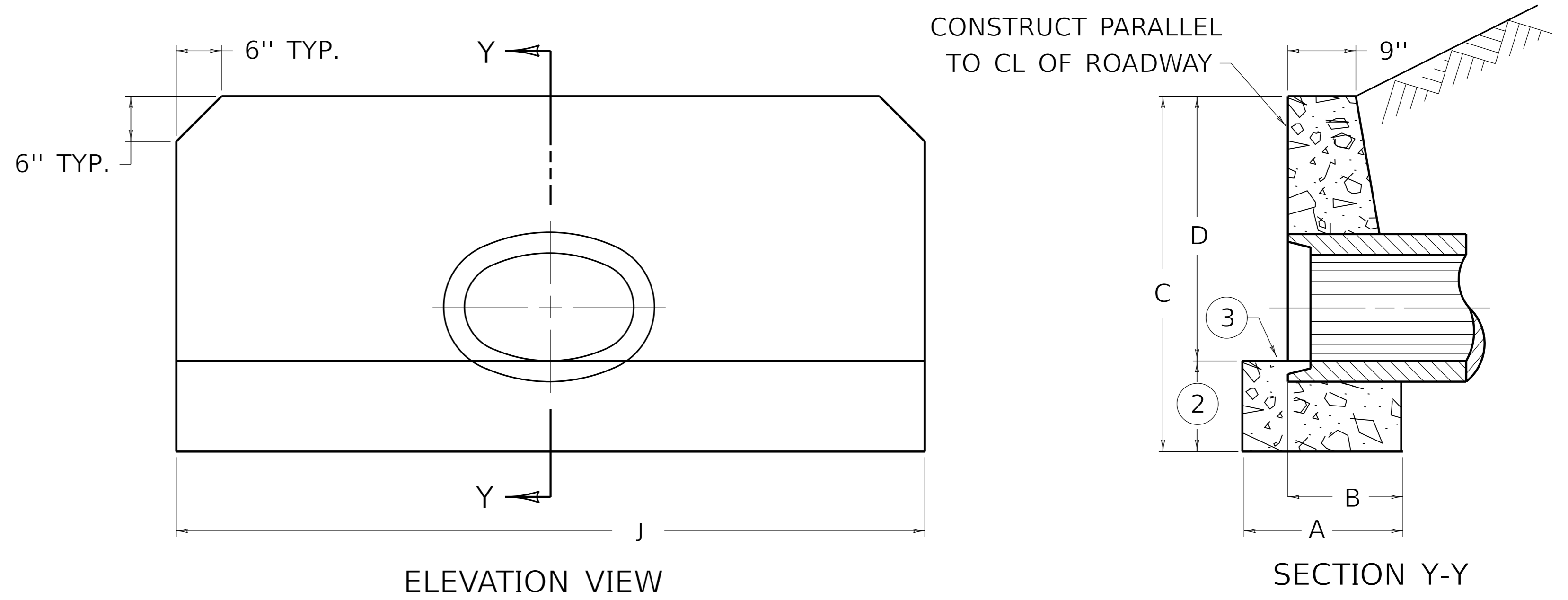


DIMENSIONS AND QUANTITIES

HEADWALL TYPE	ROUND EQUIVALENT	REINFORCED CONCRETE ELLIPTICAL PIPE	CORRUGATED METAL PIPE ARCH	HEADWALL DIMENSIONS								VOLUME CU. YDS FOR 1 HEADWALL (EARTH)	VOLUME CU. YDS FOR 1 HEADWALL (ROCK)	
				A	B	C	D	E	F	G	H ^①			J
STANDARD	15"	—	17" X 13"	1'-9"	1'-3"	4'-0"	2'-6"	—	—	—	—	7'-10"	1.43	1.18
	18"	23" X 14"	21" X 15"	1'-9"	1'-3"	4'-5"	2'-11"	—	—	—	—	8'-3"	1.64	1.33
	24"	30" X 19"	28" X 20"	1'-9"	1'-3"	4'-10"	3'-4"	—	—	—	—	9'-6"	2.10	1.79
	27"	34" X 22"	—	1'-10"	1'-4"	5'-2"	3'-8"	—	—	—	—	10'-6"	2.53	2.18
RAISED	15"	—	17" X 13"	1'-9"	1'-3"	4'-6"	3'-0"	—	—	—	—	9'-4"	1.89	1.59
	18"	23" X 14"	21" X 15"	1'-9"	1'-3"	4'-11"	3'-5"	—	—	—	—	9'-9"	2.11	1.62
	24"	30" X 19"	28" X 20"	1'-9"	1'-3"	5'-4"	3'-10"	—	—	—	—	11'-0"	2.68	2.18
	27"	34" X 22"	—	1'-10"	1'-4"	5'-8"	4'-2"	—	—	—	—	12'-0"	3.09	2.40
STANDARD ELL	15"	—	17" X 13"	1'-9"	1'-3"	4'-0"	2'-6"	1'-10"	3'-7"	4'-0"	2'-4"	5'-9"	1.41	1.16
	18"	23" X 14"	21" X 15"	1'-9"	1'-3"	4'-5"	2'-11"	2'-3"	4'-2"	4'-6"	2'-11"	6'-3"	1.86	1.76
	24"	30" X 19"	28" X 20"	1'-9"	1'-3"	4'-10"	3'-4"	2'-10"	4'-7"	5'-8"	3'-4"	7'-5"	2.48	2.30
	27"	34" X 22"	—	1'-10"	1'-4"	5'-2"	3'-8"	3'-2"	5'-0"	6'-5"	3'-8"	8'-3"	2.74	2.67
RAISED ELL	15"	—	17" X 13"	1'-9"	1'-3"	4'-6"	3'-0"	2'-4"	4'-1"	4'-9"	2'-10"	6'-6"	1.81	1.52
	18"	23" X 14"	21" X 15"	1'-9"	1'-3"	4'-11"	3'-5"	2'-11"	4'-8"	5'-3"	3'-5"	7'-0"	2.33	2.05
	24"	30" X 19"	28" X 20"	1'-9"	1'-3"	5'-4"	3'-10"	3'-4"	5'-1"	6'-5"	3'-10"	8'-2"	3.02	2.64
	27"	34" X 22"	—	1'-10"	1'-4"	5'-8"	4'-2"	3'-8"	5'-6"	7'-2"	4'-2"	9'-0"	3.26	2.83



- NOTES**
- ① THE DIMENSION AND/OR ANGLE OF INTERSECTION BETWEEN THE WALLS MAY BE VARIED ON CONSTRUCTION.
 - ② VOLUME BASED ON VALUES OF 18" ON EARTH, 12" ON ROCK.
 - ③ FINISH BY FLOATING

KENTUCKY
DEPARTMENT OF HIGHWAYS
CONCRETE HEADWALLS
FOR
15"-27"
NON-CIR. PIPE CULVERTS
STANDARD DRAWING NO. RDH-010-02

SUBMITTED _____ DIRECTOR DIVISION OF DESIGN _____ DATE _____
APPROVED _____ STATE HIGHWAY ENGINEER _____ DATE _____