SYNTHESIS 9, LLC 523 N. D. S.T. TACOMA, WA 98403

REUSE OF DOCUMENTS THIS DOCUMENT AND THE IDEAS AND DESI

509 202 RC  $\Box$ 

CROSSING VO.II/ PUYALLUP ST TOW CARP PIONEER

REVISIONS REVISION #1 25.08.18

REVISIONS

CHECKED BY:

25.08.18 Carport No.17 PROJECT INFO

AS1.0

### **BUILDING CODE REFERENCES:**

ALL CODE REFERENCES HEREAFTER SHALL CORRESPOND TO THE FOLLOWING EDITIONS. U.N.O.:

CODE EDITION MATERIAL

CONCRETE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY, (ACI 318)-19. 2004 ACI DETAILING MANUAL (ACI SP-66). REINFORCING 15TH EDITION OF (AISC) STEEL CONSTRUCTION STEEL

MANUAL.

STRUCTURAL WELDING CODE - STEEL, (AWS) WELDING

D1.1-20.

2016 (AISI) NORTH AMERICAN SPECIFICATION LIGHT GAGE STEEL

FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS WITH SUPPLEMENT 2.

## LOADS:

RISK CATEGORY = II

#### DESIGN DATA:

ROOF DEAD LOAD AT CARPORTS

DL ROOFING AND TRIM 1.03 PSF DL FOR PURLINS SELF WEIGHT 25 PSF ROOF SNOW LOAD

#### WIND:

THE WIND LOADS ARE DETERMINED IN ACCORDANCE WITH ASCE 7-16:

BASIC WIND SPEED V: 110 MPH **EXPOSURE CATEGORY:** WIND IMPORTANCE FACTOR: 1.0

#### **SEISMIC:**

IMPORTANCE FACTOR le = 1.0LATITUDE = 47.213645; LONGITUDE = -122.365315Ss = 1.308, S1 = 0.451, SEISMIC SITE CLASS = DSds = 1.047, Sd1 = 0.834, SEISMIC DESIGN CATEGORY = DRW = 1.25 STEEL ORDINARY CANTILEVERED COLUMNS CS = 0.838

## **FOUNDATION:**

GROUND TO BE SW, SP, SM, SC GM & GC PER IBC TABLE 1806.2 ALLOWABLE SOIL: BEARING CAPACITY (DL+LL): 2,000 PSF

CONTRACTOR SHALL VERIFY SOIL CONDITION PRIOR TO PROCEEDING WITH CONSTRUCTION

## **CONCRETE:**

MINIMUM COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3,000 PSI TO COMPLY WITH EXPOSURE REQUIREMENT OF IBC TABLE 1904.1. STRUCTURAL DESIGN IS BASED ON f'c OF 2,500 PSI. PER IBC 1705.3, NO SPECIAL INSPECTION IS REQUIRED.

ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI. MAXIMUM WATER/CEMENT RATIO (W/C) SHALL BE 0.55. PROVIDE AIR ENTRAINMENT (5%  $\pm$  1%) IN CONCRETE EXPOSED TO FREEZE-THAW ACTION.

### STRUCTURAL STEEL:

STRUCTURAL STEEL MATERIALS, FABRICATION AND ERECTION SHALL CONFORM TO CURRENT AISC STEEL CONSTRUCTION MANUAL IN ACCORDANCE TO IBC CHAPTER 22. PAINT ALL STRUCTURAL STEEL EXPOSED TO WEATHER UNLESS NOTED OTHERWISE ON DRAWINGS.

MATERIAL SPECIFICATION, UNLESS NOTED OTHERWISE:

STRUCTURAL SHAPES: ASTM A992 GRADE 50 BARS AND PLATES: ASTM A36 STRUCTURAL TUBING/HSS: ASTM A500, GRADE B (FY = 46 KSI)ASTM A307

FLAT; BEVELED WASHERS: ASTM F436

DIRECT-TENSION WASHERS: ASTM F959

FILLER METAL: E70XX ELECTRODES, ALL WELDS SHALL BE SINGLE PASS 3/16" UNLESS NOTED

OTHERWISE COLD FORMED SHAPES: ASTM A653, FY = 50 KSIROOF METAL DECK: ASTM A792. FY = 80 KSI

#### **SCREW FASTENERS:**

SELF DRILLING AND SELF-TAPPING SCREWS SHALL BE #12-14 TEK SCREWS OR APPROVED EQUAL AND SHALL CONFORM TO ASTM A545 OR SAEJ78. SAEJ93 OR ANSI/ASMEB18.6.4.

#### ROOFING:

1 3/8" PROFILE x 26 GA ROOF DECK (V-LINE 32) OR EQUIVALENT WITH #12-14 TEK SCREWS AT 9" O.C. UNLESS NOTED OTHERWISE OR (4) SCREWS PER 32" WIDE PANEL @ EACH SUPPORT

ROOFING IS V-LINE 32 - 26 GA

GAUGE	WT.	S+	l+	S-	-
	(IBS/FT2)	(IN3/FT)	(IN4/FT)	(IN3/FT)	(IN4/FT)
26	0.91	0.0847	0.0619	0.0833	0.0619

#### PURLINS:

ALL PURLINS ARE ASTM A653 CEE 10 X 3 1/2 X 12 GAUGE UNLESS NOTED OTHERWISE. WITH THE FOLLOWING MINIMUM GROSS PROPERTIES:

GAUGE	DEPTH	FLANGE	LIP	SX	IX	Fy
	(IN)	(IN)	(IN)	(IN3)	(IN4)	(KSI)
12	10.00	3.5	1.0	5.63	28.148	50

## **GENERAL:**

THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO BRACING AND SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS).

CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS OR MATERIALS. SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA.

ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR MECHANICAL, PLUMBING AND ELECTRICAL WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF AN OPTION IS CHOSEN, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES AND SHALL COORDINATE ALL DETAILS.

AS REV. ON DRAWING: SUBJECT OF REVISION: REVISION #: DATE:

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

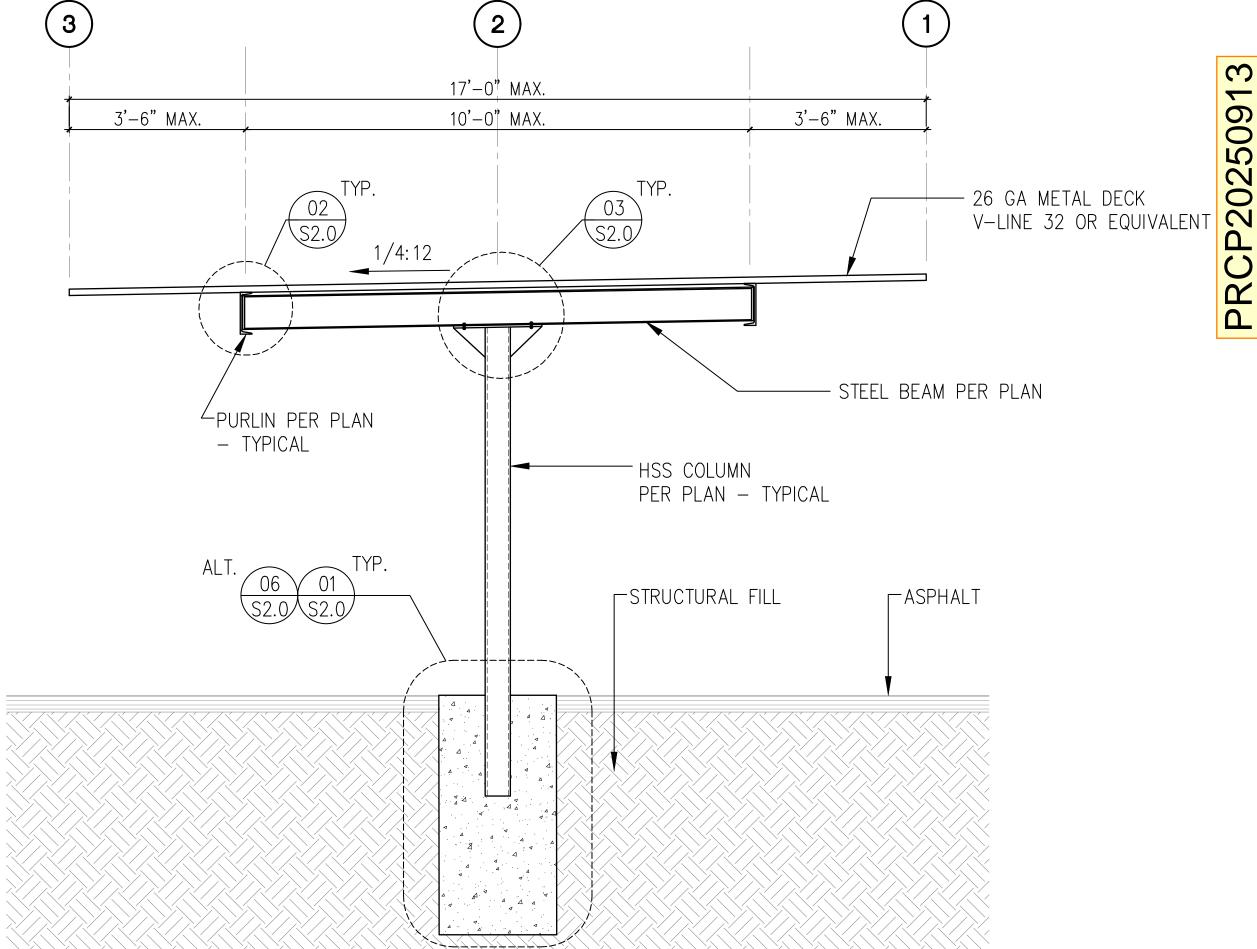
CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH OWNER PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE OWNER.

TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY, U.N.O.

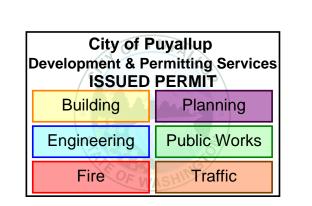
WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND/OR SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN.

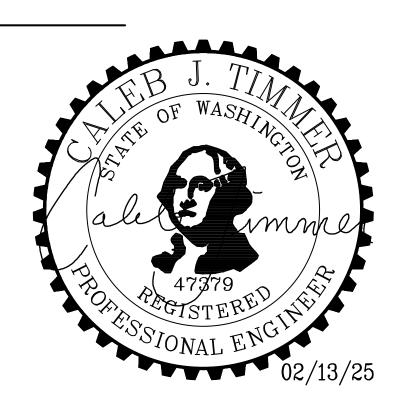
ANY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A REGISTERED ENGINEER RECOGNIZED BY THE BUILDING

CODE JURISDICTION OF THIS PROJECT.









TYPE:

EAST T	<b>TOWN</b>	CROSSING
CARPO	RTS	

PIONEER WAY E PUYALLUP, WA 9837

GENERAL STRUCTURAL NOTES AND TYPICAL SECTION

## CARPORTS OF WASHINGTON

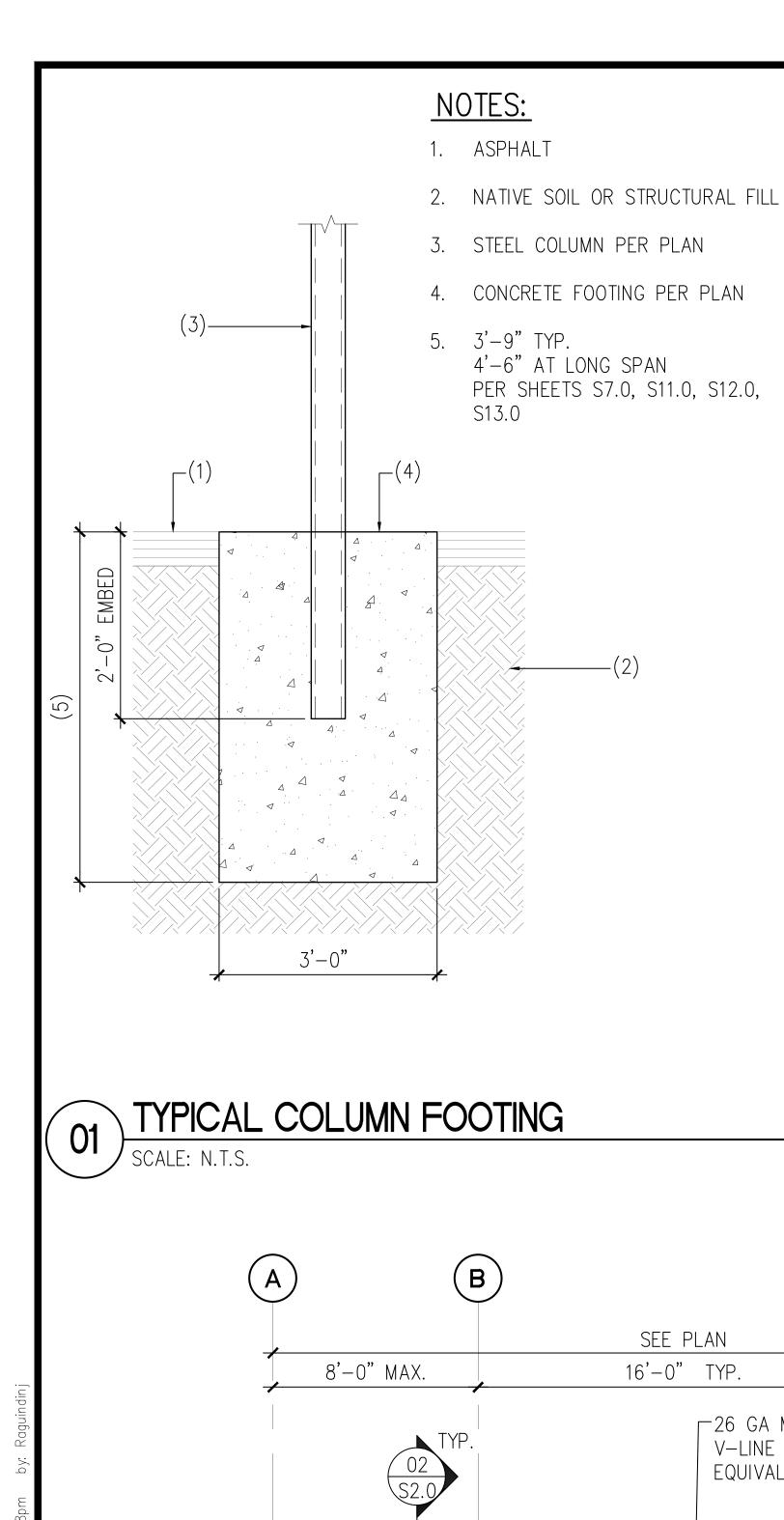
P.O. BOX 2389 BUCKLEY, WASHINGTON 98321

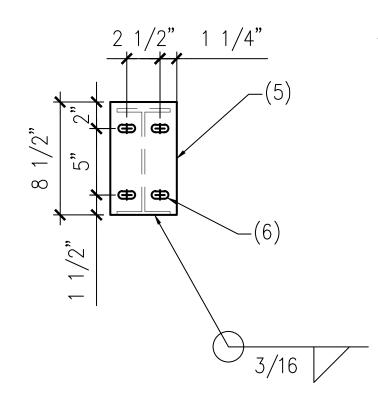


http://www.sittshill.com/

sh s	sitts&hill
CIVIL   ST	RUCTURAL   SURVEY
4815 CENTER STRE	ET   TACOMA, WA. 98409
PHONE: (253) 474-94	FAX: (253) 474-0153

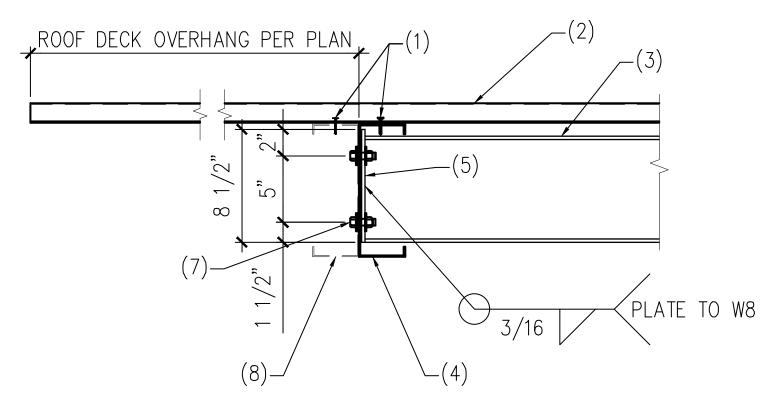
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DRAWN	JPR	31.0
CHECKED _	CJT	PROJECT NO.
DATE	02/10/25	
SCALE	AS NOTED	20,822

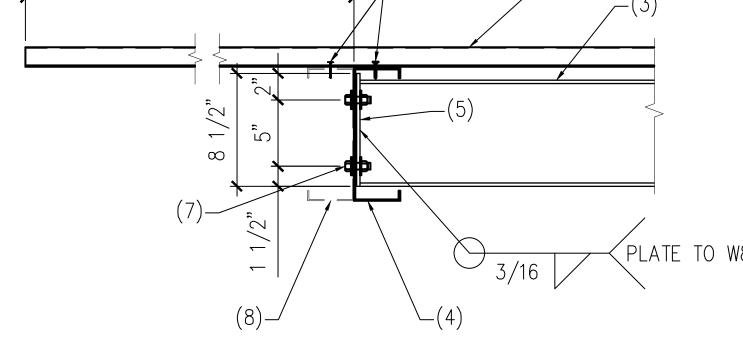




## NOTES:

- 1. #12-14 TEK SCREWS PER DETAIL 4
- 2. DECKING PER PLAN
- 3. STEEL BEAM PER PLAN
- 4. PURLIN PER PLAN
- 5. 5"x8 1/2"x1/4" A36 STEEL PLATE
- (4) 9/16" x 11/16" SLOTTED HOLES WITH 1/2" DIAMETER BOLTS
- 7. (4) 1/2" DIAMETER BOLTS
- 8. EXTRA PURLIN PER PLANS ATTACH DECKING TO EACH PURLIN AND ATTACH PURLINS TOGETHER WITH (2) #12 SCREWS AT 24" O.C.





## BEAM TO PURLIN CONNECTION SCALE: N.T.S.

(D)

(c)

┌26 GA METAL DECK

-PURLIN PER PLAN

V-LINE 32 OR

EQUIVALENT

MATIVE SOIL OR

STRUCTURAL FILL

8'-0" MAX.

— ÁSPHALT

SEE PLAN

-HSS COLUMN

PER PLAN -

**TYPICAL** 

## NOTES:

- 1. SEE STRUCTURAL NOTES ON SHEET S1.0
- 2. VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH CONSTRUCTION
- BAY DIMENSIONS ARE MAXIMUMS IT IS STRUCTURALLY ACCEPTABLE TO USE SMALLER DIMENSIONS
- 4. PROVIDE HEIGHT PER TABLE
- SEE TABLE BELOW FOR SHEET SHOWING

	Y Y Y Y Y Y	YYY	Y Y Y
>	CONFIGURATION	SHEET #	CLR. HEIGHT
(	4-STALL TYPE 1	S3.0	7'-2"
	4-STALL TYPE 2	S4.0	7'-2"
\_	4—STALL TYPE 3	S5.0	7'-2"
(	4-STALL TYPE 4	S6.0	7'-2"
	4-STALL LONG SPAN	S7.0	8'-2"
	5-STALL	S8.0	7'-2"
(	6-STALL TYPE 1	S9.0	7'-2"
7	6-STALL TYPE 2	S10.0	7'-2"
	6-STALL LONG SPAN	S11.0	7'-2"
(	9-STALL LONG TYPE 1	S12.0	8'-2"
$\nearrow$	9-STALL LONG TYPE 2	S13.0	7'-2"
	8-STALL	S14.0	7'-2"
(		, , ,	, , , .

#### AS REV. ON DRAWING: SUBJECT OF REVISION: COORDINATION

1 1/2" 🖔

3/16

SECTION A-A

BEAM TO COLUMN CONNECTION

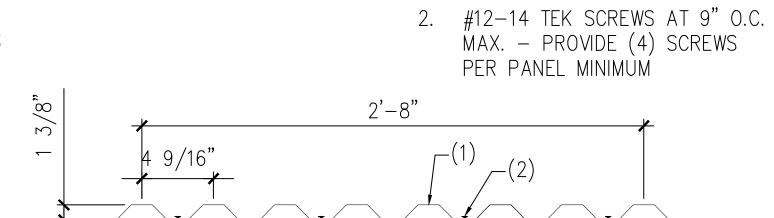
1 1/2" CLEAR

ALTERNATE COLUMN FOOTING

1 1/2"

## NOTES:

- 1. 3/8"x4"x24" STEEL CAP PLATE WITH (4) 5/8" DIAMETER BOLTS WITH NUTS AND WASHERS
- 2. 1/4"x6"x9" STIFFENER PLATE EACH SIDE OF COLUMN
- (4) STANDARD DIÁMETER HOLES
- METAL DECKING PER PLAN
- 5. STEEL BEAM PER DETAIL 5
- 6. HSS COLUMN PER PLAN
- 3/16"x2"x4" SHIM PĹATE
- 8. 1/4" x4" x6 1/4" TALL STEEL PLATE -CENTERED ON POST
- 9. 1/4" STEEL PLATE TO COLUMN



DATE:

05/20/25

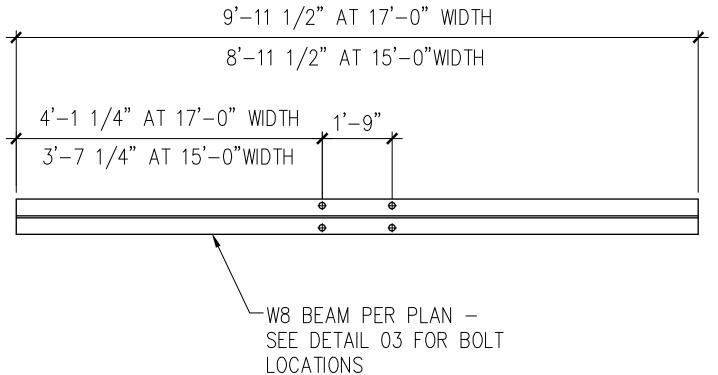
NOTES:

TYPE:

1. METAL DECK PER PLAN AND GSN

# **ROOF SCREW PATTERN**

REVISION #:

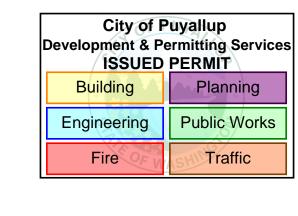


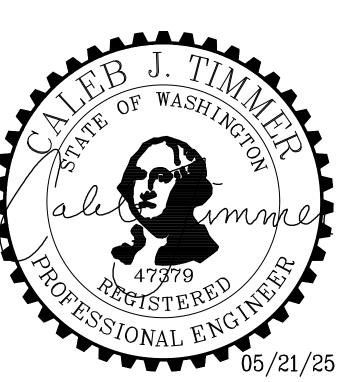
## W8 RAFTER LAYOUT (05)

SCALE: N.T.S.

## NOTES:

- 1. ASPHALT OR CONCRETE AS OCCURS
- 2. SUBGRADE PER GSN
- 3. STEEL COLUMN PER PLAN
- 4. CONCRETE FOOTING
- 5. PROVIDE MIN. (6) #4 BARS E.W. TOP AND BOTTOM - PLÀCÉ (1) BAR WITHIN 1 1/2" OF EACH SIDE OF THE COLUMN, EACH WAY TYPICAL.
- 6. 4'-6" SQUARE TYPICAL. 4'-9" SQUARE LONG SPAN
- UNDERGROUND R-TANK BY OTHERS AT 6-STALL PER SHEET S9.0. PROVIDE MINIMUM 12" CLEARANCE FROM BOTTOM OF FOOTING TO TOP OF R-TANK SYSTEM.





TYPICAL ELEVATION

EAST TOWN CROSSING CARPORTS

PIONEER WAY E PUYALLUP, WA 9837

AND ELEVATION

SCALE: N.T.S.

06

CARPORTS OF WASHINGTON

P.O. BOX 2389 BUCKLEY, WASHINGTON 98321

3" CLEAR



CIVIL   STR	UCTURAL   SURVEY
4815 CENTER STREE	TACOMA, WA. 98409
PHONE: (253) 474-944	9   FAX: (253) 474-0153
http://	www.sittshill.com/

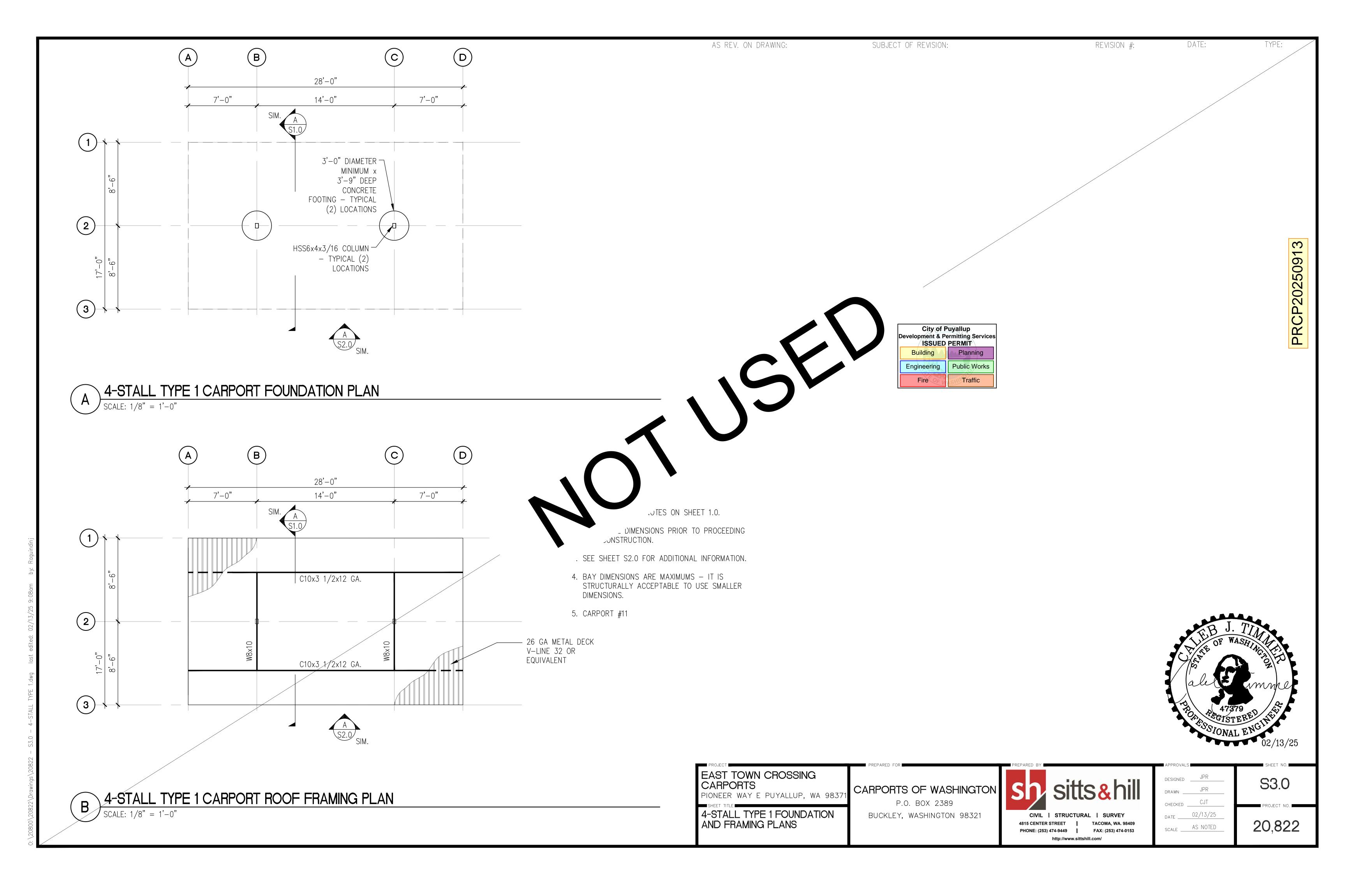
<b>ADDDO</b>			CUEST NO
APPROVAL	S		SHEET NO.
DESIGNED	JPR		600
DRAWN	JPR		32.0
CHECKED	CJT	,	PROJECT NO.
DATE	05/20/2025		
SCALE	AS NOTED		20,822

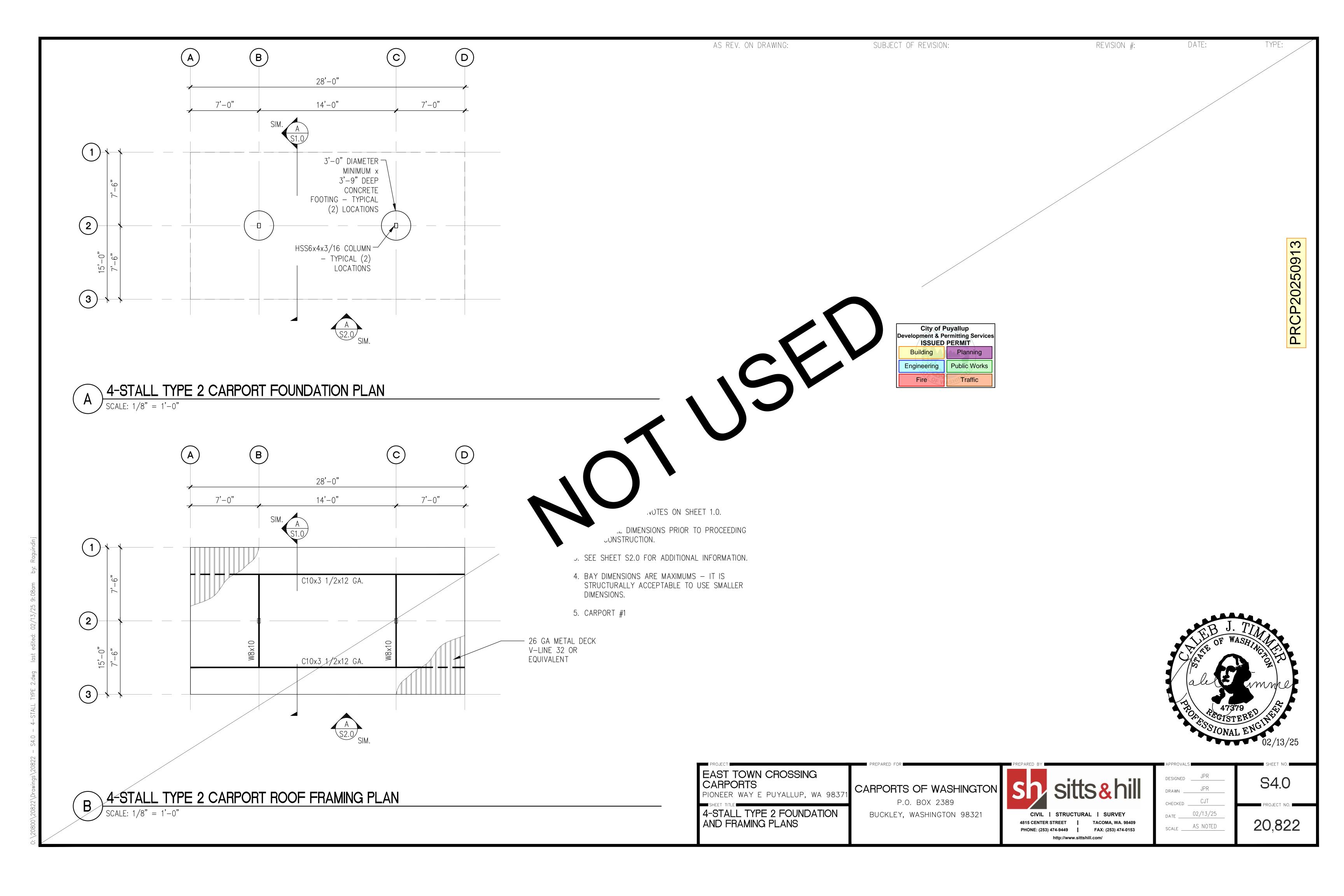
TYPICAL DETAILS

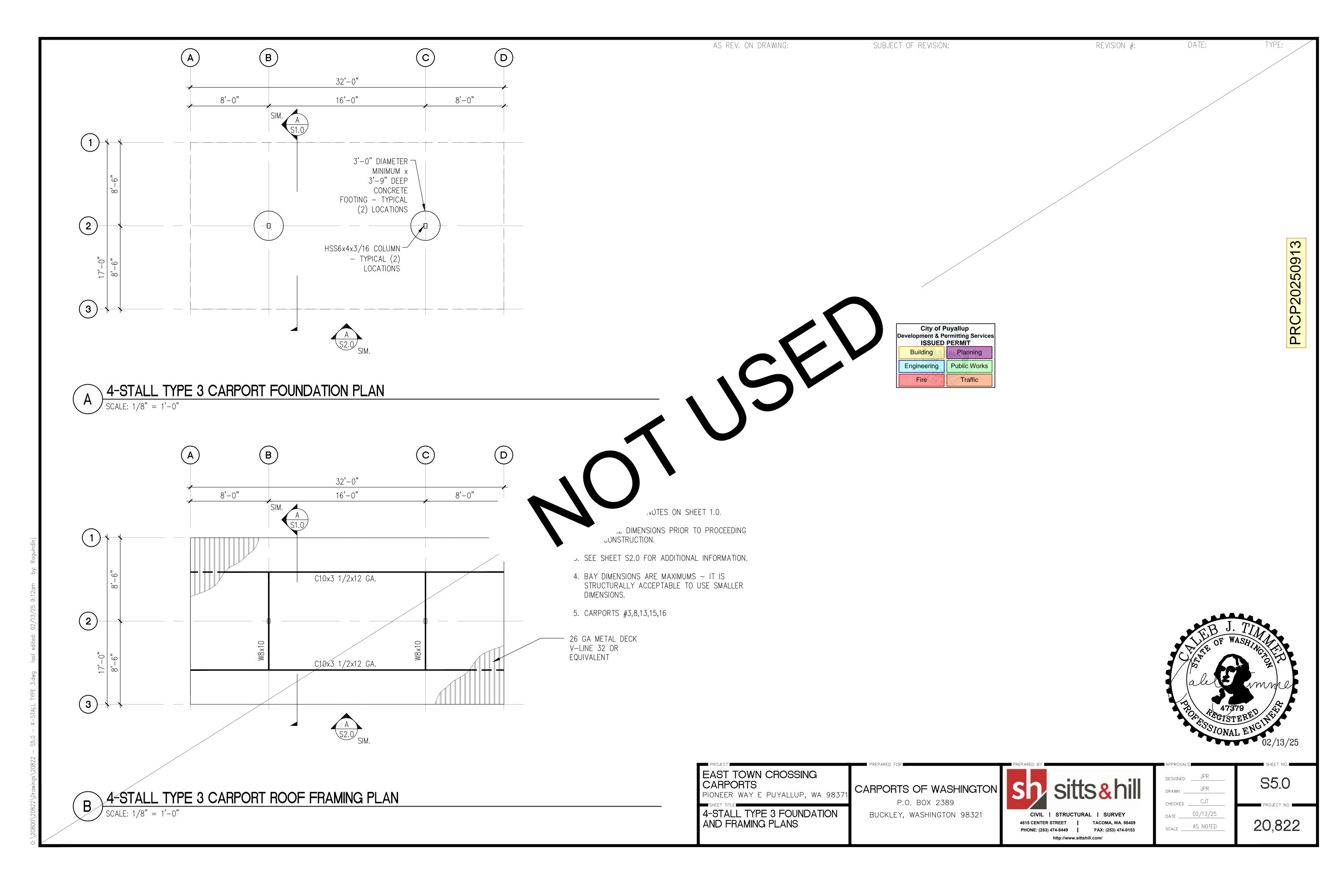
SCALE: N.T.S.

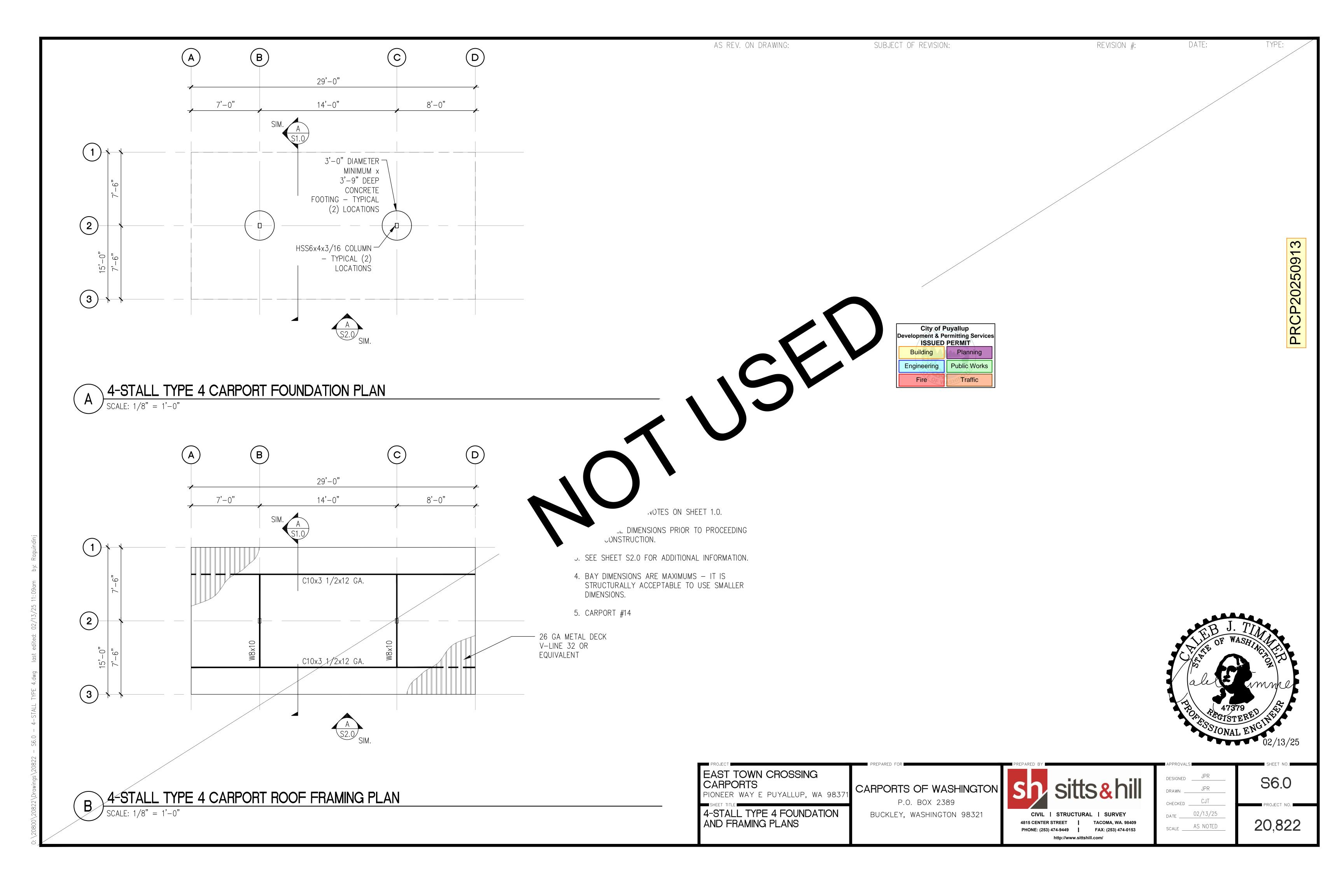
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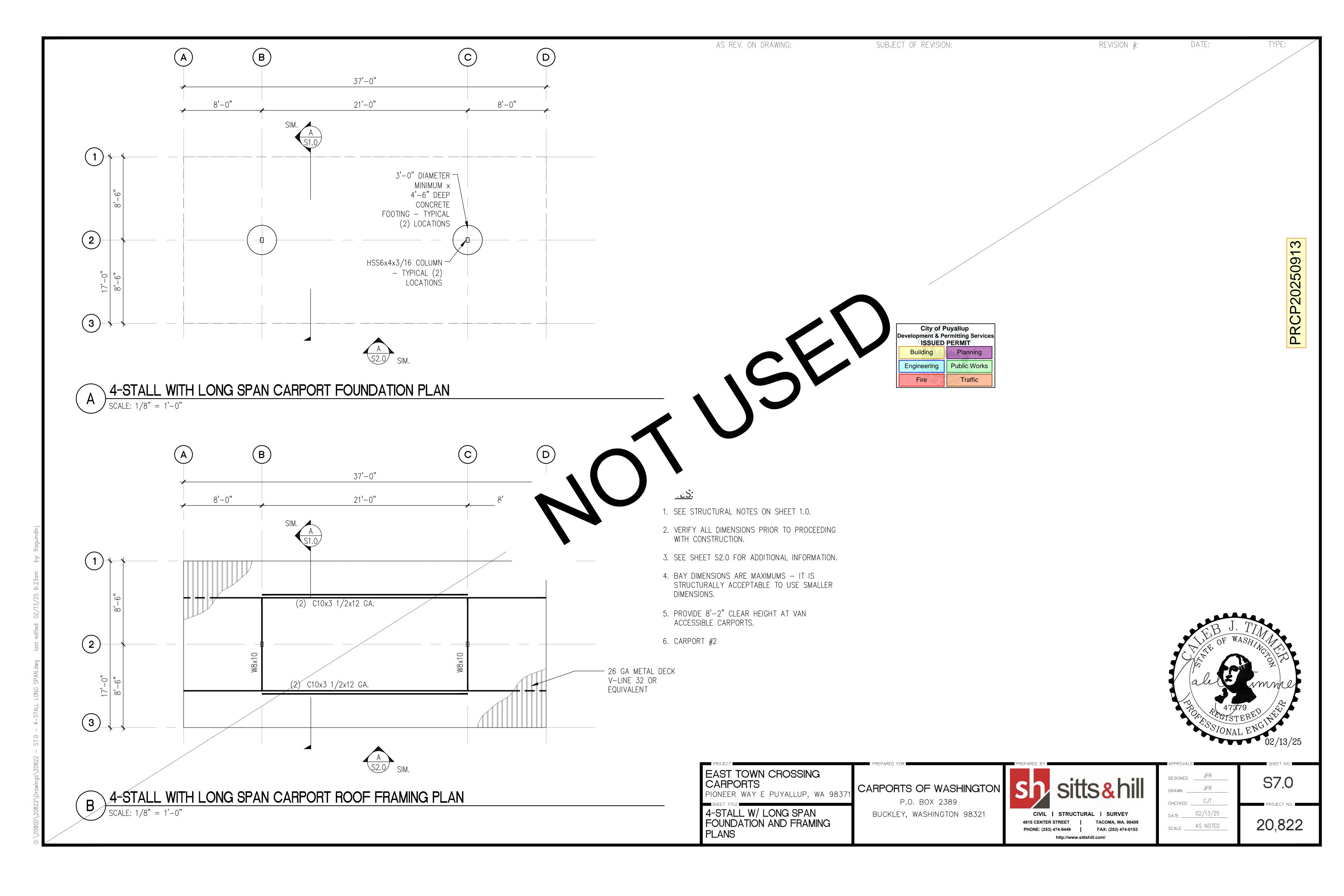
PRCP202509

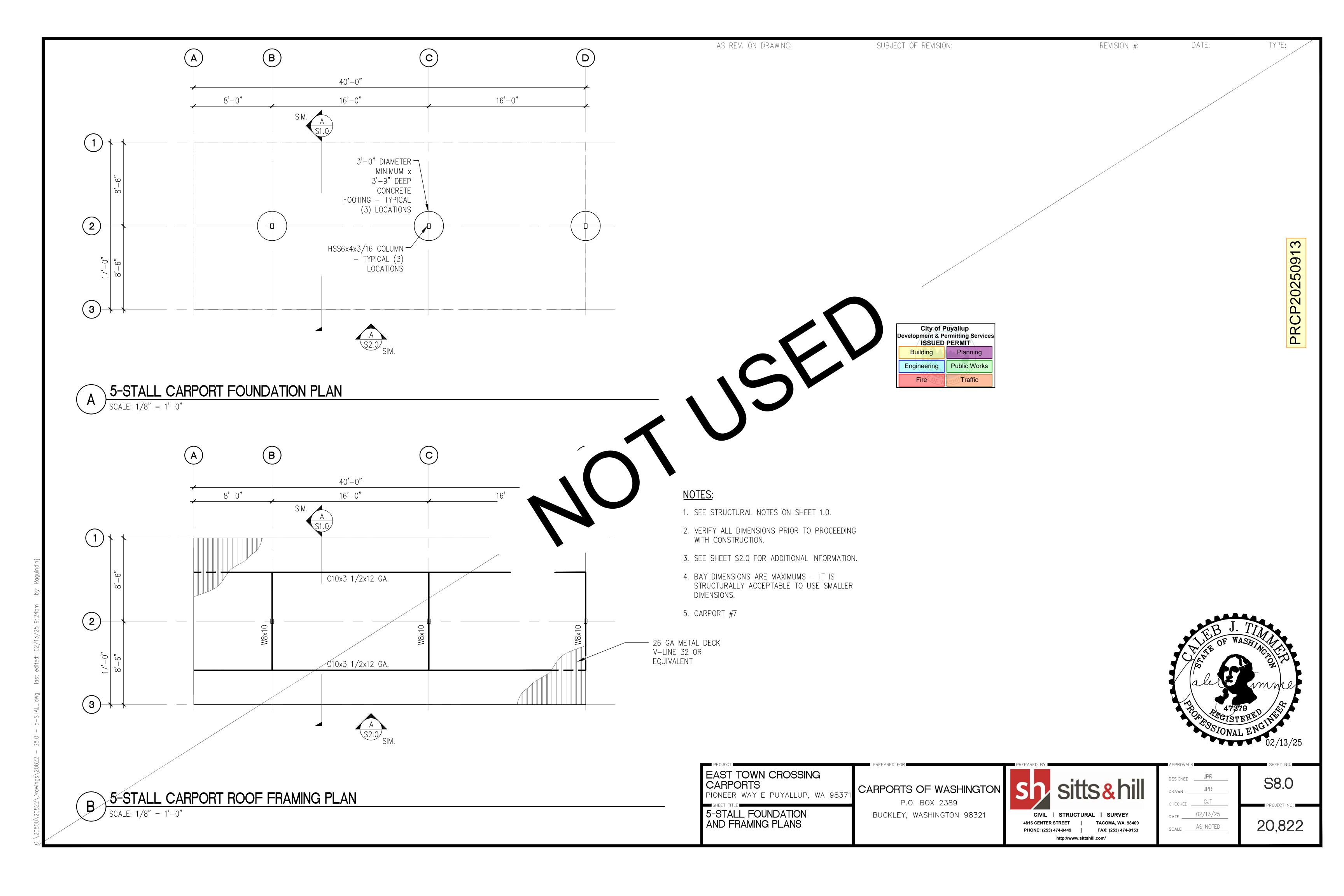


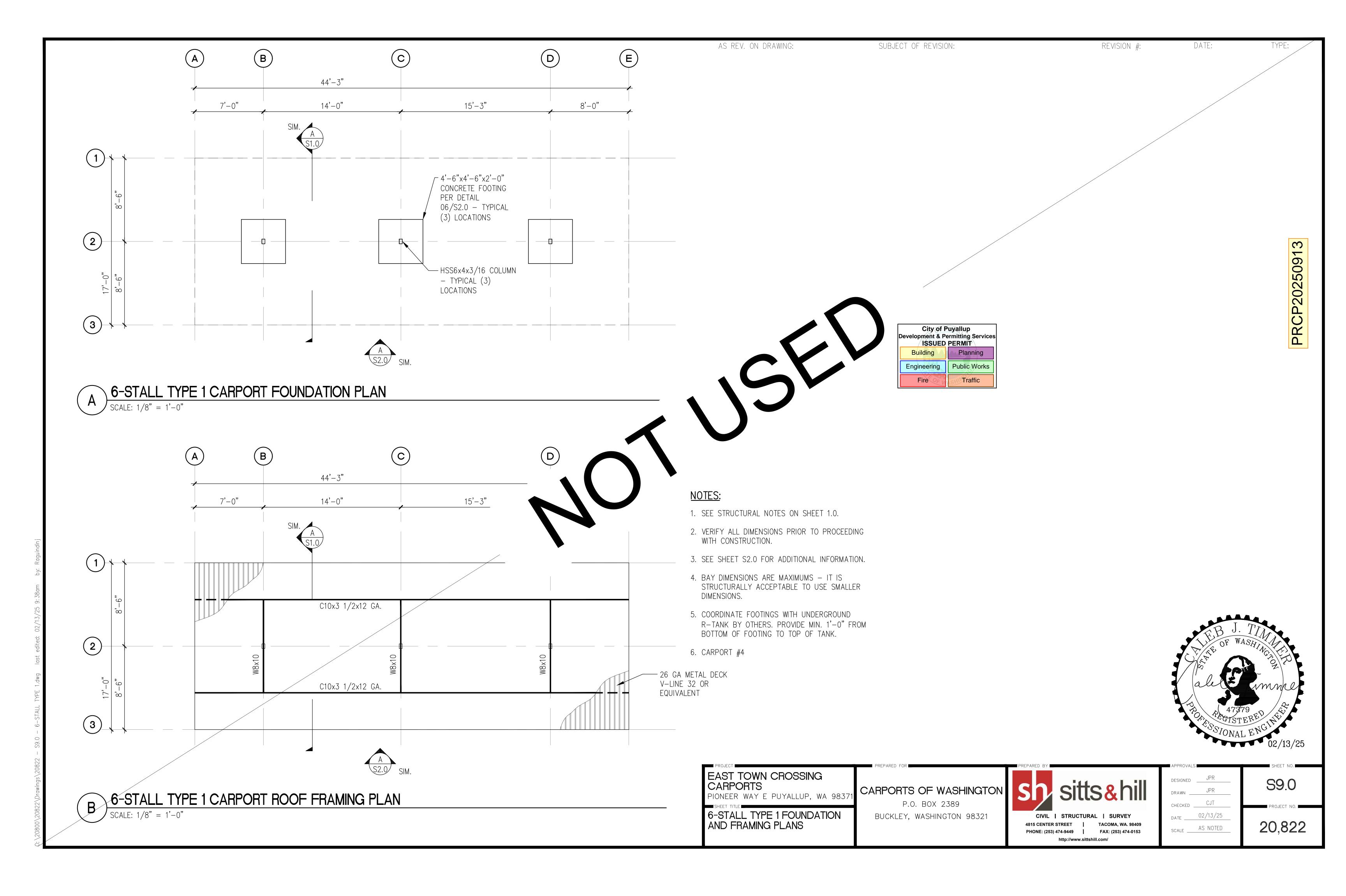


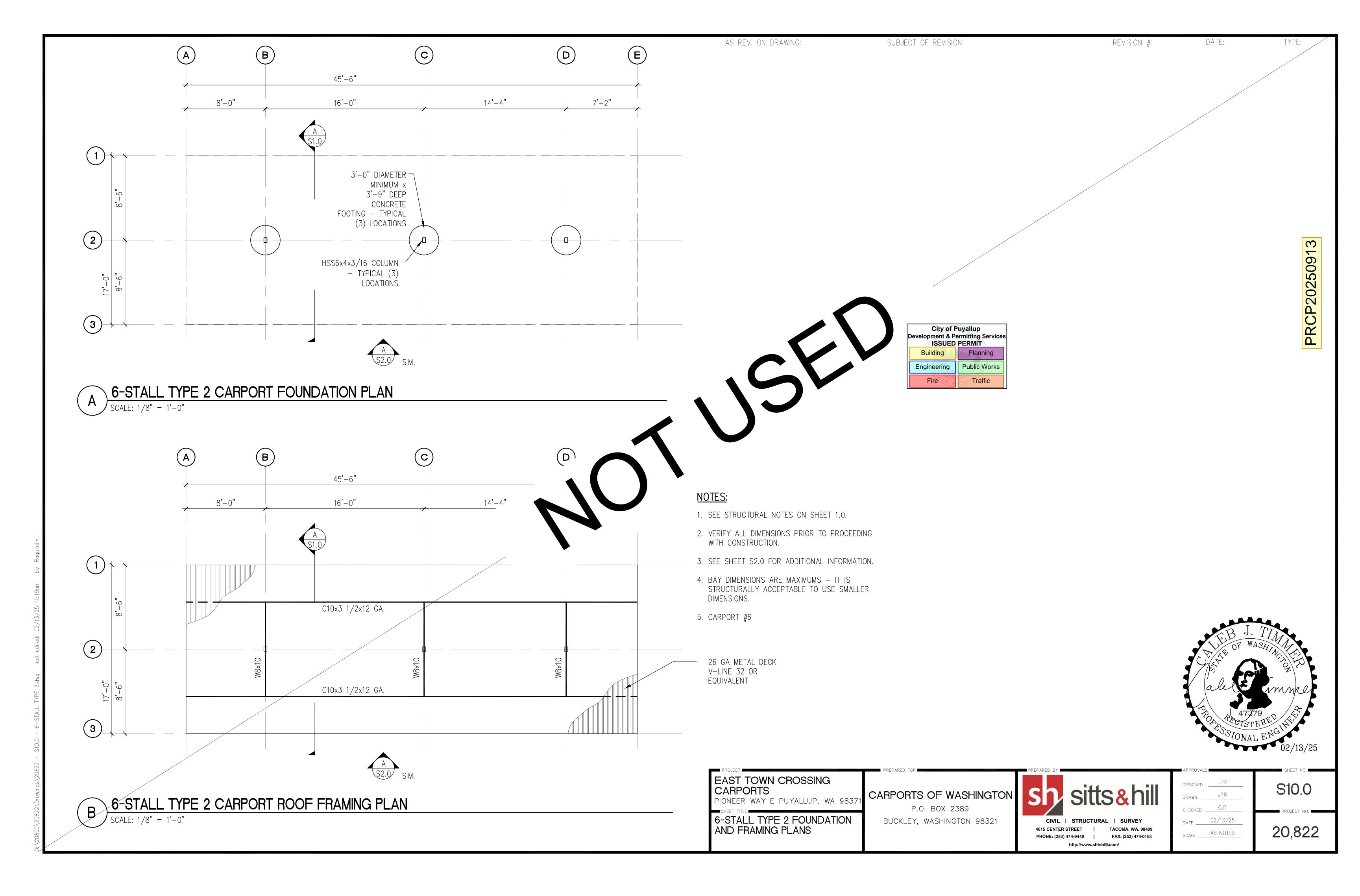






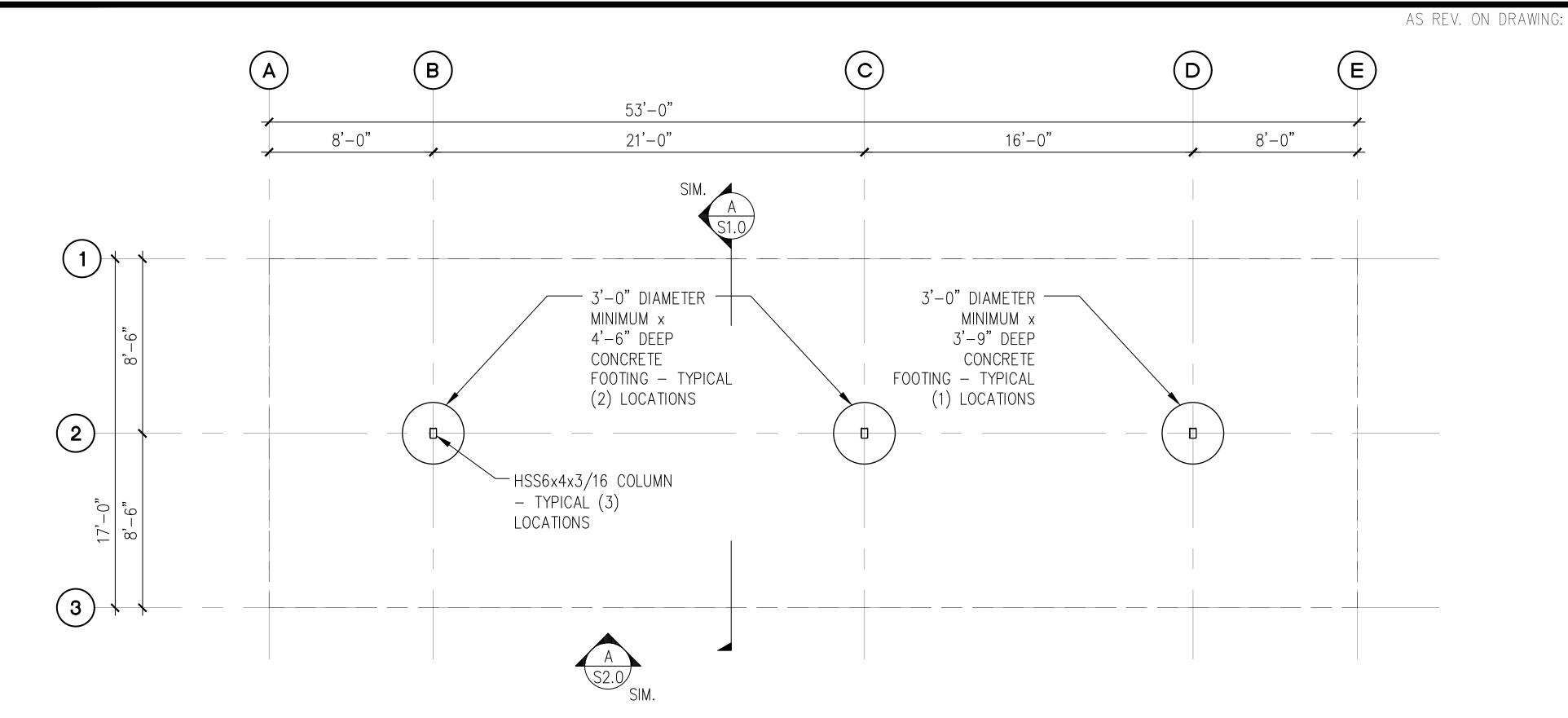








DATE:



## **CONTRACTOR NOTE**

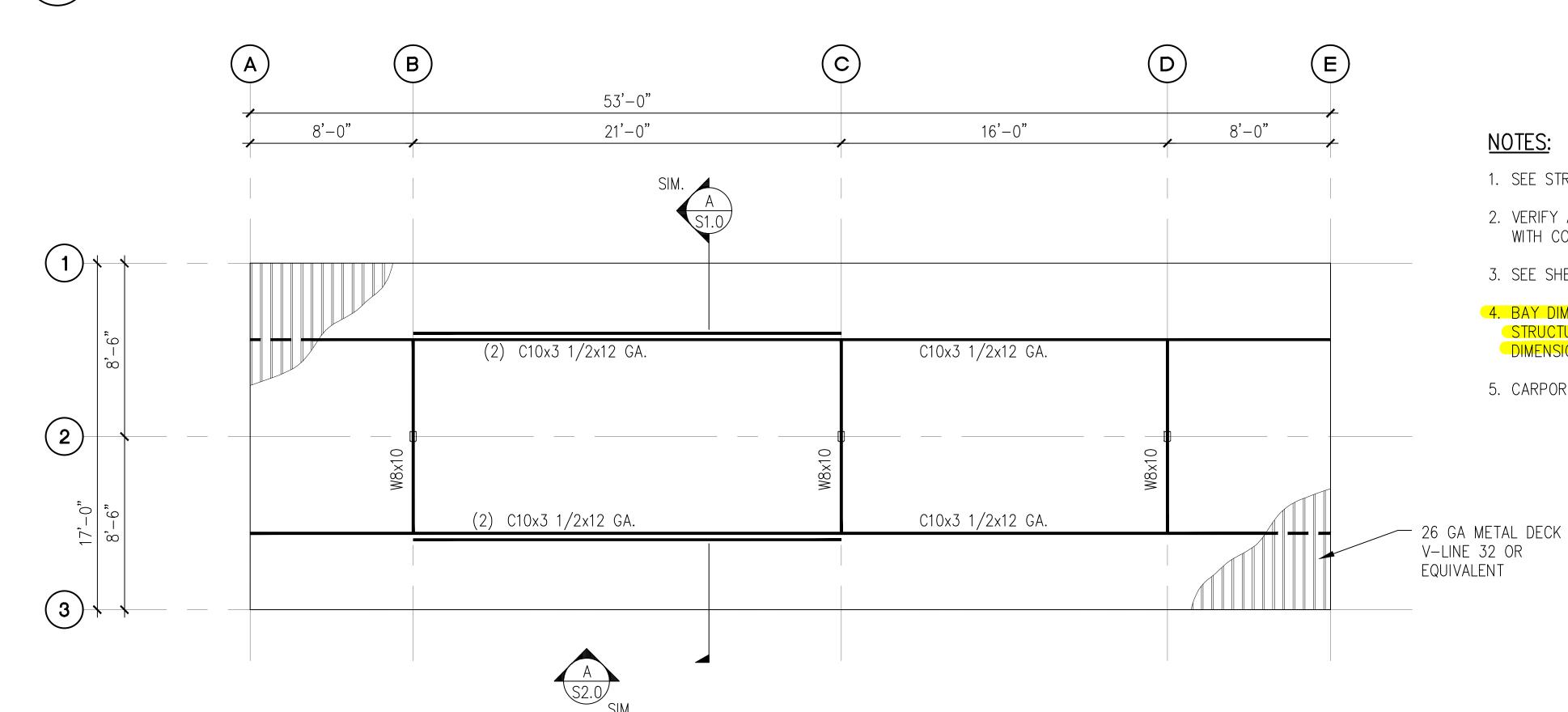
SUBJECT OF REVISION:

See Sheet AS1.0 for footing and post locations

City of Puyallup evelopment & Permitting Services ISSUED PERMIT		
Building	Planning	
Engineering	Public Works	
Fire OF W	Traffic	

6-STALL WITH LONG SPAN CARPORT FOUNDATION PLAN

SCALE: 1/8" = 1'-0"



## NOTES:

- 1. SEE STRUCTURAL NOTES ON SHEET 1.0.
- 2. VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 3. SEE SHEET S2.0 FOR ADDITIONAL INFORMATION.
- 4. BAY DIMENSIONS ARE MAXIMUMS IT IS STRUCTURALLY ACCEPTABLE TO USE SMALLER DIMENSIONS.
- 5. CARPORT #7

B 6-STALL WITH LONG SPAN CARPORT ROOF FRAMING PLAN SCALE: 1/8" = 1'-0"

6-STALL W/ LONG SPAN FOUNDATION AND FRAMING **PLANS** 

EAST TOWN CROSSING CARPORTS
PIONEER WAY E PUYALLUP, WA 9837

CARPORTS OF WASHINGTON P.O. BOX 2389

BUCKLEY, WASHINGTON 98321



PHONE: (253) 474-9449 FAX: (253) 474-0153

http://www.sittshill.com/

designed \_\_\_\_JPR JPR CHECKED \_\_\_\_CJT DATE \_\_\_\_\_02/13/25 scale \_\_\_\_AS NOTED

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20,822

PRCP20250913

