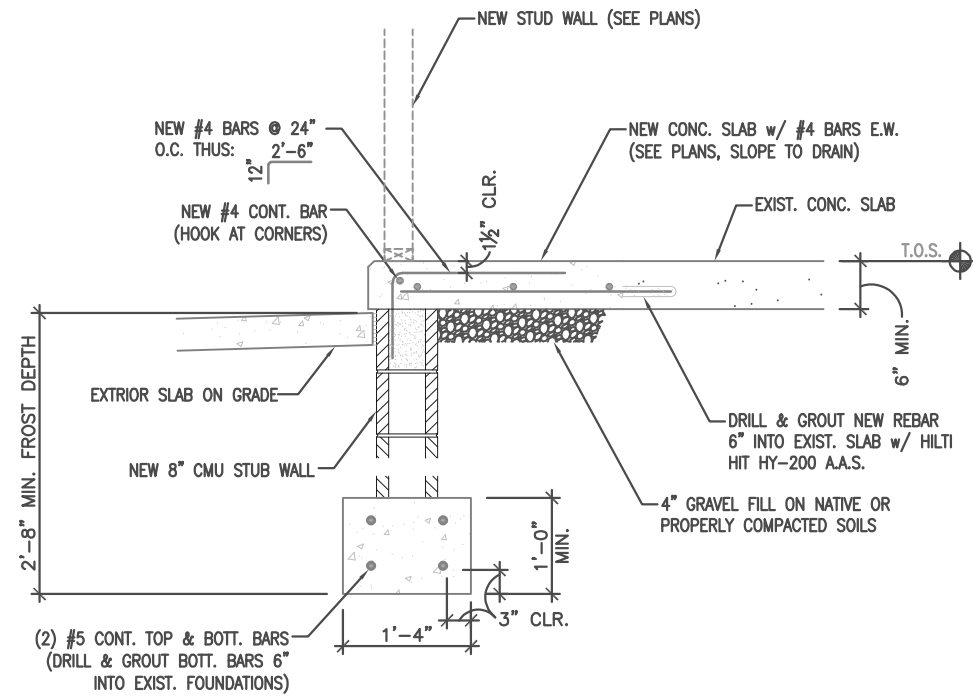
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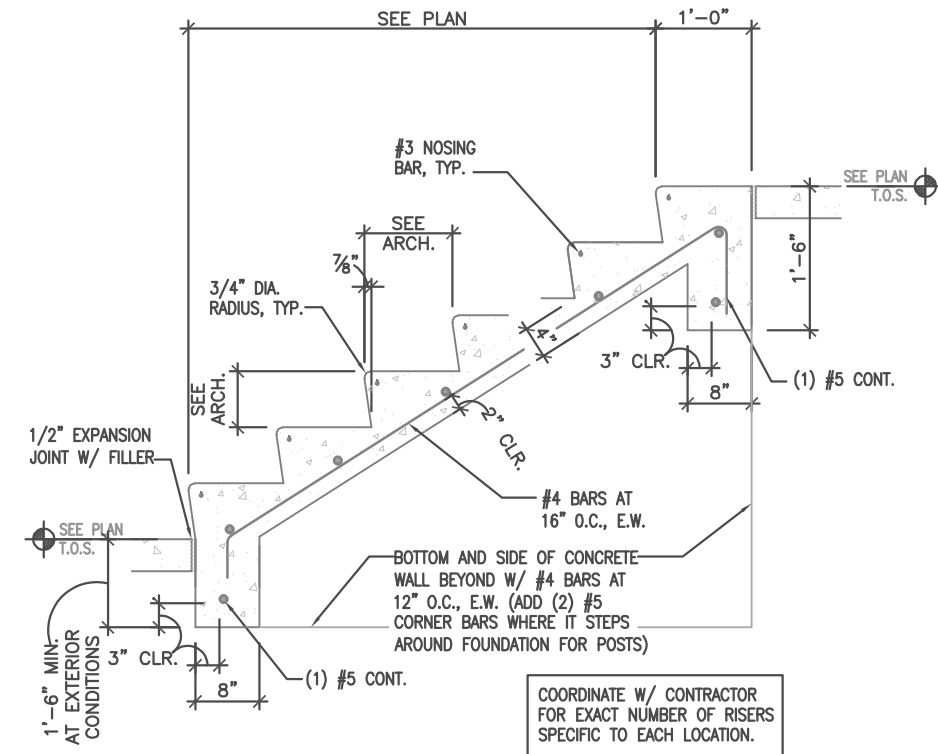
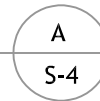
SECTION & DETAILS

S-4



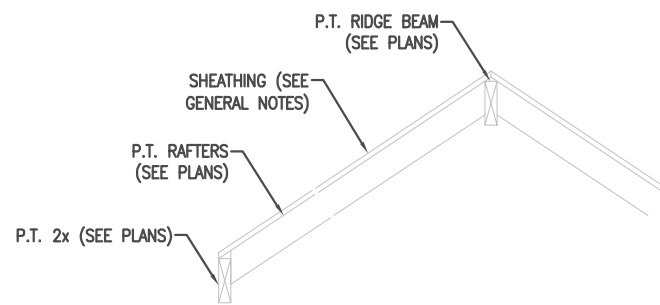
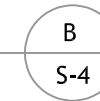
SECTION

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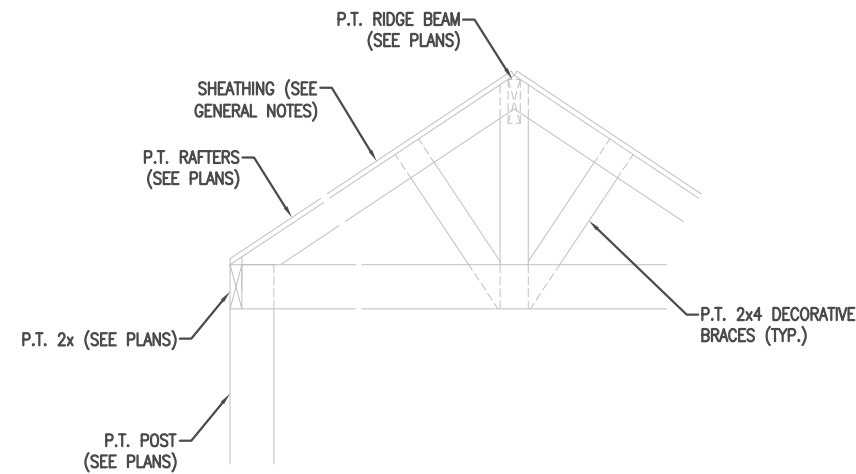
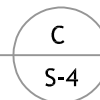
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