



- ☒ Reviewed
- ☐ Furnish as Corrected
- ☐ Revise and Resubmit
- ☐ Submit Specified Item
- ☐ Rejected

This review is only for general conformance with the design concept and the information given in the Construction Documents. Corrections or comments made on the submittals during this review do not relieve the Contractor from compliance with the requirements of the plans and specifications. Review of specific item shall not include review of an assembly of which the item is a component. The Contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; coordination of the Work with that of all other trades and performing all Work in a safe and satisfactory manner.

Date 10-21-2024
By MKE

Sheets 1-6 of 6

Design calculations were included with this submittal and were used to aid in the review of the drawings. We conducted our review of the shop drawings in accordance with the specifications indicated in the contract documents. SBI has no additional comments on the calculations.



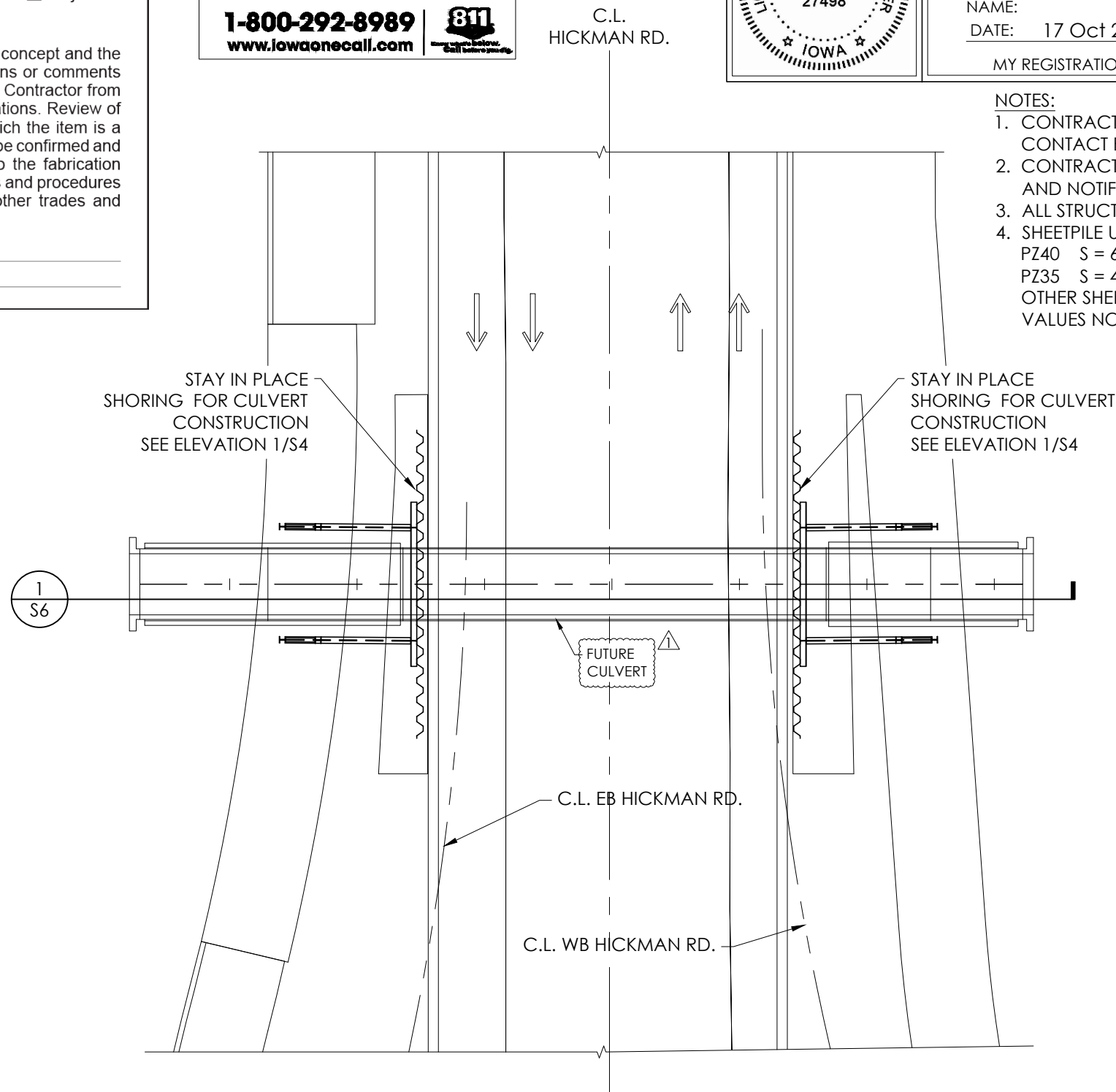
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.
THIS NOTICE COVERS DRAWINGS ST-S6

SIGNATURE: _____
NAME: LUKE LOGAN, P.E.
DATE: 17 Oct 2024 27498

MY REGISTRATION EXPIRES ON 31-DECEMBER-2025

NOTES:

1. CONTRACTOR FIELD VERIFY ALL DIMENSIONS & ELEVATIONS CONTACT E.O.R. WITH ANY DISCREPANCIES
2. CONTRACTOR TO MONITOR DEFLECTION @ TOP OF WALL AND NOTIFY E.O.R. IF GREATER THAN 1" AT ANY TIME
3. ALL STRUCTURAL STEEL TO BE A36 MIN., SHEETPILE TO BE 39ksi STEEL MIN.
4. SHEETPILE USED IN DESIGN:
PZ40 S = 60.7 IN³ I = 490.85 IN⁴
PZ35 S = 48.5 IN³ I = 361.22 IN⁴
OTHER SHEETPILE SECTIONS MAY BE SUBSTITUTED IF THEY MEET THE VALUES NOTED ABOVE



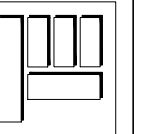
SHEET PILE LAYOUT PLAN

SCALE: N.T.S.



FOR APPROVAL

TOMETICH ENGINEERING, INC.
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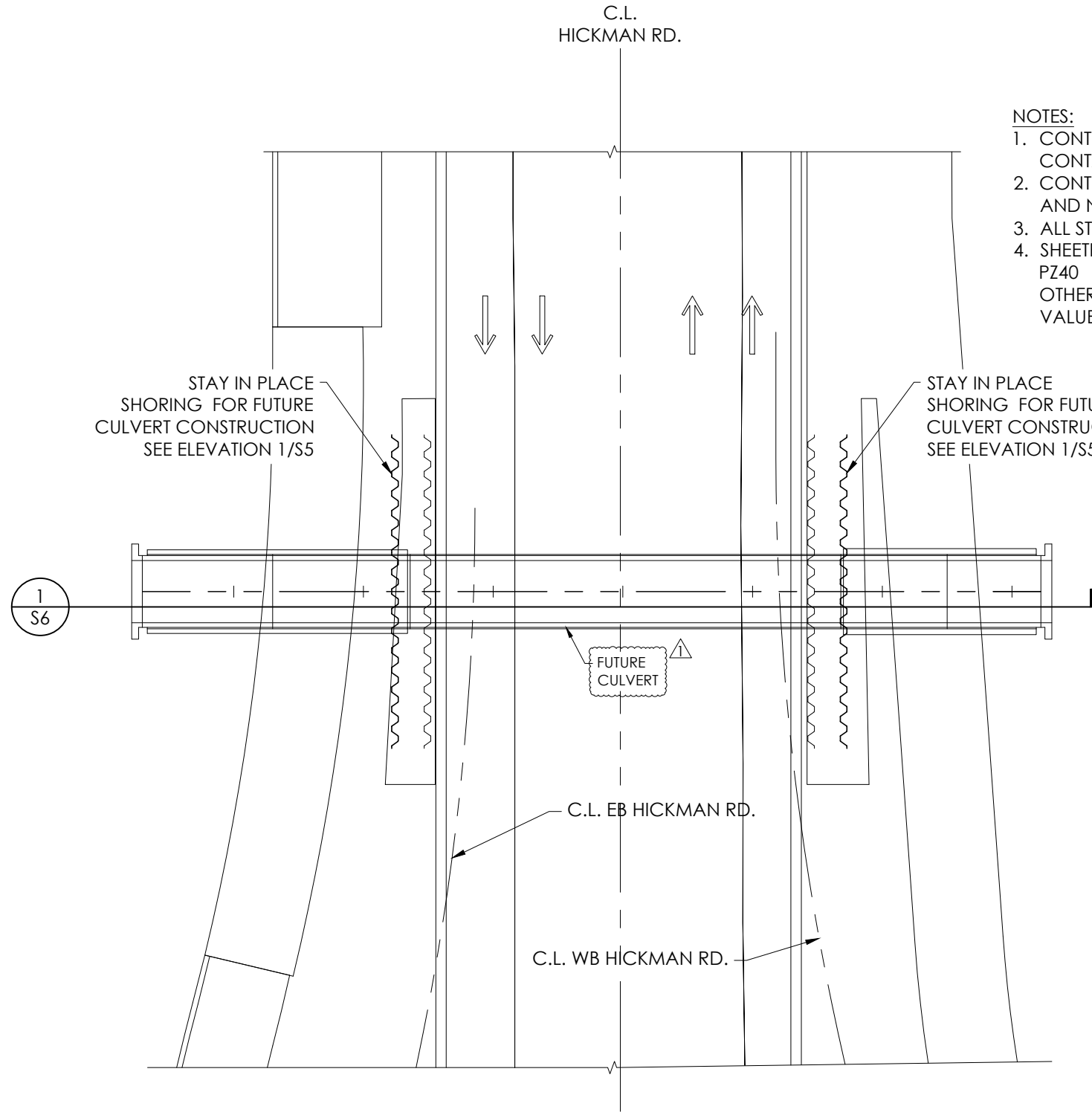


PEDESTRIAN CULVERT
IDOT: IM-080-3(340)125--OE-77
POLK CO., IOWA

ISSUE / REVISION		Date
No.	Description	
1	FOR APPROVAL	10/14/24
	REVISION 1	10/17/24

DATE: 10/17/24
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ENG: L.J.L. DSN: WDM

S1

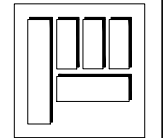


- NOTES:
- 1. CONTRACTOR FIELD VERIFY ALL DIMENSIONS & ELEVATIONS CONTACT E.O.R. WITH ANY DISCREPANCIES
 - 2. CONTRACTOR TO MONITOR DEFLECTION @ TOP OF WALL AND NOTIFY E.O.R. IF GREATER THAN 1" AT ANY TIME
 - 3. ALL STRUCTURAL STEEL TO BE A36 MIN., SHEETPILE TO BE 39ksi STEEL MIN.
 - 4. SHEETPILE USED IN DESIGN:
PZ40 $S = 60.7 \text{ IN}^3$ $I = 490.85 \text{ IN}^4$
OTHER SHEETPILE SECTIONS MAY BE SUBSTITUTED IF THEY MEET THE VALUES NOTED ABOVE

SHEET PILE LAYOUT PLAN

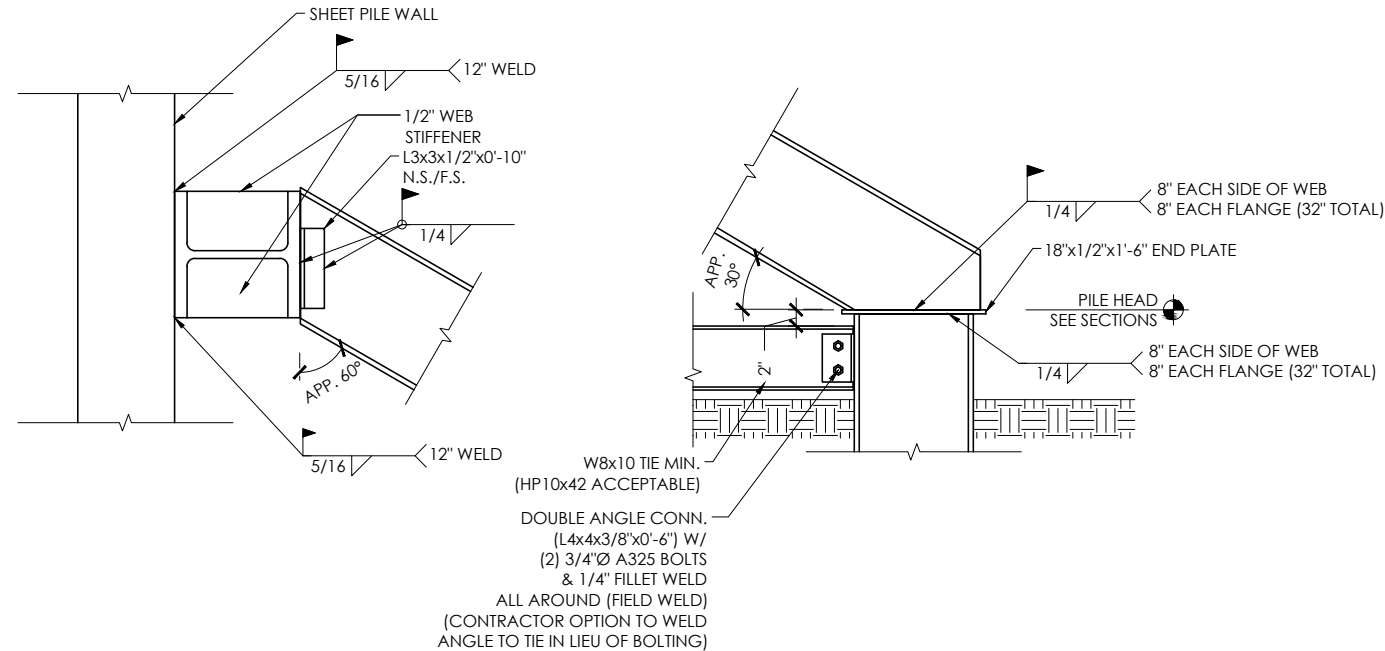
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CONNECTION DETAIL

SCALE: 1/2" = 1'-0"

3

S3

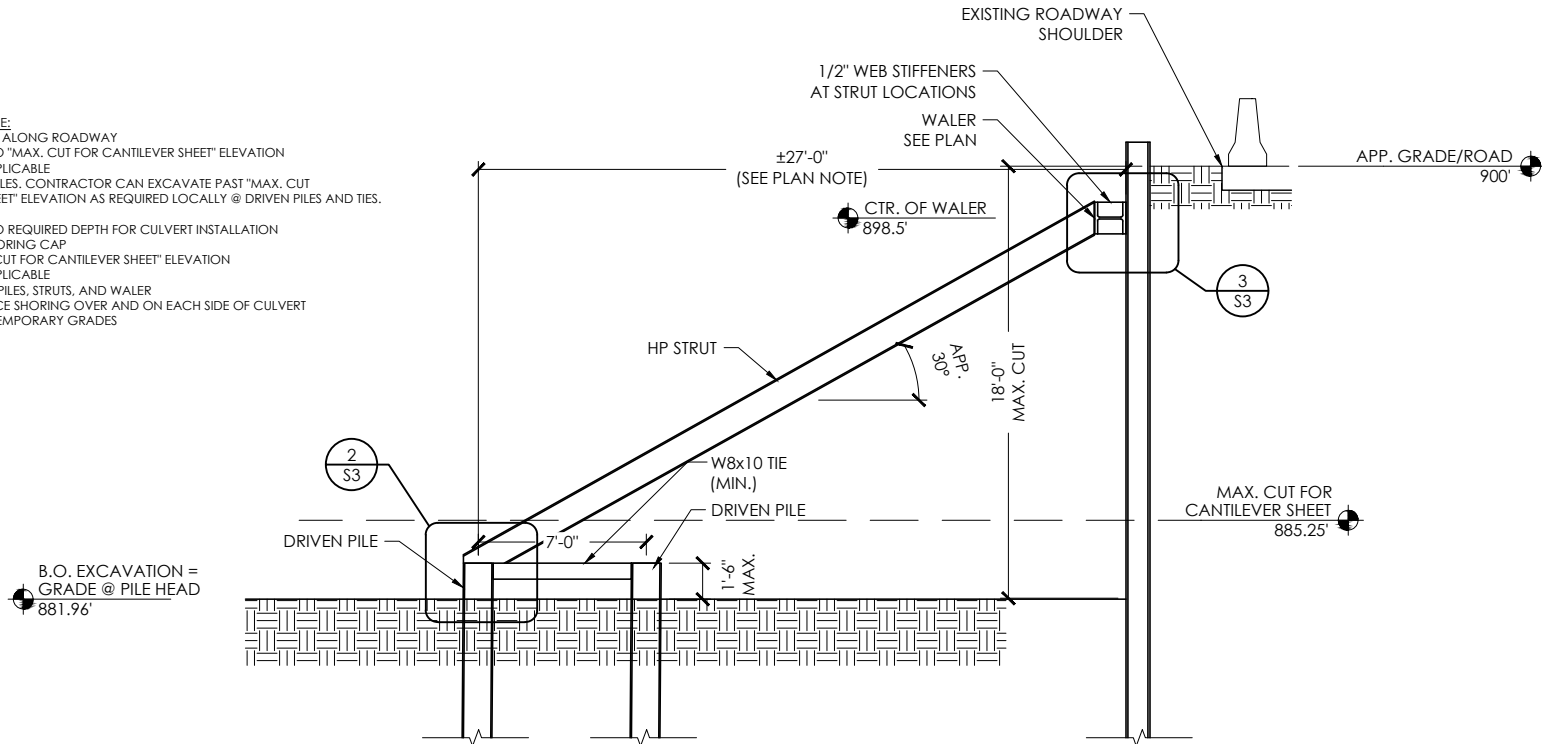
CONNECTION DETAIL

SCALE: 1/2" = 1'-0"

2

S3

- EXCAVATION PROCEDURE:
1. INSTALL PZ-40 SHEETS ALONG ROADWAY
 2. EXCAVATE DOWN TO "MAX. CUT FOR CANTILEVER SHEET" ELEVATION (SEE 1/S3) WHERE APPLICABLE
 3. INSTALL REACTION PILES, CONTRACTOR CAN EXCAVATE PAST "MAX. CUT FOR CANTILEVER SHEET" ELEVATION AS REQUIRED LOCALLY @ DRIVEN PILES AND TIES.
 4. INSTALL STRUTS
 5. EXCAVATE DOWN TO REQUIRED DEPTH FOR CULVERT INSTALLATION
 6. INSTALL CULVERT SHORING CAP
 7. BACKFILL TO "MAX. CUT FOR CANTILEVER SHEET" ELEVATION (SEE 1/S3) WHERE APPLICABLE
 8. REMOVE REACTION PILES, STRUTS, AND WALER
 9. INSTALL STAY IN PLACE SHORING OVER AND ON EACH SIDE OF CULVERT
 10. BACKFILL TO FINAL TEMPORARY GRADES



BRACED SHEET PILE SECTION
FOR CULVERT CONSTRUCTION

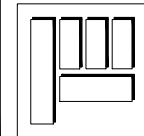
SCALE: 1/8" = 1'-0"

1

S3

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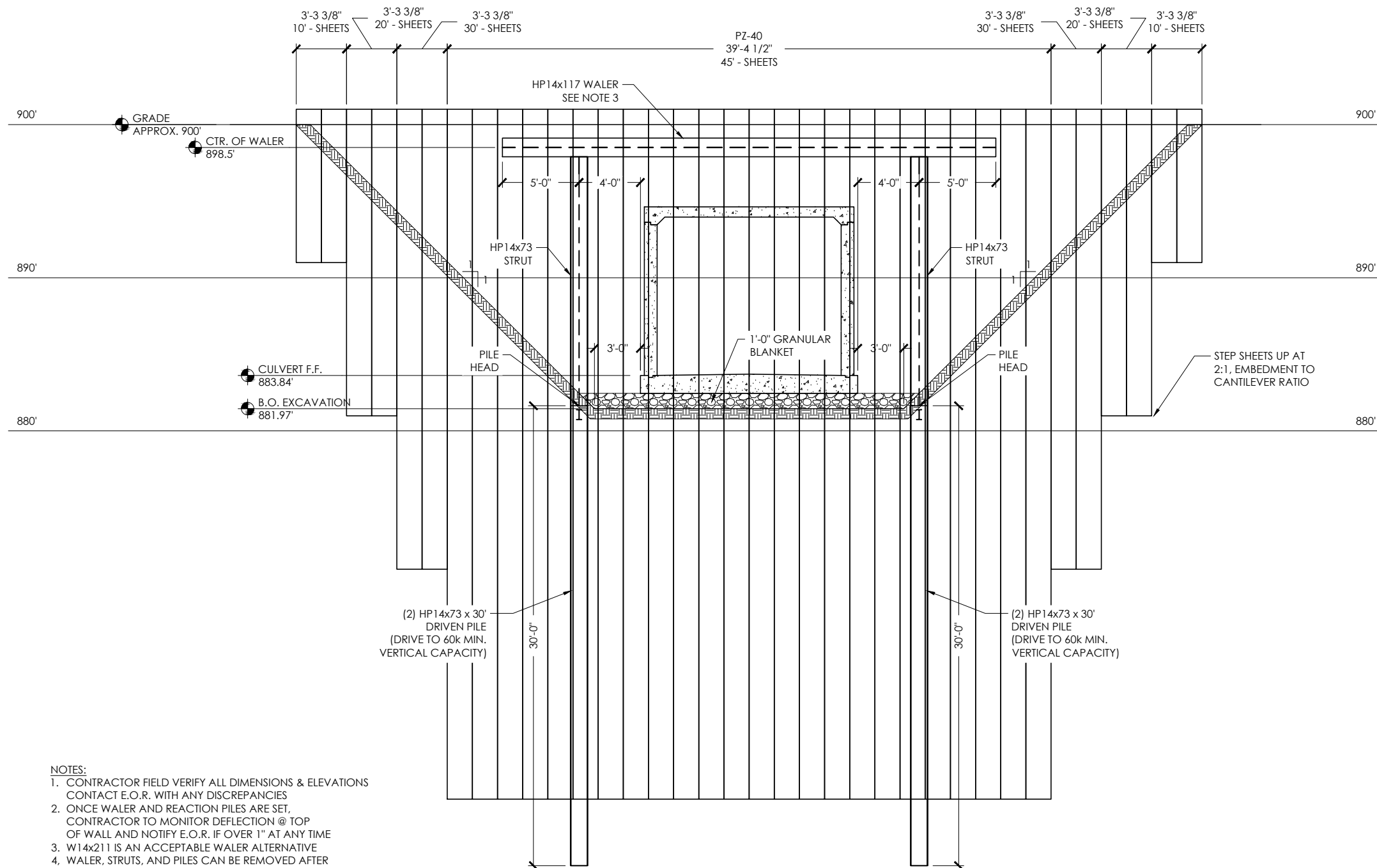


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S3



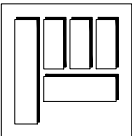
- NOTES:
1. CONTRACTOR FIELD VERIFY ALL DIMENSIONS & ELEVATIONS CONTACT E.O.R. WITH ANY DISCREPANCIES
 2. ONCE WALER AND REACTION PILES ARE SET, CONTRACTOR TO MONITOR DEFLECTION @ TOP OF WALL AND NOTIFY E.O.R. IF OVER 1" AT ANY TIME
 3. W14x211 IS AN ACCEPTABLE WALER ALTERNATIVE
 4. WALER, STRUTS, AND PILES CAN BE REMOVED AFTER EXCAVATION IS BACKFILLED TO THE POINT THAT NO CUT IS DEEPER THAN 14'-9"
 5. DIMENSION TO BE FIELD VERIFIED SO THAT STRUT IS @ APPROX. 30° ANGLE
 6. ALL STRUCTURAL STEEL TO BE A36 MIN., SHEETPILE TO BE 39ksi STEEL, MIN.

BRACED SHEET PILE ELEVATION
FOR CULVERT CONSTRUCTION

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

1
S4

FOR APPROVAL



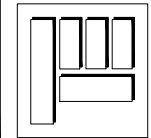
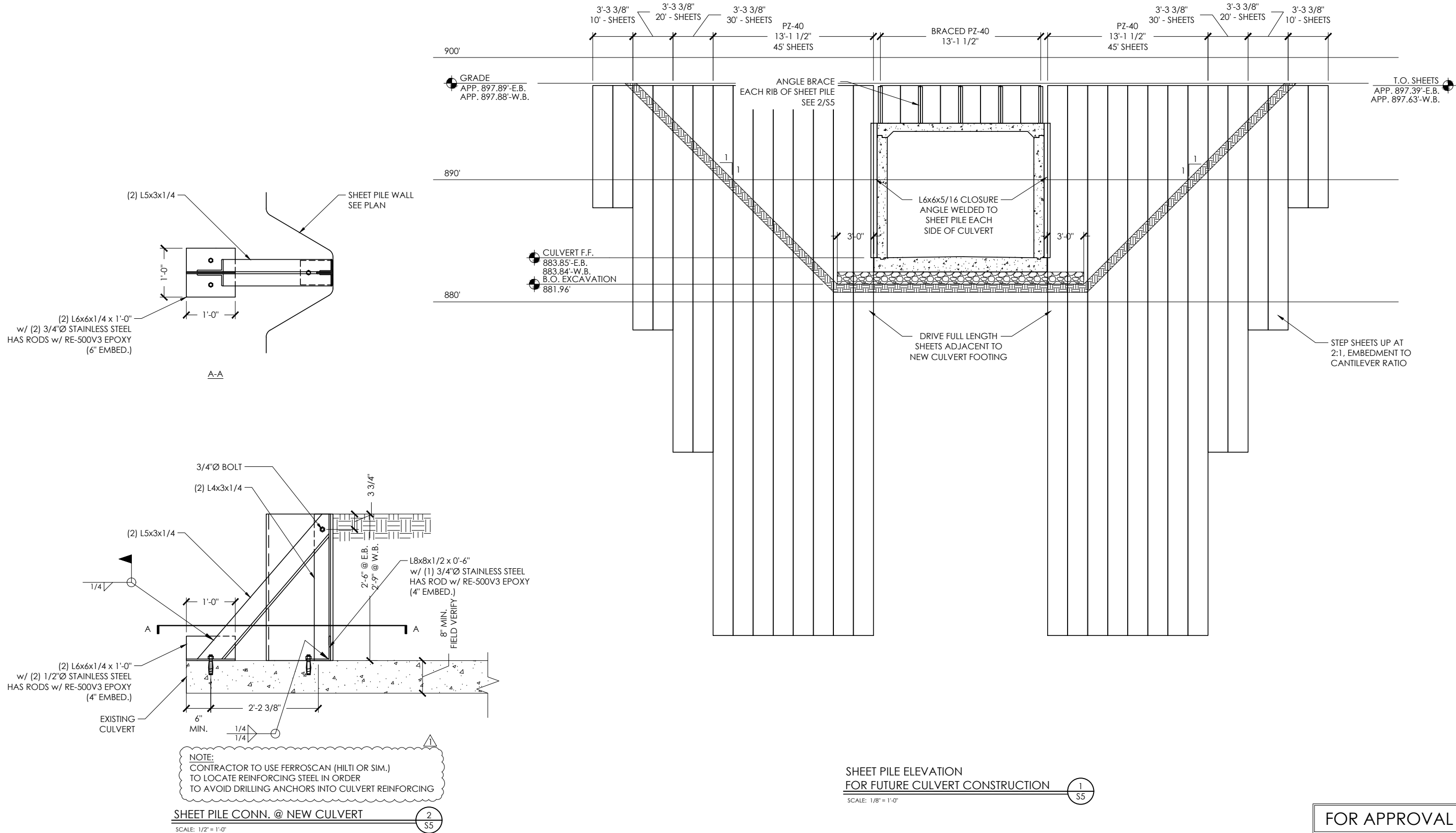
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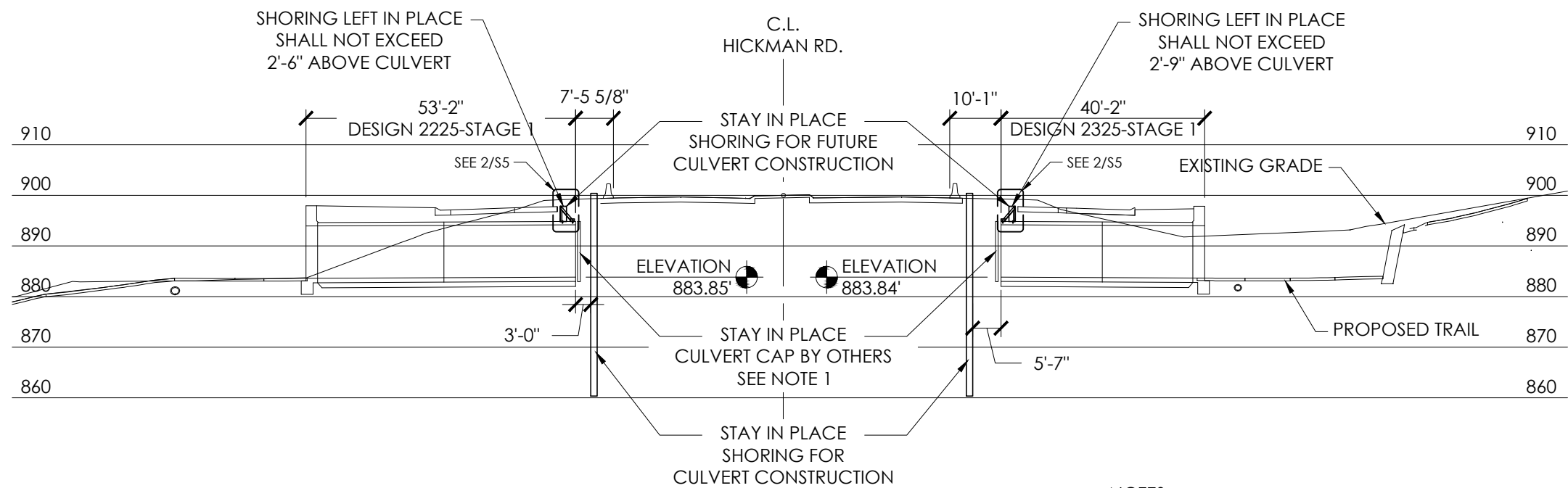
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CULVERT CROSS SECTION

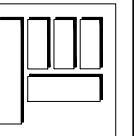
SCALE: N.T.S.

1
S6

NOTES:

1. STAY IN PLACE CULVERT CAP FOR BACKFILL OF SHORING UNTIL CONSTRUCTION OF FUTURE CULVERT IS BY OTHERS. WOOD 6X8 DL NO. 1 @ 6" O.C. SPANNING VERTICALLY OVER END OF CULVERT SHOWN FOR REFERENCE

FOR APPROVAL



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S6