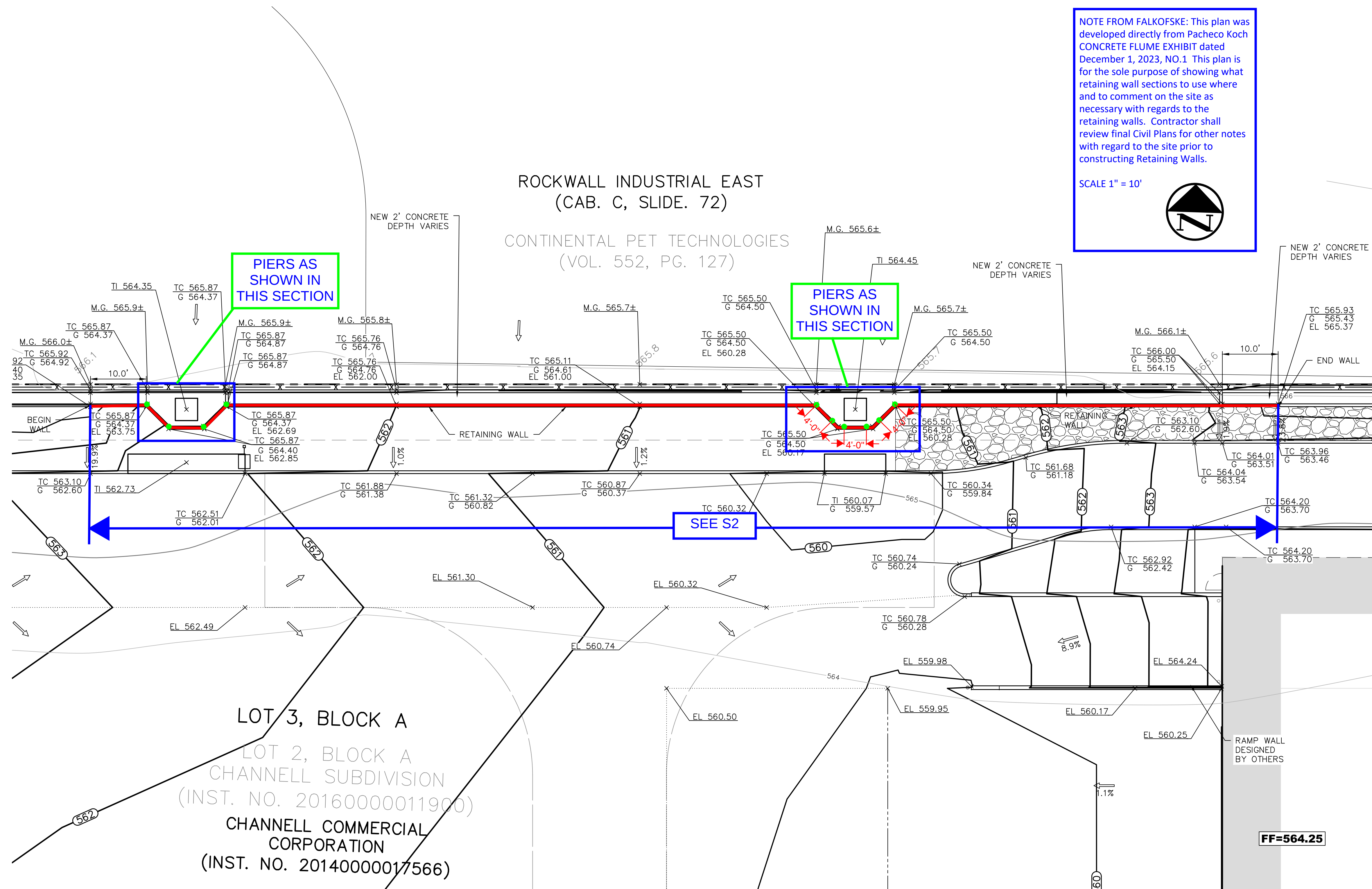
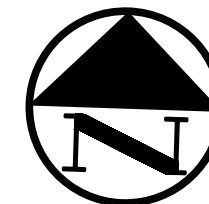




NOTE FROM FALKOFSKE: This plan was developed directly from Pacheco Koch CONCRETE FLUME EXHIBIT dated December 1, 2023, NO.1. This plan is for the sole purpose of showing what retaining wall sections to use where and to comment on the site as necessary with regards to the retaining walls. Contractor shall review final Civil Plans for other notes with regard to the site prior to constructing Retaining Walls.

SCALE 1" = 10'



As-Built

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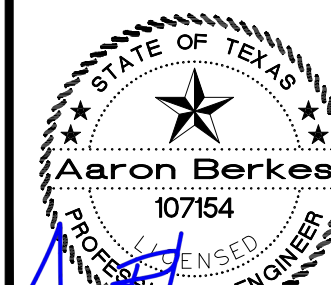
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09-08-23	AMB	1	01-22-24	BDB
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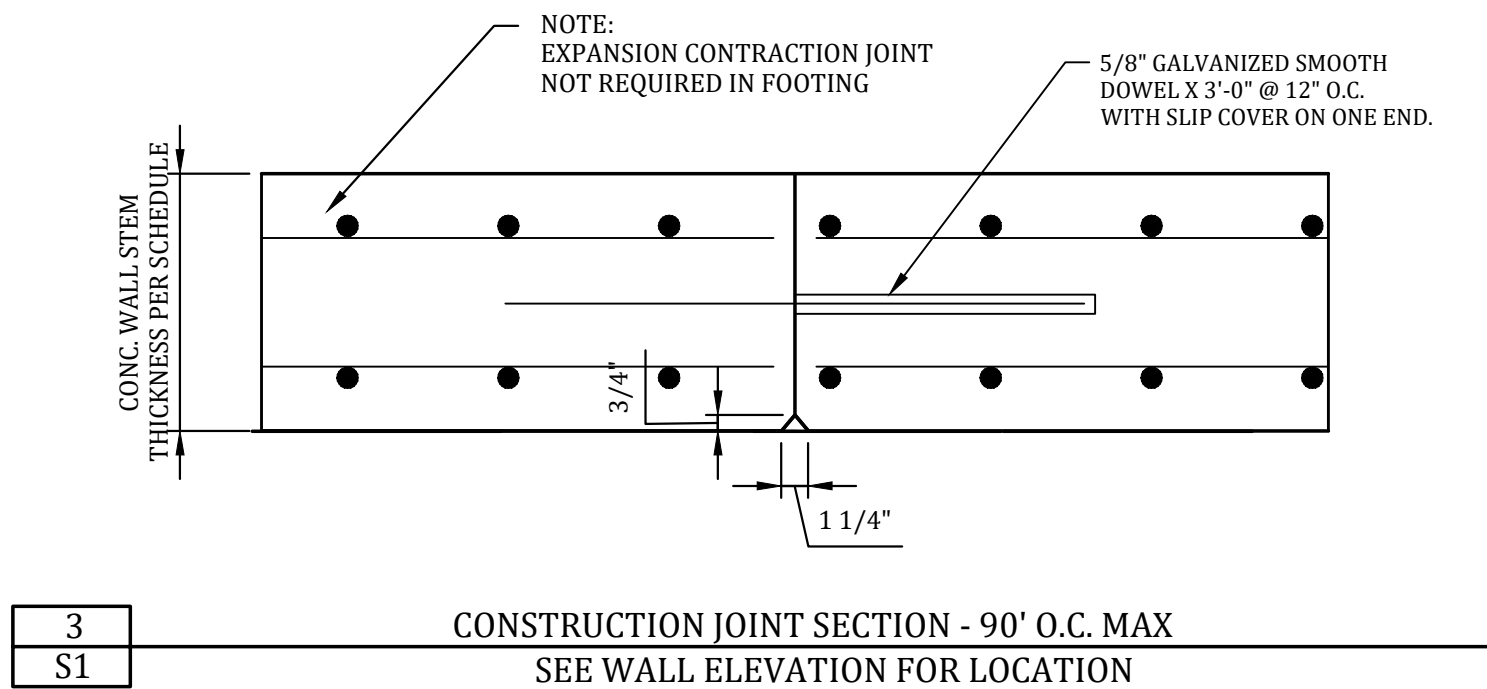
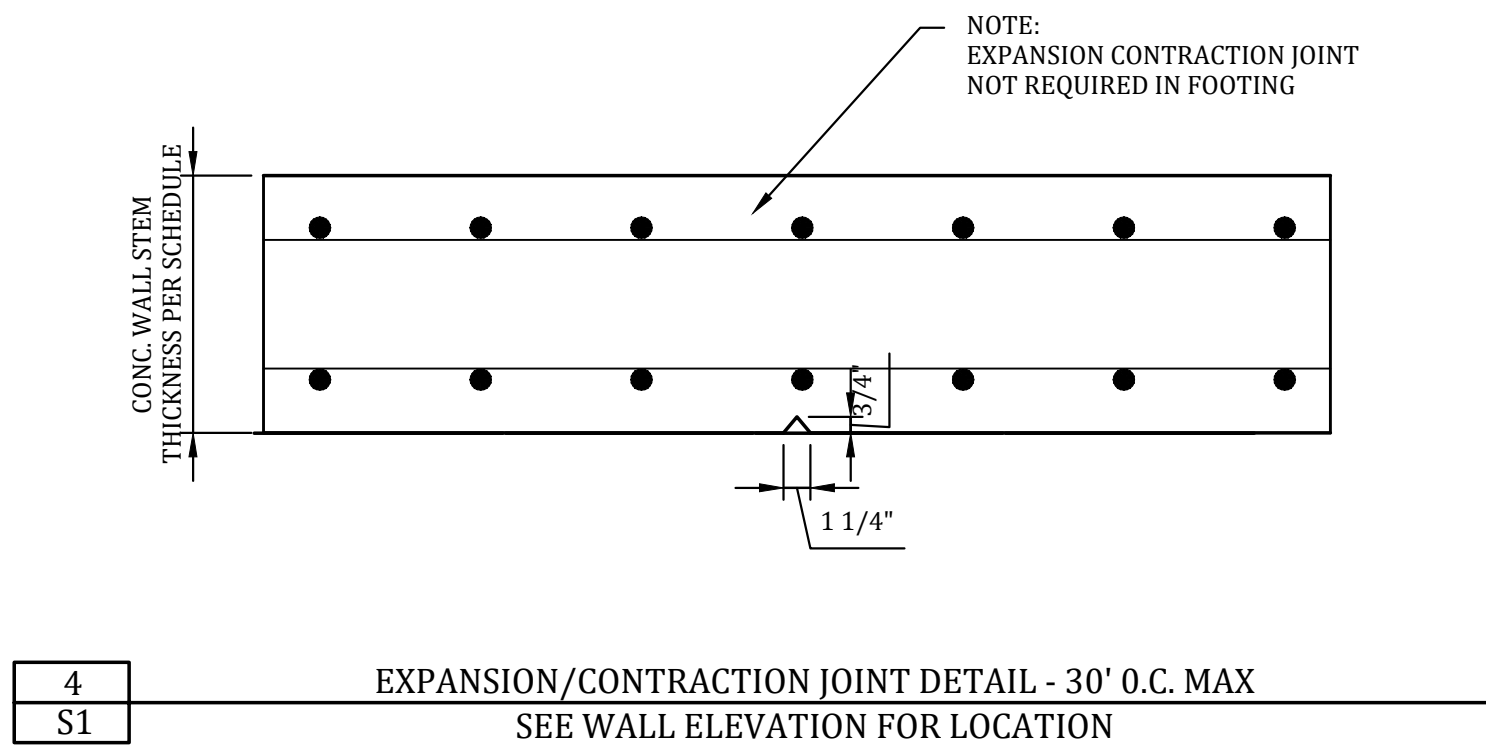
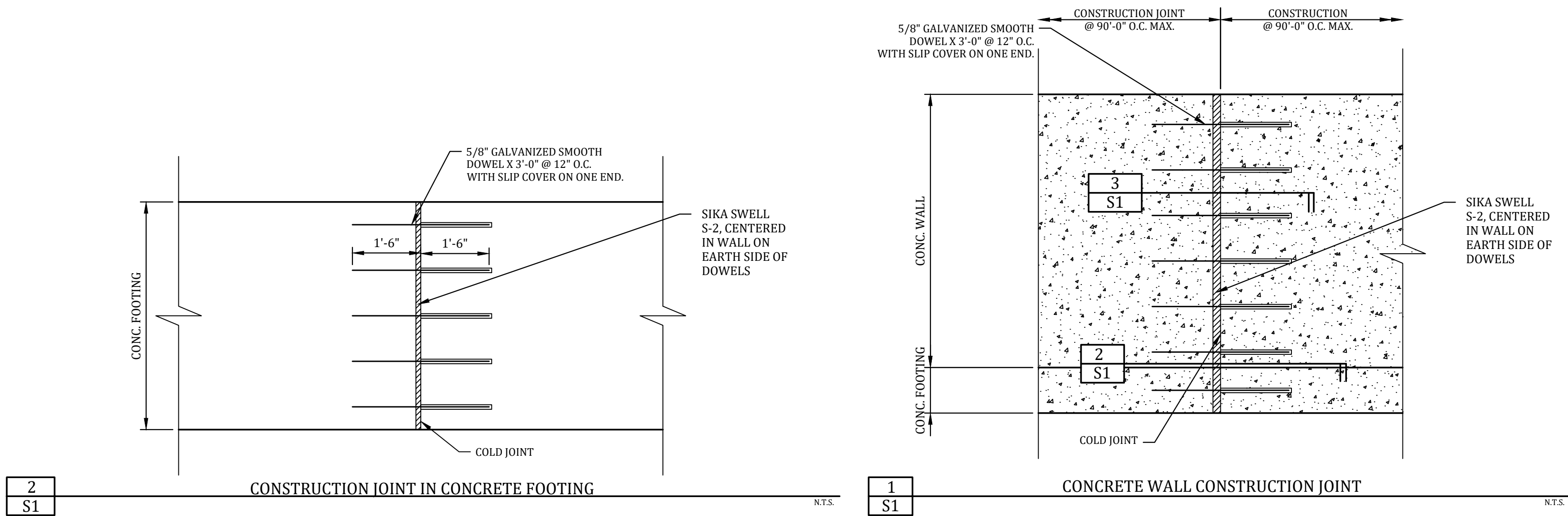
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CHANNELL FIBER FACILITY
1700 JUSTIN ROAD
ROCKWALL, TEXAS
ERW SITE SOLUTIONS
7524 JACK NEWELL BLVD. S.
FORT WORTH, TEXAS



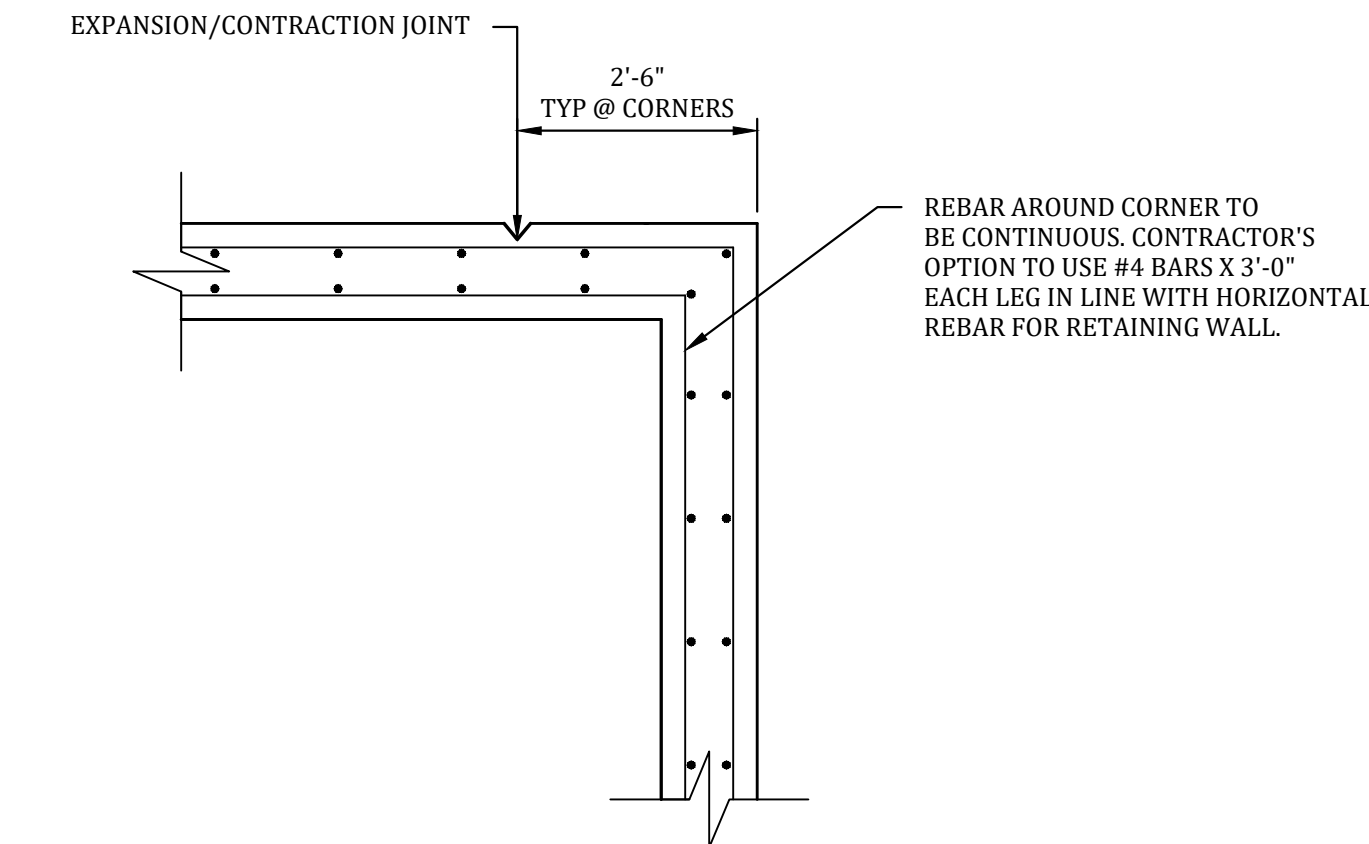
JOB NO. 839.23

SP1



NOTE: MIN. 3" CLEAR DISTANCE
UNLESS NOTED OTHERWISE.

MIN. REQUIRED LAP SPLICE LENGTH	
BAR NO.	REQUIRED LENGTH
3	1'-6"
4	1'-6"
5	1'-10"
6	2'-3"
7	4'-0"
8	4'-7"



1. Design Building Code

International Building Code, 2021 Edition

2. Geotechnical Report

Firm: REED ENGINEERING GROUP
Report No. 24409 Dated: MAY 11, 2022
Allowable Bearing Capacity 1500 psf

3. Geotechnical Criteria

Bearing on Stiff Natural Undisturbed Clayey Soils or Compacted and Tested Soils

Pier Design Parameters: per geotechnical report

Backfill Soil Parameters:

Backfill Soil - On site soils
Unit Weight: 120 pcf
Backfill Angle of Internal Friction PHI = 26 deg

Backfill soils may be onsite clayey soils and shall be compacted to a minimum of between 92 to 98 percent of maximum dry density, as determined by ASTM D698, "Standard Proctor" at minimum + 3 percentage points of optimum. However, in cases where the backfill soils will be used for support of buildings, roadways, or other structures the requirements of the geotechnical report control.

Locate base of walls on undisturbed or properly compacted soil.

Walls have been designed for a minimum factor of safety against sliding and overturning of 1.5. Walls have been analyzed for global stability considerations and has a minimum longterm factor of safety of 1.5.

4. Materials:

CONCRETE:

Concrete shall be TX DOT Class C concrete with $f_c = 3600$ psi.

The use of workability admixtures and air entrainment in the concrete mix designs is permitted and encouraged.

The use of calcium chloride admixtures in the concrete is not permitted.

Hard rock aggregate of 3/4" max shall be used in concrete.

Provide the concrete mix designs for the retaining walls to Falkofske Engineering, Inc. for review prior to construction. Also provide recent (within the last 6 months) compressive test results of the mix designs for review by Falkofske Engineering, Inc.

Provide concrete test cylinders for every 50 yards of concrete placed, or for any concrete placed on any given day. Make 6 test cylinders, test one at 7 days, one at 14 days, three at 28 days, and hold the 6th cylinder in reserve for 56 days if necessary. Provide all concrete compressive test results to Falkofske Engineering, Inc. for final review.

Provide chair support for all rebar 4'-0" max spacing.

Vibrate wall to prevent honeycombing. All honeycombing shall be chipped out. DO NOT rub wall to cover.

Provide steel centerizers to center the steel in the pier hole, and use chairs to hold steel off the ground in the bottom of the pier hole.

Concrete may free fall during placement, as long as the concrete is centered in the pier and does not damage the steel cage.

Piers may be "Standard Drilled" or "Auger Cast In Place".

CONCRETE REINFORCEMENT:

All concrete steel reinforcement shall be new billet steel conforming to ASTM A-615, Grade 60 with $f_y = 60$ ksi. All reinforcement shall be free of rust and deleterious materials.

DRAINAGE MATERIAL:

Free draining gravel for drainage zone shall be no. 57 stone or approved equal.

Filter fabric shall be Mirafil 140N or approved equal.

PVC perforated pipe with filter sock 3" diameter.

5 Construction Reviews

Construction Reviews By Materials Testing Lab:

Concrete Cylinder, refer to Materials for concrete information.

Compaction of Backfill shall meet the requirement by the geotechnical engineer.

The geotechnical engineer, shall be retained to perform pier drilling review. A pier drilling log shall be made for each pier indicating the depth through clay soils & embedment into limestone.

The pier drilling logs shall note that the piers holes are clean prior to placing the steel reinforcement cage.

The size, number, and grade of the reinforcement placed in the pier hole shall be verified by the testing lab and so noted on the pier drilling logs.

FEI will perform cursory review of the pier drilling operations. Contractor shall contact FEI at least 24hrs prior to drilling operations starting.

Construction Reviews By FEI:

Pre-pour, rebar and dimensional observations to verify compliance with plans. These special inspections are required so that FEI can sign off on the wall construction after construction.

Construction Inspections by the Building Department:

The contractor shall arrange for all inspections that may be required by the City of ROCKWALL Building Department.

6. Retaining Wall Design Constraints

Retaining walls should not have solid fence placed on top of wall other than that shown on these plans. Retaining walls shall not have additional surcharge placed above wall other than that shown on these plans. Retaining walls shall not have slope at base or top of wall that exceed that which is shown on these plans. The retaining walls noted above require special design.

Minor variations in the construction of the retaining walls from these documents may be accepted at the discretion of the design engineer.

As-Built

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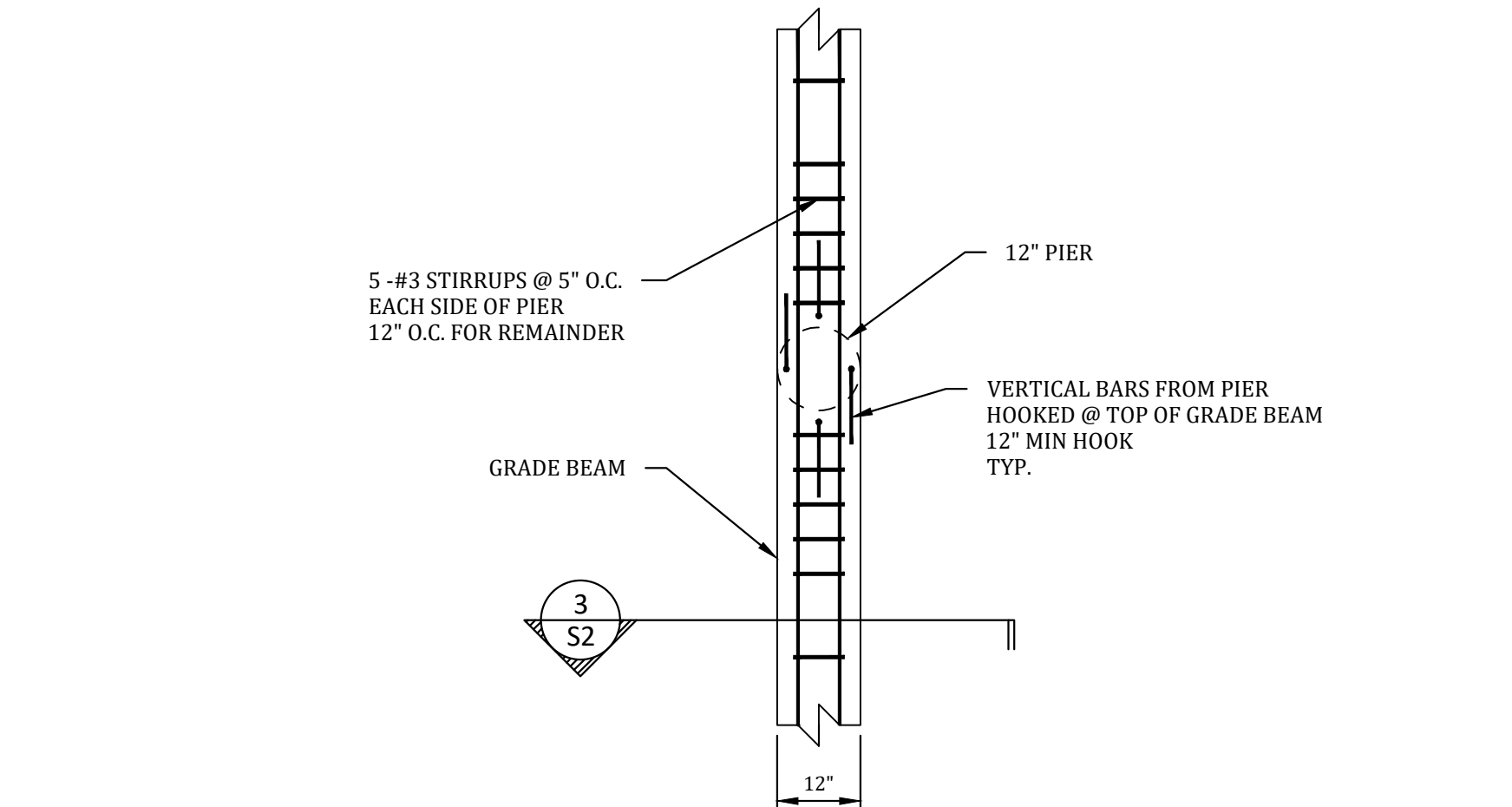
CAST IN PLACE CONCRETE WALL - STANDARD NOTES AND DETAILS
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09-09-24

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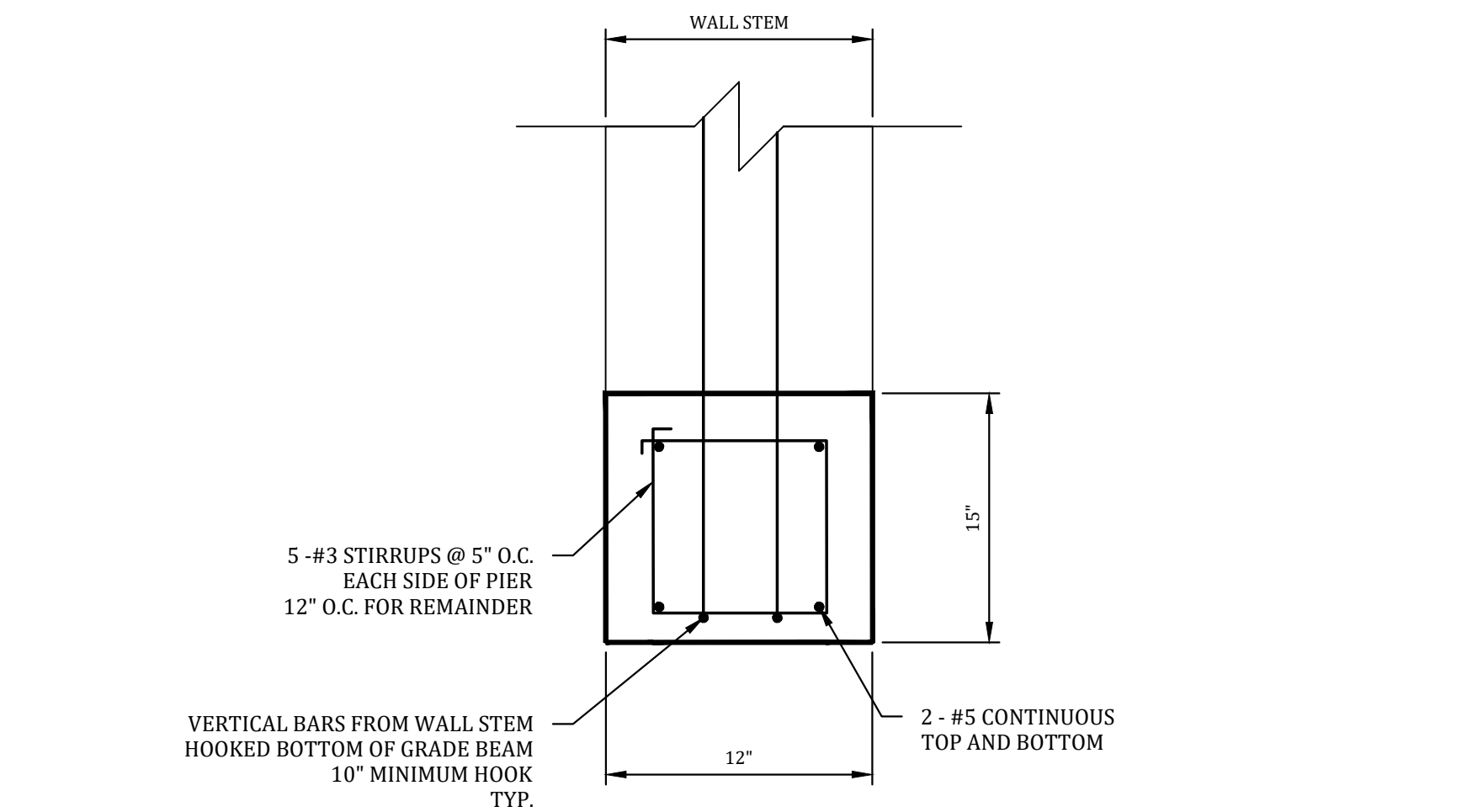
S1



2
S2

GRADE BEAM/PIER INTERACTION
PLAN VIEW

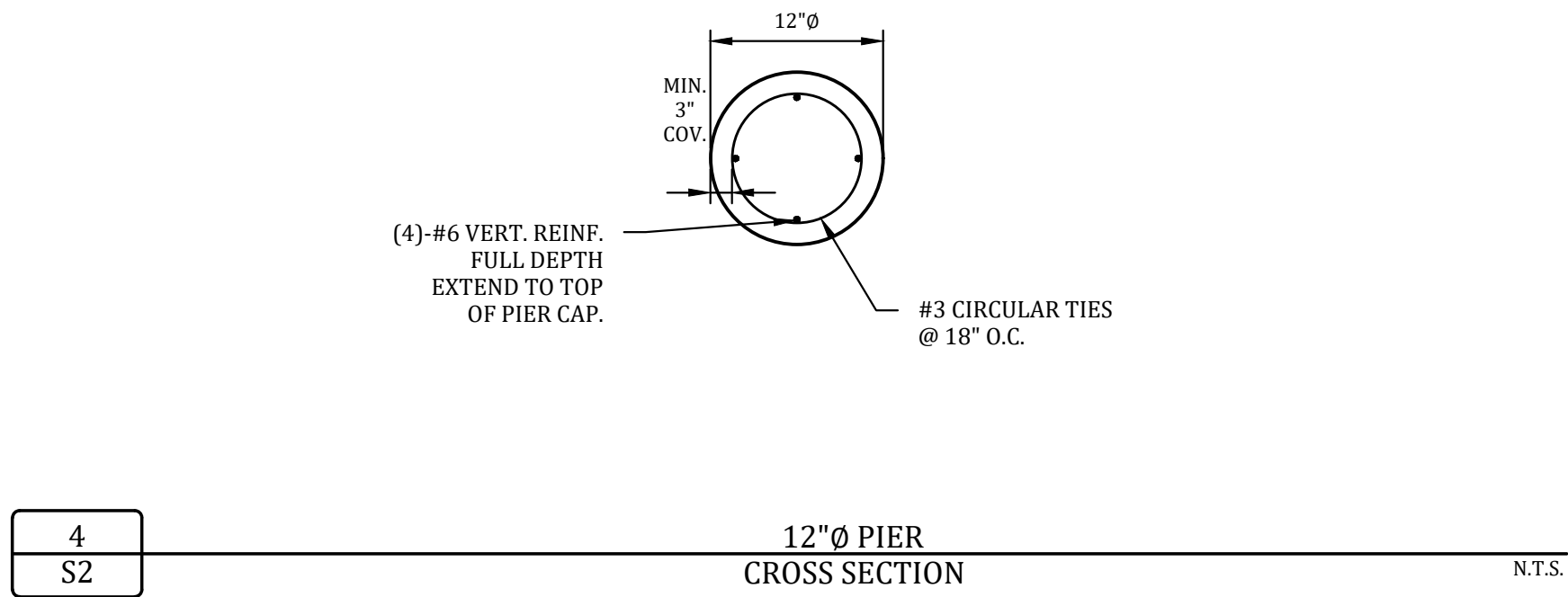
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3
S2

GRADE BEAM-CROSS SECTION

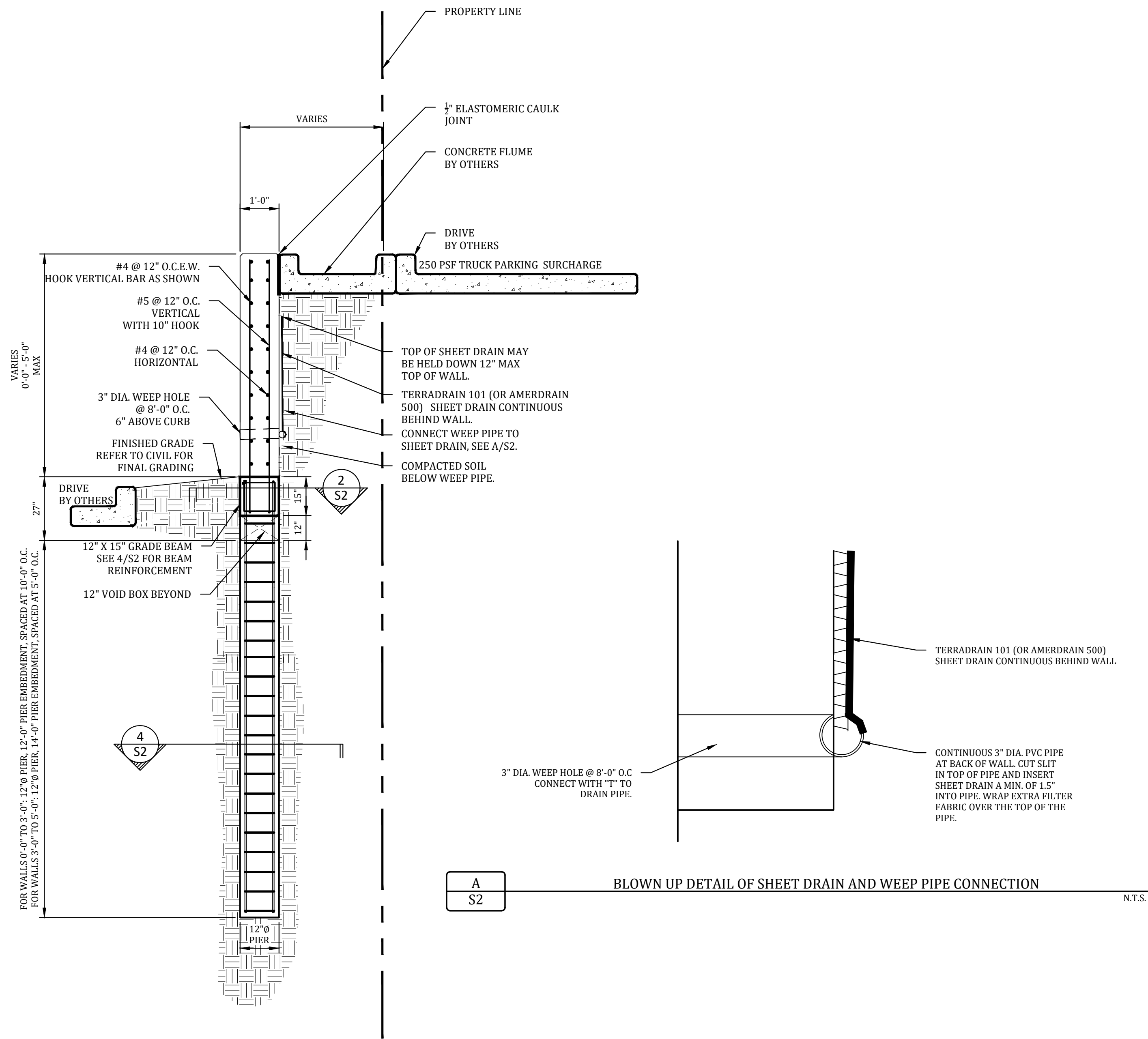
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1
S2

PIER SUPPORTED CONCRETE WALL - CROSS SECTION
FOR WALLS 0'-0" TO 5'-0" TALL

N.T.S.



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09-08-23	AMB	1	09-12-23	EG
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S2