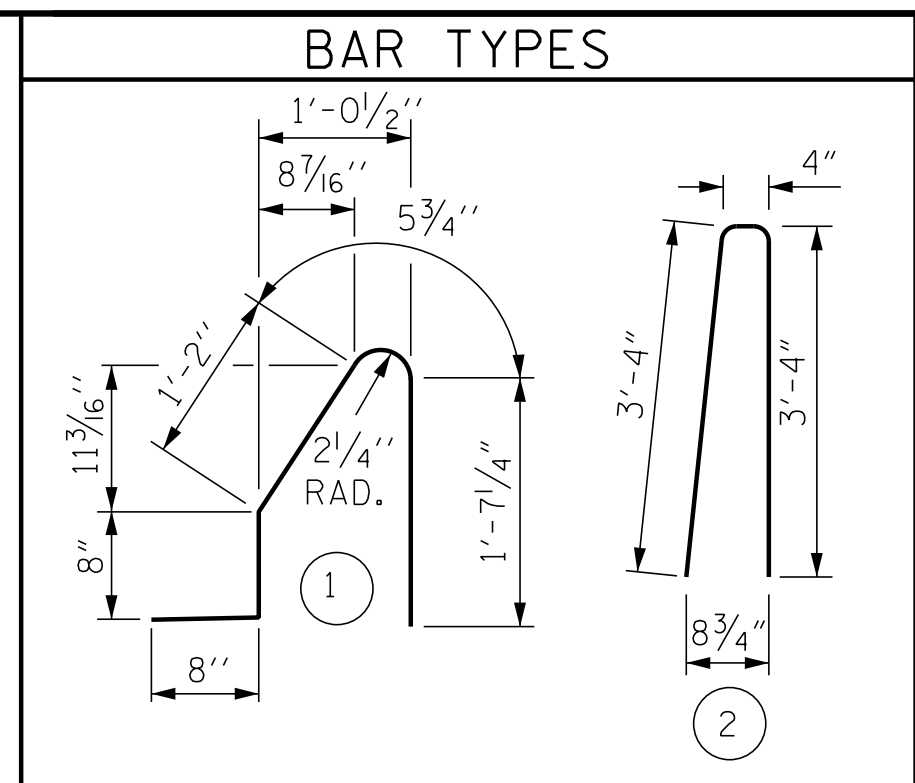


NOTES

BARRIER RAIL IN A CONTINUOUS UNIT SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THE UNIT HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF BARRIER RAIL SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

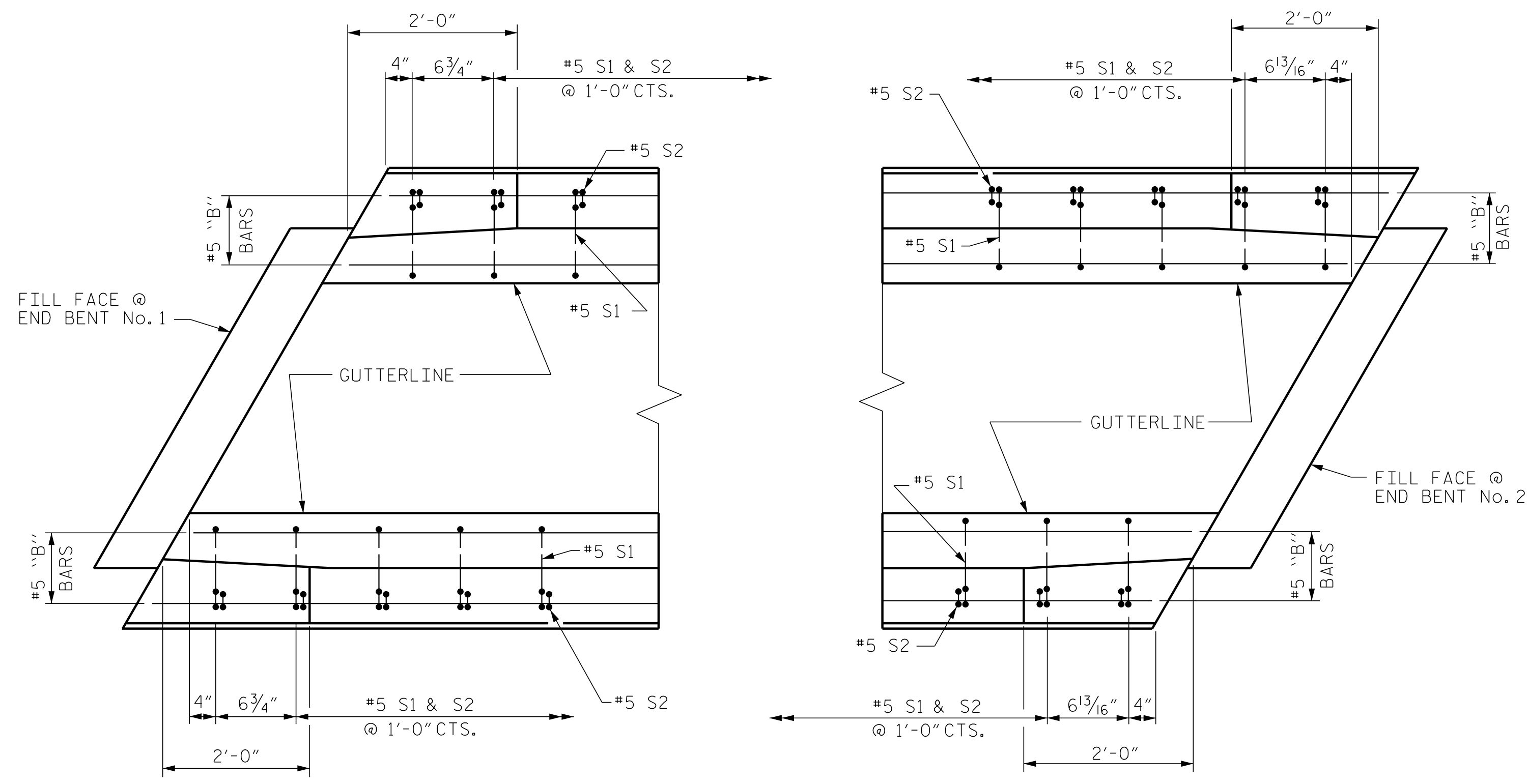


ALL BAR DIMENSIONS ARE OUT TO OUT

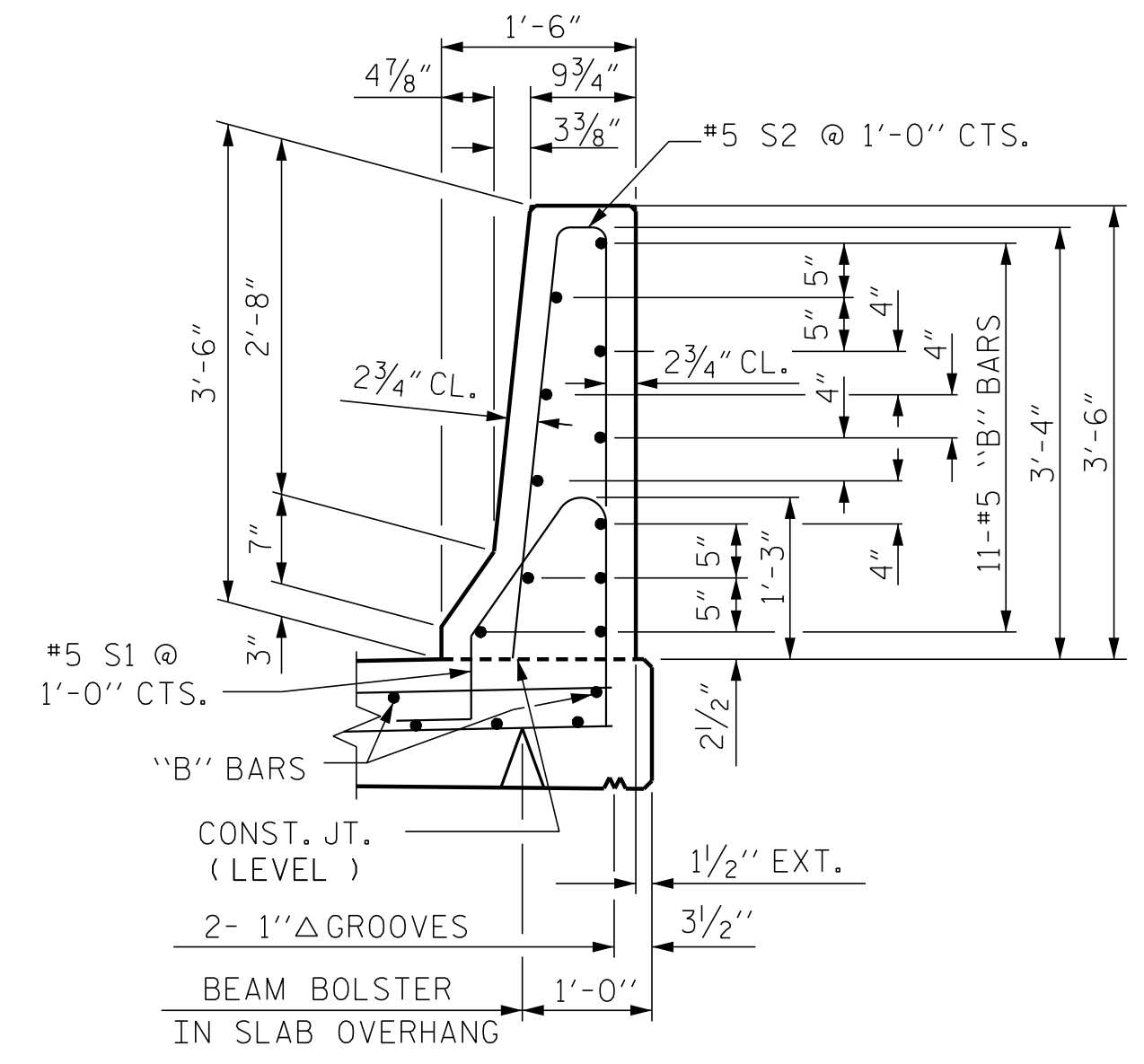
BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY

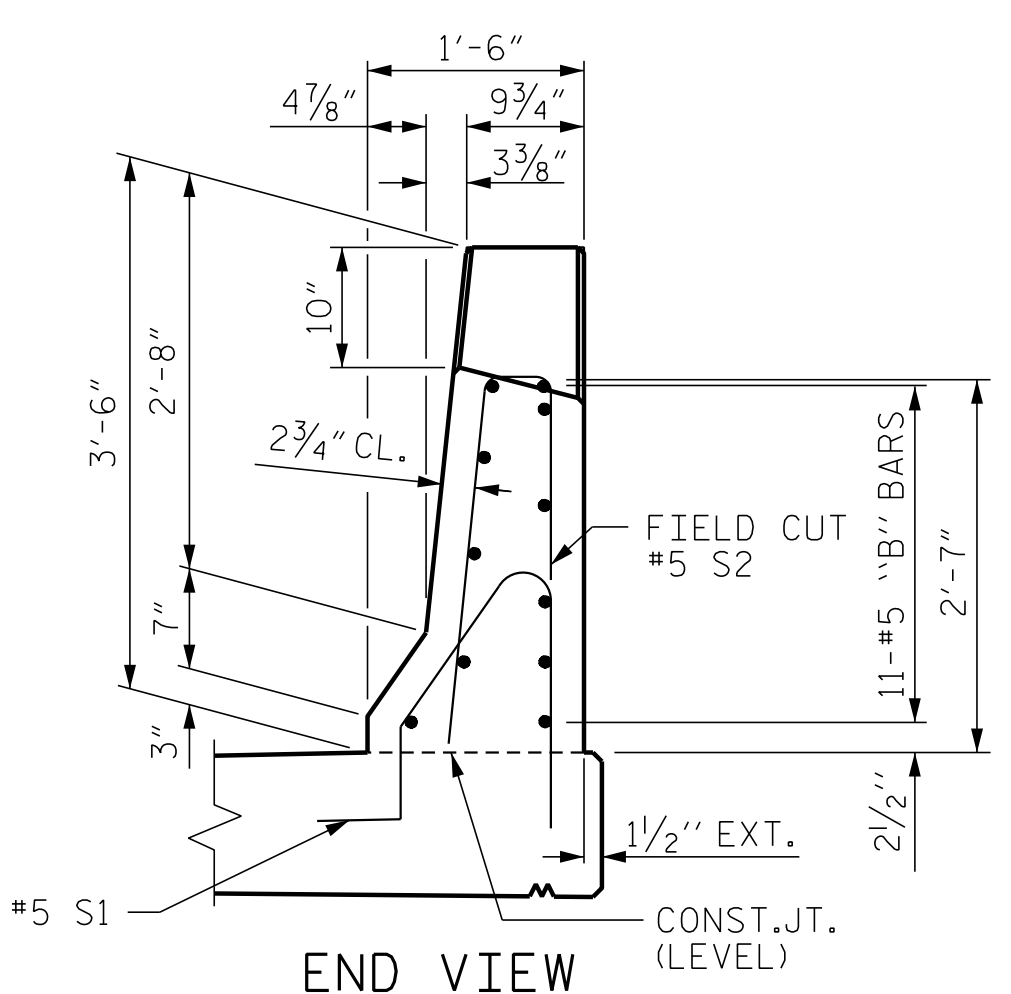
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	132	#5 STR	22'-7"	3109
* B2	88	#5 STR	13'-5"	1231
* S1	370	#5 1	4'-7"	1769
* S2	370	#5 2	7'-0"	2701
* EPOXY COATED REINFORCING STEEL				8,810 LBS.
CLASS AA CONCRETE				50.1 CU. YDS.
CONCRETE BARRIER RAIL				368.51 LIN. FT.



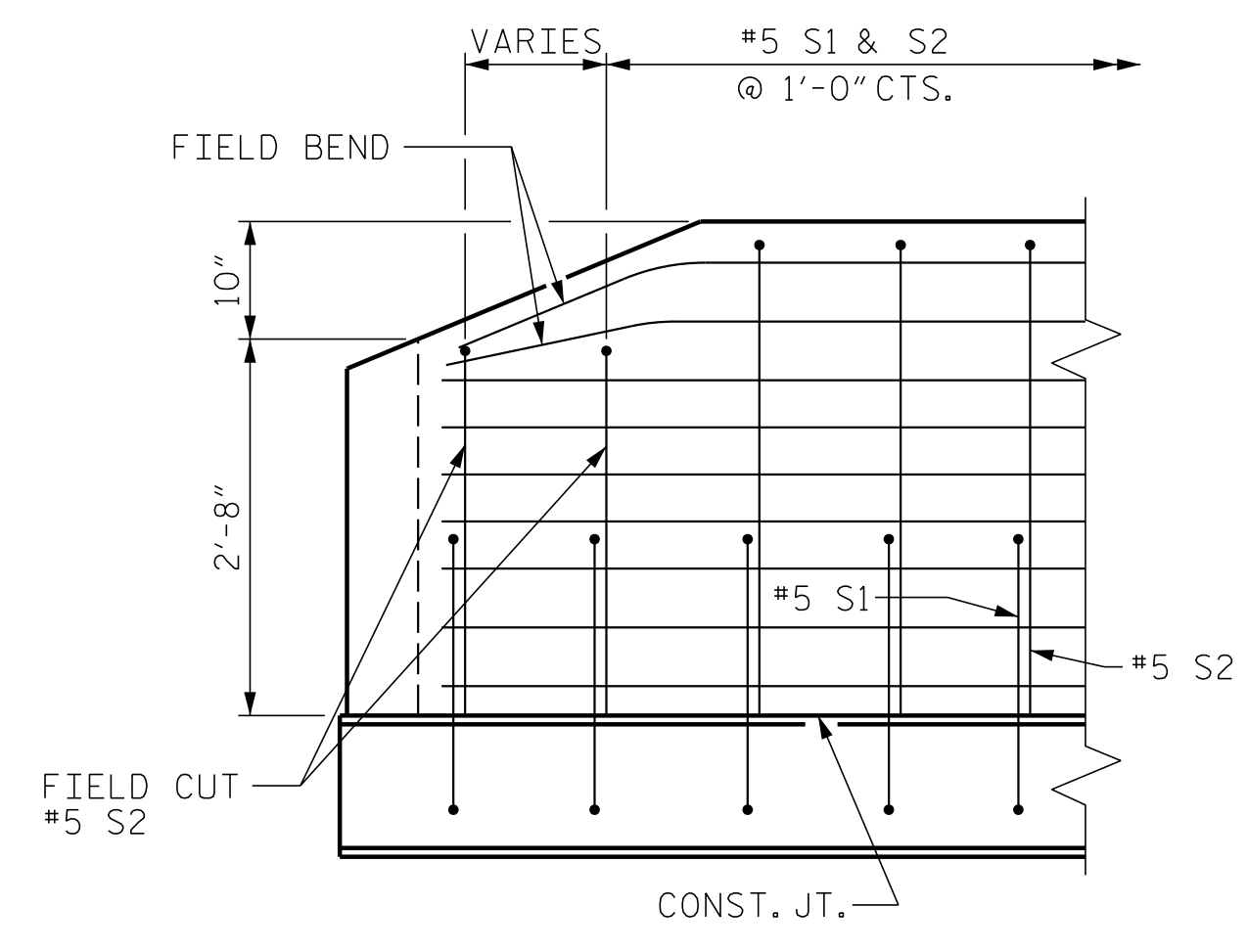
PLAN



SECTION THRU RAIL



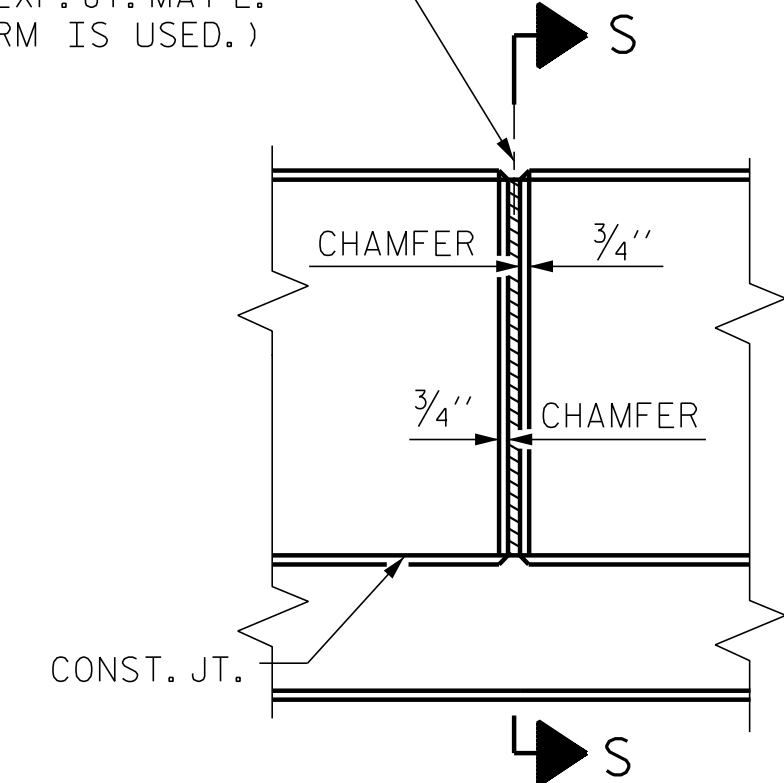
END VIEW



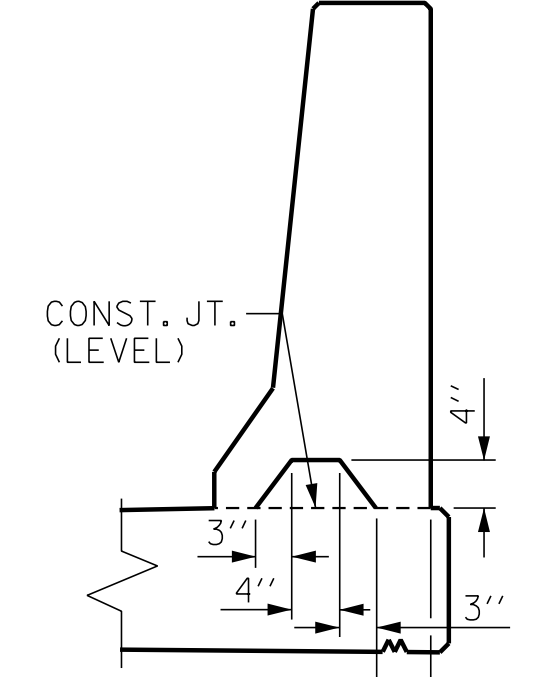
SIDE VIEW

END OF RAIL DETAILS

1/2" EXP. JT. MAT'L HELD IN PLACE WITH GALVANIZED NAILS.
(NOTE: OMIT EXP. JT. MAT'L WHEN SLIP FORM IS USED.)



ELEVATION AT EXPANSION JOINTS
BARRIER RAIL DETAILS



SECTION S-S
AT DAM IN OPEN JOINT
(THIS IS TO BE USED ONLY WHEN SLIP FORM IS USED)

PROJECT NO. R-5311A
HERTFORD COUNTY
STATION: 25+47.22 -Y1-

SHEET 2 OF 2

ENGINEER OF RECORD:
DocuSign by: *David Charles Hunt*
SEAL 14091
BLACK ENGINEER
CHARLES HUNT
12/21/2016
ETHERILL ENGINEERING

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
CONCRETE BARRIER RAIL

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			61
2			4			

P:\2015\A-5311A\Structures\Str 1 -Y1-DGN\WR-5311A_STR_Y1_BR.dgn 12/20/2016 1:07:33 PM

DRAWN BY: J. PENDERGRAFT/DAH DATE: 3-16
CHECKED BY: B.C. HUNT DATE: 4-16

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED