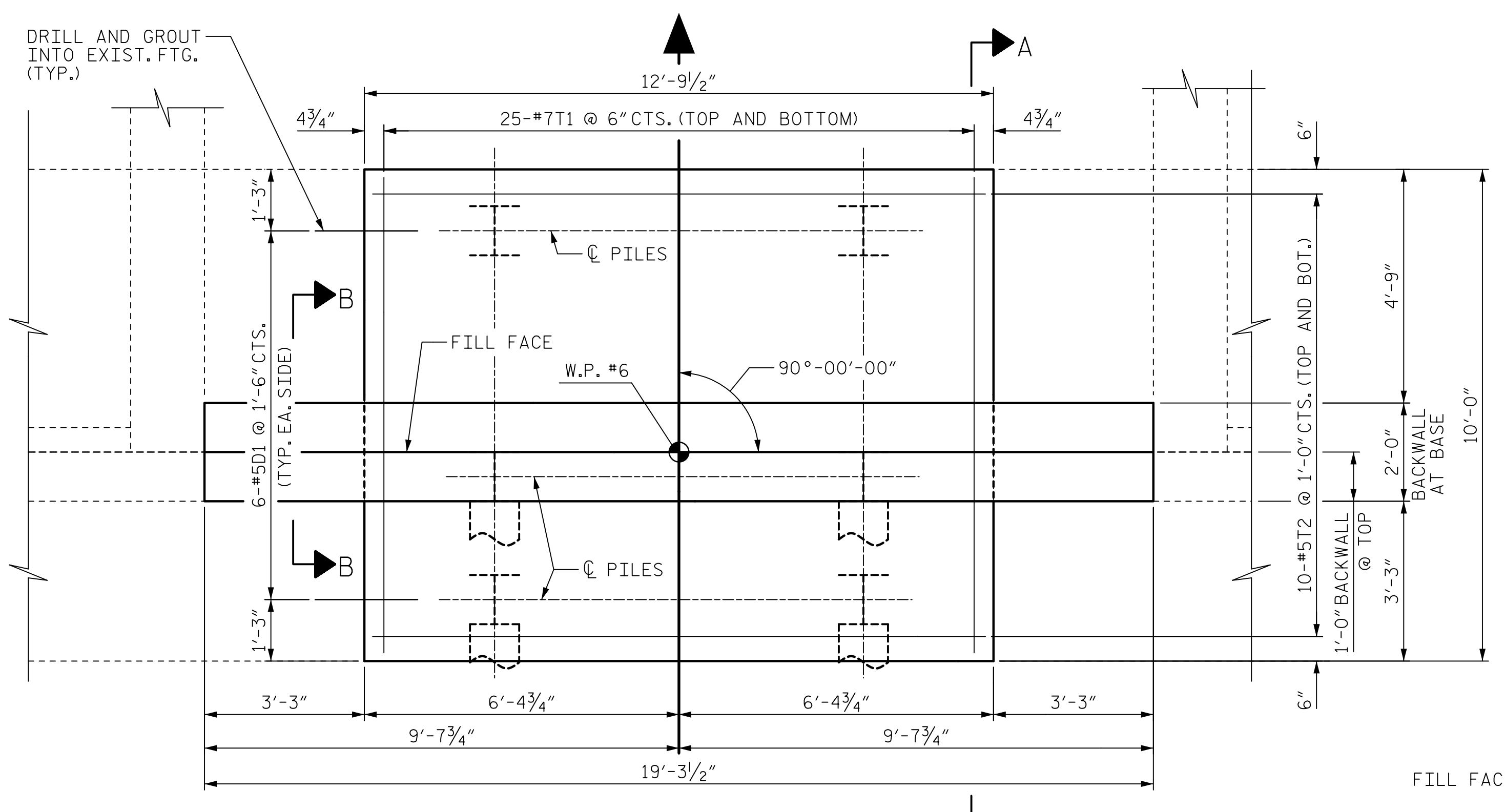
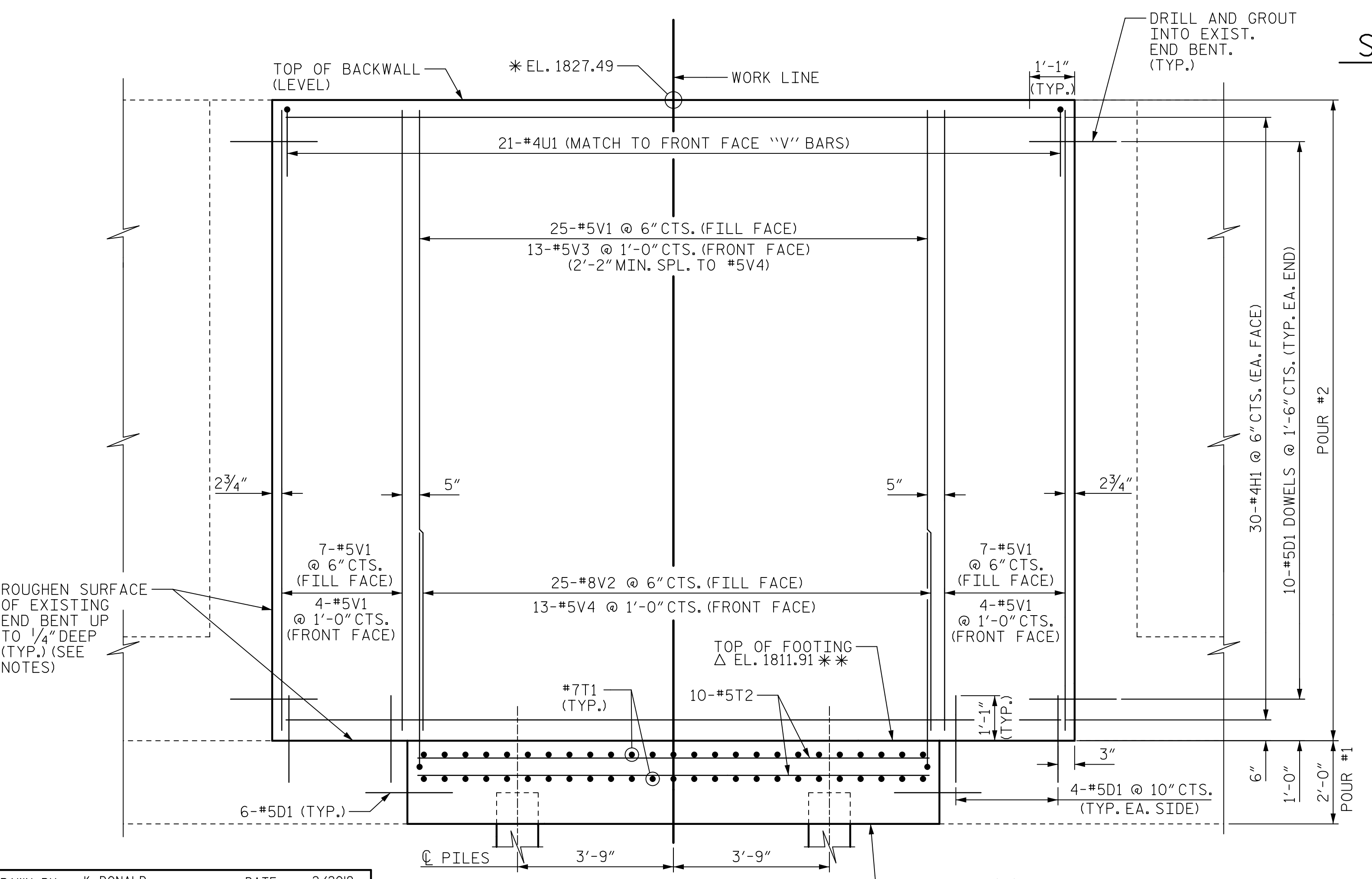


DATE: 2/27/2020  
TIME: 4:26:57 PM

USER: Merch Research  
DGN: R:\Structures\04 Drawings\01\_235\_15BPR20\_SMU\_EBR.dgn



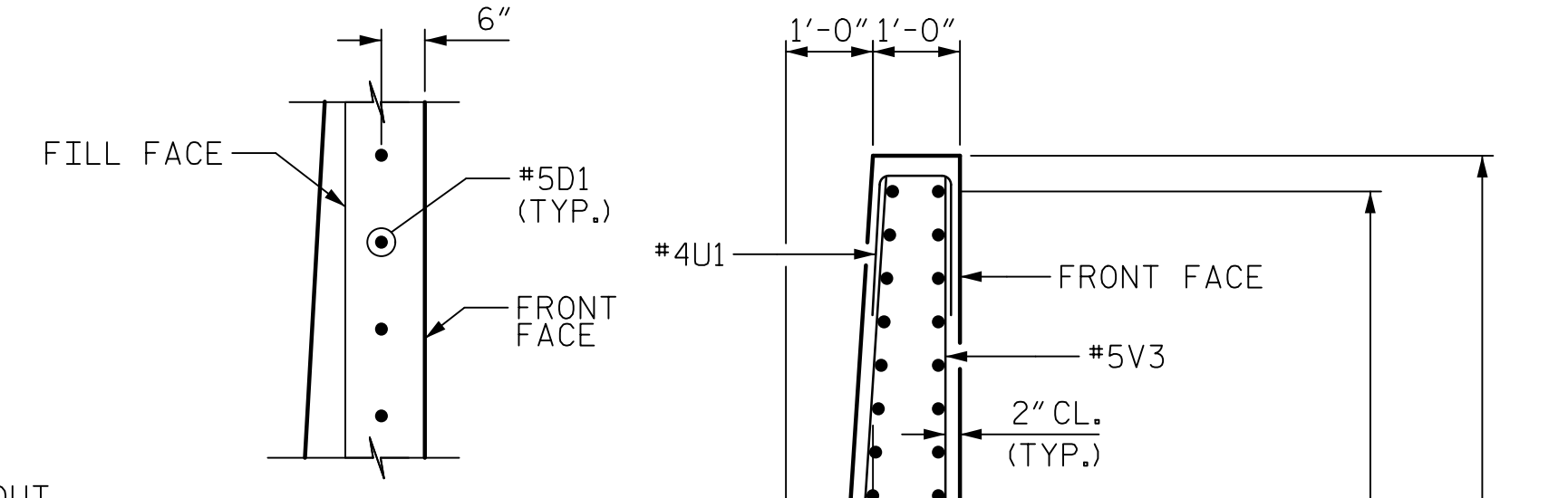
**PLAN OF FOOTING**  
FOR PILE LOCATIONS, SEE SHEET 1.  
BACKWALL REINFORCING NOT SHOWN.



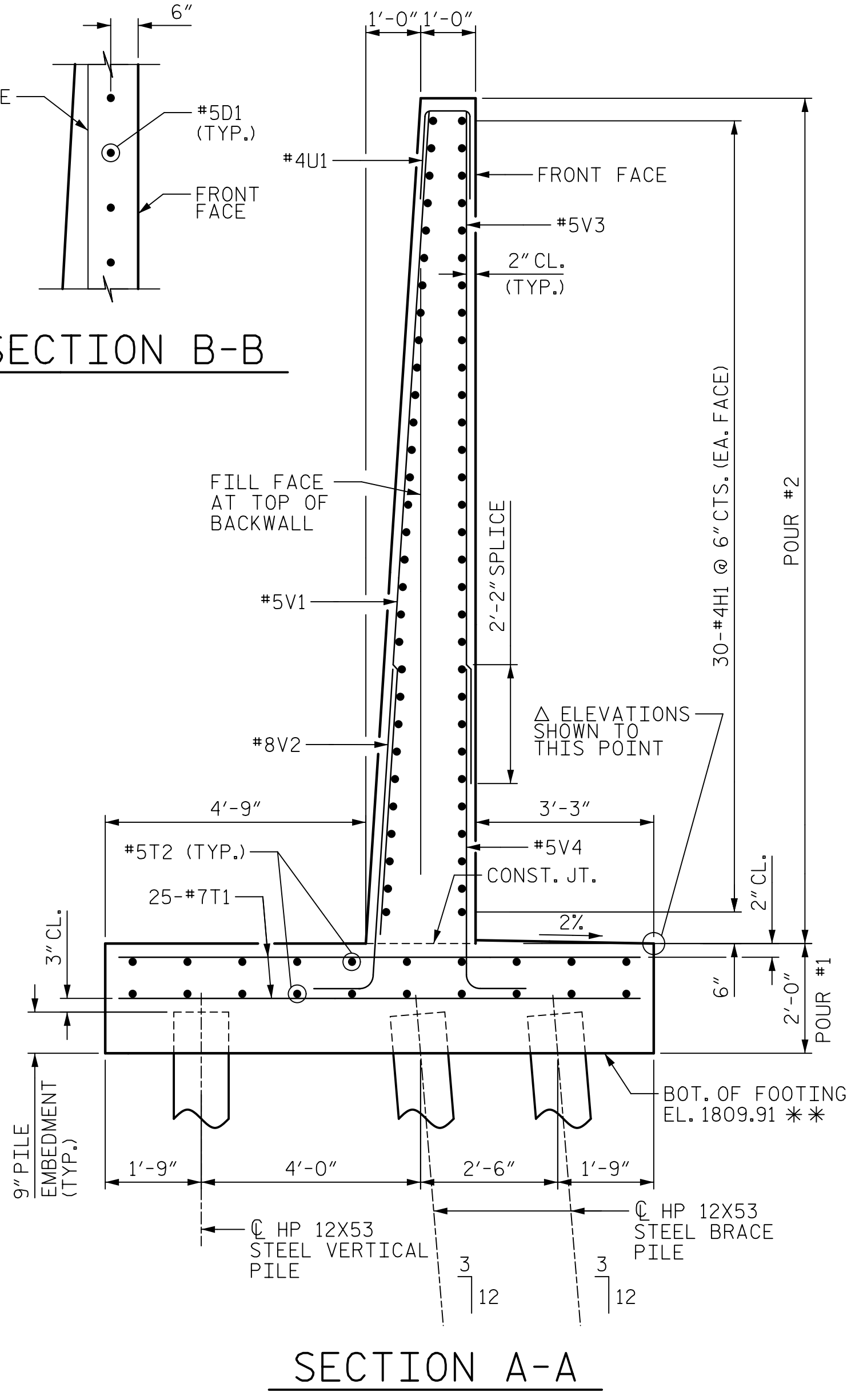
**ELEVATION**

**NOTES**

- EXISTING WINGWALL AND TOP OF EXISTING FOOTING AT SIDES TO BE CONNECTED TO NEW SECTION SHALL BE CLEANED AND SCARIFIED TO 1/4" DEEP.
- REINFORCEMENT MAY BE SLIGHTLY SHIFTED AS NECESSARY TO AVOID DOWELS.
- #5V1 AND #5V3 BARS IN BACKWALL SHALL BE PLACED 2" CLEAR FROM THE TOP OF THE BACKWALL.
- THE TOP SURFACE AREAS OF THE END BENT CAP SHALL BE CURED IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
- DOWELS SHALL BE DRILLED AND GROUTED WITH A TYPE 3A EPOXY IN ACCORDANCE WITH SECTION 1081 OF THE STANDARD SPECIFICATIONS.
- EXPOSED SURFACES OF END BENT SHALL BE PROTECTED WITH SILANE. SILANE SHALL NOT BE APPLIED UNTIL STAGES II AND III ARE COMPLETE. SEE SPECIAL PROVISIONS.
- INSTALL THE 2"Ø PIPE DRAIN THROUGH THE BACKWALL AS REQUIRED ON THE TYPICAL SECTION DETAILS SHEET. REINFORCING MAY BE SHIFTED AS NECESSARY TO CLEAR THE DRAIN.
- \* TOP OF BACKWALL ELEVATION SHALL MATCH TOP OF PROPOSED FLOORBEAM AT END BENT.
- \*\* ELEVATIONS SHOWN ARE BASED ON BEST AVAILABLE INFORMATION AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION. TOP AND BOTTOM OF PROPOSED FOOTING SHALL MATCH ELEVATIONS OF ADJACENT EXISTING FOOTINGS. ANY DEVIATIONS SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTING THE FOOTING.
- FOR SILANE TREATMENT, SEE SPECIAL PROVISIONS.



**SECTION B-B**



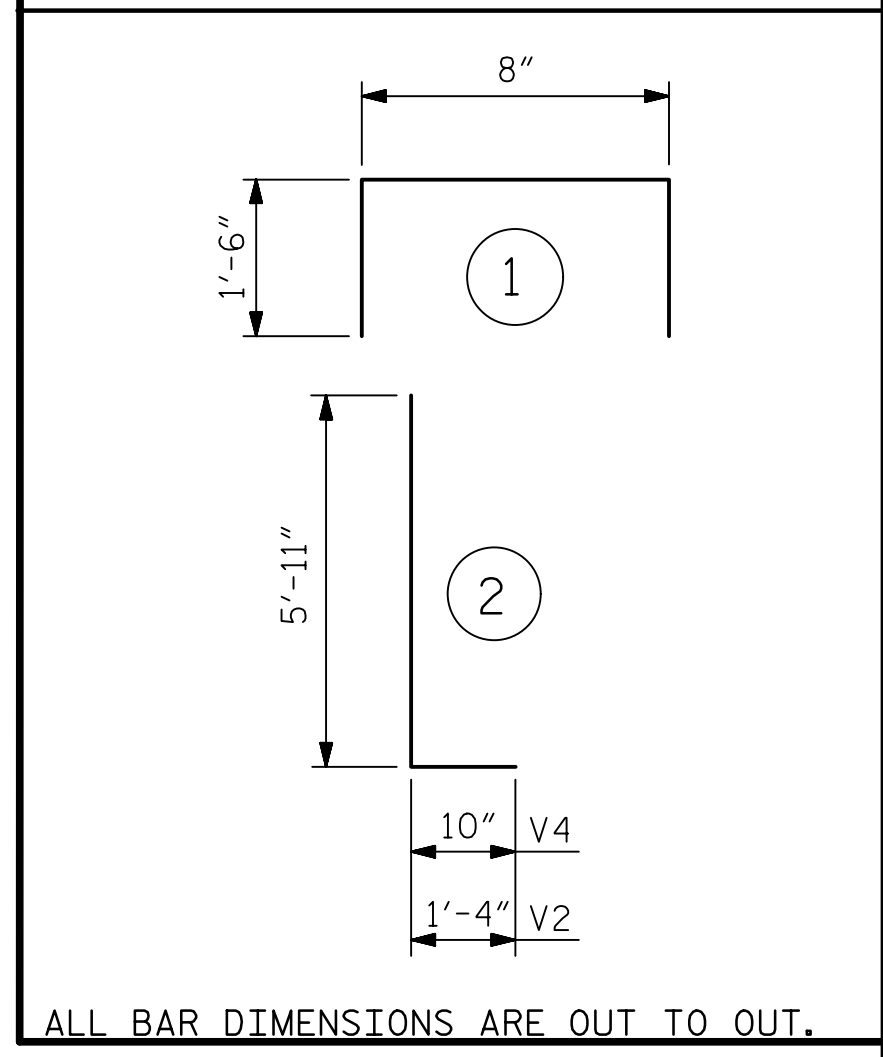
**SECTION A-A**

**BILL OF MATERIAL**

END BENT 2					
BAR	No.	SIZE	TYPE	LENGTH	WEIGHT
D1	40	5	STR	1'-9"	73
H1	60	4	STR	18'-11"	757
T1	50	7	STR	9'-8"	988
T2	20	5	STR	12'-5"	259
U1	21	4	1	3'-8"	51
V1	47	5	STR	15'-0"	735
V2	25	8	2	7'-3"	484
V3	13	5	STR	12'-5"	168
V4	13	5	2	6'-9"	92
TOTAL REINFORCING STEEL					3608 LBS.
TOTAL CLASS A CONCRETE					26.0 CY
POUR 1 (FOOTING)					9.5 CY
POUR 2 (WALL)					16.5 CY

HP 12 X 53 STEEL PILES		
No. 6		LIN. FT. = 90
STEEL PILE POINTS		6 EA.
PILE EXCAVATION		
IN SOIL		54 LF
NOT IN SOIL		6 LF
PILE DRIVING EQUIP. SETUP		6 EA.
SILANE TREATMENT		1900 SF.
SURFACE PREPARATION FOR SILANE		
		1900 SF.

**BAR TYPES**



ALL BAR DIMENSIONS ARE OUT TO OUT.

PROJECT NO. 15BPR.20  
HENDERSON COUNTY  
 STATION: 35+30.22 -L-  
 SHEET 2 OF 5

DRAWN BY : K. DONALD  
 CHECKED BY : G. COLS  
 DESIGNED BY : K. MUENCH  
 DESIGN CHECKED BY : J. SLOAN

DATE : 2/2019  
 DATE : 3/2019  
 DATE : 3/2019  
 DATE : 3/2019

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

SUBSTRUCTURE

END BENT 2  
 STAGE IA

REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. S-125  
 TOTAL SHEETS 129

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED