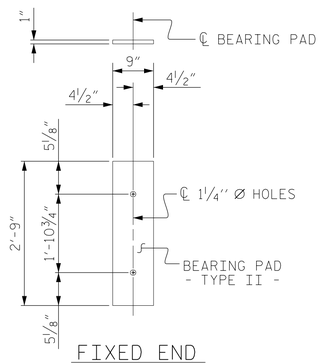
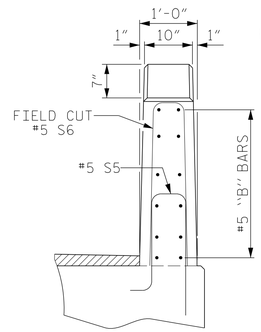


FIXED END

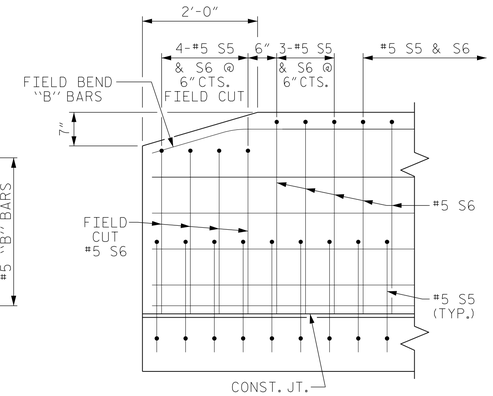
(TYPE II - 48 REQ'D)

ELASTOMERIC BEARING DETAILS

ELASTOMER IN ALL BEARINGS SHALL BE 60 DUROMETER HARDNESS.

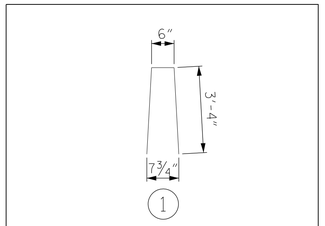


END VIEW



SIDE VIEW

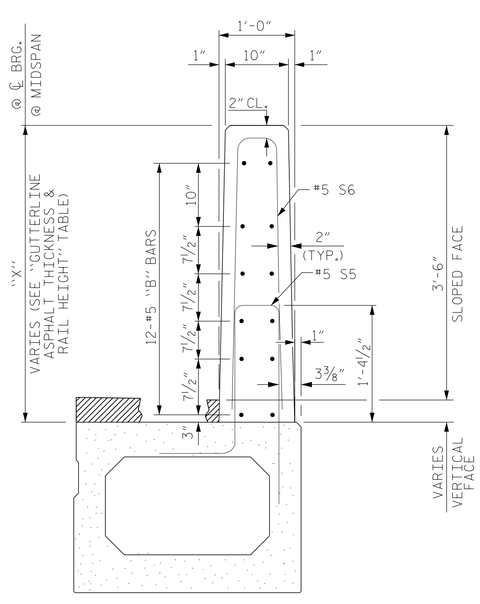
END OF RAIL DETAILS



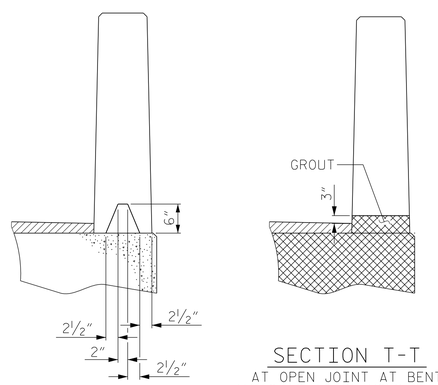
BAR TYPE

BAR DIMENSIONS ARE OUT TO OUT

BOX BEAM UNITS REQUIRED			
	NUMBER	LENGTH	TOTAL LENGTH
90' UNIT			
EXTERIOR B.B.	2	90'-0"	180'-0"
INTERIOR B.B.	10	90'-0"	900'-0"
TOTAL	12	———	1080'-0"
60' UNIT			
EXTERIOR B.B.	2	60'-0"	120'-0"
INTERIOR B.B.	10	60'-0"	600'-0"
TOTAL	12	———	720'-0"



SECTION THRU RAIL

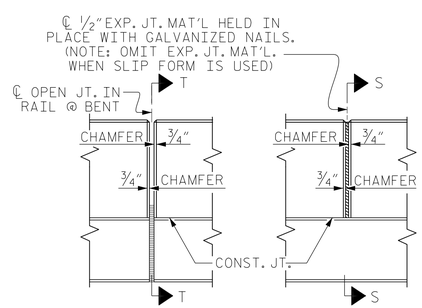


SECTION S-S

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

SECTION T-T

AT OPEN JOINT AT BENT
(THIS IS TO BE USED WHERE
FOAM JOINT IS NOT USED)



ELEVATION AT EXPANSION JOINTS

VERTICAL CONCRETE BARRIER RAIL DETAILS

BILL OF MATERIAL FOR VERTICAL CONCRETE BARRIER RAIL-SPAN A					
BAR	BARS PER PAIR OF EXTERIOR UNITS	SIZE	TYPE	LENGTH	WEIGHT
	90' UNIT				
✳B10	192	#5	STR	12'-10"	2570
✳ S6	242	#5	1	7'-2"	1809
✳EPOXY COATED REINFORCING STEEL			LBS.		4379
CLASS AA CONCRETE			CU.YDS.		23.1
TOTAL VERTICAL CONCRETE BARRIER RAIL			LN. FT.		180.1
BAR	BARS PER PAIR OF EXTERIOR UNITS	SIZE	TYPE	LENGTH	WEIGHT
	60' UNIT				
✳ B7	96	#5	STR	16'-8"	1669
✳ S6	162	#5	1	7'-2"	1211
✳EPOXY COATED REINFORCING STEEL			LBS.		2880
CLASS AA CONCRETE			CU.YDS.		15.7
TOTAL VERTICAL CONCRETE BARRIER RAIL			LN. FT.		120.1

GUTTERLINE ASPHALT THICKNESS & RAIL HEIGHT				
36' (SE)	ASPHALT OVERLAY THICKNESS @ MID-SPAN		RAIL HEIGHT @ MID-SPAN	
	LEFT ✳✳	RIGHT ✳✳	LEFT ✳✳	RIGHT ✳✳
60' UNITS	2½"	2⅞"	3'-8½"	3'-8⅞"
90' UNITS	1¾"	1½"	3'-7¾"	3'-7½"

RAIL HEIGHT @ ℄ BRG. "X"			
	EB1	B1	EB2
LT.✳✳	3'-10¾"	3'-10⅜"	3'-8½"
RT.✳✳	3'-10"	3'-10½"	3'-9⅛"

✳✳LT. AND RT. DESIGNATIONS TAKEN LOOKING UPSTATION.

NORTH CAROLINA PROFESSIONAL SEAL 11725 ENGINEER DAVID R. RUGGLES

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT NO. 17BP.5.R.56

WARREN COUNTY

STATION: 15+60.00 -L-

SHEET 7 OF 7

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

3'-0" X 2'-9" PRESTRESSED CONCRETE BOX BEAM UNIT

STEWART
Firm License No. C-1051
421 Fayetteville St,
Suite 400
Raleigh, NC 27601
T 919.380.8750
www.stewartinc.com

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-11
1			3			TOTAL SHEETS
2			4			21

DRAWN BY:	H.ASSFOURA	DATE :	11/14
CHECKED BY:	P.JACOB	DATE :	11/14
DESIGN ENGINEER OF RECORD:	D.RUGGLES	DATE :	11/15

3/8/2016
..\400.011.17BP5R56_SMU_SP07.dgn
USER:jloftus