

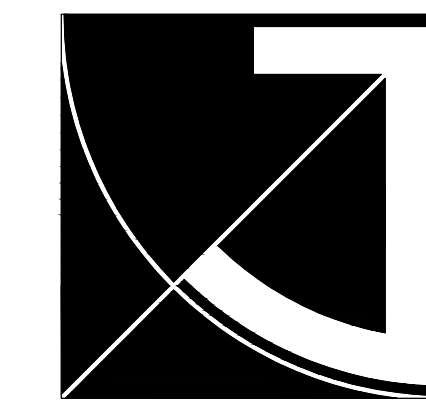
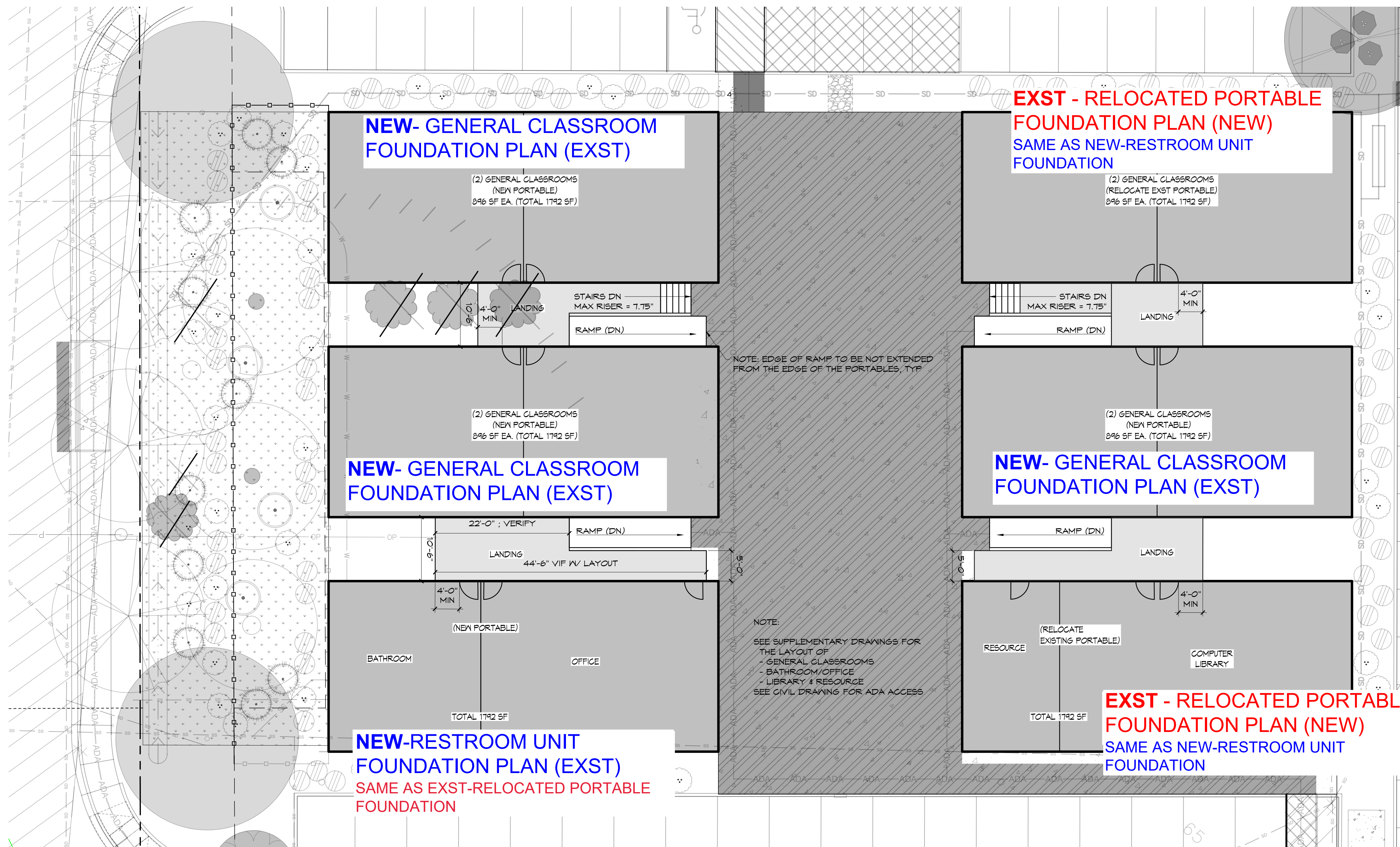
PAGE 1: SITE PLAN WITH NOTES
 PAGE 2: **NEW- GENERAL CLASSROOM FOUNDATION PLAN (EXST)**
 PAGE 3~4: **EXST - RELOCATED PORTABLE FOUNDATION PLAN (NEW)**
 AND
NEW - BATHROOM UNIT FOUNDATION PLAN (EXST)
 PAGE 5~8: **X-PLATE ANCHOR LETTER**

Approval of submitted plans is not an approval of omissions or oversights by this office or non compliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable codes and regulations of the local government.

The approved construction plans, documents, and all engineering must be posted on the job at all inspections in a visible and readily accessible location.

Full sized legible color plans are required to be provided by the permittee on site for inspection.

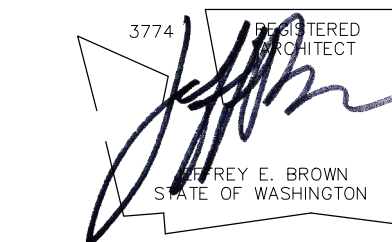
Separate Electrical Permit is required with the Washington State Department of Labor & Industries.
<https://lni.wa.gov/licensing-permits/electrical/electrical-permits-fees-and-inspections>
 or call for Licensing Information:
 1-800-647-0982



JEFF BROWN ARCHITECTURE

JEFF BROWN ARCHITECTURE
 12181 C STREET SOUTH
 TACOMA, WA 98444

PROJECT LEAD
 JEFFREY E. BROWN
 253.606.8324
 jeff@jeffbrownarchitecture.com



PROJECT NAME/ADDRESS

PRPF20241230
 CASCADE CHRISTIAN SCHOOLS
 ELEMENTARY SCHOOL
 PORTABLE PLACEMENTS
 811 21ST STREET SE
 PUYALLUP, WA 98372

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 These documents have been prepared specifically for the above named project. They are not suitable for use on other projects or in other locations without the approval and participation of the Architect.

PROJECT NUMBER
 24001

DRAWING TYPE

CUP/SEPA DOCUMENT

DATE	ISSUE	NO.
09.19.24		
10.22.24	CITY-REV	
03.03.25	CITY-REV	
05.12.25	CITY-REV	

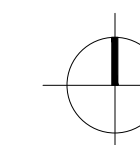
SHEET TITLE

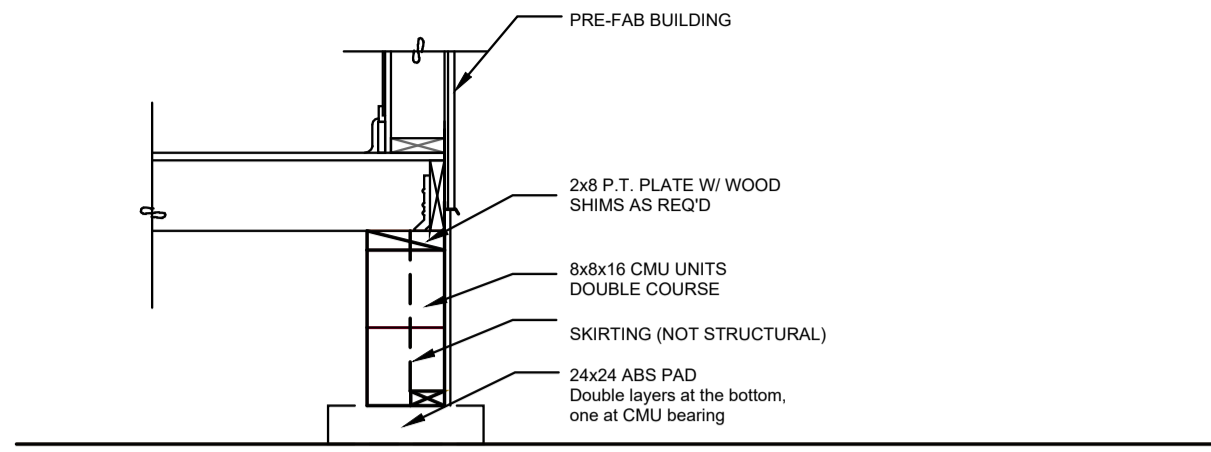
PARTIAL SITE PLAN

SHEET #

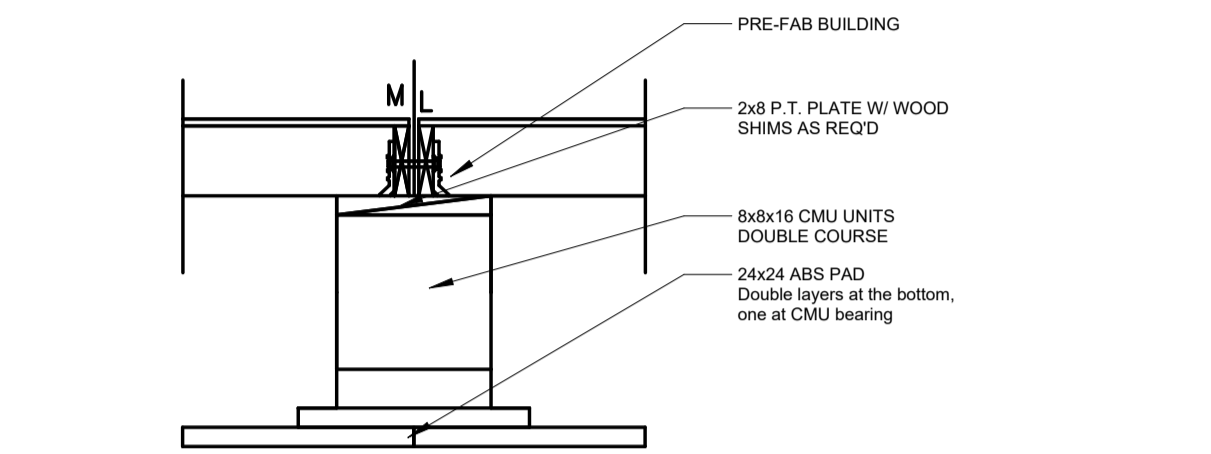
A1.2

PARTIAL SITE PLAN
 (11x17) SCALE: 1" = 20'
 (22x34) SCALE: 1" = 10'

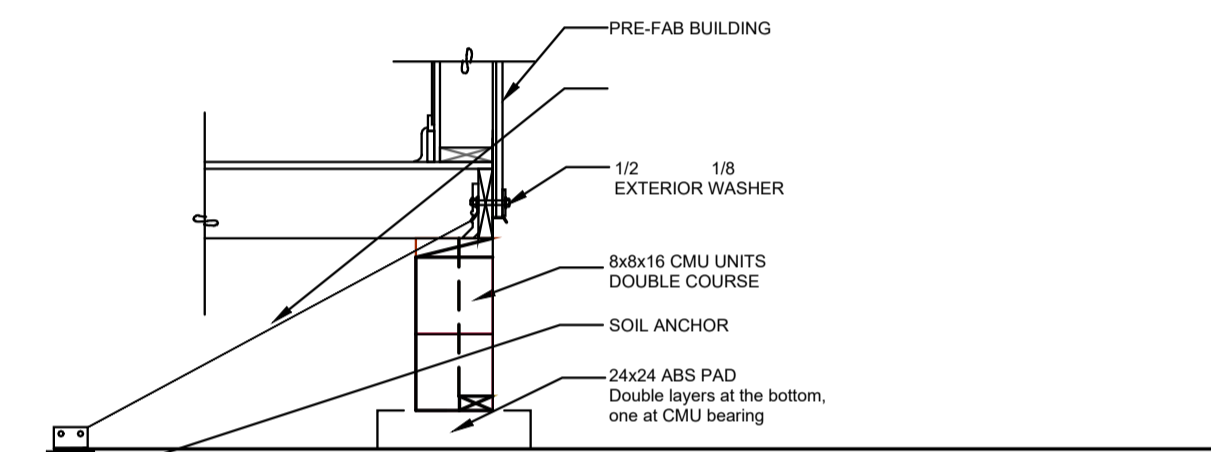




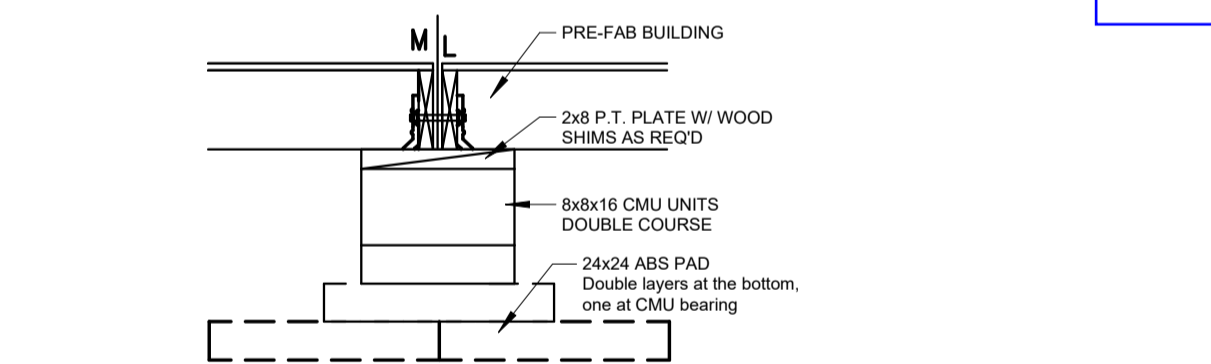
2 PERIMETER SUPPORT
1: 20



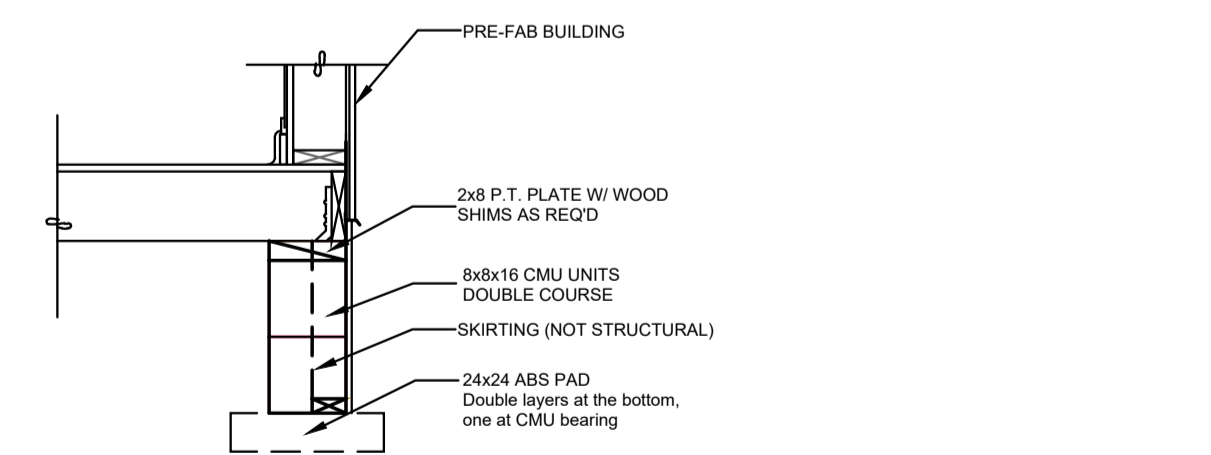
3 MATELINE SUPPORT
1: 20



4 SOIL ANCHOR
1: 20



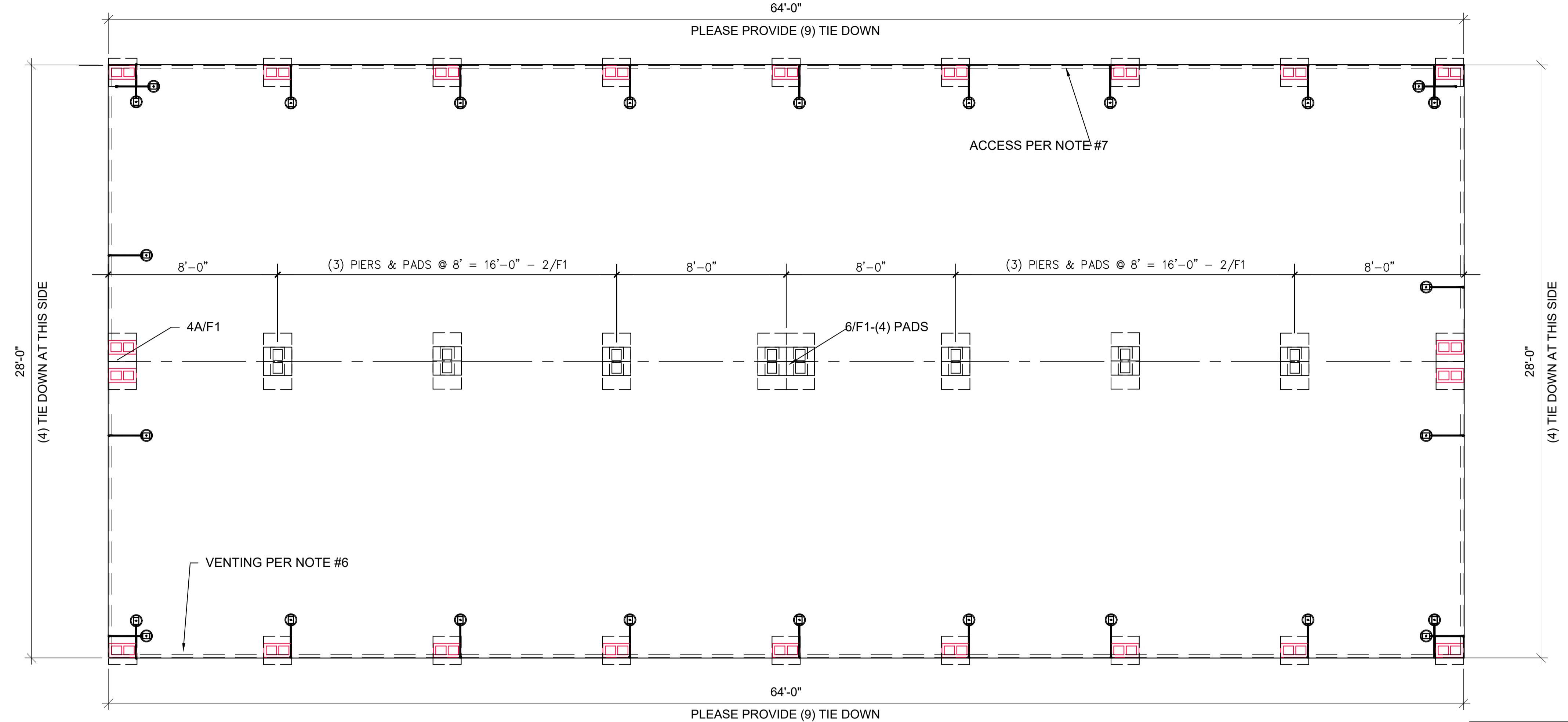
5 INTERIOR COLUMN SUPPORT
1: 20



6 EXTERIOR MATELINE SUPPORT
1: 20

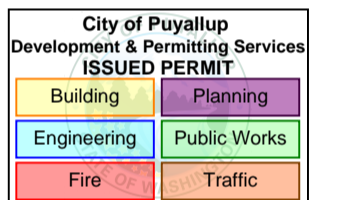
**NEW- GENERAL CLASSROOM
FOUNDATION PLAN (EXST)**

1 FOUNDATION PLAN
1: 40



STRUCTURAL NOTES

1. GENERAL:
 - 1.1. BUILDING DIMENSIONS FROM THE MODULAR BUILDING MANUFACTURERS MAY VARY AND INSIGNIFICANT ADJUSTMENTS MAY BE MADE IN THE FIELD.
 - 1.2. ANY VARIATION IN INSTALLATION OR MATERIALS OF THE FOUNDATION REQUIRES ENGINEER CONCURRENCE PRIOR TO PURCHASE AND INSTALLATION OF THE FOUNDATION MATERIALS.
 - 1.3. A GEOTECHNICAL REPORT WAS NOT PROVIDED FOR THIS DESIGN. IBC MINIMUM VALUES FOR SOIL BEARING WAS USED. VERIFY BEARING CAPACITY WITH LOCAL BUILDING OFFICIAL PRIOR TO INSTALLATION. OWNER IS RESPONSIBLE FOR PROVIDING A STABLE, LEVEL AND SMOOTH SUBGRADE.
2. DESIGN INFORMATION & LOADING:
 - 2.1. BUILDING CODE
 - 2.1.1. IBC, 2018 EDITION & OSSC-2019
 - 2.1.2. BUILDING RISK CATEGORY II
 - 2.2. ROOF LIVE LOADS:
 - 2.2.1. 45 PSF-GROUND SNOW LOAD
 - 2.2.2. 45 PSF-ROOF DESIGN SNOW LOAD
 - 2.2.3. 20 PSF-ROOF DESIGN LIVE LOAD
 - 2.3. FLOOR LIVE LOAD: CLASSROOM
 - 2.3.1. 40 PSF UNIFORM
 - 2.3.2. 1,000# CONCENTRATED
 - 2.4. WIND CRITERION:
 - 2.4.1. Vult=130 MPH, Vasd=101 MPH, EXP C, Kzt=1.0
 - 2.5. SEISMIC CRITERION: Sds=1.398, S1=0.486, Ie=1.0, SEISMIC CATEGORY, D
 - 2.6. ASSUMED SOIL BEARING: 2,000 PSF, ASSUMED SITE SOIL CLASS D-DEFACED
3. CONCRETE: (16"x16"x4", MIN. PRECAST BEARING PADS)
 - 3.1. DESIGN COMP. STRENGTH 2,500 PSI
 - 3.2. REINF. YIELD 60 KSI
4. MASONRY:
 - 4.1. 8x16 UNITS ASTM C-90, GRADE N
 - 4.2. UNITS MAY BE 8" &/OR 4" NOMINAL HEIGHT UNITS.
 - 4.3. SET SINGLE DRY-STACKED UNITS W/CORES VERTICAL & NO MORE THAN 24-INCHES HIGH, PER PLAN.
 - 4.4. SET DOUBLE ALTERNATING DRY-STACKED UNITS W/CORES VERTICAL & NO MORE THAN 48-INCHES HIGH, PER PLAN.
 - 4.5. SET DOUBLE ALTERNATING DRY-STACKED UNITS W/CORES VERTICAL. CELLS GROUTED TO WITHIN (3) UNITS FROM TOP. NO MORE THAN 72-INCHES HIGH, PER PLAN. IF HIGHER THAN 72-INCHES A SPECIAL STRUCTURAL REVIEW IS REQUIRED.
5. WOOD:
 - 5.1. ALL WOOD MEMBERS OF THE FOUNDATION SYSTEM SHALL BE SPF-STD OR BETTER, UNLESS NOTED OTHERWISE.
 - 5.2. ALL WOOD IN CONTACT WITH SOIL, ASPHALT, MASONRY, OR CONCRETE SHALL BE PRESSURE TREATED (P.T.), FOR EXPOSURE.
 - 5.3. ALL WOOD WITHIN 6-INCHES OF SUBGRADE TO BE TREATED FOR EXPOSURE AND INSECTS.
 - 5.4. CONNECTORS IN CONTACT WITH P.T. WOOD TO BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL CONNECTORS.
 - 5.5. WOOD BEARING PADS MAY BE SUBSTITUTED FOR 24x24 CONCRETE PADS ONE FOR ONE AND SHALL BE P.T. 2x12-24" LONG, MIN.
6. SPECIALTY ITEMS:
 - 6.1. METAL PIERS TO BE CAPABLE OF SUPPORTING 6,000#
 - 6.2. ABS PADS MAY BE SUBSTITUTED FOR 16x16 CONCRETE PADS ONE FOR ONE AND SHALL BE "BLACK PAD" OR EQUIVALENT. 16"x16", MIN.
 - 6.4. TRANSVERSE & LONGITUDINAL SOIL ANCHORS TO BE MINUTEMAN ANCHORS, MARK 'MMA-35' MODEL '36-XDH', X-DRIVE ANCHORS OR EQUIVALENT W/ A MIN. ALLOWABLE DESIGN LOAD OF 1,800# IN ASPHALT.
 - 6.5. UPLIFT SOIL ANCHORS TO BE MINUTEMAN ANCHORS, MARK 'MMA-92', MODEL '4430 EZDH 3 4' OR 'GW-2 -NC1' AUGER STYLE SOIL ANCHORS W/STABILIZER HEAD OR EQUIVALENT W/ A MIN. ALLOWABLE DESIGN LOAD OF 3,150#. PRE-DRILL ASPHALT AND BASE PRIOR TO INSTALLATION. REFILL DRILLED HOLE.
 - 6.6. COMPLETE FINAL ADJUSTMENT OF TIES TO BUILDING ONLY AFTER BUILDING IS FULLY BLOCKED AND LEVELLED.
 - 6.7. INSTALL ALL SPECIALTY ITEMS PER THE MANUFACTURER'S RECOMMENDATIONS.
7. VENTING:
 - 7.1. IF CRAWLSPACE IS ENCLOSED, PROVIDE UNDER FLOOR VENTILATION AT 1 NET SF OF VENTILATION PER 150 SF OF FLOOR AREA.
 - 7.2. IF A CLASS 1 VAPOR RETARDER IS INSTALLED THE RATIO MAY BE INCREASED TO 11500.
8. ACCESS:
 - 8.1. PROVIDE MINIMUM 18"x24" ACCESS TO THE UNDER FLOOR AREA.
 - 8.2. PROVIDE 18" MIN. CLEARANCE FROM SOIL TO UNDERSIDE OF ANY UNTREATED WOOD MEMBER.
 - 8.3. PROVIDE 12" MIN. CLEARANCE UNDER FROM SOIL TO UNDERSIDE OF ALL BUILDING MEMBERS.
9. SITE CONDITIONS:
 - 9.1. FOUNDATION SUBGRADE TO BE 2-INCH MINIMUM ASPHALT PAVEMENT OVER A MINIMUM OF 4-INCH THICK COMPACTED ROAD-MIX GRAVEL PAD OVER UNDISTURBED NATIVE SUITABLE STABLE SOILS OR STRUCTURAL FILL.



PRPF20241230



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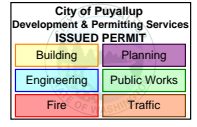
By Yuri at 12:06:36 AM, 5/15/2024

REV.	DATE	DESCRIPTION	GM BY	CHK/APR
1	2024-04-17	ISSUED FOR PERMIT		

PROJECT:	28x64 CLASSROOM			DRAWING TITLE:	FOUNDATION / CRAWLSPACE PLAN		
CLIENT:	ATCO STRUCTURES AND LOGISTICS			PROJECT NO:	1106442-A	DRAWING NO:	SC100
				REV. #			1

PRPF20241230

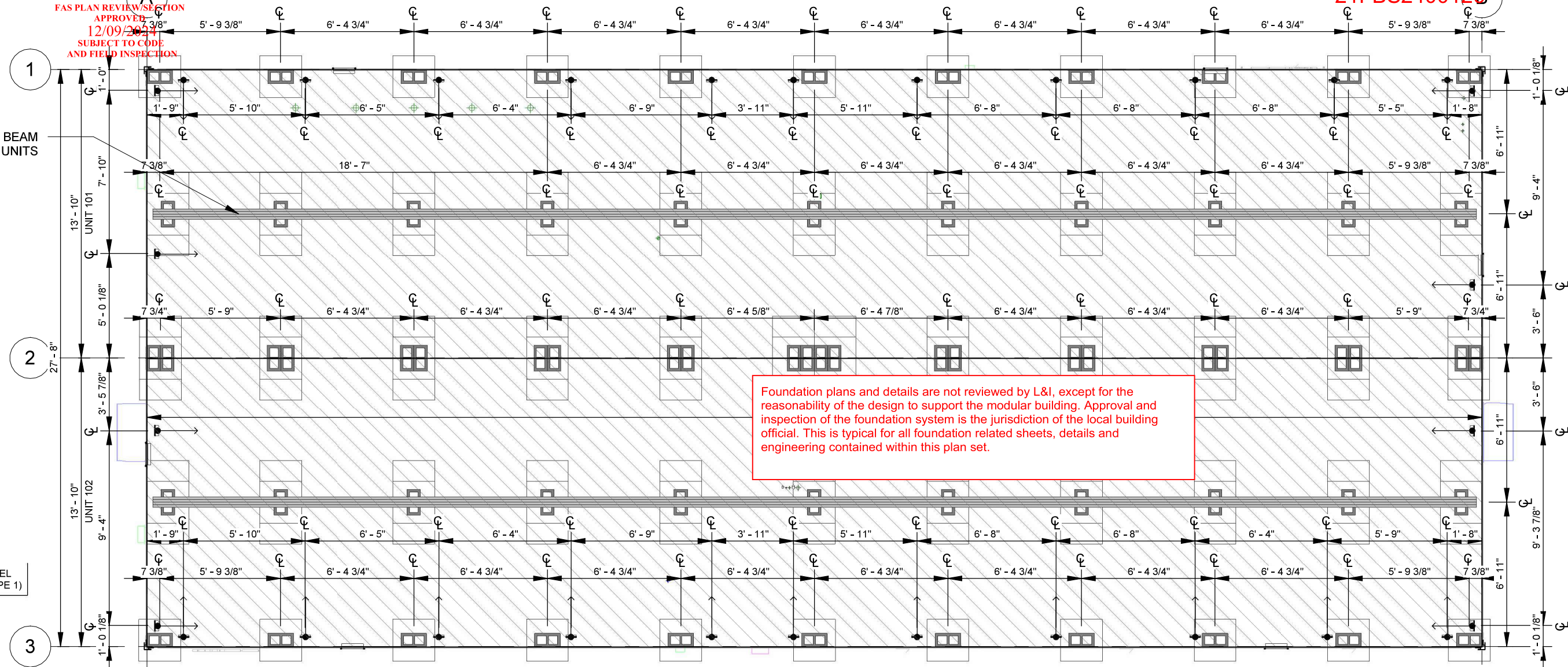
21FBS2400126



STATE OF WASHINGTON DEPT. OF LABOR AND INDUSTRIES FAS PLAN REVIEW/SECTION APPROVED 12/09/2024 SUBJECT TO CODE AND FIELD INSPECTION



By Yuri at 7:30:26 PM, 7/24/2024



Foundation plans and details are not reviewed by L&I, except for the reasonability of the design to support the modular building. Approval and inspection of the foundation system is the jurisdiction of the local building official. This is typical for all foundation related sheets, details and engineering contained within this plan set.

1 STRUCTURAL FOUNDATION PLAN SCALE: 3/16" = 1'-0"

STRUCTURAL NOTES

- 1. GENERAL: 1.1. BUILDING DIMENSIONS FROM THE MODULAR BUILDING MANUFACTURERS MAY VARY AND INSIGNIFICANT ADJUSTMENTS MAY BE MADE IN THE FIELD. 1.2. ANY VARIATION IN INSTALLATION OR MATERIALS OF THE FOUNDATION REQUIRES ENGINEER CONCURRENCE PRIOR TO PURCHASE AND INSTALLATION OF THE FOUNDATION MATERIALS. 1.3. A GEOTECHNICAL REPORT WAS NOT PROVIDED FOR THIS DESIGN. IBC MINIMUM VALUES FOR SOIL BEARING WAS USED. VERIFY BEARING CAPACITY WITH LOCAL BUILDING OFFICIAL PRIOR TO INSTALLATION. OWNER IS RESPONSIBLE FOR PROVIDING A STABLE, LEVEL AND SMOOTH SUBGRADE. 2. DESIGN INFORMATION & LOADING: 2.1. BUILDING CODE 2.1.1. 2021 WASHINGTON STATE BUILDING CODE (2021 IBC, AMENDED) & OSSC-2019 2.1.2. BUILDING RISK CATEGORY II 2.2. ROOF LCHE LOADS: 2.2.1. 45 PSF-GROUND SNOW LOAD 2.2.2. 45 PSF-ROOF DESIGN SNOW LOAD 2.2.3. 20 PSF-ROOF DESIGN LCHE LOAD 2.3. FLOOR LCHE LOAD: CLASSROOM 2.3.1. 125 PSF UNIFORM 2.3.2. 1,000# CONCENTRATED 2.4. WIND CRITERION: 2.4.1. Vult=130 MPH, Vasd=101 MPH, EXP C, Kzt=1.0 2.5. SEISMIC CRITERION: Sds=1.04, S1=0.61, Ie=1.0, SEISMIC CATEGORY, D 2.6. ASSUMED SOIL BEARING: 2,000 PSF, ASSUMED SITE SOIL CLASS D-DEFAULT

- 3. CONCRETE: (24"x24"x4", MIN. PRECAST BEARING PADS) 3.1. DESIGN COMP. STRENGTH 2,500 PSI 3.2. REINF. YIELD 60 KSI 4. MASONRY: 4.1. 8x16 UNITS ASTM C-90, GRADE N 4.2. UNITS MAY BE 8" &/OR 4" NOMINAL HEIGHT UNITS. 4.3. SET SINGLE DRY-STACKED UNITS W/CORES VERTICAL & NO MORE THAN 24-INCHES HIGH, PER PLAN. 4.4. SET DOUBLE ALTERNATING DRY-STACKED UNITS W/CORES VERTICAL & NO MORE THAN 48-INCHES HIGH, PER PLAN. 4.5. SET DOUBLE ALTERNATING DRY-STACKED UNITS W/CORES VERTICAL, CELLS GROUTED TO WITHIN (3) UNITS FROM TOP, NO MORE THAN 72-INCHES HIGH, PER PLAN. IF HIGHER THAN 72-INCHES A SPECIAL STRUCTURAL REVIEW IS REQUIRED. 5. WOOD: 5.1. ALL WOOD MEMBERS OF THE FOUNDATION SYSTEM SHALL BE SPF-STD OR BETTER, UNLESS NOTED OTHERWISE. 5.2. ALL WOOD IN CONTACT WITH SOIL, ASPHALT, MASONRY, OR CONCRETE SHALL BE PRESSURE TREATED (P.T.), FOR EXPOSURE. 5.3. ALL WOOD WITHIN 6-INCHES OF SUBGRADE TO BE TREATED FOR EXPOSURE AND INSECTS. 5.4. CONNECTORS IN CONTACT WITH P.T. WOOD TO BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL CONNECTORS. 5.5. WOOD BEARING PADS MAY BE SUBSTITUTED FOR 24x24 CONCRETE PADS ONE FOR ONE AND SHALL BE P.T. 2x12-24" LONG, MIN.

- 6. SPECIALTY ITEMS: 6.1. METAL PIERS TO BE CAPABLE OF SUPPORTING 6,000# 6.2. ABS PADS MAY BE SUBSTITUTED FOR 24"x24" CONCRETE PADS ONE FOR ONE AND SHALL BE "BLACK PAD" OR EQUIVALENT, 24"x24", MIN. 6.4. TRANSVERSE & LONGITUDINAL SOIL ANCHORS TO BE MINUTEMAN ANCHORS, MARK 'MMA-35' MODEL '36-XDH', X-DRCHE ANCHORS OR EQUIVALENT W/ A MIN. ALLOWABLE DESIGN LOAD OF 1,800# IN ASPHALT. 6.5. UPLIFT SOIL ANCHORS TO BE MINUTEMAN ANCHORS, MARK 'MMA-92', MODEL '4430 EZDH 3 4' OR 'GW-2-NC1' AUGER STYLE SOIL ANCHORS W/STABILIZER HEAD OR EQUIVALENT W/ A MIN. ALLOWABLE DESIGN LOAD OF 3,150#. PRE-DRILL ASPHALT AND BASE PRIOR TO INSTALLATION. REFILL DRILLED HOLE. 6.6. COMPLETE FINAL ADJUSTMENT OF TIES TO BUILDING ONLY AFTER BUILDING IS FULLY BLOCKED AND LEVELED. 6.7. INSTALL ALL SPECIALTY ITEMS PER THE MANUFACTURER'S RECOMMENDATIONS. 7. VENTING: 7.1. IF CRAWLSPACE IS ENCLOSED, PROVIDE UNDER FLOOR VENTILATION AT 1 NET SF OF VENTILATION PER 150 SF OF FLOOR AREA. 7.2. IF A CLASS 1 VAPOR RETARDER IS INSTALLED THE RATIO MAY BE INCREASED TO 11500. 8. ACCESS: 8.1. PROVIDE MINIMUM 18"x24" ACCESS TO THE UNDER FLOOR AREA. 8.2. PROVIDE 18" MIN. CLEARANCE FROM SOIL TO UNDERSIDE OF ANY UNTREATED WOOD MEMBER. 8.3. PROVIDE 12" MIN. CLEARANCE UNDER FROM SOIL TO UNDERSIDE OF ALL BUILDING MEMBERS. 9. SITE CONDITIONS: 9.1. FOUNDATION SUBGRADE TO BE 2-INCH MINIMUM ASPHALT PAVEMENT OVER A MINIMUM OF 4-INCH THICK COMPACTED ROAD-MIX GRAVEL PAD OVER UNDISTURBED NATCHE SUITABLE STABLE SOILS OR STRUCTURAL FILL.



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FOR PERMIT

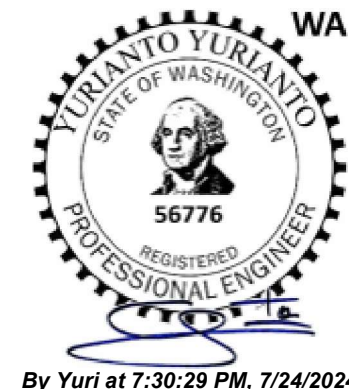
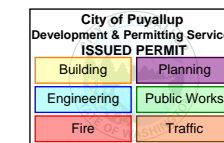
NEW-RESTROOM UNIT EXST-RELOCATED PORTABLE

REV.	DATE	DESCRIPTION	BY	CHK/APR
A	2024-06-07	ISSUED FOR STATE APPROVAL	CB	

PROJECT: 28x64 ASL USA SR FLEET OFFICE WASH CLIENT: CASCADE CHRISTIAN SCHOOL

DRAWING TITLE: FOUNDATION PLAN PROJECT NO: 1107994 Exp. 12/09/2025 DRAWING NO: SC100 REV. # A

PRPF20241230

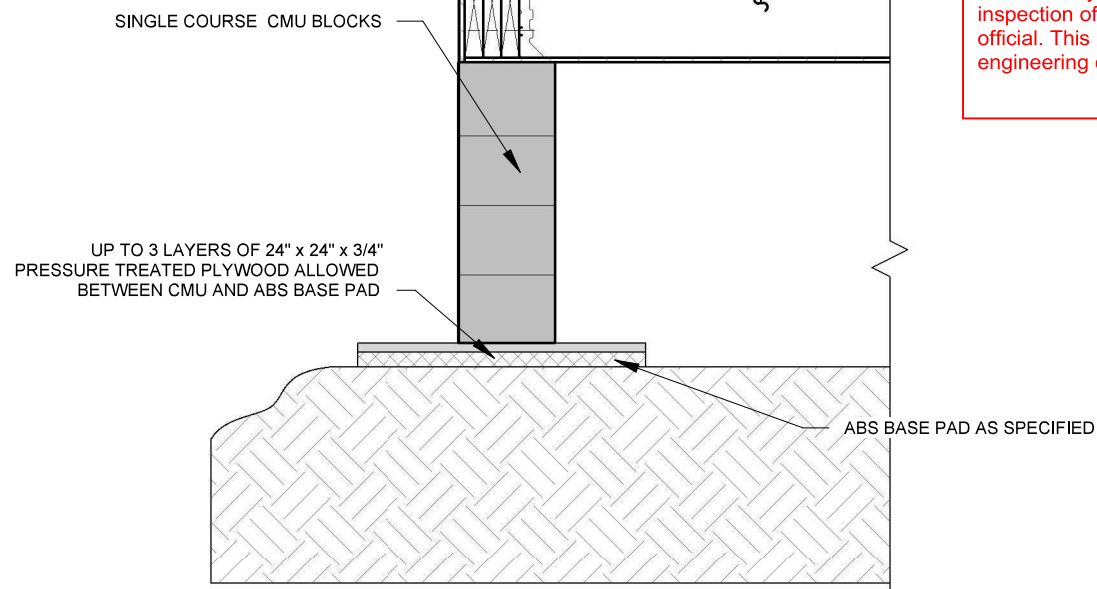


By Yuri at 7:30:29 PM, 7/24/2024

STATE OF WASHINGTON
DEPT. OF LABOR AND
INDUSTRIES
EAS/PLAN REVIEW/SECTION
APPROVED
12/09/2024
SUBJECT TO CODE
AND FIELD INSPECTION

TYPICAL FLOOR
- DOUBLE LAYER 3/4" SELECT T&G PLYWOOD
- 2x10 FLOOR JOISTS @ 16" O/C
- 3/8" PRESSURE TREATED PLYWOOD

Foundation plans and details are not reviewed by L&I, except for the reasonability of the design to support the modular building. Approval and inspection of the foundation system is the jurisdiction of the local building official. This is typical for all foundation related sheets, details and engineering contained within this plan set.



1 FOUNDATION PERIMETER DETAIL

SCALE: 3/4" = 1'-0"

INSTALL STEEL ANCHOR BRACKET - TYPE 1 AS INDICATED
C/W (2) 5/8" x 4 1/2" LONG LAG SCREWS
SEE OVERALL STRUCTURAL FOUNDATION PLAN FOR LOCATION OF STEEL ANCHOR BRACKETS

CUT OUT UNDER SHEATHING AS REQUIRED

TYPICAL FLOOR
- DOUBLE LAYER 3/4" SELECT T&G PLYWOOD
- 2x10 FLOOR JOISTS @ 16" O/C
- 3/8" PRESSURE TREATED PLYWOOD

1.25" WIDE x 0.035" THICK GALVANIZED STEEL TIE-DOWN STRAP CONFORMING WITH ASTM D3953-91 3150 LB ALLOWABLE CAPACITY

SINGLE COURSE CMU BLOCKS
UP TO 3 LAYERS OF 24" x 24" x 3/4" PRESSURE TREATED PLYWOOD ALLOWED BETWEEN CMU AND ABS BASE PAD

45.00° MAXIMUM

ABS BASE PAD AS SPECIFIED

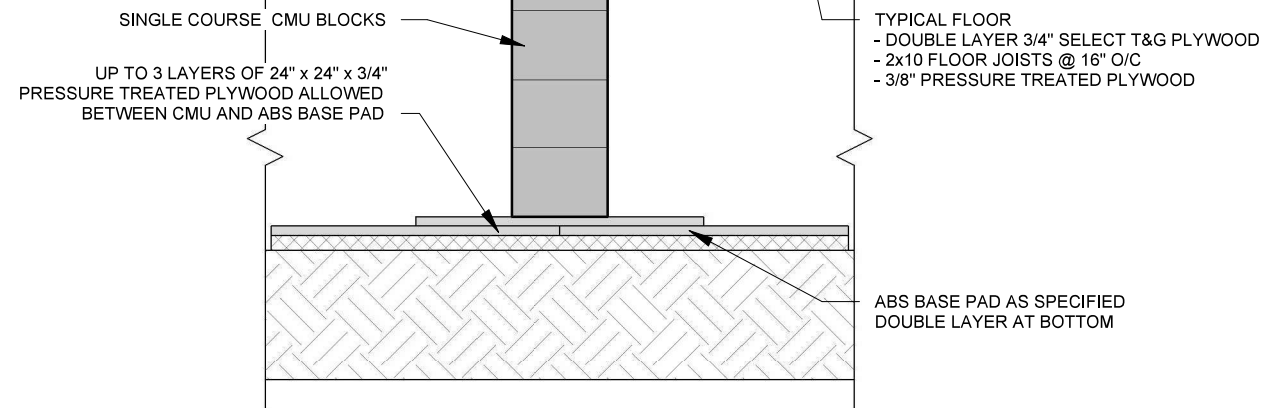
ENGINEERED GROUND ANCHOR

*USE STANDARD GROUND ANCHORS INSTALLED TO FULLEST DEPTH WITH STABILIZER PLATES

Use Standard Earth Ground Anchors Installed To Fullest Depth With Stabilizer Plates. Total (9) Tie-Downs At Each Structura Long Side And (2) Tie-Downs Per Short Side.

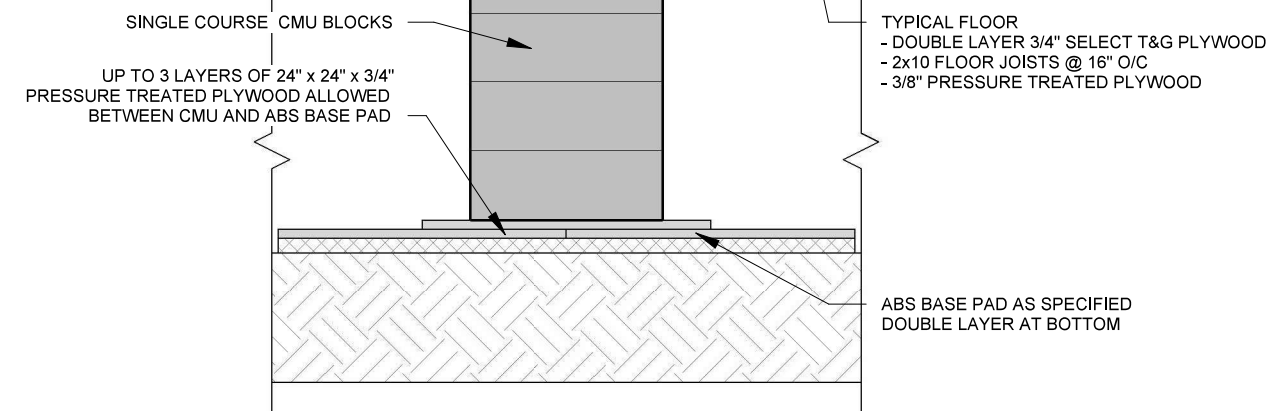
3 FOUNDATION SOIL ANCHOR

SCALE: 3/4" = 1'-0"



2 FOUNDATION MATING LINE DETAIL

SCALE: 3/4" = 1'-0"



4 FOUNDATION COLUMN SUPPORT DETAIL

SCALE: 3/4" = 1'-0"



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11x17 SHEET - DO NOT PRINT TO OTHER SCALE

FOR PERMIT

NEW-RESTROOM UNIT
EXST-RELOCATED PORTABLE

REV.	DATE	DESCRIPTION	BY	CHK/APR
A	2024-06-07	ISSUED FOR STATE APPROVAL	CB	

PROJECT: 28x64 ASL USA SR FLEET OFFICE WASH

CLIENT: CASCADE CHRISTIAN SCHOOL

DRAWING TITLE: FOUNDATION DETAILS

PROJECT NO: 1107994 Exp. 12/09/2025
DRAWING NO: SC200

REV. # A

STRUCTURAL CONSULTANT
Yurianto Yurianto, S.E., P.E., M.Sc.
5760 Legacy Dr. Ste B3-333. Plano, TX 75024
P: (972) 896-5373. E: yurianto@modularconsultant.com

PRPF20241230

Date: July 30, 2025

Project: **Cascade Christian Schools Classroom/Washcar/ATCO stock classrooms at Puyallup, WA**

Subject: Certified Letter for X-Plate Anchor

Calculations required to be provided by the Permittee on site for all Inspections

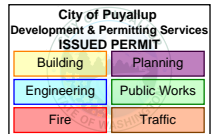
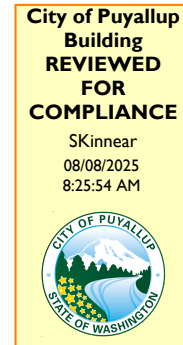
To Whom it may concern,

The purpose of this letter is to certify that the modular tie-down earth auger anchor may be substitute with X-Plate anchor for difficult class 2 soil condition. The number of anchors, however, shall be increased by 43% at each tie-down direction. (Lateral capacity of Earth auger is 3150 lb. Thus $3150 \text{ lb} / 2200 \text{ lb} = 143\%$). For Example: If the original number of earth auger tie-down is 9 per the long side of building, and 4 per the gable end side of the building. Therefore, using the X-Plate anchors, the revised quantity shall be 13 per the long side of the building, and 6 per the gable end side of the building. The anchor shall be placed at approximately equally spaced, plus minus 12".



X-Plate Anchor
Stabilized Cross Drive
Anchor For difficult
class 2 Soils. 2200 lb.
working load at 50 degrees
max angle.

Black Paint Part #59118



If you have any questions regarding this, please let me know.

Sincerely,

Yurianto Yurianto, S.E. *, P.E., M.Sc.

Structural Consultant.

* S.E. in the State of IL, NV, HI, AZ, OK, MA, GA

Yurianto
Yurianto

Digitally signed by Yurianto
Yurianto
DN: cn=Yurianto Yurianto
c=US o=Texas
Reason: I am the author of this
document
Location:
Date: 2025-08-05 13:21:06-00



By Yuri at 12:11:26 PM, 7/30/2025

This content is from the eCFR and is authoritative but unofficial.



Title 24 –Housing and Urban Development

Subtitle B –Regulations Relating to Housing and Urban Development

Chapter XX –Office of Assistant Secretary for Housing—Federal Housing Commissioner, Department of Housing and Urban Development

Part 3285 –Model Manufactured Home Installation Standards

Subpart C –Site Preparation

Authority: 42 U.S.C. 3535(d), 5403, 5404, and 5424.

Source: 72 FR 59362, Oct. 19, 2007, unless otherwise noted.

§ 3285.202 Soil classifications and bearing capacity.

The soil classification and bearing capacity of the soil must be determined before the foundation is constructed and anchored. The soil classification and bearing capacity must be determined by one or more of the following methods, unless the soil bearing capacity is established as permitted in paragraph (f) of this section:

- (a) **Soil tests.** Soil tests that are in accordance with generally accepted engineering practice; or
- (b) **Soil records.** Soil records of the applicable LAHJ; or
- (c) **Soil classifications and bearing capacities.** If the soil class or bearing capacity cannot be determined by test or soil records, but its type can be identified, the soil classification, allowable pressures, and torque values shown in Table to § 3285.202 may be used.
- (d) A pocket penetrometer; or
- (e) In lieu of determining the soil bearing capacity by use of the methods shown in the table, an allowable pressure of 1,500 psf may be used, unless the site-specific information requires the use of lower values based on soil classification and type.

- (f) If the soil appears to be composed of peat, organic clays, or uncompacted fill, or appears to have unusual conditions, a registered professional geologist, registered professional engineer, or registered architect must determine the soil classification and maximum allowable soil bearing capacity.



TABLE TO § 3285.202

Soil classification		Soil description	Allowable soil bearing pressure (psf) ¹	Blow count ASTM D 1586-99	Torque probe ³ value ⁴ (inch-pounds)-
Classification number	ASTM D 2487-00 or D 2488-00 (incorporated by reference, see § 3285.4)				
1		Rock or hard pan	4000 +		
2	GW, GP, SW, SP, GM, SM	Sandy gravel and gravel; very than dense and/or cemented sands; coarse gravel/ cobbles; preloaded silts, clays and coral	2000	40 +	More than 550.
3	GC, SC, ML, CL	Sand; silty sand; clayey sand; silty gravel; medium dense course sands; sandy gravel; and very stiff silt, sand clays	1500	24-39	351-550.
4A	CG, MH ²	Loose to medium dense sands; firm to stiff clays and silts; alluvial fills	1000	18-23	276-350.
4B	CH, MH ²	Loose sands; firm clays; alluvial fills	1000	12-17	175-275.
5	OL, OH, PT	Uncompacted fill; peat; organic clays	Refer to 3285.202(e)	0-11	Less than

Notes:

¹ The values provided in this table have not been adjusted for overburden pressure, embedment depth, water table height, or settlement problems.

² For soils classified as CH or MH, without either torque probe values or blow count test results, selected anchors must be rated for a 4B soil.

³ The torque test probe is a device for measuring the torque value of soils to assist in evaluating the holding capacity of the soil in which the ground anchor is placed. The shaft must be of suitable length for the full depth of the ground anchor.

⁴ The torque value is a measure of the load resistance provided by the soil when subject to the turning or twisting force of the probe.



Soil classification		Soil description	Allowable soil bearing pressure (psf) ¹	Blow count ASTM D 1586-99	Torque probe ³ value ⁴ (inch-pounds)-
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					175.

Notes:

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