

STAMP

PROJECT #:
DRAWN BY:
Project Issue Date

Revision Schedule		
Number	Description	Date
00	SUBMISSION	02/09

SHEET NAME

COVER SHEET & GENERAL NOTES

SHEET NUMBER

S-1.0

GENERAL NOTES AND SPECIFICATIONS																															
WOOD																															
<p>1. WOOD FRAMING GENERAL:</p> <ul style="list-style-type: none"> PROVIDE DOUBLE JOISTS UNDER AND PARALLEL TO ALL BEARINGS PARTITIONS. ALL BOLT HOLES SHALL BE DRILLED 1/32" TO 1/16" OVERSIZED. 2x12 JOISTS SHALL BE BLOCKED AT THE SUPPORTS AND AT 8 FEET o.c. (AND RAFTERS GREATER THAN 10" DEPTHS AT THE SUPPORTS AND AT 10 FEET O.C.) WITH SOLID 2x BLOCKING 2" SHALLOWER THAN JOISTS OR APPROVED METAL CROSS BRIDGING. WOOD FRAMING MEMBERS: SOUTHERN PINE N2 UNLESS OTHERWISE MARKED ON THE PLANS. RAFTER TIES SPACED AT 4 FEET (MAX.) ON CENTER ARE REQUIRED IMMEDIATELY ABOVE CEILING JOISTS WHICH ARE NOT PARALLEL TO THE RAFTERS. 																															
NAILING SCHEDULE TABLE																															
JOIST TO SILL OR GIRDER, TOENAIL	3-8d																														
BRIDGING TO JOIST, TOENAIL EACH END	2-8d																														
1"x6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2-8d																														
WIDER THAN 1"x6" SUBFLOOR TO EACH JOIST, FACE NAIL	3-8d																														
2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2-16d																														
SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL	16d @16" o.c.																														
SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS	3-16d per 16"																														
TOP PLATE TO STUD, END NAIL	2-16d																														
STUD TO SOLE PLATE	4-8d, TOENAIL OR 2-16d, END NAIL																														
DOUBLE STUDS FACE NAIL	16d @24"o.c.																														
DOUBLED TOP PLATES, TYPICAL FACE NAIL	16d @16"o.c.																														
DOUBLE TOP PLATES, LAP SPLICE	8-16d																														
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3-8d																														
RIM JOIST TO TOP PLATE, TOENAIL	8d @6" o.c.																														
TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2-16d																														
CONTINUOUS HEADER, TWO PIECES	16d @ o.c. along each edge																														
CEILING JOISTS TO PLATE, TOENAIL	3-8d																														
CONTINUOUS HEADER TO STUD, TOENAIL	4-8d																														
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16d																														
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16d																														
RAFTER TO PLATE, TOENAIL	3-8d																														
1"x BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8d																														
1"x8" SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2-8d																														
WIDER THAN 1"x8" SHEATHINGS TO EACH BEARING, FACE NAIL	3-8d																														
BUILT-UP CORNER STUDS	16d @24" o.c.																														
BUILT-UP GIRDER & BEAMS 20d @32" o.c. AT TOP & BOTTOM & STAGGERED	2-20d @ ENDS																														
2"x PLANKS	2-16d @ EACH BEARING																														
WOOD SHEAR AND DIAPHRAGMS:																															
<ul style="list-style-type: none"> COMMON NAILS SHALL BE USED FOR ALL DIAPHRAGMS AND SHEAR WALL NAILING. ROOF SHEATHING: 1/2" THICK PLYWOOD CDX WITH INDEX 32/16. 8d NAILS @ 6" o.c. AT PANEL EDGES, AND 8d NAILS @ 12" o.c. AT PANEL FIELD. ALLOW 1/8" SPACING AT PANEL EDGES, UNLESS OTHERWISE RECOMMENDED BY THE PANEL MANUFACTURER. FLOOR SHEATHING: 3/4" THICK PLYWOOD CDX WITH INDEX 32/16. USE 10d COMMON NAILS AT 6" o.c. AND @ PANEL EDGES AND 10" o.c. IN THE FIELD. ALLOW 1/8" SPACING AT PANEL EDGES, UNLESS OTHERWISE RECOMMENDED BY THE PANEL MANUFACTURER. PLYWOOD DIAPHRAGMS: PRODUCT STANDARD PS 1-95, SOUTHERN PINE. WATERPROOFING: STUCCO OVER PLYWOOD SHEAR WALL WILL BE WATERPROOFED WITH A MINIMUM OF TWO 15# (GRADE D) UNDERLAYMENTS. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANELS EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.7. 																															
WOOD CONSTRUCTION																															
<p>1. STRUCTURAL LUMBER SHALL BE GRADE-MARKED SOUTHERN PINE</p> <table border="1"> <tr> <td>RAFTERS</td> <td>2 TO 4 WIDE UP TO 6 DEEP</td> <td>No. 2</td> </tr> <tr> <td></td> <td>2 TO 4 WIDE, 8" OR LARGER</td> <td>No. 2</td> </tr> <tr> <td>JOISTS</td> <td>2 TO 4 WIDE, 6 AND DEEPER</td> <td>No. 2</td> </tr> <tr> <td>BEAMS, PURLINS</td> <td>OVER 4 WIDE</td> <td>No. 1</td> </tr> <tr> <td>SUB-PURLINS</td> <td>2 TO 4 WIDE, 4 DEEP</td> <td>No. 1</td> </tr> <tr> <td>LEDGERS</td> <td></td> <td>No. 2</td> </tr> <tr> <td>STUDS</td> <td>2x4 OR 3x4</td> <td>No. 2</td> </tr> <tr> <td>STUDS</td> <td>2x6</td> <td>No. 2</td> </tr> <tr> <td>POSTS</td> <td></td> <td>No. 2</td> </tr> <tr> <td>SILLS, PLATES AND BLOCKING</td> <td></td> <td>No. 2</td> </tr> </table> <p>2. SILLS OR PLATES BEARING ON CONCRETE OR MASONRY WHICH IS WITHIN 48" OF EARTH SHALL BE PRESSURE TREATED, OR EQUAL, WOOD SILL PLATES SHALL BE BOLTED TO THE FOUNDATION WITH 5/8" DIAMETER x 10" BOLTS 4'-0" o.c. 12" MIN. FROM ENDS, OR 2 BOLTS MIN. PER PIECE. WHERE DIFFERENT SIZES AND/OR SPACING ARE REQUIRED, THEY SHALL GOVERN. INSTALL WITH 3"x3"x1/4" (OR 2"x2"x3/16") PLATE WASHER AT EACH ANCHOR BOLT.</p> <p>3. PARALLAM BEAMS MUST BE FABRICATED IN A LOCAL COUNTY LICENSED SHOP.</p> <p>4. JOISTS SHALL BE BLOCKED AT SUPPORTS AND BRIDGED OR BLOCKED AT INTERVALS OF 8 FT WHERE JOISTS ARE 2x12 OR DEEPER.</p> <p>5. JOISTS UNDER NON-BEARING PARTITIONS SHALL BE DOUBLED, EXCEPT AS NOTED.</p> <p>6. LAGBOLTS (& SCREWS) SHALL BE PRE-DRILLED TO SHANK DIAMETER AND FULL DEPTH AND SCREWED (NOT DRIVEN) INTO PLACE.</p> <p>7. CUT WASHERS SHALL BE PLACED UNDER HEADS AND NUTS OF ALL BOLTS AND UNDER HEADS OF LAGBOLTS. ONE CUT WASHER SHALL BE USED FOR BOLTS CONNECTING WOOD LEDGERS TO CONCRETE OR MASONRY WALLS.</p> <p>8. ALL HARDWARE USED FOR WOOD CONNECTION SHALL BE SIMPSON STRONG-TIE PRODUCTS. INSTALL PER MANUFACTURERS RECOMMENDATIONS. ALTERNATE PRODUCTS WILL ONLY BE PERMITTED IF WRITTEN APPROVAL AND ACCEPTANCE IS OBTAINED BY ENGINEER.</p> <p>9. ALL LUMBER SHALL HAVE A MOISTURE CONTENT NOT TO EXCEED 19% AT THE TIME OF FABRICATION OR CONSTRUCTION.</p> <p>10. PROVIDE LEAD HOLE 40%-70% OF THREADED SHANK DIA. AND FULL DIA. FOR SMOOTH SHANK PORTION.</p> <p>11. PLACE 2" FIREBLOCKING IN STUD WALLS AT CEILING AND FLOOR LEVELS, AT EACH 10" HEIGHT OF STUDS, AND BETWEEN STAIR STRINGERS AT SUPPORTS.</p> <p>12. ALL DIAPHRAGMS AND SHEAR NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX.</p>		RAFTERS	2 TO 4 WIDE UP TO 6 DEEP	No. 2		2 TO 4 WIDE, 8" OR LARGER	No. 2	JOISTS	2 TO 4 WIDE, 6 AND DEEPER	No. 2	BEAMS, PURLINS	OVER 4 WIDE	No. 1	SUB-PURLINS	2 TO 4 WIDE, 4 DEEP	No. 1	LEDGERS		No. 2	STUDS	2x4 OR 3x4	No. 2	STUDS	2x6	No. 2	POSTS		No. 2	SILLS, PLATES AND BLOCKING		No. 2
RAFTERS	2 TO 4 WIDE UP TO 6 DEEP	No. 2																													
	2 TO 4 WIDE, 8" OR LARGER	No. 2																													
JOISTS	2 TO 4 WIDE, 6 AND DEEPER	No. 2																													
BEAMS, PURLINS	OVER 4 WIDE	No. 1																													
SUB-PURLINS	2 TO 4 WIDE, 4 DEEP	No. 1																													
LEDGERS		No. 2																													
STUDS	2x4 OR 3x4	No. 2																													
STUDS	2x6	No. 2																													
POSTS		No. 2																													
SILLS, PLATES AND BLOCKING		No. 2																													

PARAMETERS DESIGN FBC 2020
WIND DESIGN
<p>1. BASIC WIND SPEED (3-SECOND GUST), MILES PER HOUR = 146 WIND IMPORTANCE FACTOR, I=1.0 AND OCCUPANCY CATEGORY = II</p> <p>2. WIND EXPOSURE CATEGORY: C (CASE 1)</p> <p>3. THE APPLICABLE INTERNAL PRESSURE COEFFICIENT =0.18</p>
CONCRETE NOTES
CONCRETE FOUNDATION, FLOOR SLABS,
<p>ALL CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM STRENGTHS AT 28 DAYS: FOOTINGS AND SLAB-ON-GRADE = 2500 PSI</p> <ul style="list-style-type: none"> BAR SPLICES IN CONCRETE SHALL BE LAP 40 BAR DIAMETERS MINIMUM, AND MAY BE WIRED TOGETHER, UNLESS OTHERWISE NOTED ON PLANS.
ADDITIONAL NOTES
<ul style="list-style-type: none"> CONTRACTORS RESPONSIBLE FOR THE CONSTRUCTION OF A WIND OR SEISMIC FORCE RESISTING SYSTEM/COMPONENT LISTED IN THE "STATEMENT OF SPECIAL INSPECTION" SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE LOCAL COUNTY INSPECTORS AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON SUCH SYSTEM OR COMPONENT PER SEC. 1709.1. IF ADVERSE SOIL CONDITIONS ARE ENCOUNTERED, A SOILS INVESTIGATION REPORT MAY BE REQUIRED. PERIODIC SPECIAL INSPECTION IS REQUIRED FOR WOOD SHEAR WALLS, SHEAR PANELS, AND DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING, AND OTHER FASTENING COMPONENTS OF THE SEISMIC FORCE RESISTING SYSTEM. SPECIAL INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED WHERE THE FASTENER SPACING OF THE SHEATHING IS 4 INCHES ON CENTER OR LESS. FOUNDATION SILLS SHALL BE NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD. FIELD WELDING TO BE DONE BY WELDERS CERTIFIED BY THE LOCAL COUNTY FOR STRUCTURAL STEEL. CONTINUOUS INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED. SHOP WELDS MUST BE PERFORMED IN A LOCAL COUNTY LICENSED FABRICATOR'S SHOP. LOCAL COUNTY LICENSED FABRICATOR IS REQUIRED FOR STRUCTURAL STEEL. PROVIDE LEAD HOLE 40%-70% OF THREADED SHANK DIA. AND FULL DIA. FOR SMOOTH SHANK PORTION. A COPY OF THE LOCAL STATE RESEARCH REPORT AND/OR CONDITIONS OF LISTING SHALL BE MADE AVAILABLE AT THE JOB SITE. HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS; AND HOLD-DOWNS SHALL BE FINGER TIGHT AND 1/2 WRENCH TURN JUST PRIOR TO COVERING THE WALL FRAMING. CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE STEEL PLATE WASHERS IN ACCORDANCE WITH TABLE 2305.5 OF LOCAL STATE BUILDING CODE. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.7. ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX. ALL BOLT HOLES SHALL BE DRILLED 1/32" TO 1/16" OVERSIZED. HOLD-DOWN HARDWARE MUST BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION.

OWNER

CONTACT

TWA ENGINEERING & CONSULTING, PLLC
41 Centimeters Dr, Mauldin, SC 29662, USA
E-Mail: toufic.awad@twaengineers.com
Phone:7867778727

CODE DATA

PROJECT NAME: SHED SUN SCREEN AWNING

PROPERTY ADDRESS: STEVE GUNN, 50544 BERMONT RD, PUNTA GORDA, FL 33982

CITY: PUNTA GORDA

ZIP CODE: 33982

LOCAL JURISDICTION:

CODE UTILIZED: 2018 INTERNATIONAL RESIDENCE CODE
2020 FLORIDA BUILDING CODE
NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION 2018 (NDS)

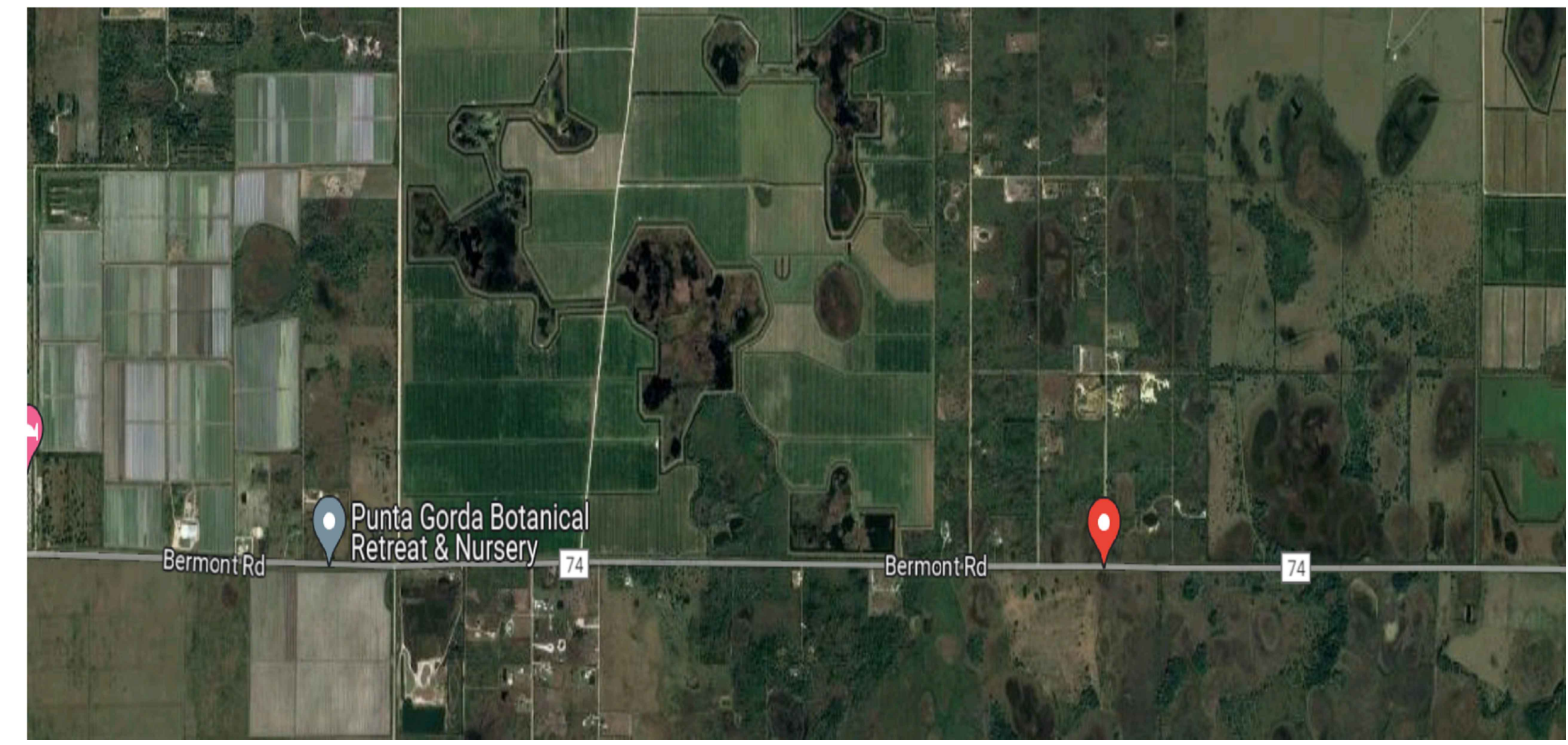
SHEET INDEX	
S-1.0	COVER SHEET & GENERAL NOTES
S-2.0	STRUCTURAL PLAN
S-3.0	TYPICAL DETAILS

PROJECT DESCRIPTION

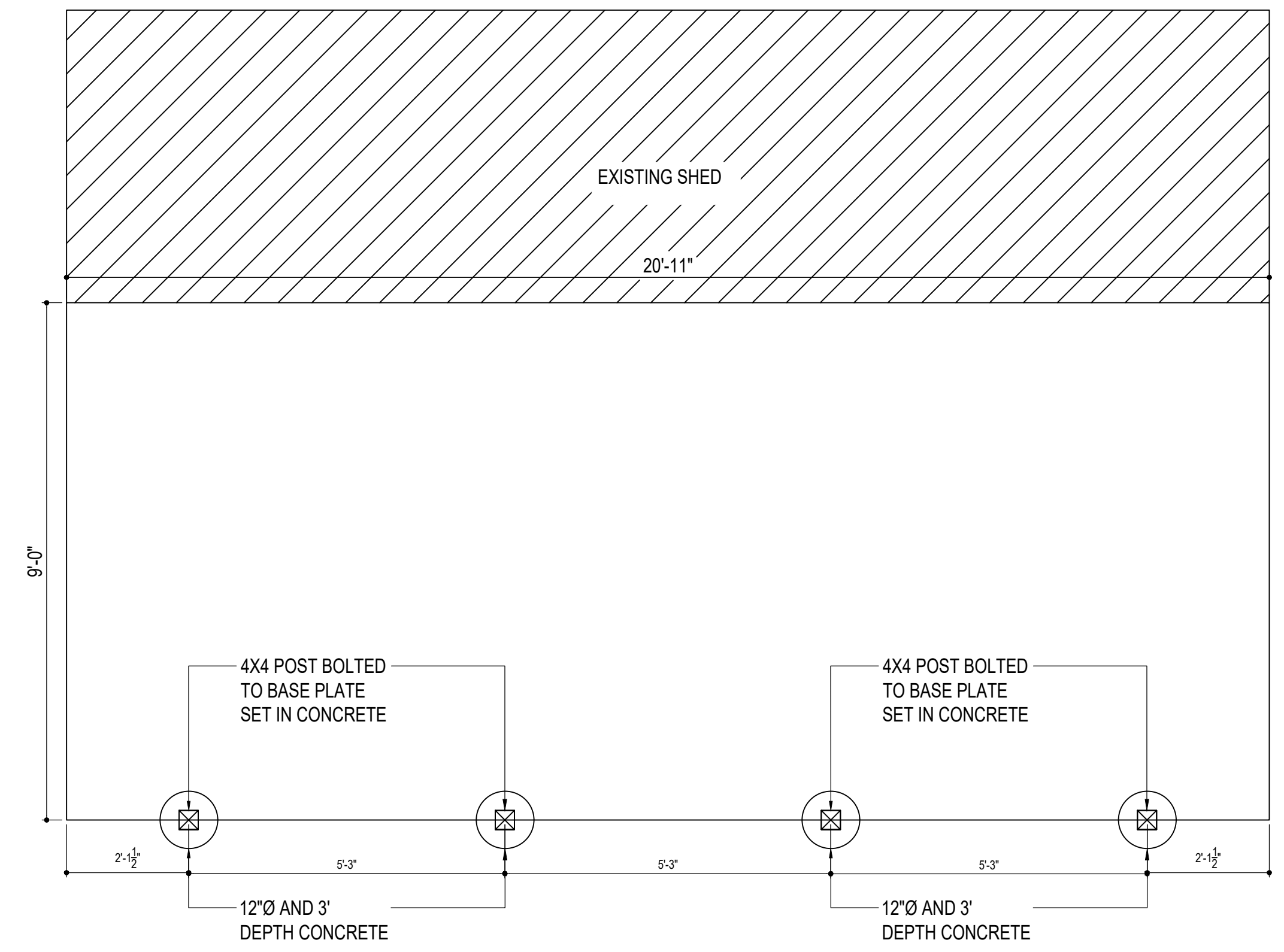
SHED SUN SCREEN AWNING FOR SMALL ANIMAL HOUSING (SMALL PRIMATES)

STRUCTURAL ENGINEER

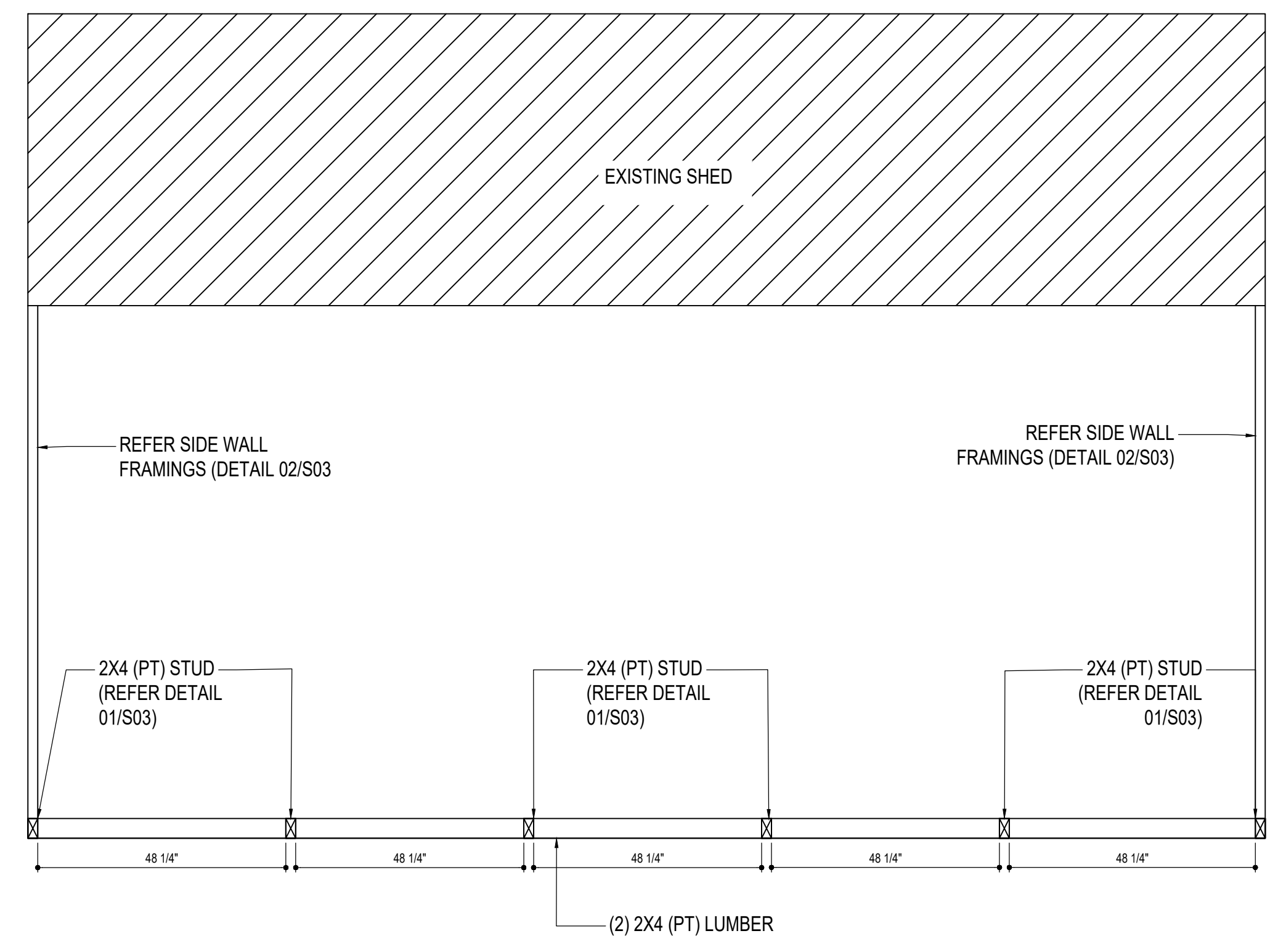
TWA ENGINEERING & CONSULTING, PLLC
41 Centimeters Dr, Mauldin, SC 29662, USA



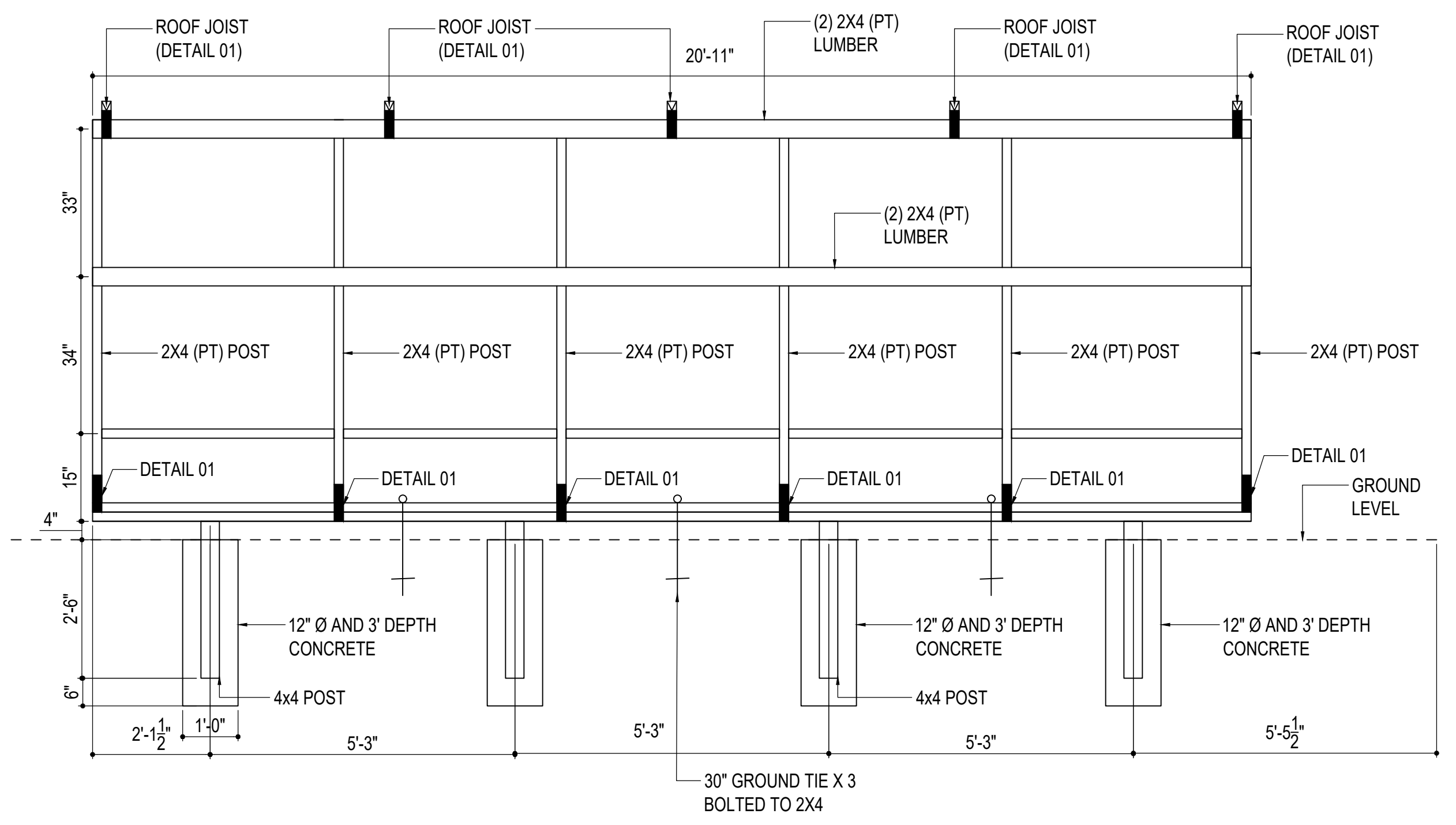
SITE MAP



1
S02
FOUNDATION PLAN
Scale: 1/2" - 1'-0"

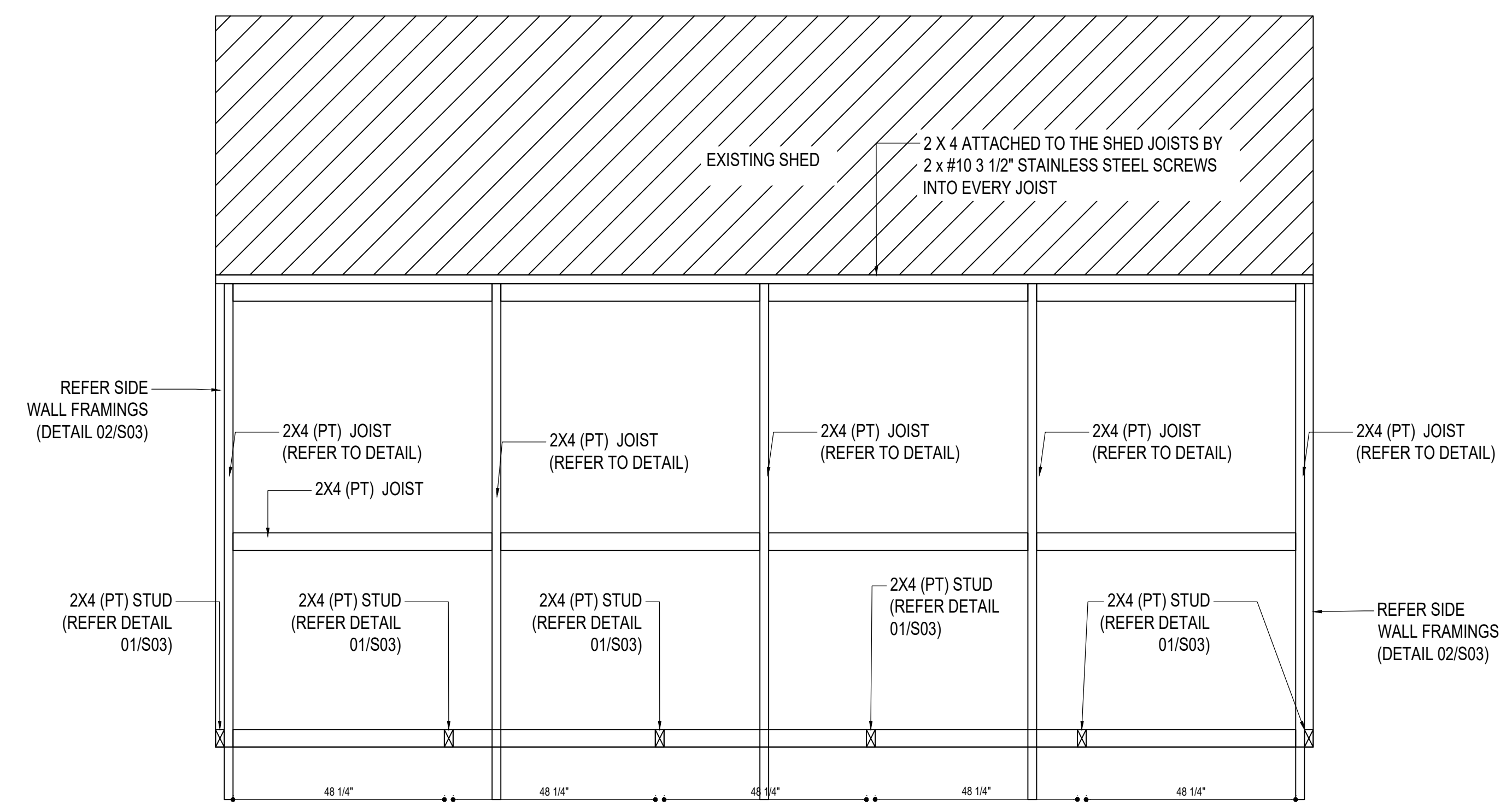


2
S02
GROUND FLOOR PLAN
Scale: 1/2" - 1'-0"



DETAIL 01: GALVANIZED TIE PLATES SECURED WITH 1 1/4" COATED STEEL SCREWS

3
S02
TYPICAL SECTION
Scale: 1/2" - 1'-0"



1
S02
ROOF PLAN
Scale: 1/2" - 1'-0"

STAMP

PROJECT #:
DRAWN BY:
Project Issue Date

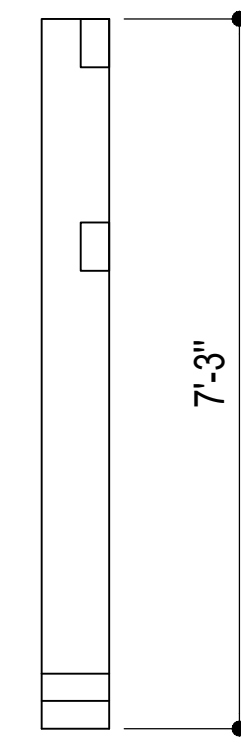
Revision Schedule		
Number	Description	Date
00	SUBMISSION	02/09

SHEET NAME

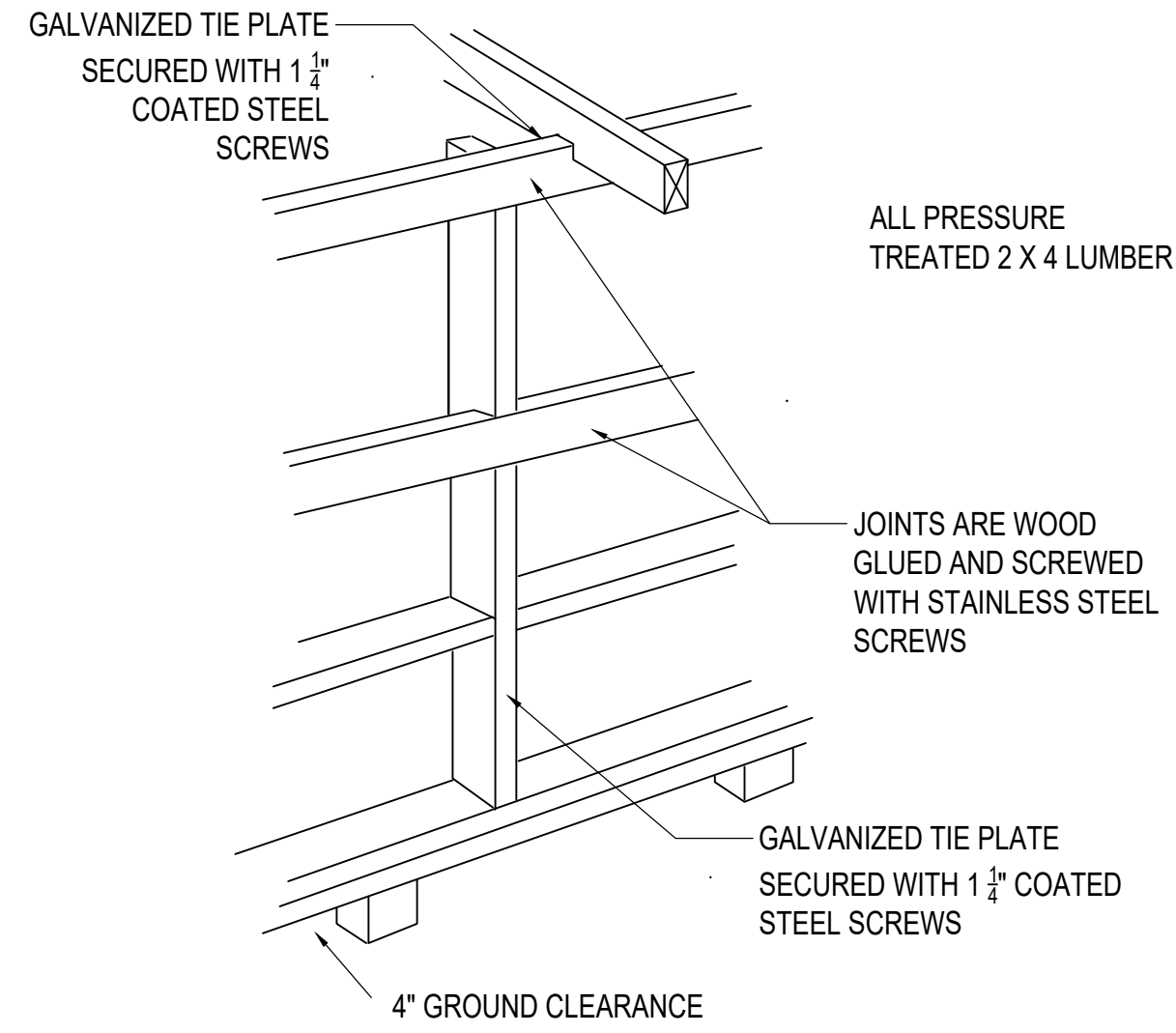
STRUCTURAL PLANS

SHEET NUMBER

S-2.0



**ELEVATION
VIEW**

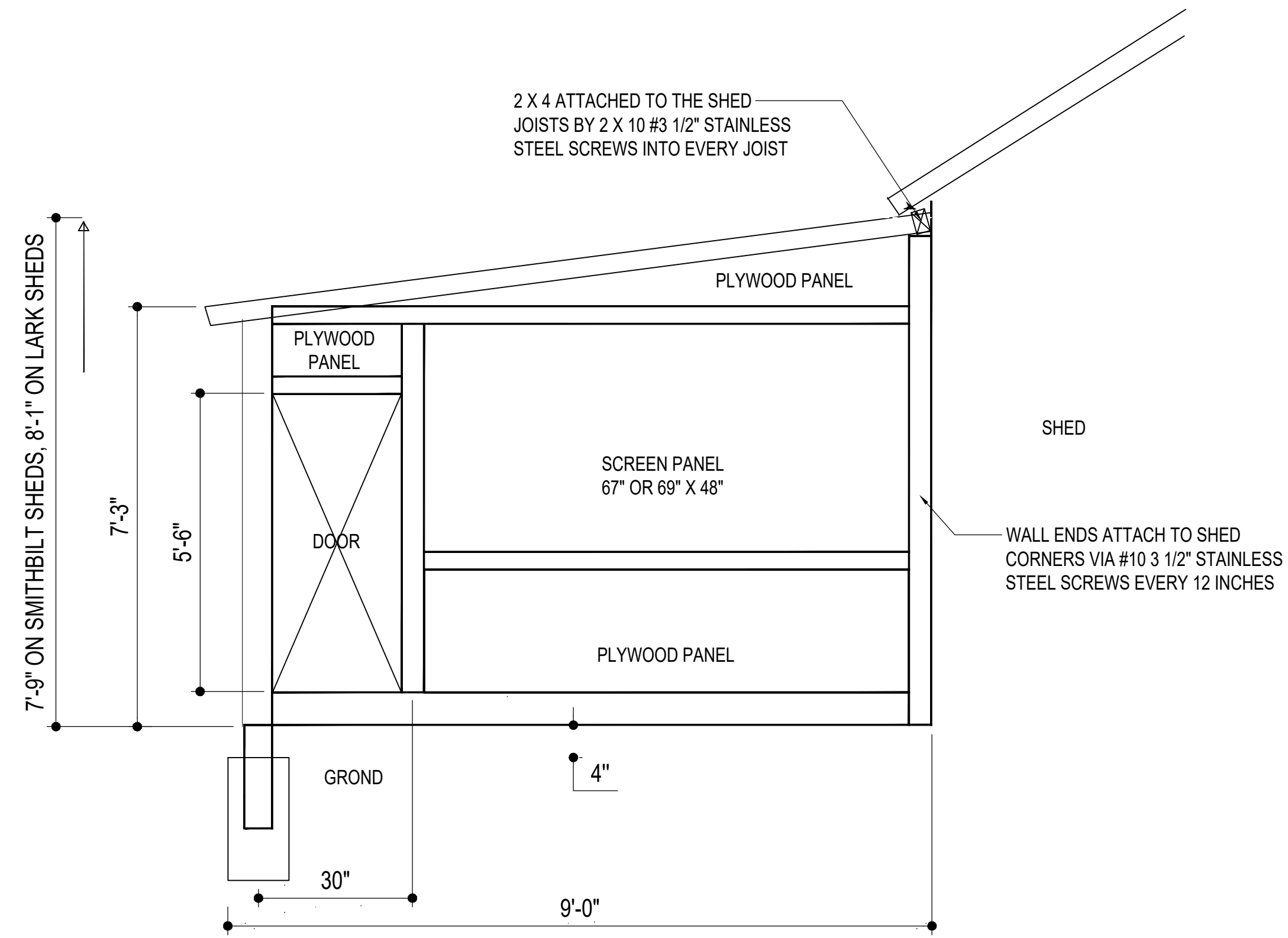


**ISOMETRIC
VIEW**

VERTICAL STUD DETAILS

Scale: 1/2" - 1'-0"

1
S03



SIDE WALL FRAMING DETAILS

Scale: 1/2" - 1'-0"

2
S03

STAMP

PROJECT #:

DRAWN BY:

Project Issue Date

Revision Schedule

Number	Description	Date
00	SUBMISSION	02/09

SHEET NAME

**TYPICAL
DETAILS**

SHEET NUMBER

S-3.0