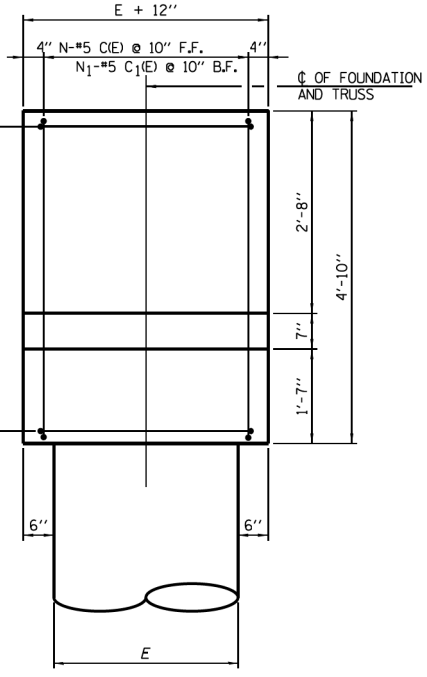
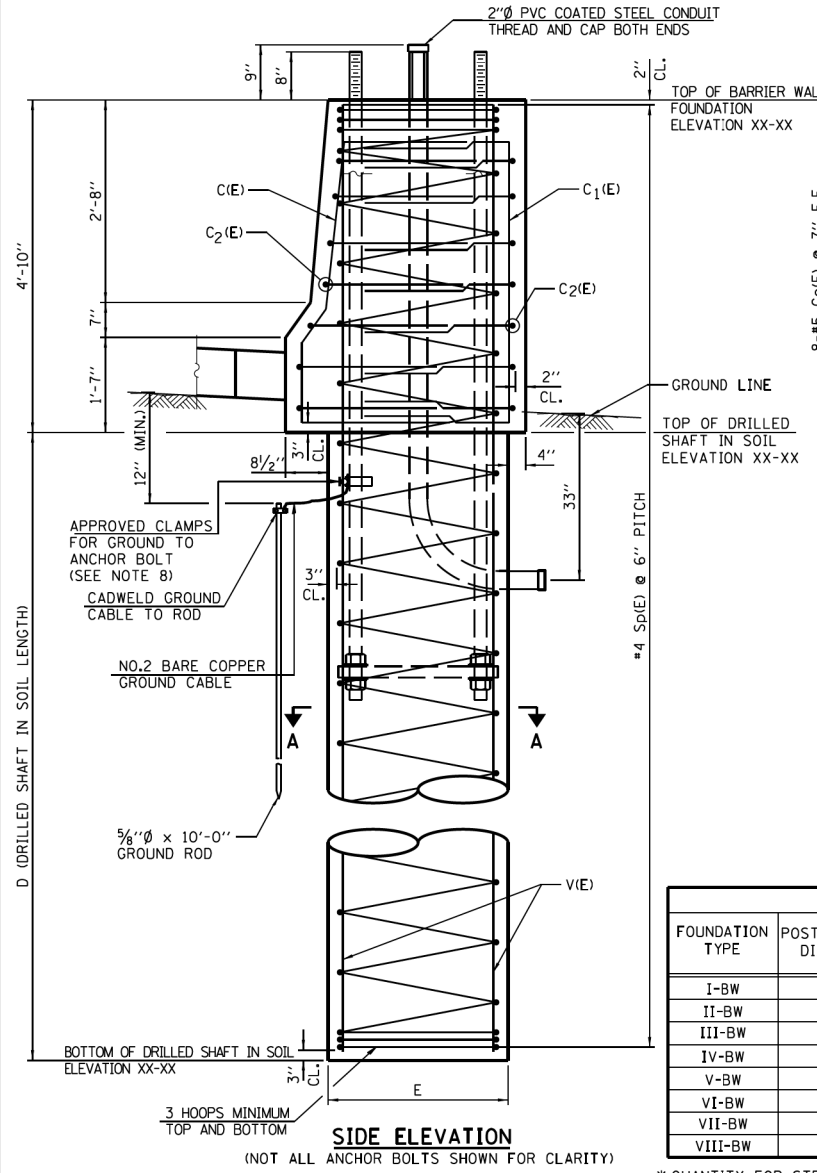


*GRIND ANCHOR BOLT TO BRIGHT FINISH AT GROUND CLAMP LOCATION BEFORE INSTALLING CLAMPS



FRONT ELEVATION
(ANCHOR BOLTS NOT SHOWN FOR CLARITY)

MARK TABLE BAR C(E)

FOUNDATION TYPE	F	G	LENGTH	N	POUNDS
I - BW	2'-5"	2'-9"	9'-9"	5	51
II - BW	2'-8"	3'-0"	10'-3"	6	65
III - BW	2'-11"	3'-3"	10'-9"	7	79
IV - BW	2'-11"	3'-3"	10'-9"	7	79
V - BW	3'-2"	3'-6"	11'-3"	7	83
VI - BW	3'-5"	3'-9"	11'-9"	8	98
VII - BW	3'-5"	3'-9"	11'-9"	8	98
VIII - BW	3'-5"	3'-9"	11'-9"	8	98

MARK TABLE BAR C1(E)

FOUNDATION TYPE	H	I	LENGTH	N1	POUNDS
I - BW	2'-9"	2'-5"	9'-7"	5	50
II - BW	3'-0"	2'-8"	10'-1"	6	64
III - BW	3'-3"	2'-11"	10'-7"	7	78
IV - BW	3'-3"	2'-11"	10'-7"	7	78
V - BW	3'-6"	3'-2"	11'-1"	7	81
VI - BW	3'-9"	3'-5"	11'-7"	8	97
VII - BW	3'-9"	3'-5"	11'-7"	8	97
VIII - BW	3'-9"	3'-5"	11'-7"	8	97

MARK TABLE BAR C2(E)

FOUNDATION TYPE	J	K	LENGTH	N	POUNDS
I - BW	2'-9"	3'-4"	8'-10"	16	148
II - BW	3'-0"	3'-10"	9'-10"	16	165
III - BW	3'-3"	4'-4"	10'-10"	16	181
IV - BW	3'-3"	4'-4"	10'-10"	16	181
V - BW	3'-6"	4'-10"	11'-10"	16	198
VI - BW	3'-9"	5'-4"	12'-10"	16	215
VII - BW	3'-9"	5'-4"	12'-10"	16	215
VIII - BW	3'-9"	5'-4"	12'-10"	16	215

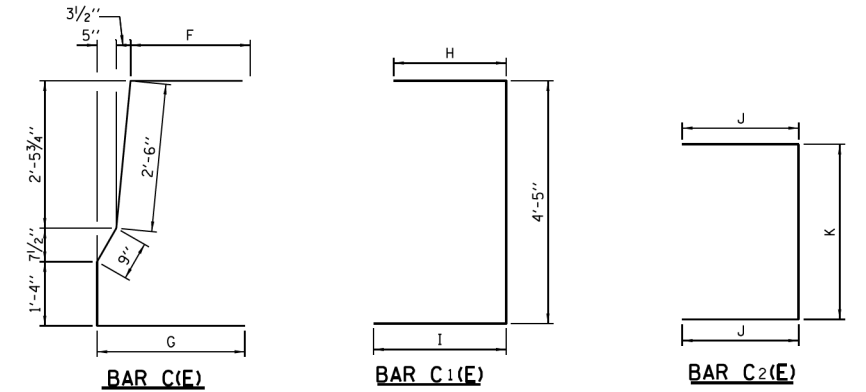
BARRIER WALL FOUNDATION SCHEDULE

FOUNDATION TYPE	POST OUTSIDE DIAMETER	DRILLED SHAFT IN SOIL			ANCHOR BOLTS			VERTICAL REINFORCEMENT VIE			SPIRAL REINFORCEMENT Sp(E)		BARRIER DIMENSIONS					
		E	D	CONC. CY.	DIA.	NO.	BOLT CIRCLE	NO.	BAR SIZE	LENGTH	POUNDS	LENGTH	POUNDS	A	B	C	CONC. CY.	* STRUCTURE EXCAVATION C.
I-BW	16"	36"	19'-6"	5.1	2 1/2"	8	22"	8	#11	23'-11"	1020	377'	252	3'-4"	1'-6"	1'-10"	2.6	2.4
II-BW	20"	42"	21'-6"	7.7	2"	12	26"	10	#11	25'-11"	1377	491'	328	3'-10"	1'-9"	2'-1"	3.4	2.7
III-BW	24"	48"	23'-6"	10.9	2 1/4"	12	30"	12	#11	27'-11"	1780	616'	411	4'-4"	2'-0"	2'-4"	4.2	3.0
IV-BW	28"	48"	26'-0"	12.1	2 1/4"	12	34"	12	#11	30'-5"	1938	671'	448	4'-4"	2'-0"	2'-4"	4.2	3.0
V-BW	32"	54"	27'-0"	15.9	2 1/4"	12	38"	16	#11	31'-5"	2671	792'	529	4'-10"	2'-3"	2'-7"	5.1	3.4
VI-BW	36"	60"	27'-6"	20.0	2 1/4"	12	42"	20	#11	32'-11"	3498	903'	604	5'-4"	2'-6"	2'-10"	6.1	3.8
VII-BW	38"	60"	29'-6"	21.5	2 1/2"	12	44"	20	#11	33'-11"	3604	961'	642	5'-4"	2'-6"	2'-10"	6.1	3.8
VIII-BW	40"	60"	31'-0"	22.5	2 1/2"	12	46"	20	#11	35'-5"	3763	1004'	671	5'-4"	2'-6"	2'-10"	6.1	3.8

* QUANTITY FOR STRUCTURE EXCAVATION IS CALCULATED ASSUMING A 1'-0" BURIED DEPTH OF BARRIER.

NOTES:

- THE FOUNDATION DETAILS SHOWN ARE BASED ON COMMON COHESIVE SOIL CONDITIONS (SILTY OR SANDY CLAY), WITH AN AVERAGE QU $>$ 1.25 TON/SQ. FT. AND GRANULAR SOIL CONDITIONS WITH MINIMUM STANDARD PENETRATION TEST VALUE, N $>$ 10 BLOWS PER FOOT, FOR ALL STRATA WITHIN THE "B" PORTION OF THE FOUNDATION. THE SOILS DATA SHALL BE DETERMINED BY THE ENGINEER BY FIELD TESTING DURING CONSTRUCTION OR FROM PREVIOUS SOIL INVESTIGATIONS AT THE SITE. FOR LOWER SOIL STRENGTHS OR DIFFERENT SOIL TYPES, THE ENGINEER SHALL REVIEW PERTINENT DATA AND DETERMINE ANY REQUIRED REVISIONS TO THE DIAMETER, DEPTH, REINFORCEMENT OR CONFIGURATION OF THE FOUNDATION. IF CHANGES ARE REQUIRED BY THE ENGINEER, OR IF DIMENSIONS "B" AND "D" ARE INCREASED MORE THAN 12" BY THE CONTRACTOR, "AS-BUILT" PLANS SHALL BE PREPARED AND SUBMITTED TO THE TOLLWAY FOR FUTURE REFERENCE. ACTUAL "D", "ELEVATION BOTTOM", AND "QU" OR "N" VALUES SHALL ALSO BE ENTERED ON THIS SHEET FOR PERMANENT REFERENCE.
- FOR SIZE AND NUMBER OF PVC COATED STEEL CONDUITS, SEE ELECTRICAL CONSTRUCTION DRAWINGS.
- NO SONOTUBES OR DECOMPOSABLE FORMS SHALL BE USED BELOW THE LOWER CONDUIT ENTRANCE. PERMANENT METAL FORMS OF OTHER SHIELDING MAY NOT BE LEFT IN PLACE BELOW THAT ELEVATION WITHOUT THE ENGINEER'S WRITTEN PERMISSION. EXCAVATIONS SHALL BE DEWATERED BEFORE CONCRETE PLACEMENT IF DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST.
- CONCRETE SHALL BE PLACED MONOLITHICALLY WITHOUT CONSTRUCTION JOINTS.
- BACKFILL SHALL BE PLACED PER ARTICLE 502 OF STANDARD SPECIFICATION AND PRIOR TO ERECTION OF SUPPORT COLUMN.
- A NORMAL SURFACE FINISH FOLLOWED BY A PROTECTIVE COAT APPLICATION SHALL BE REQUIRED ON CONCRETE SURFACES ABOVE THE LOWEST ELEVATION 6" BELOW FINISHED GROUND LINE. COST INCLUDED IN DRILLED SHAFT IN SOIL.
- REBAR CAGE SHALL BE POSITIONED SO THERE WILL BE NO INTERFERENCE BETWEEN VERTICAL REINFORCEMENT AND ANCHOR BOLTS.
- GRIND ANCHOR BOLT TO BRIGHT FINISH AT GROUND CLAMP LOCATION BEFORE INSTALLING CLAMP.



LEGEND

- E, F - EACH FACE
- F, F - FRONT FACE
- B, F - BACK FACE

APPROVED: *Paul Kovacs*
CHIEF ENGINEER DATE: 2-7-2012

Illinois Tollway
Open Roads for a Faster Future

OVERHEAD SIGN STRUCTURE
CANTILEVER TYPE, STEEL
DRILLED SHAFT IN SOIL,
BARRIER WALL

STANDARD F7-01

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com

FILE NAME = \$FILES\$	USER NAME = default	DESIGNED -	REVISIONS -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOLLWAY STANDARD DRAWING	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = H=1"=10' V=1"=5'	CHECKED - RGR	REVISIONS -			94	49-1-R-1	LAKE	677	663	
	PLOT DATE = 6/18/2012	DATE - 6/19/2012	REVISIONS -			CONTRACT NO. 60L77					
						ILLINOIS FED. AID PROJECT					