

NOTES

STIRRUPS IN PRECAST PIECES MAY BE SHIFTED AS NECESSARY TO CLEAR DOWELS AND GROUT PIPES.

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL CAST WITH THE BENT CAP SHALL BE GRADE 60 AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRECAST BENT CAPS.

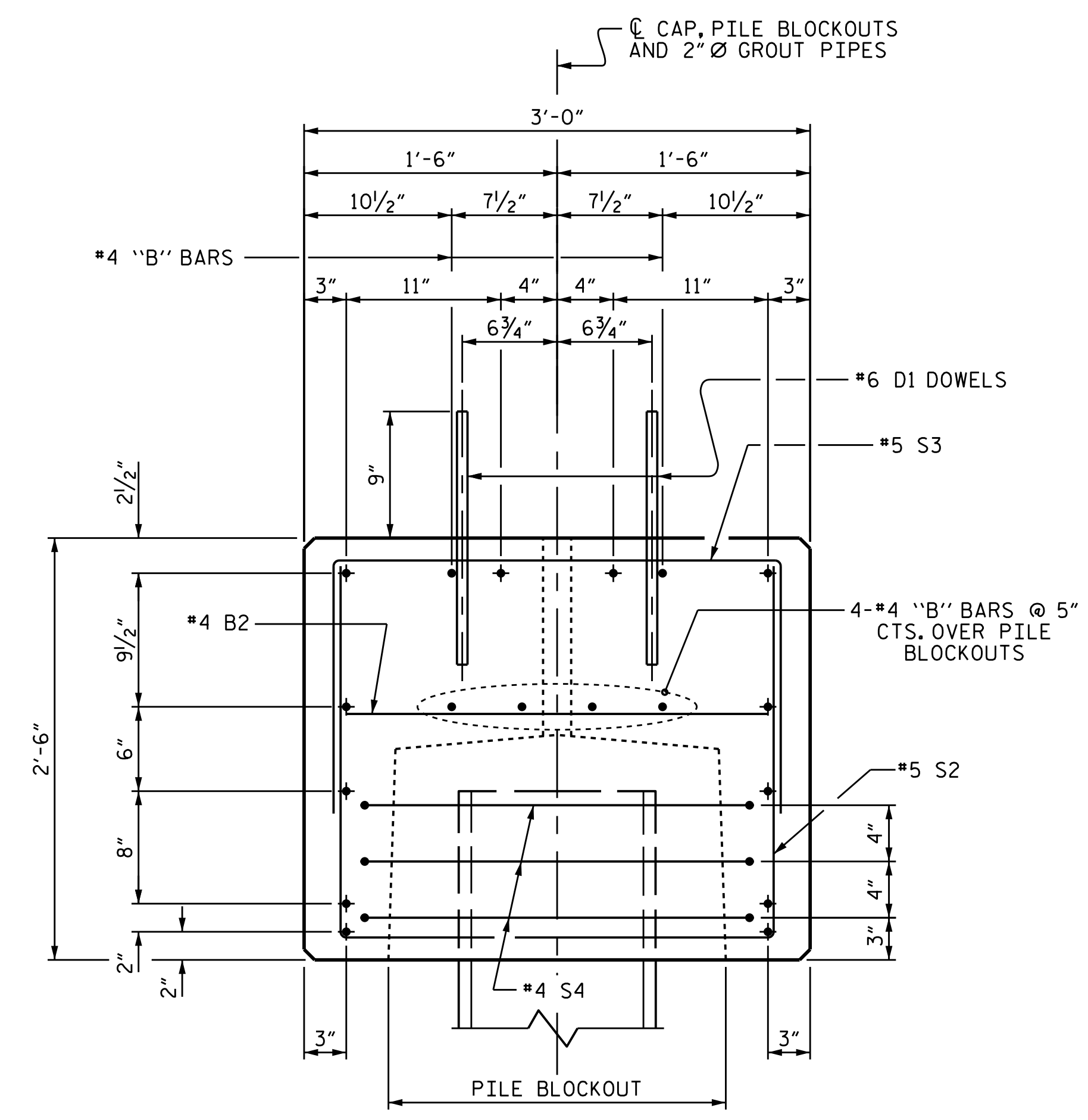
WHEN BENT CAPS ARE CAST, A HOLD-DOWN SYSTEM SHALL BE EMPLOYED TO PREVENT VOIDS FROM RISING OR MOVING SIDWAYS. AT LEAST SIX WEEKS PRIOR TO CASTING BENT CAPS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND COMMENT, DETAILED DRAWINGS OF THE PROPOSED HOLD-DOWN SYSTEM. IN ADDITION TO STRUCTURAL DETAILS, LOCATION AND SPACING OF THE HOLD-DOWNS SHALL BE INDICATED.

PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE ENDS OF THE BENT CAP SEGMENTS.

APPLY EPOXY PROTECTIVE COATING TO THE ENDS OF THE BENT CAP SEGMENTS.

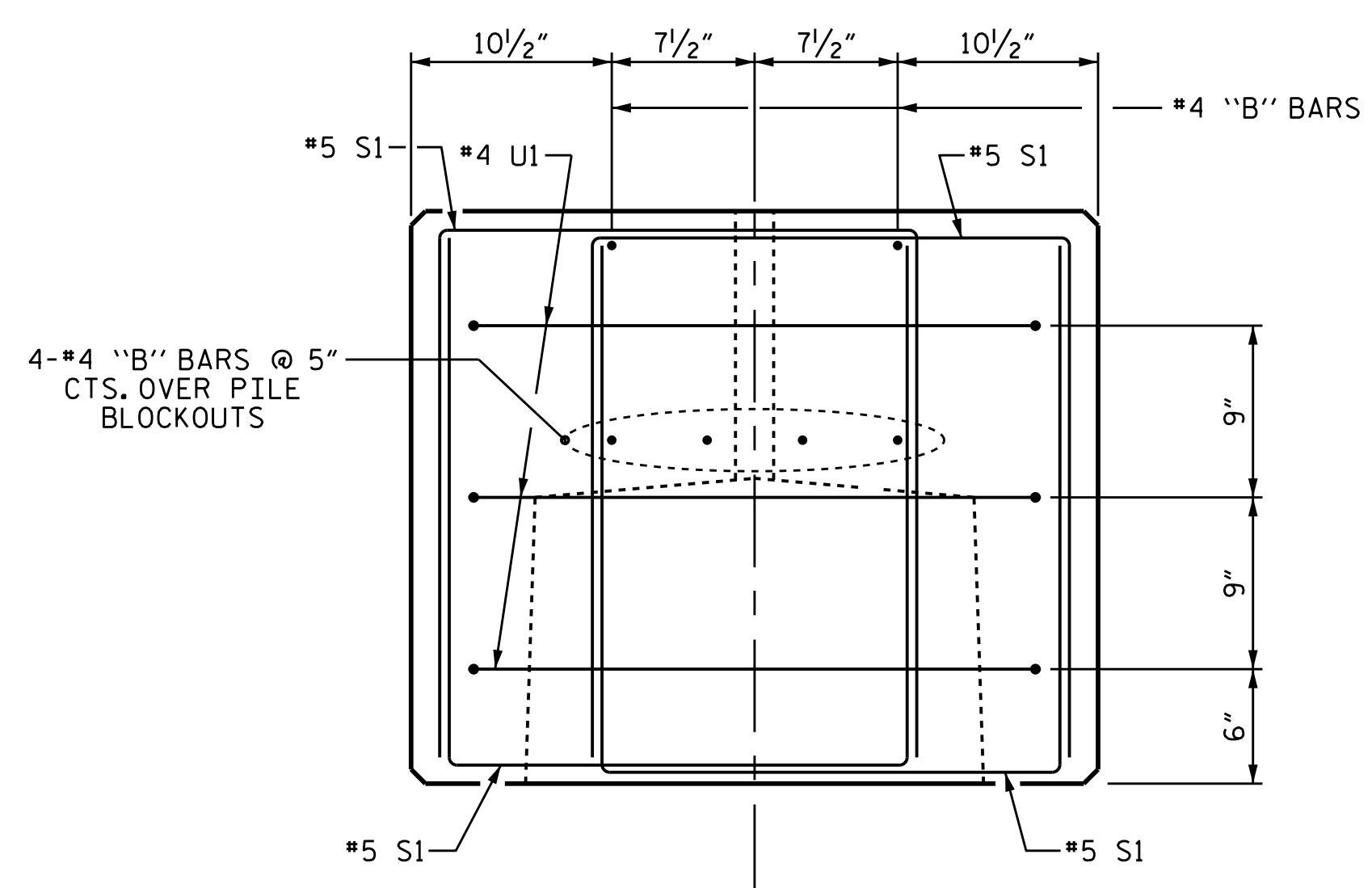
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE BENT CAPS SHALL BE DONE WHEN THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 3000 PSI.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A METHOD TO LIFT AND SUPPORT THE PRECAST CAP PIECES IN THE PROPER LOCATION AND ELEVATION AS SHOWN ON THE PLANS PRIOR TO PLACEMENT AND CURING OF THE GROUT IN THE PILE BLOCKOUTS. THE METHOD CHOSEN SHALL PROVIDE FOR A WATERTIGHT SEAL AT THE BOTTOM OF THE CAP UNTIL THE GROUT HAS HARDENED SO NO GROUT COMES IN CONTACT WITH THE STREAM.



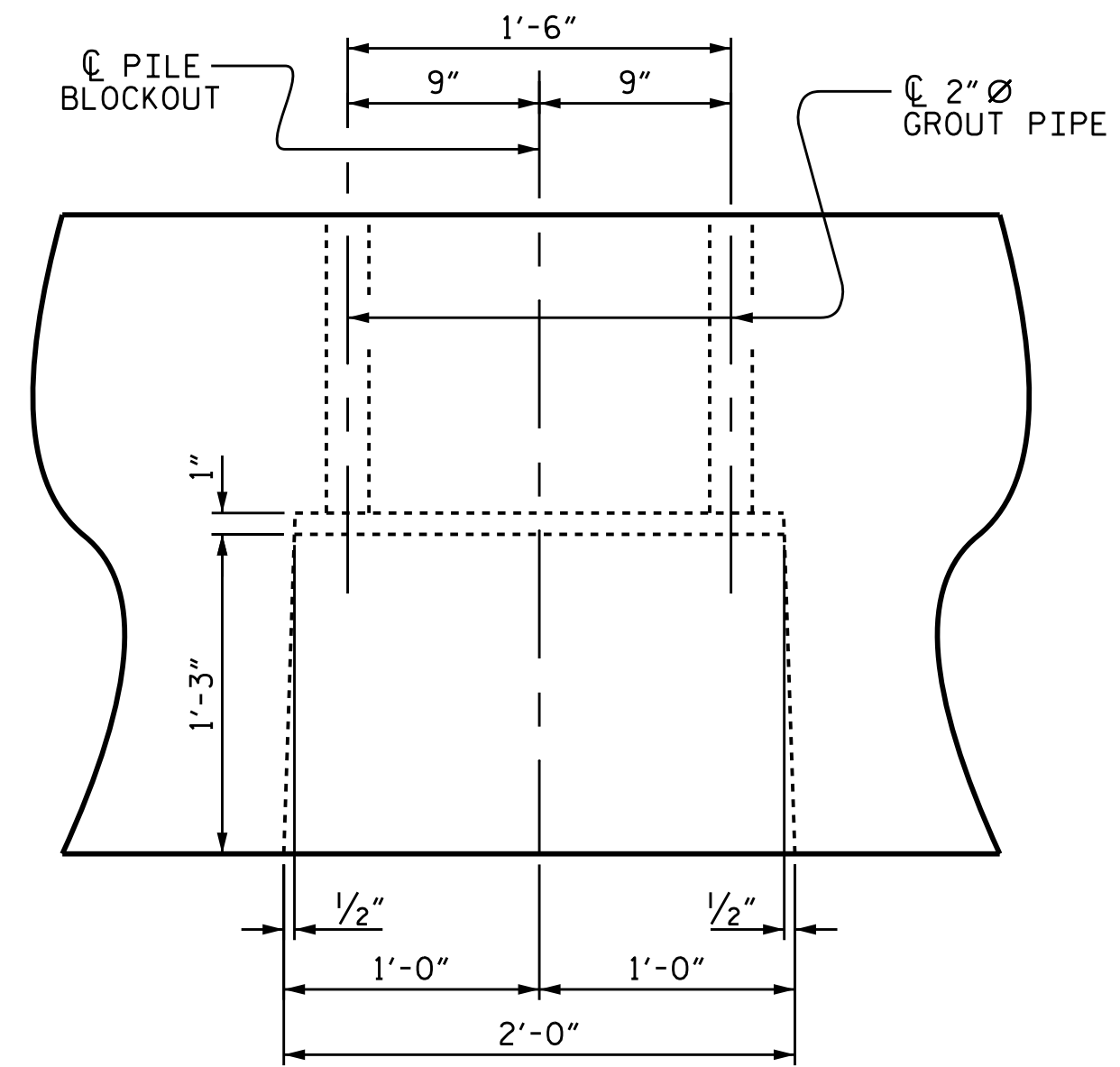
SECTION A-A

(SHOWING 0.6" Ø LOW RELAXATION STRAND LAYOUT) (12 STRANDS)

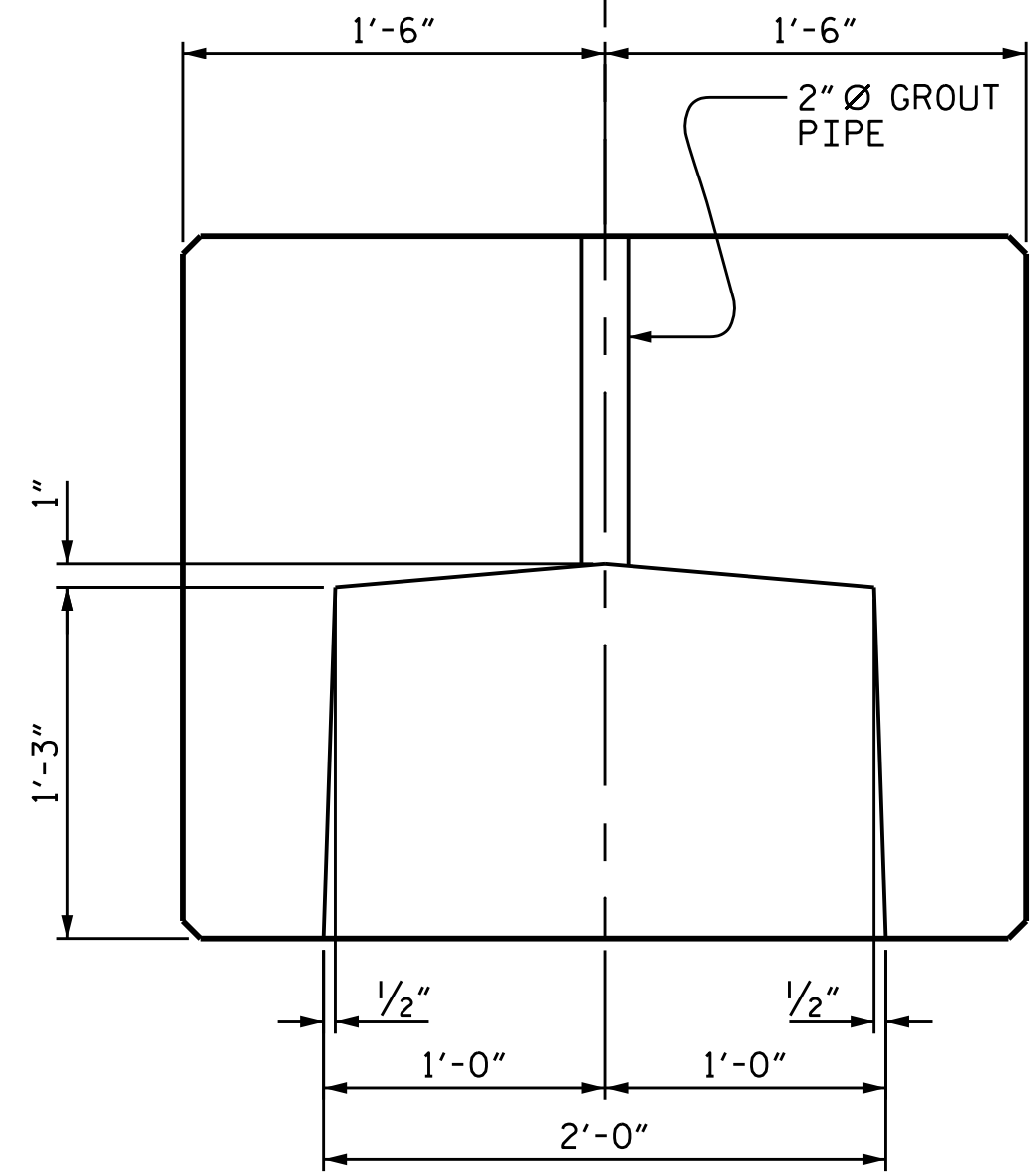


END OF CAP VIEW

(TYPICAL BOTH ENDS)



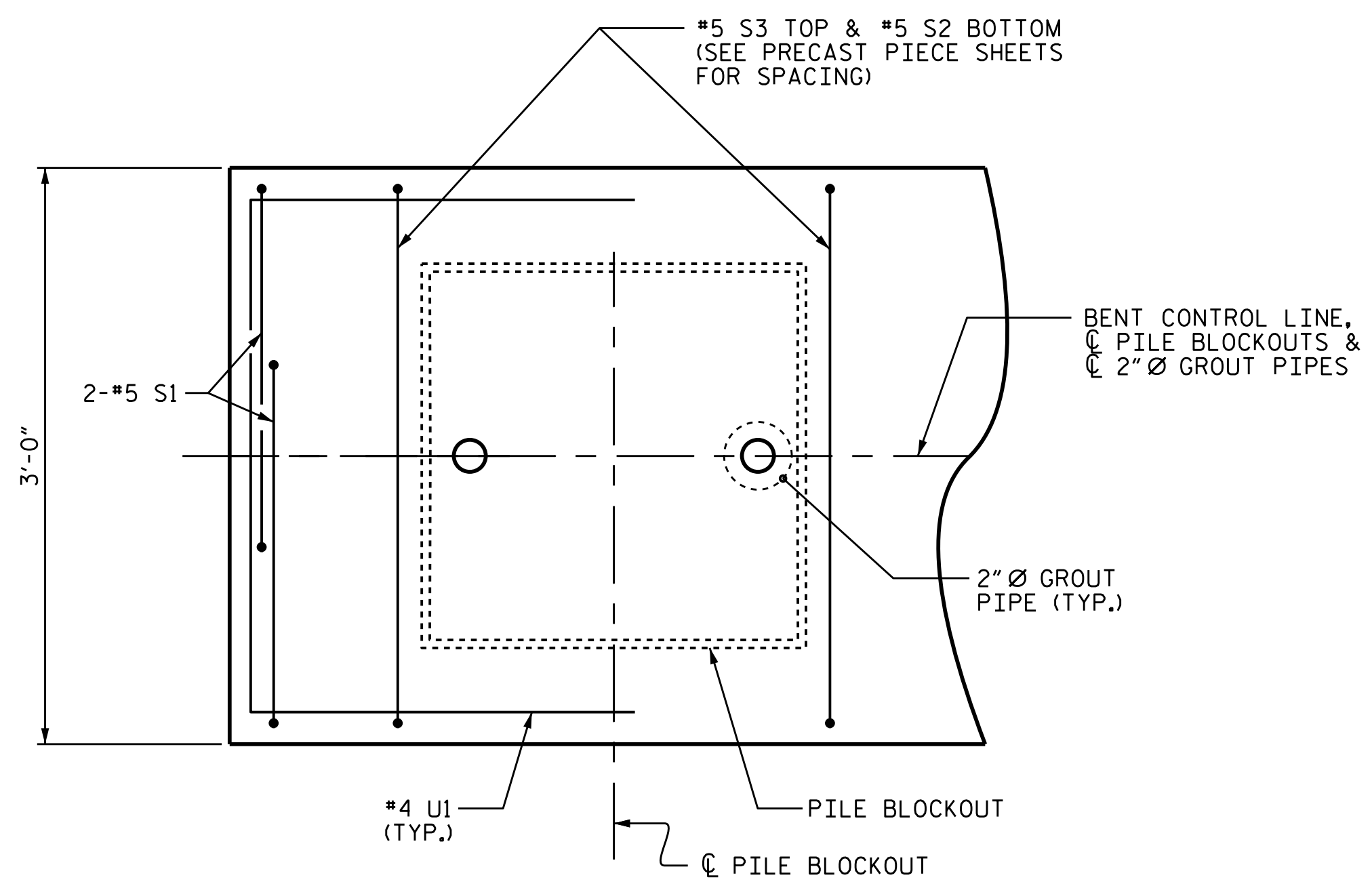
ELEVATION



SECTION

PILE BLOCKOUT DETAILS

(DIMENSIONS ARE TYPICAL EACH BLOCKOUT)



PART PLAN-END OF CAP

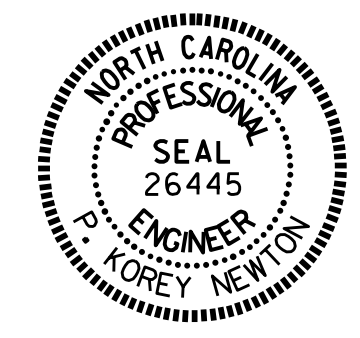
(TYPICAL BOTH ENDS)

PRECAST PRESTRESSED CONCRETE BENT CAPS (FOR ONE BENT)			
PIECE	LENGTH	NUMBER	TOTAL LENGTH
B-01	8'-11 1/2"	2	17'-11"
B-02	14'-5"	1	14'-5"
TOTAL		3	32.33'

HP 14 X 73 GALVANIZED STEEL PILES			
BENT 1	No. 7	LIN. FT.	315
BENT 2	No. 7	LIN. FT.	385
PILE DRIVING EQUIPMENT SETUP FOR HP 14 X 73 GALVANIZED STEEL PILES			
BENT 1		NO. 7	
BENT 2		NO. 7	
PILE REDRIVES			
BENT 1		NO. 4	
BENT 2		NO. 4	
STEEL PILE POINTS			
BENT 1		NO. 7	

PROJECT NO. B-5304
PENDER COUNTY
 STATION: 12+27.00 -L-

SHEET 5 OF 5



Designed by:
 P. Corey Newton
 11/23/2017

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
BENT No. 1 & 2
 (OPTIONAL PRESTRESSED CONCRETE BENT CAP)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-23E
1			3			TOTAL SHEETS 25
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ASSEMBLED BY : P. K. NEWTON	DATE : 9/21/17
CHECKED BY : O. T. NGUYEN	DATE : 9/22/17
DRAWN BY : MAA 3/12	
CHECKED BY : SHS 6/12	
REV. 4/17	MAA/THC