

DOCKETED

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Project Title:	Humboldt Bay Generating Station - Compliance
TN #:	204979
Document Title:	Petition for Project Modification- Spare Transformer
Description:	N/A
Filer:	Jonathan Fong
Organization:	PG&E
Submitter Role:	Public Agency
Submission Date:	6/11/2015 2:23:13 PM
Docketed Date:	6/11/2015

HBGS-CEC-101

June 10, 2015

Mr. Jonathan Fong
Compliance Project Manager
California Energy Commission
Energy Facilities Siting and Compliance Division
1516 Ninth Street, MS 2000
Sacramento, California 95814-5512

Subject: Humboldt Bay Generating Station (06-AFC-07C) - Petition for Project Modification, Spare 60-kV, 75 MVA Transformer

Dear Mr. Fong:

Enclosed please find a Petition for project modification for the Humboldt Bay Generating Station (HBGS), in compliance with Section 1769 of the California Energy Commission Siting Regulations. The purpose of this petition is to add a spare 60-kV, 75 MVA, spare transformer. The spare transformer would enhance plant reliability should one of the existing 60-kV transformers fail. The modification would not result in any environmental impacts or inconsistencies with Laws, Ordinances, Regulations, or Standards (LORS).

Should you have any questions, please contact me at 707-269-1810.

Sincerely,



Scott Washington
Environmental Field Specialist

attachment

Introduction

Pursuant to the California Energy Commission Regulations Section 1769 (Post Certification Amendments and Changes), PG&E hereby submits this petition for project modification to add a 60-kV, 75 MVA spare transformer at the Humboldt Bay Generating Station (HBGS). PG&E believes the proposed modification constitutes an insignificant project change since it will not result in the modification to any conditions of certification or cause the project to not comply with applicable laws, ordinances, regulations, and standards (LORS). Below is the information required by Section 1769.

1. Section 1769 (a)(1)(A) Provide a complete description of the proposed modification, including new language for any conditions that will be affected

On September 24, 2008, the California Energy Commission (CEC) granted a license to PG&E to construct and operate the HBGS. Construction began in September 2008 and the HBGS commenced commercial operation in October 2010. Electricity demand for the greater Humboldt County area is largely served by HBGS. Given this, plant reliability is essential.

HBGS interconnects with PG&E's 60-kV and 115-kV transmission systems. There are three generator step-up (GSU) transformers that were installed during HBGS construction, two 13.8/60-kV step-up transformers and one 13.8/115-kV step-up transformer. To enhance plant reliability, PG&E proposes to add a spare 60-kV GSU transformer in case one of the 60-kV transformers fails. The reciprocating engines connected to the 60-kV system are run more frequently, as determined by the Cal-ISO. Given this, enhancing the reliability of the 60-kV system is merited. Since it can take up to 18 months for a new transformer to be manufactured and delivered to the site, it is beneficial to have a spare GSU transformer on site. The spare transformer will enable HBGS to continue to serve the Humboldt area without a long disruption in service.

The spare transformer will be located on an existing 17 foot x 22 foot foundation, which was originally built for the Humboldt Bay Power Plant (HBPP) Mobile Emergency Power Plants (MEPPS) transformer. The MEPPS transformers were removed as part of HBPP decommissioning. The foundation will be expanded to 27 feet x 27 feet to accommodate the HBGS spare GSU transformer. The maximum depth of excavation for the foundation will be 40 inches. In addition, a containment berm will be incorporated into the foundation. Figure 1 shows the location of the foundation. The engineering drawings (90% complete) for the new foundation are included in Attachment A.

Foundation installation for the spare transformer will occur in August 2015. The construction of the foundation will take approximately four weeks and require approximately six workers. The spare transformer is scheduled to be delivered to the HBGS site in early December 2015 and will be installed on the foundation upon arrival. It will take approximately two weeks and eight workers to set the transformer on the foundation, prepare it, and test it. As part of the installation, the transformer will be provided with a new 480V/C-3 phase electrical line to keep the transformer's control panel warm and prevent condensation inside the panel, which would damage the electrical connections.

In the event one of the existing 60-kV transformers failed, PG&E would remove the failed transformer and install the spare transformer in its place. The spare transformer would then be interconnected to the 60-kV transmission system. The failed transformer would be hauled off-site for repair. Once the repair is complete, it would be brought back to the site and set on the spare transformer foundation, serving as the spare from that point.

The proposed modification will not require changes to any Conditions of Certification.

2. Section 1769 (a)(1)(B) Provide a discussion of the necessity for the proposed modification

Given the importance of the HBGS in serving the Humboldt County area, PG&E seeks to enhance reliability by adding a spare 60-kV GSU transformer. It can take from up to 18 months for a transformer to be manufactured and delivered to the site. If one of the 60-kV transformers were to fail, it could potentially result in power outages in parts of the Humboldt region. The spare transformer alleviates this issue.

3. Section 1769 (a)(1)(C) - If the modification is based on information that was known by the petitioner during the certification proceeding, provide an explanation why the issue was not raised at that time

The decision to add a spare transformer was made after the HBGS was licensed. Therefore this modification is not based on information known by the petitioner during the certification proceeding.

4. Section 1769 (a)(1)(D) - If the project modification is based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, provide an explanation of why the change should be permitted

The proposed modification does not undermine the assumptions, rationale, findings, or other basis of the Final Decision for the HBGS. In addition, the proposed modification should be permitted since it will enhance the reliability of the HBGS.

5. Section 1769 (a)(1)(E) – Provide an analysis of the impacts the modification may have on the environment and proposed measures to mitigate any significant adverse impacts

No environmental impacts are anticipated with the addition of the spare transformer. The spare transformer will be located within a previously disturbed area of the site, surrounded by other industrial project features.

For Cultural Resources, PG&E proposes to have a Cultural Monitor present during initial foundation excavation to determine whether the culturally sensitive Horizon A is present. Pursuant to Condition CUL-6, should the Cultural Resources Specialist believe that further monitoring is not necessary, a letter or email detailing the justification for changing the level of monitoring will be provided to the CEC Compliance Project Manager for review and approval prior to implementing any changes in monitoring. Paleontological monitoring is not necessary due to the maximum depth of excavation (40 inches), previous site disturbance, and depth of existing fill on the site.

It is not anticipated that excavation of the foundation would result in fugitive dust. However should it be necessary, fugitive dust mitigation such as water or a surfactant will be used to minimize wind blown dust resulting from the construction activity.

Lastly, the minimal traffic associated with workers and equipment for the project is not anticipated to result in traffic impacts along King Salmon Avenue. The project traffic combined with HBGS operations staff traffic and HBPP decommissioning staff traffic would be far less than the peak traffic associated with HBPP decommissioning and HBGS commissioning and operations experienced in late 2009 through 2010 when an estimated 500 staff were on-site. During this time, there were no reported issues with traffic backing up onto King Salmon Avenue.

6. Section 1769 (a)(1)(F) Provide a discussion of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards

The addition of the spare transformer will not affect the ability of the HBGS to comply with applicable LORS. There are no environmental impacts associated with the proposed addition. In addition, a CEC delegate CBO will verify compliance with the applicable California Building Codes.

7. Section 1769 (a)(1)(G) and (H) - Provide a discussion of how the modification affects the public and a discussion of the potential effect on nearby property owners, the public and parties in the application proceedings.

The proposed modification to install a spare transformer will have no impact on the public, nearby property owners, and parties to the proceeding. Construction efforts associated with installation of the spare transformer will be within the HBGS site boundaries.

8. Section 1769 (a)(1)(H) - Provide a list of property owners potentially affected by the modification

Attachment B includes the list of property owners within 1,000 feet of the HBGS site.

Figure 1: Site Vicinity & Location Map



PROPOSED 60kv
SPARE TRANSFORMER
LOCATION

PGE HBGS/HBPP OVERALL SITE
NO SCALE



SITE ADDRESS:
1000 KING SALMON AVE
EUREKA, CA. 95503-6859
APN: 305-131-35



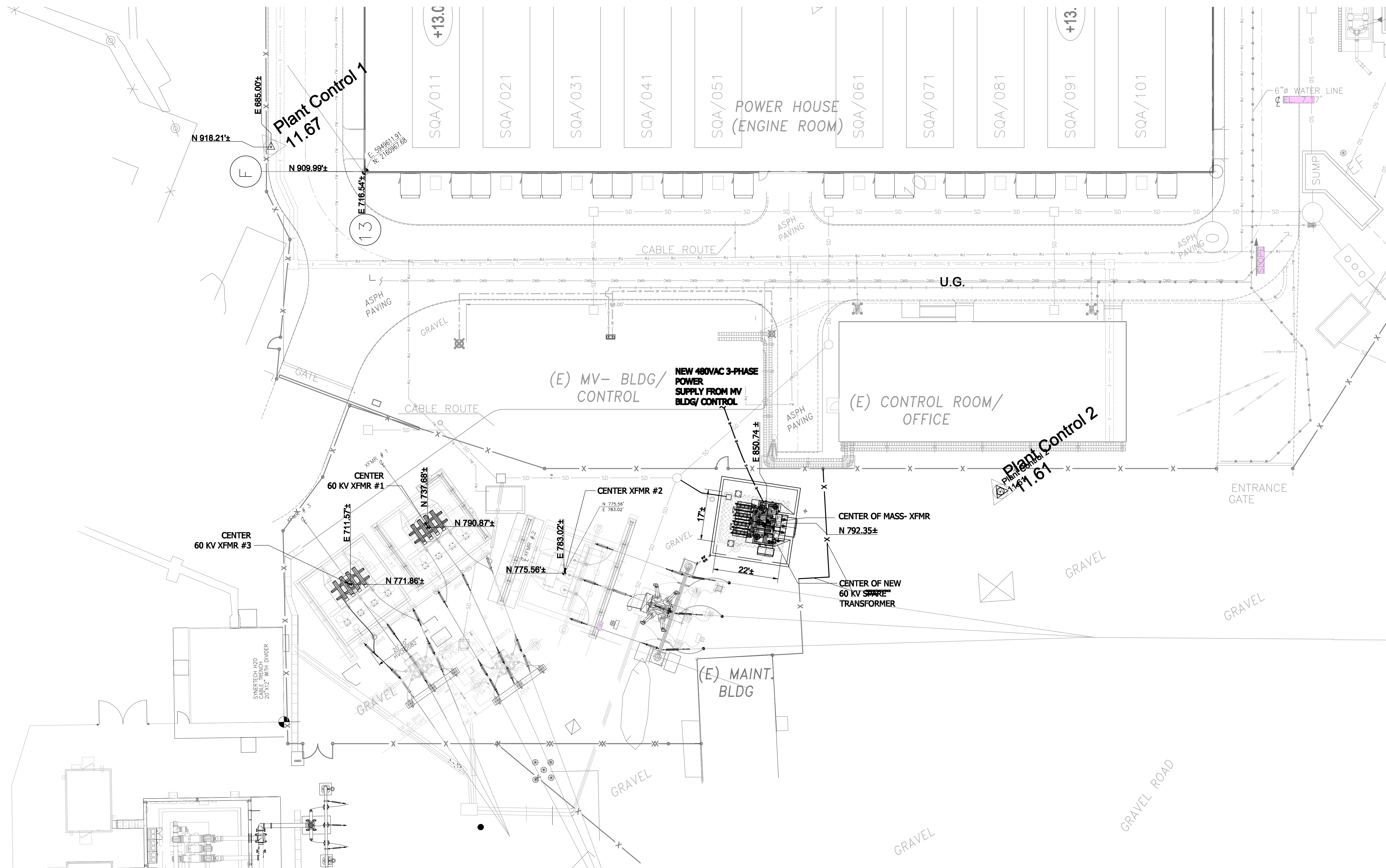
HBGS PROPOSED SPARE 60kv XFMR LOCATION
NO SCALE



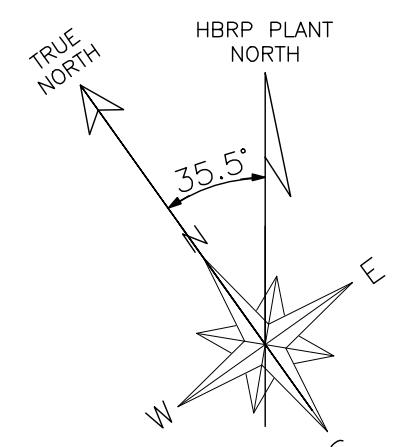
FIGURE 1

PGE1504			
REVISION DESCRIPTION		HUMBOLDT BAY POWER PLANT – PG&E CO. UNIT 3 DECOMMISSIONING PROPOSED 60kv TRANSFORMER VICINITY/LOCATION MAP	
		SHEET	REV
		1 of 1	0

Attachment A: 90% Transformer Pad Drawings



<u>True Coordinates</u>	<u>Plant Coordinates</u>
Plant Control Point 1	
N: 2160992.80	N: 918.2
E: 5949591.16	E: 685.0
Powerhouse F-13	
N: 2160967.68	N: 910.0
E: 5949611.91	E: 716.5



1 SITE PLAN

Scale: 1/16"=1'-0"

**PRELIMINARY-
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[illegible]

(E) MV-BLDG/
CONTROL

(E) CONTROL ROOM
OFFICE

ASPH
PAVING

GRAVEL

~~(E) MAINT.
BLDG~~

1

CLEARANCES

Scale: 3/16"=1'-0"

**PRELIMINARY-
NOT FOR
CONSTRUCTION**

[illegible]

CHOW ENGINEERING, INC.

**7770 PARDEE LANE, SUITE 100
OAKLAND, CA 94621**

Phone: (510) 636-8500 Fax: (510) 636-8544
www.chowang.com E-Mail: info@chowang.com

SHEET TITLE: CLEARANCES

OWNER: LUINBOIDI RAY GENERATING STATION

PG&E
1000 KING SALMON AVE.
EUREKA, CA 95503

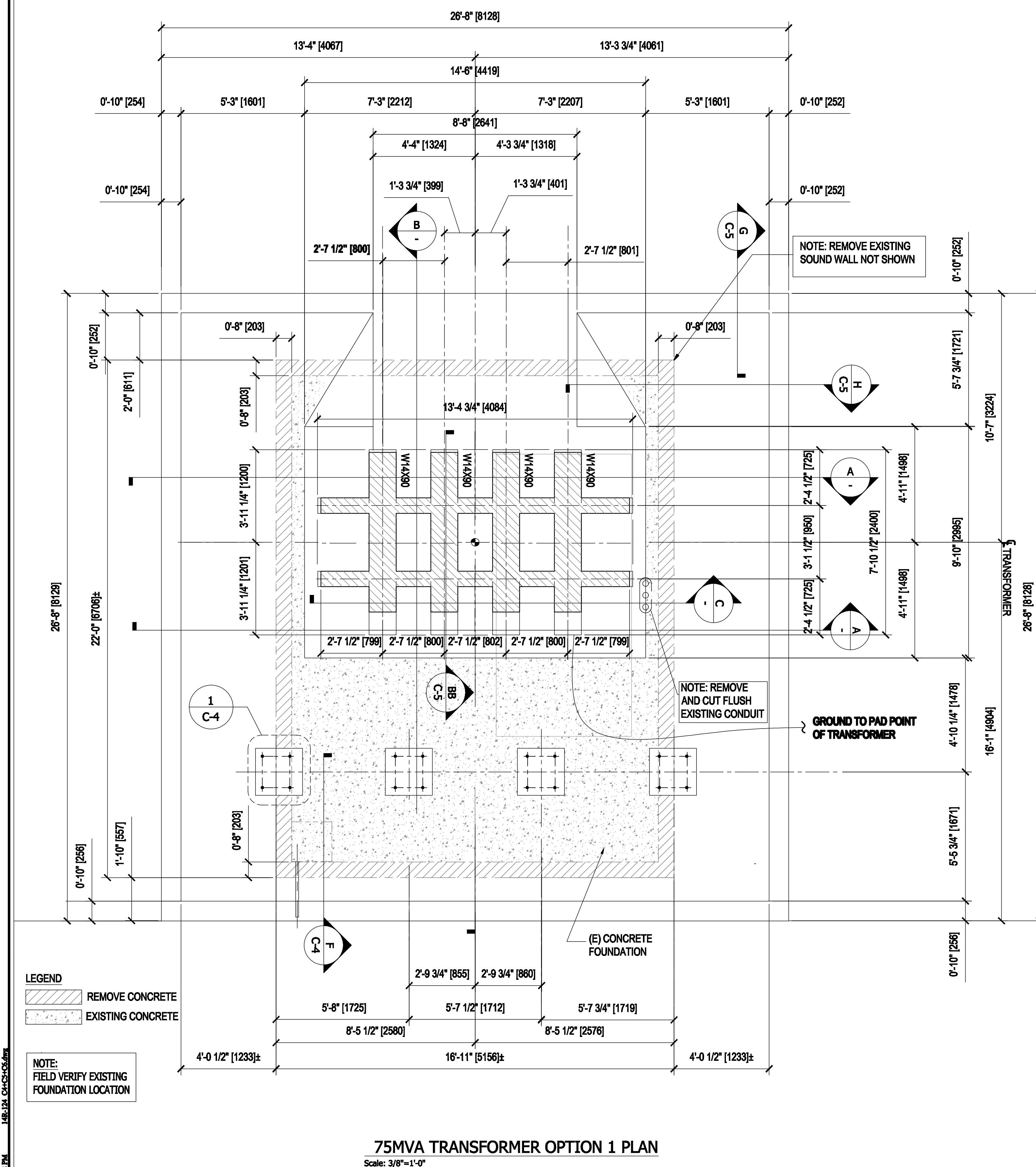
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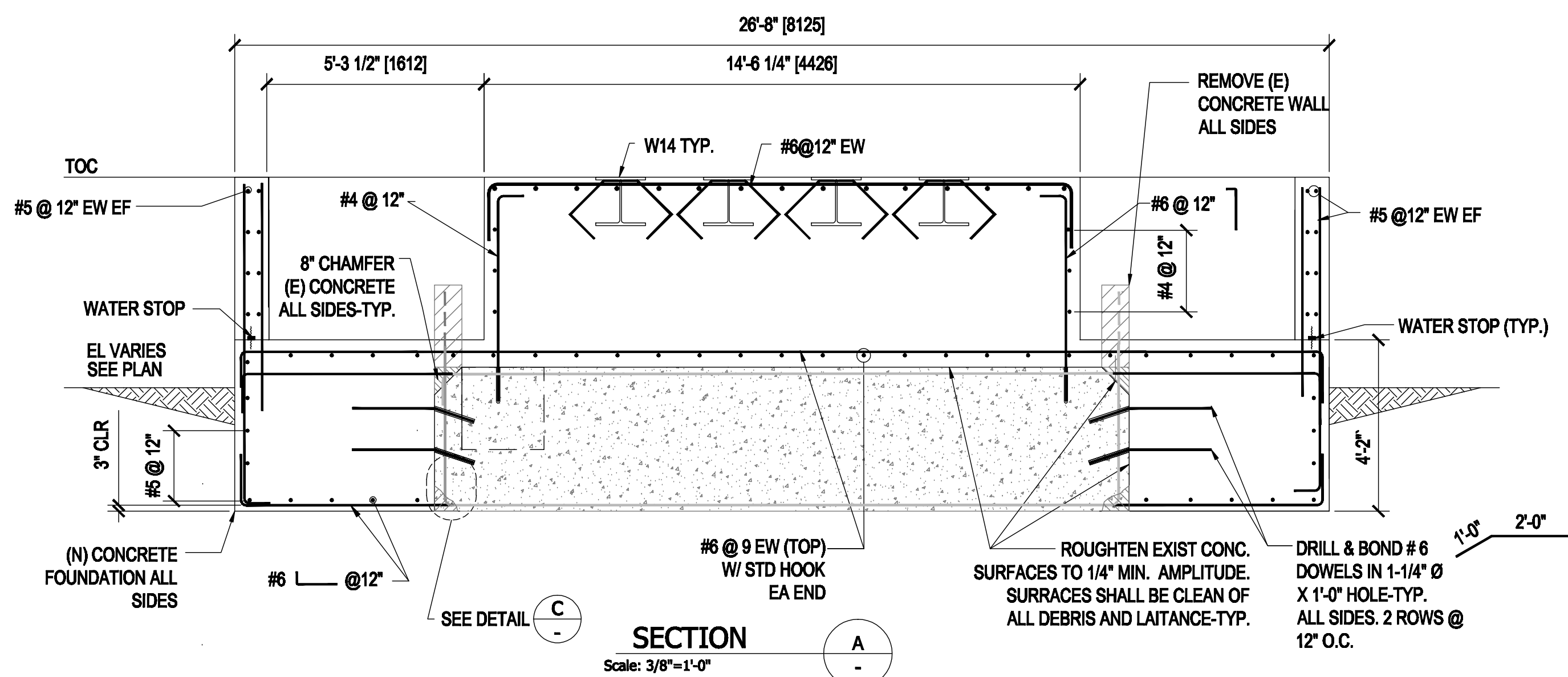
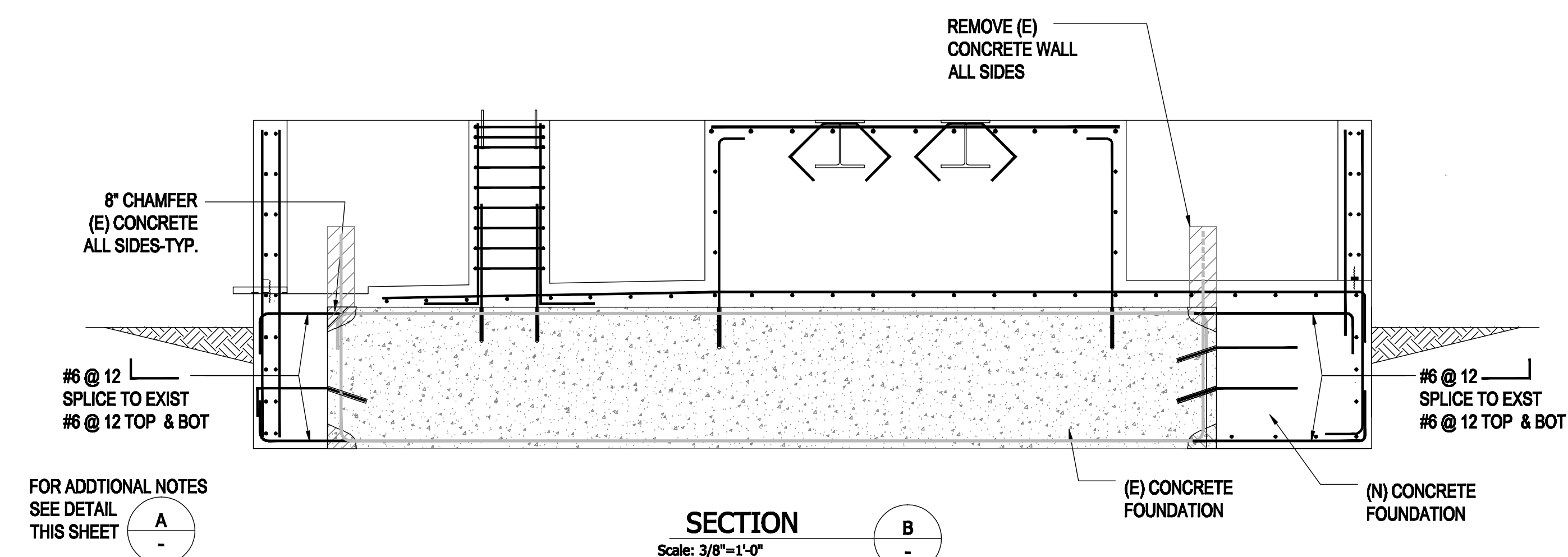
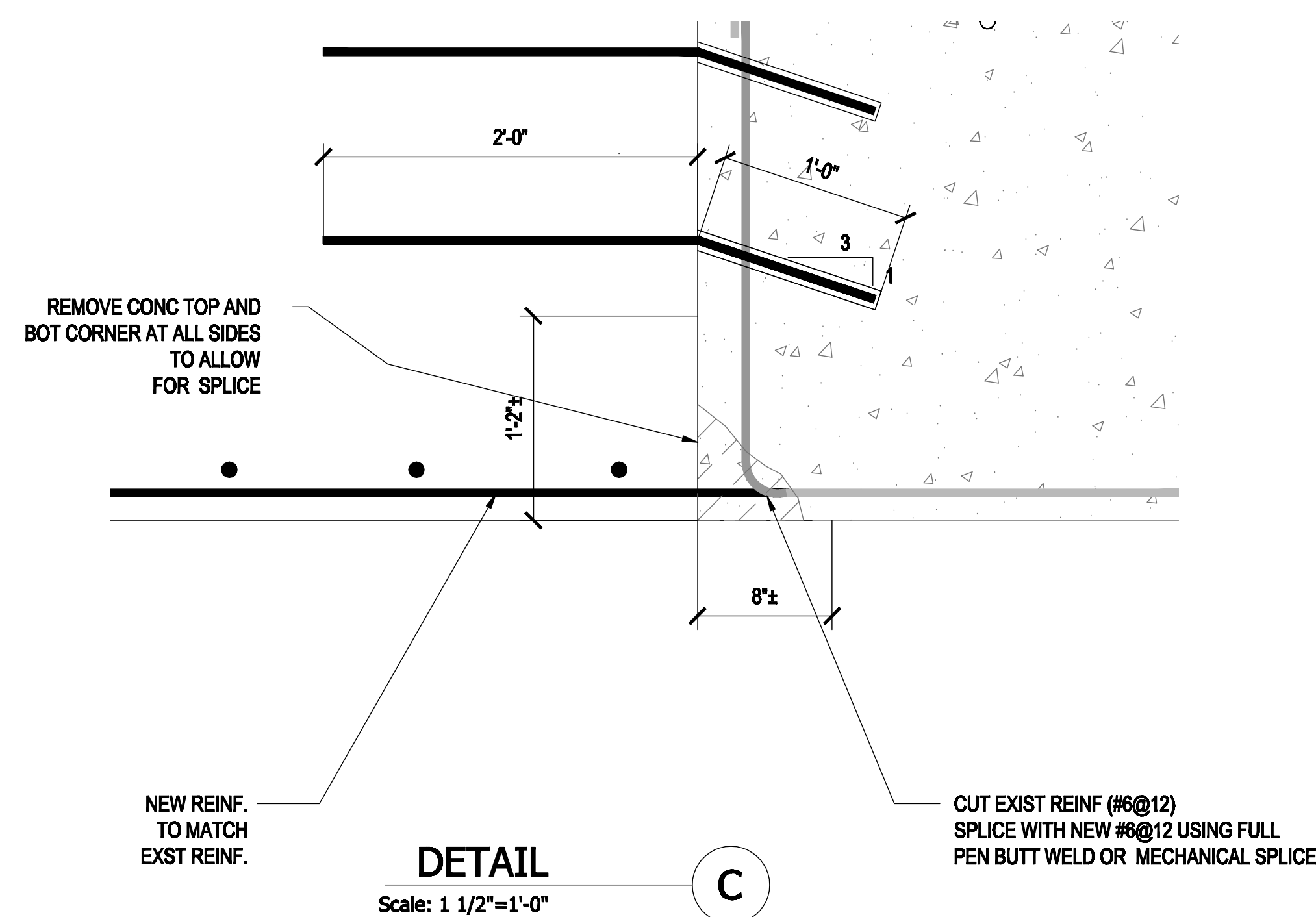
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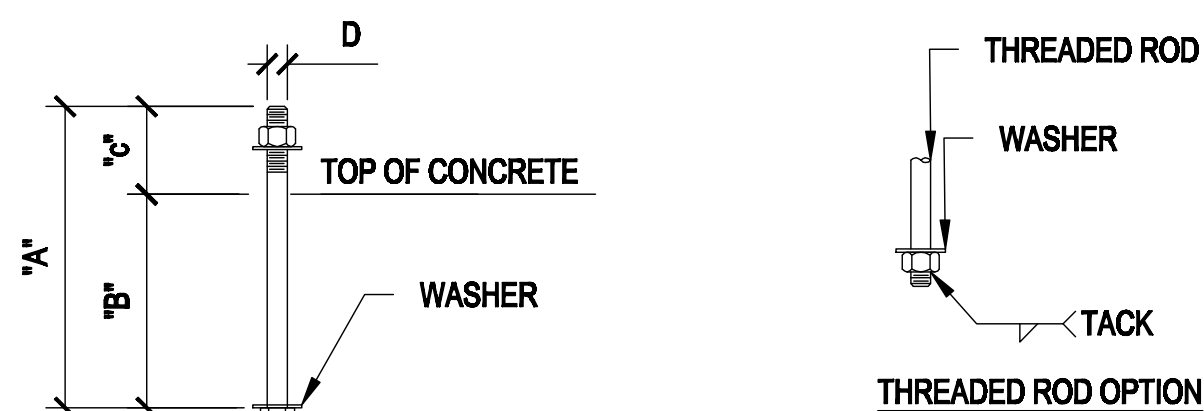
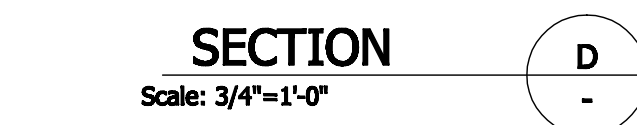
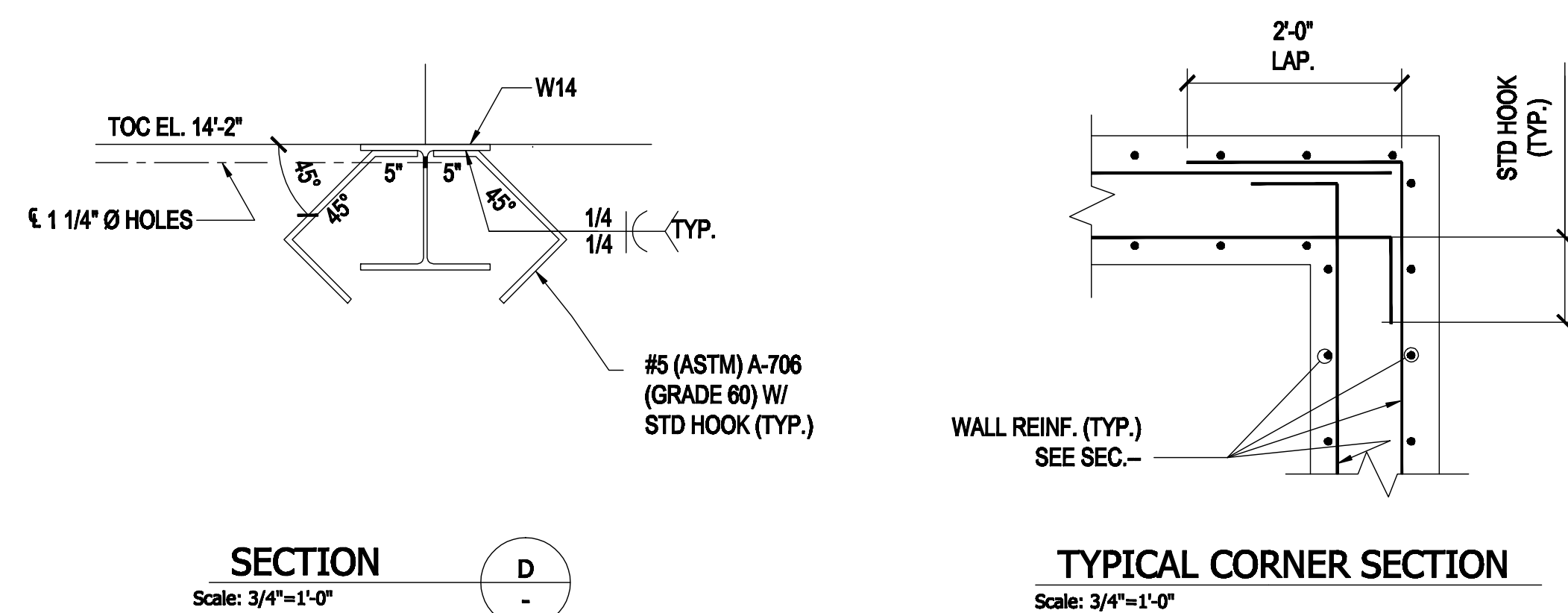
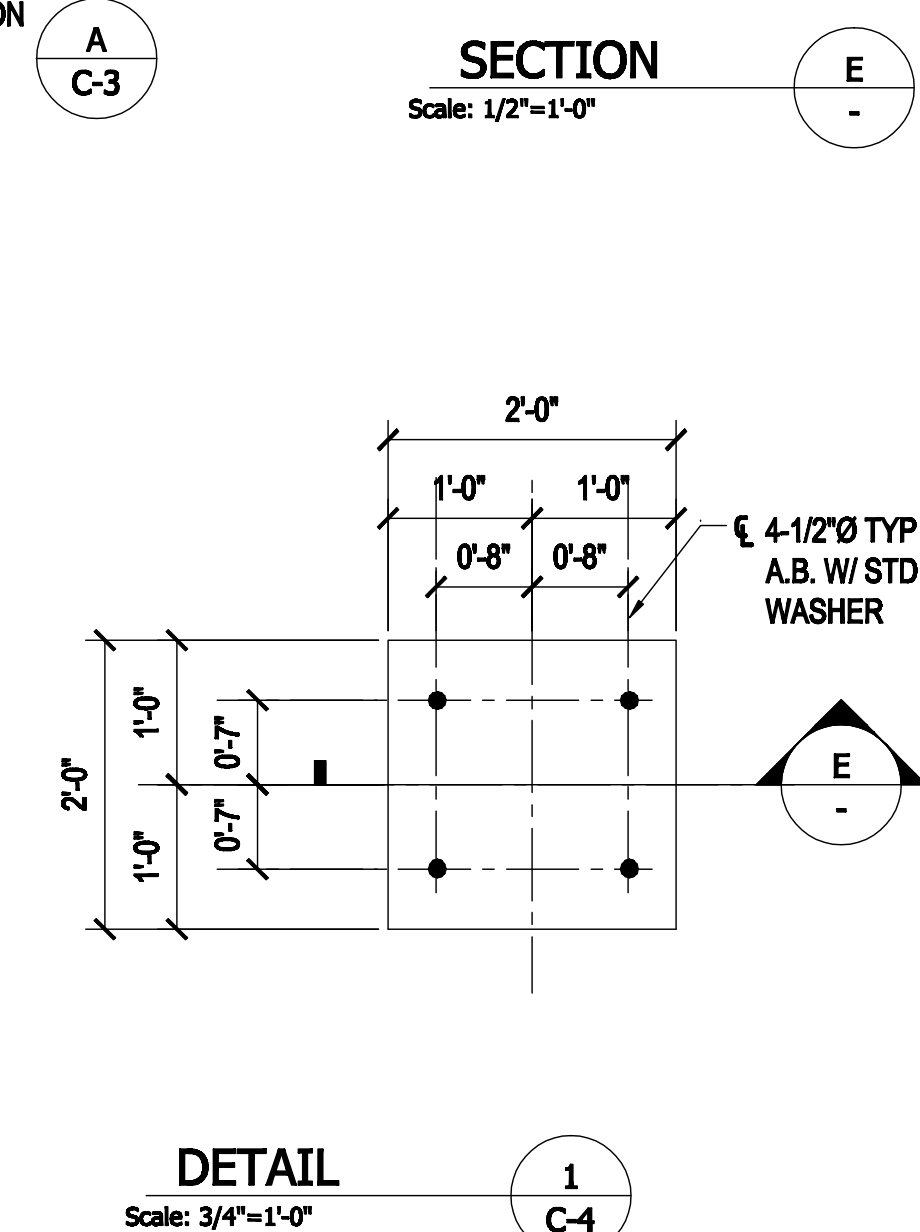
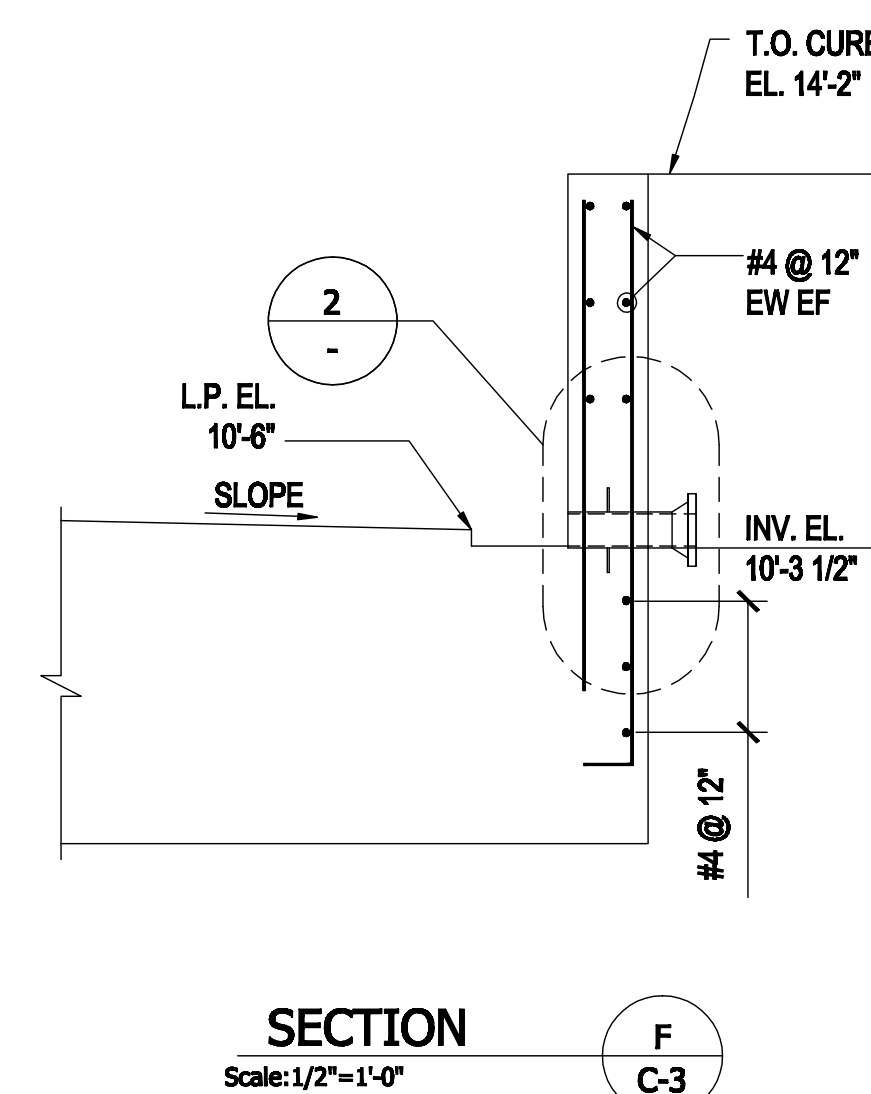
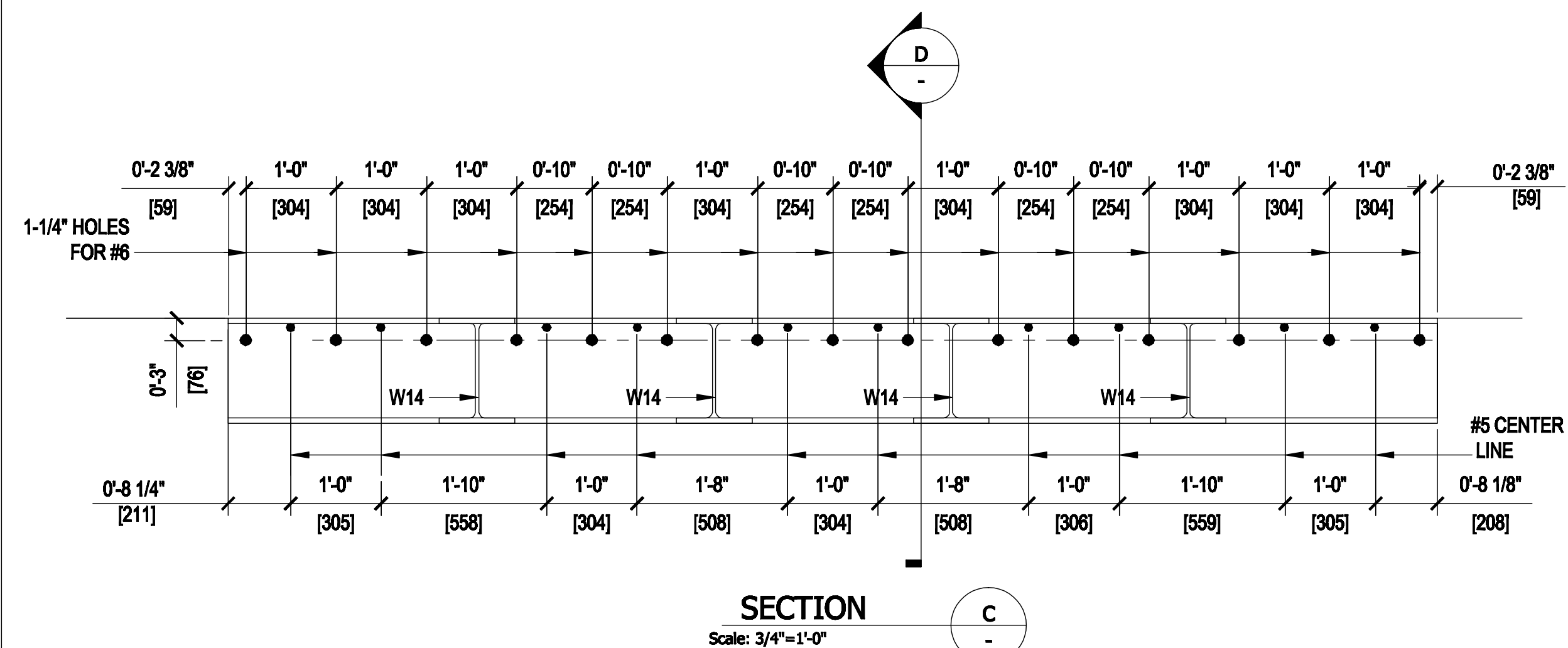
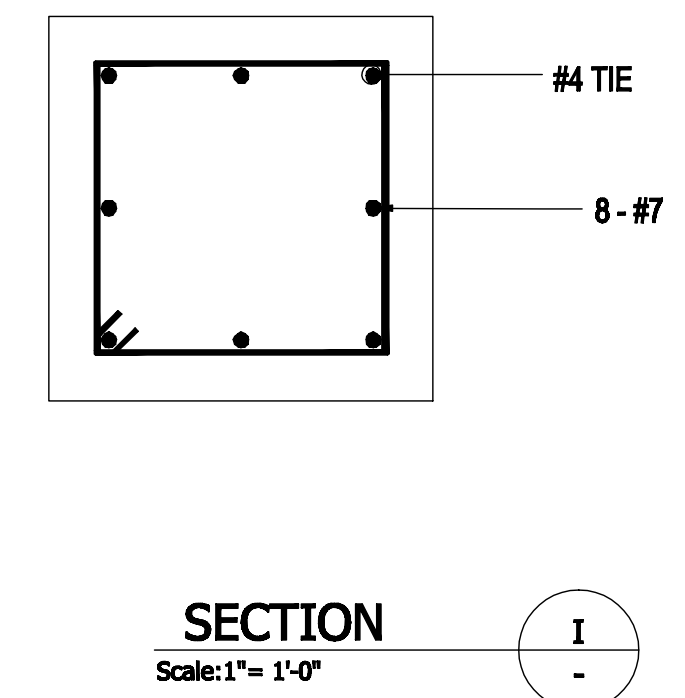
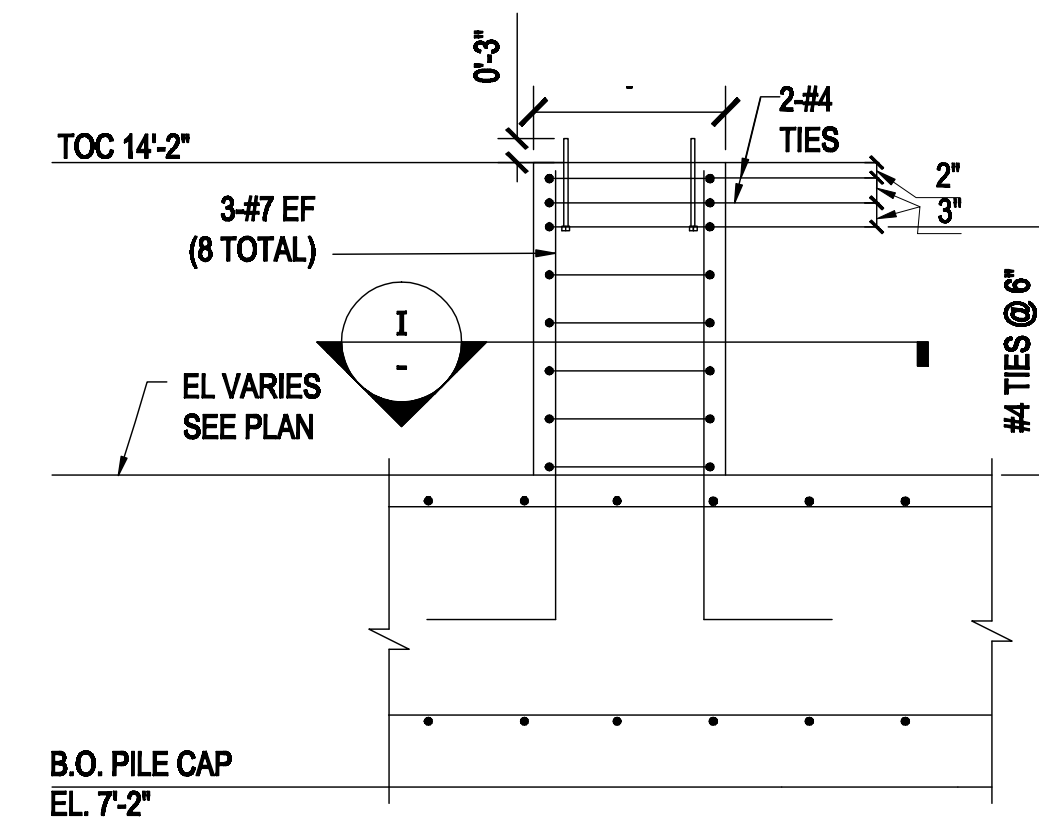
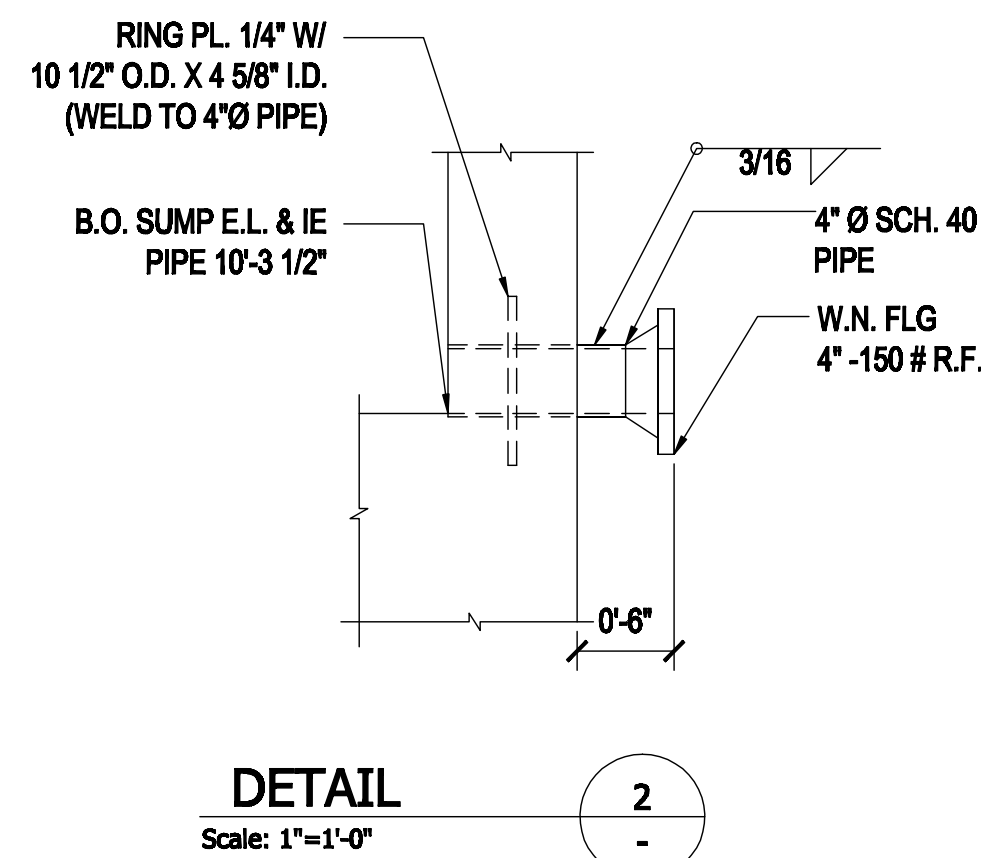
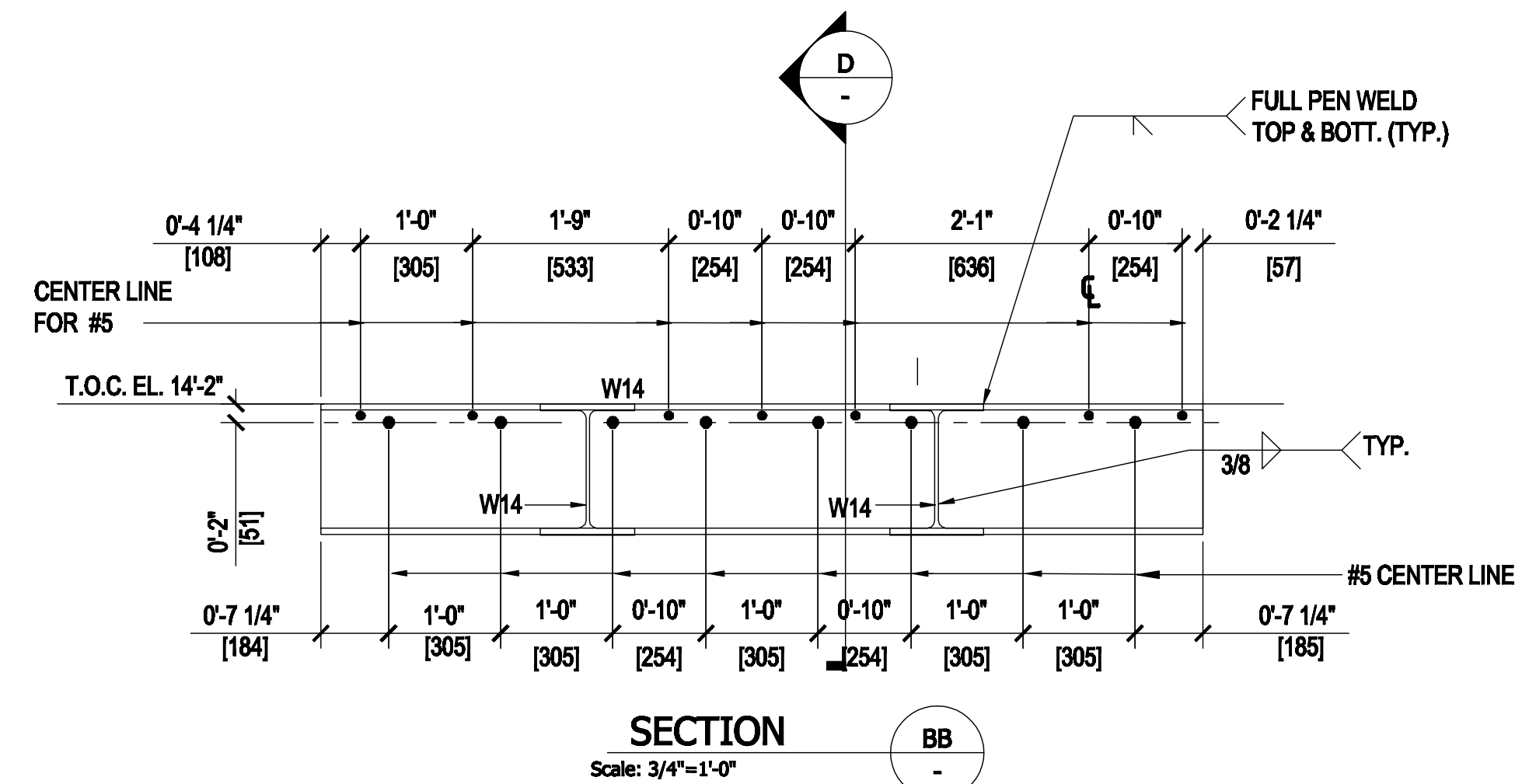
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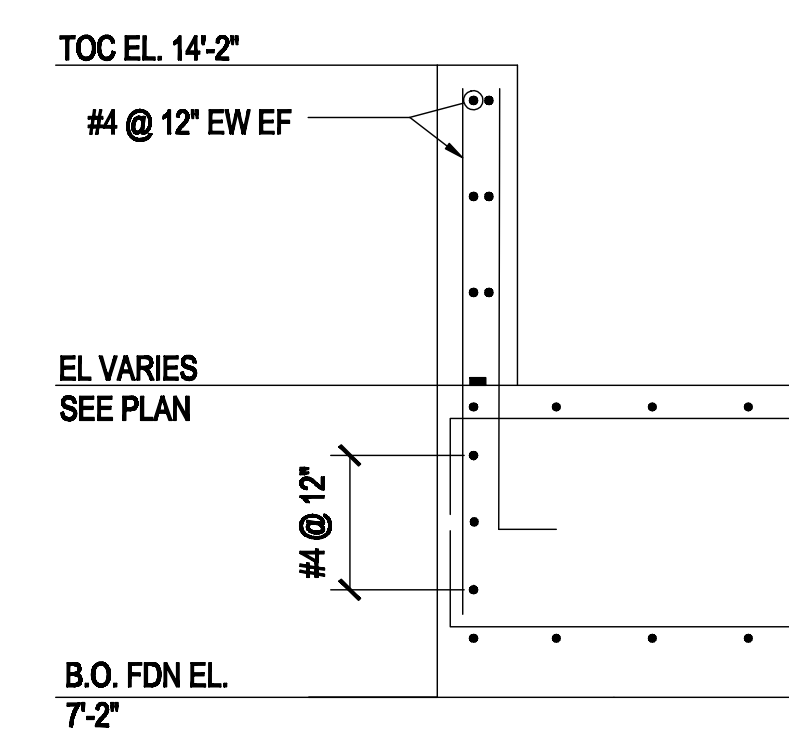
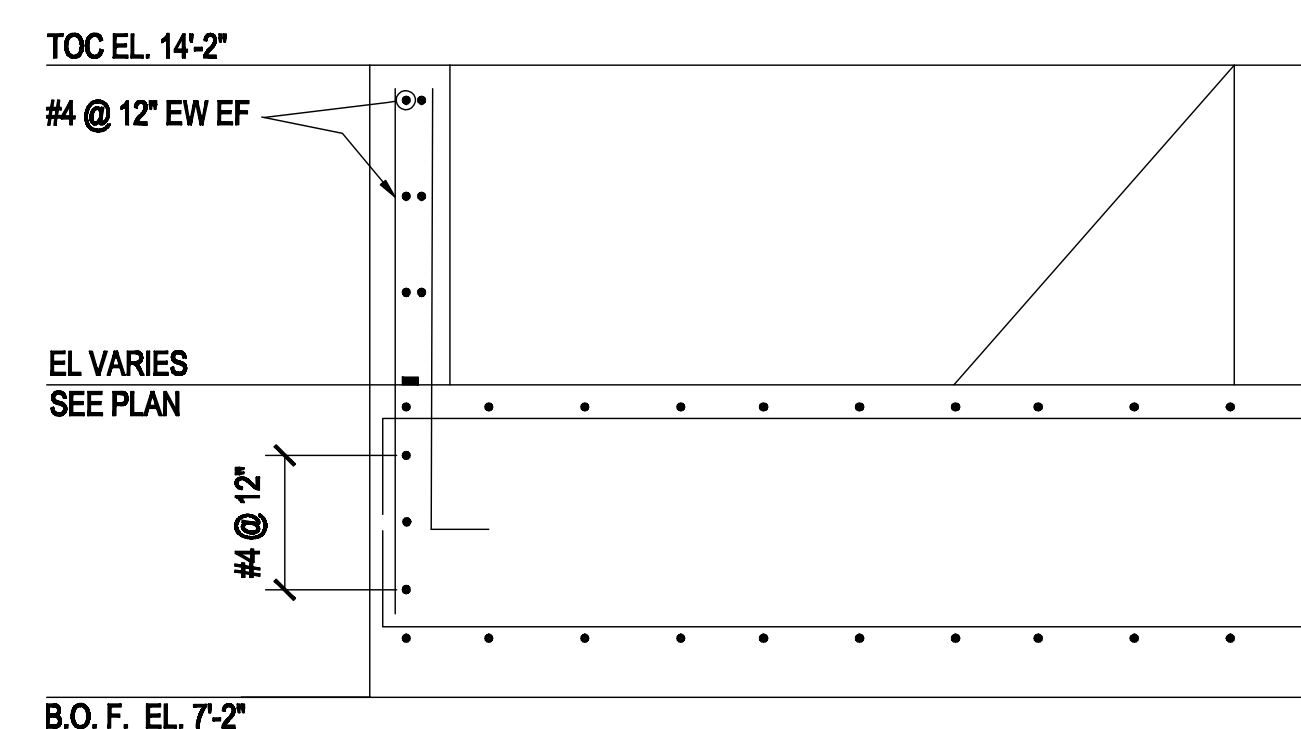
**PRELIMINARY-
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EMBEDDED ANCHOR BOLT DETAILS						
NTS						
ANCHOR BOLT ASTM GRADE	TYPE	QTY.	"A" TOTAL LENGHT	"B" EMBEDDED LENGHT	"C" PROJ. & THRD. LENGHT	"D" BOLT DIA (IN.)
F1554, GR105	TYPE E2	16	20"	16"	4"	1/2"

NOTE:
STRAIGHT THREADED ROD WITH
WASHER & NUT MAY BE SUBSTITUTED
FOR HEADED A.B. ROD SHALL BE 1 1/2"
LONGER THAN LENGTH SPECIFIED FOR
HEADED A.B.



**PRELIMINARY-
NOT FOR
CONSTRUCTION**

[illegible]

CE CHOW ENGINEERING, INC.
7770 PARDEE LANE, SUITE 100
OAKLAND, CA 94621
Phone: (510) 636-8500 Fax: (510) 636-8544
Web: www.choweng.com E-Mail: info@choweng.com

PROJECT: 60 KV SPARE TRANSFORMER
FOUNDATION

OWNER: HUNBOLDT BAY GENERATING STATION
1000 KING SALMON AVE.
EUREKA, CA 95503

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3-25-2015

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14R-124

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6 of 8

REV.



KEY PLAN

NTS

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DATE 3-10-2015

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SCALE 1"=120'

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SHEET No. 8 of 8

REV.

Attachment B: List of Property Owners

Property Owners Within 1,000 Feet of the HBGS Site

APN 305-141-005
Humboldt Bay Harbor Recreational & Conservation District
PO Box 1030
Eureka, CA 95502

APN 305-131-013, 016 & 038
Jim & Claire Hoff
3831 Turtle Creek Blvd – 20C
Dallas, Tx 75219

APN 305-131-003
North Coast Railroad Authority
419 Talmage Road, Ste M
Ukiah, CA 95482

APN 305-131-026
Humboldt Community Services District
P.O. Box 158
Cutten, CA 95534