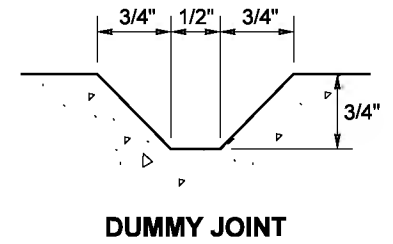
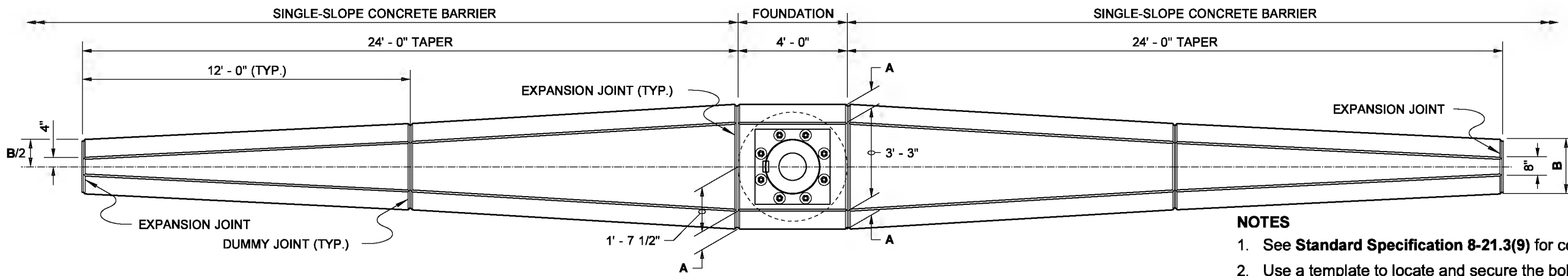
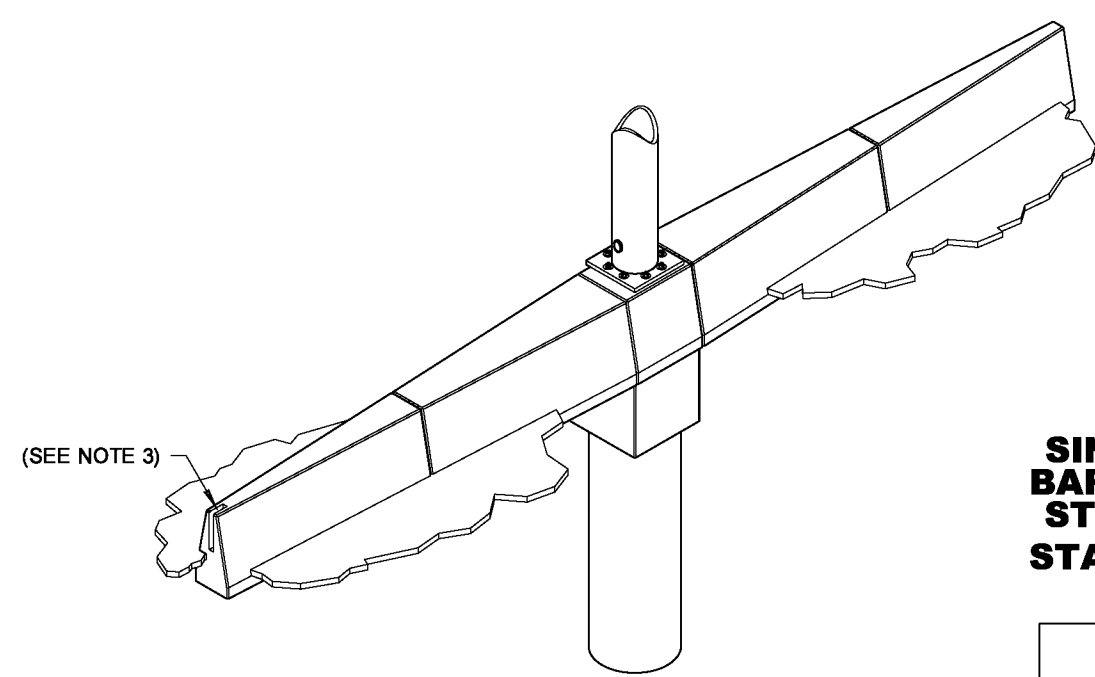
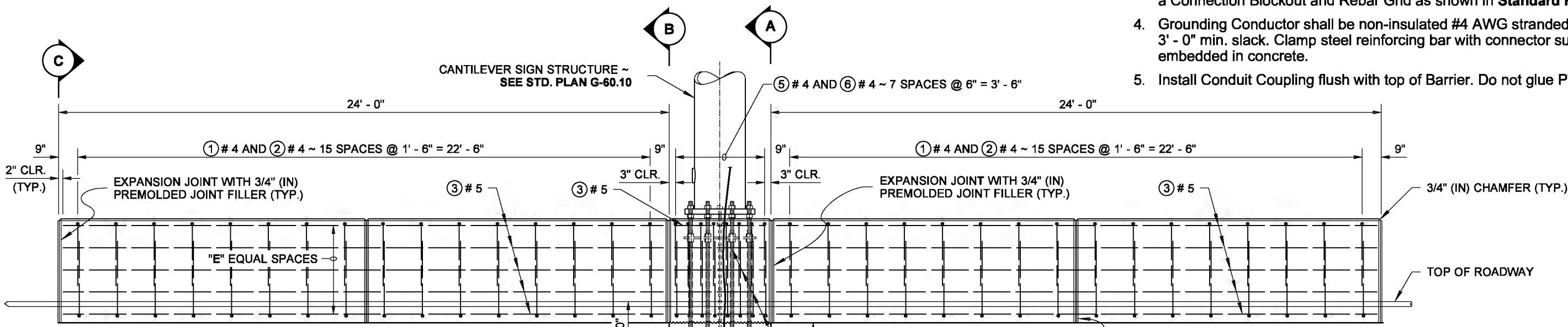


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- NOTES**
1. See **Standard Specification 8-21.3(9)** for construction requirements.
 2. Use a template to locate and secure the bolts during foundation installation.
 3. When connecting between cast-in-place and precast Single-Slope Barrier, provide a Connection Blockout and Rebar Grid as shown in **Standard Plan C-70.10**.
 4. Grounding Conductor shall be non-insulated #4 AWG stranded copper; provide 3' - 0" min. slack. Clamp steel reinforcing bar with connector suitable for use embedded in concrete.
 5. Install Conduit Coupling flush with top of Barrier. Do not glue PVC stubout.



MATERIAL SPECIFICATIONS	
SHAFT CONCRETE	CLASS 4000P
ALL OTHER CONCRETE	CLASS 4000
STEEL REINF. BAR	AASHTO M 31 GRADE 60
ANCHOR RODS	ASTM F 1554 GRADE 105
ANCHOR NUTS	AASHTO M 291
ANCHOR WASHERS	AASHTO M 293
ANCHORAGE GALVANIZING	AASHTO M 232
STEEL PLATE	ASTM A 36

SHAFT DEPTH			
Z	TOTAL SIGN AREA (SF)	ALLOWABLE LATERAL BEARING PRESSURE (PSF)	FRICTION ANGLE (DEGREE)
13' - 0"	200 OR LESS	1500 AND UP	28 MIN.
16' - 0"	200 OR LESS	1000 ~ 1499	26 MIN.
18' - 0"	200 ~ 400	1500 AND UP	28 MIN.
22' - 0"	200 ~ 400	1000 ~ 1499	26 MIN.



SINGLE-SLOPE CONCRETE BARRIER CANTILEVER SIGN STRUCTURE FOUNDATION
STANDARD PLAN C-85.20-01

SHEET 1 OF 2 SHEETS
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 STATE DESIGN ENGINEER
 Washington State Department of Transportation

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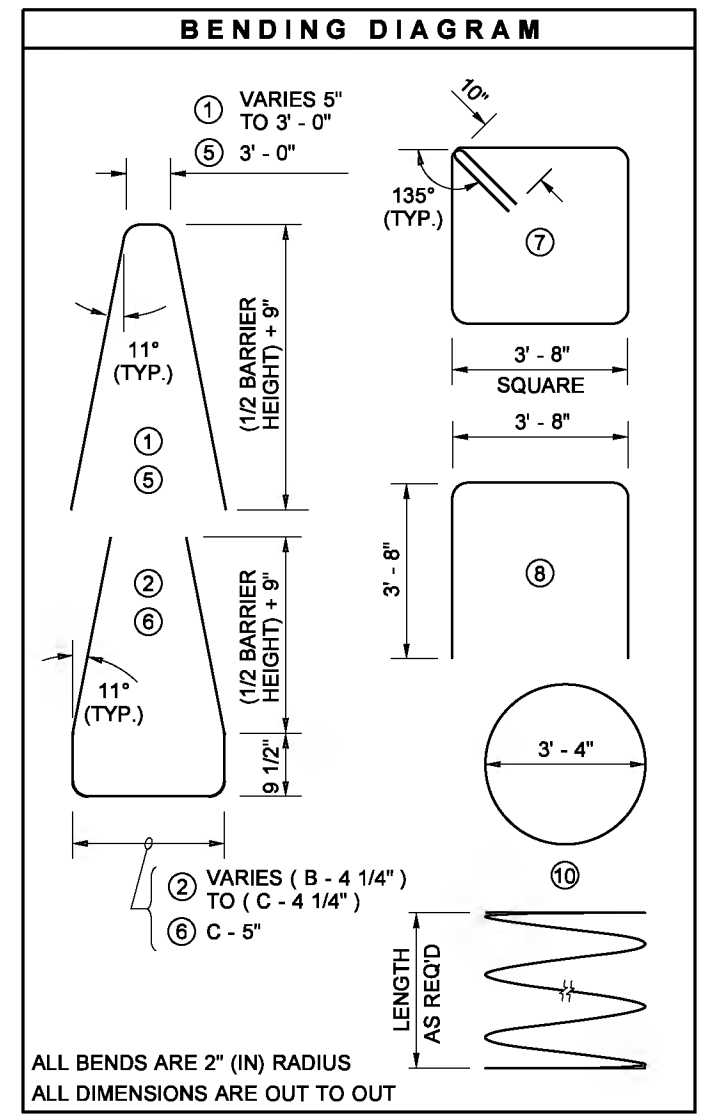
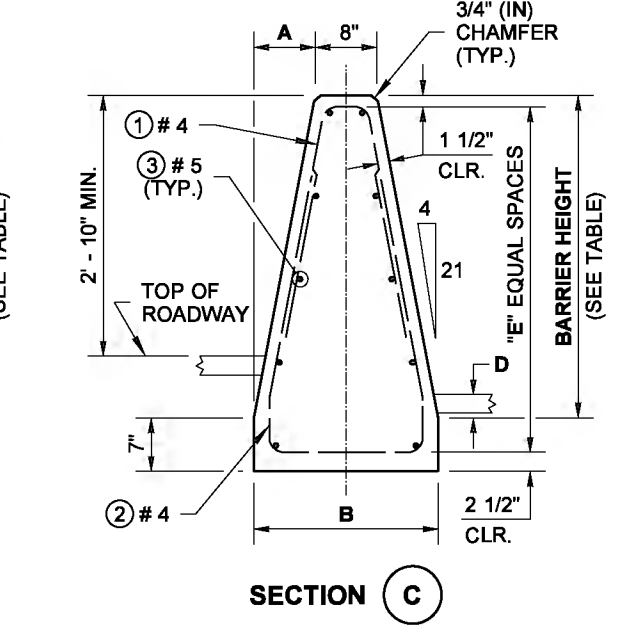
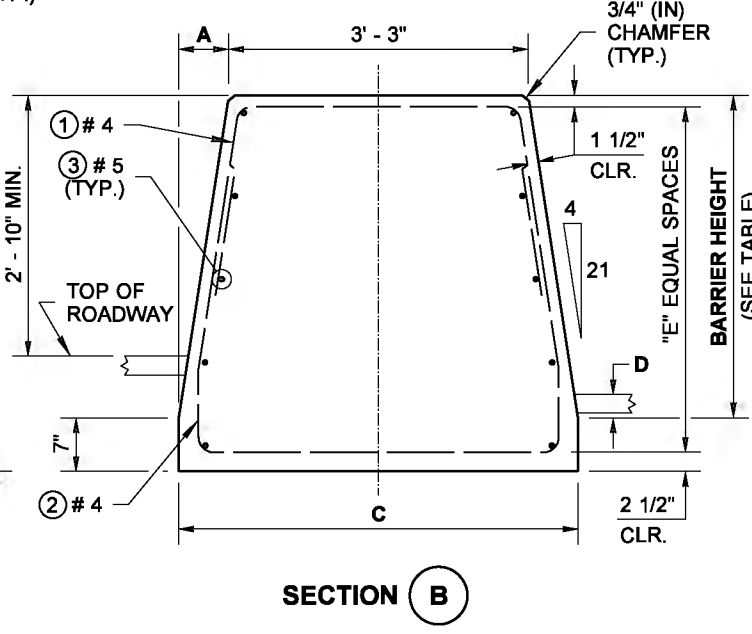
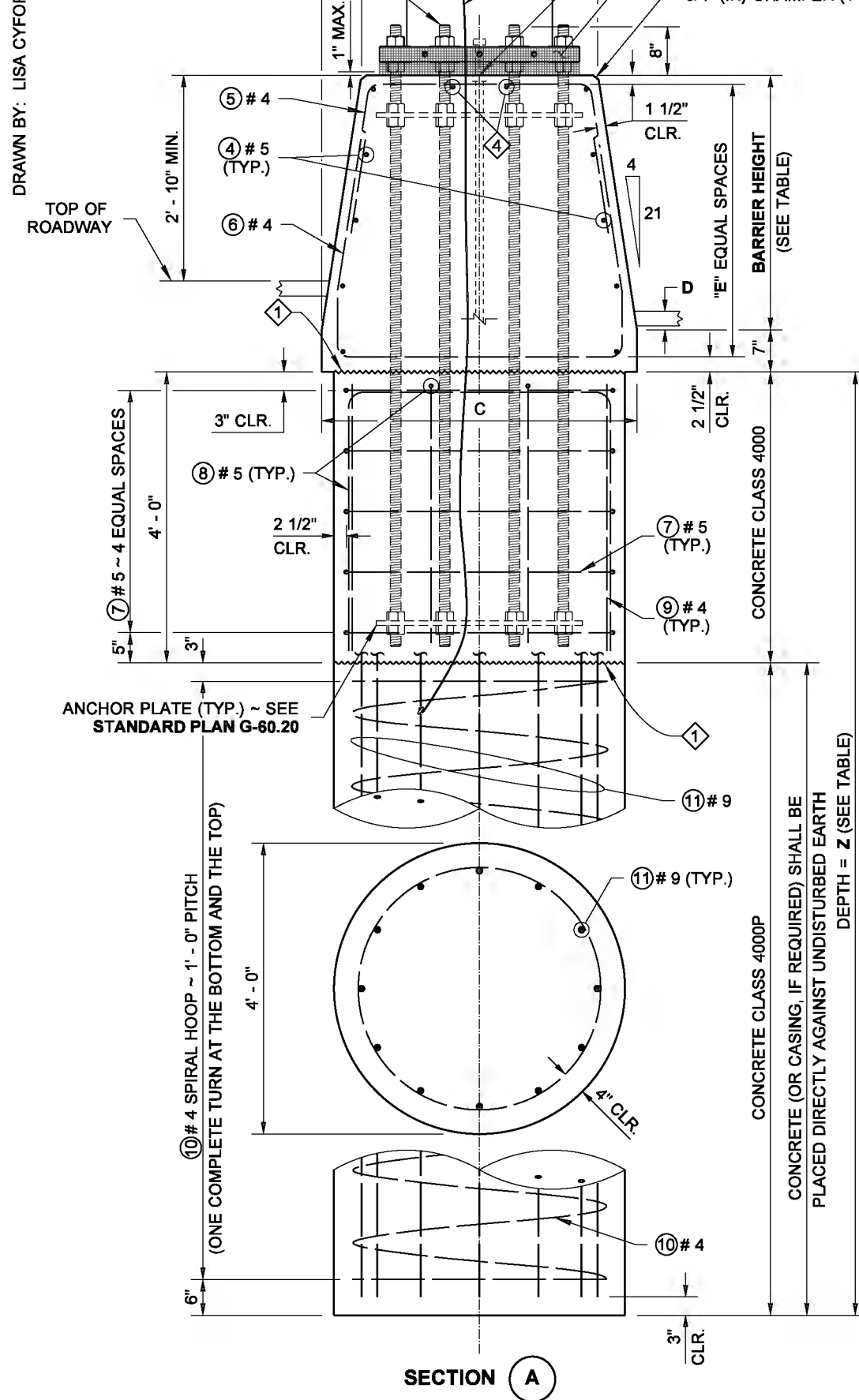
ANCHOR ROD ~ 1 3/4" (IN) DIAM. x (BARRIER HEIGHT + 4' - 2") LONG, THREADED 8" (IN) MIN. EACH END; WITH FOUR HEAVY HEX NUTS AND TWO WASHERS ~ GALVANIZE EXPOSED ANCHOR ROD END 1' - 0" MIN. (TYP.)

GROUNDING CONDUCTOR ~ ROUTE TO GROUNDING STUD (SEE NOTE 4)

CONDUIT COUPLING (SEE NOTE 5)

PROVIDE SCREEN AROUND BASE ~ SEE SCREEN DETAIL, STANDARD PLAN G-60.10, SHEET 4

3/4" (IN) CHAMFER (TYP.)



TABLE

GRADE SEPARATION	BARRIER HEIGHT	A	B	C	D	E	Q
0 TO 5"	3' - 6"	8"	2' - 0"	4' - 7"	3" MIN.	4	10 ④
UP TO 7"	4' - 0"	9 1/8"	2' - 2 1/4"	4' - 9 1/4"	7" MIN.	5	12 ④
UP TO 10"	4' - 6"	10 1/4"	2' - 4 1/2"	4' - 11 1/2"	10" MIN.	6	14 ④

BAR LIST

MARK NO.	LOCATION	QTY.	LENGTH	SIZE	TYPE
①	BARRIER ~ TOP VERTICAL	32	VARIES	# 4	
②	BARRIER ~ BOTTOM VERTICAL	32	VARIES	# 4	
③	BARRIER ~ HORIZONTAL	②	23' - 8"	# 5	STR.
④	BARRIER ~ HORIZONTAL	②	3' - 8"	# 5	STR.
⑤	BARRIER ~ TOP VERTICAL	8	VARIES	# 4	
⑥	BARRIER ~ BOTTOM VERTICAL	8	VARIES	# 4	
⑦	CAP ~ HOOP	5	15' - 9"	# 5	
⑧	CAP ~ TOP	4	10' - 10"	# 5	
⑨	CAP ~ VERTICAL, EACH CORNER	4	3' - 4"	# 4	STR.
⑩	SHAFT ~ SPIRAL	1 ③	AS REQ'D	# 4	
⑪	SHAFT ~ VERTICAL	12	"Z" MINUS CLEARANCES	# 9	STR.

- ① CONSTRUCTION JOINT WITH ROUGHENED SURFACE
- ② SEE TABLE, THIS SHEET, COLUMN "Q"
- ③ IF JOINING TWO SPIRALS, SEE LAP SPLICE DETAIL, STANDARD PLAN G-60.20, SHEET 2
- ④ ADD TWO ④ #5 BARS, EQUALLY SPACED, AT THE TOP OF THE FOUNDATION BARRIER



SINGLE-SLOPE CONCRETE BARRIER CANTILEVER SIGN STRUCTURE FOUNDATION STANDARD PLAN C-85.20-01

SHEET 2 OF 2 SHEETS

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