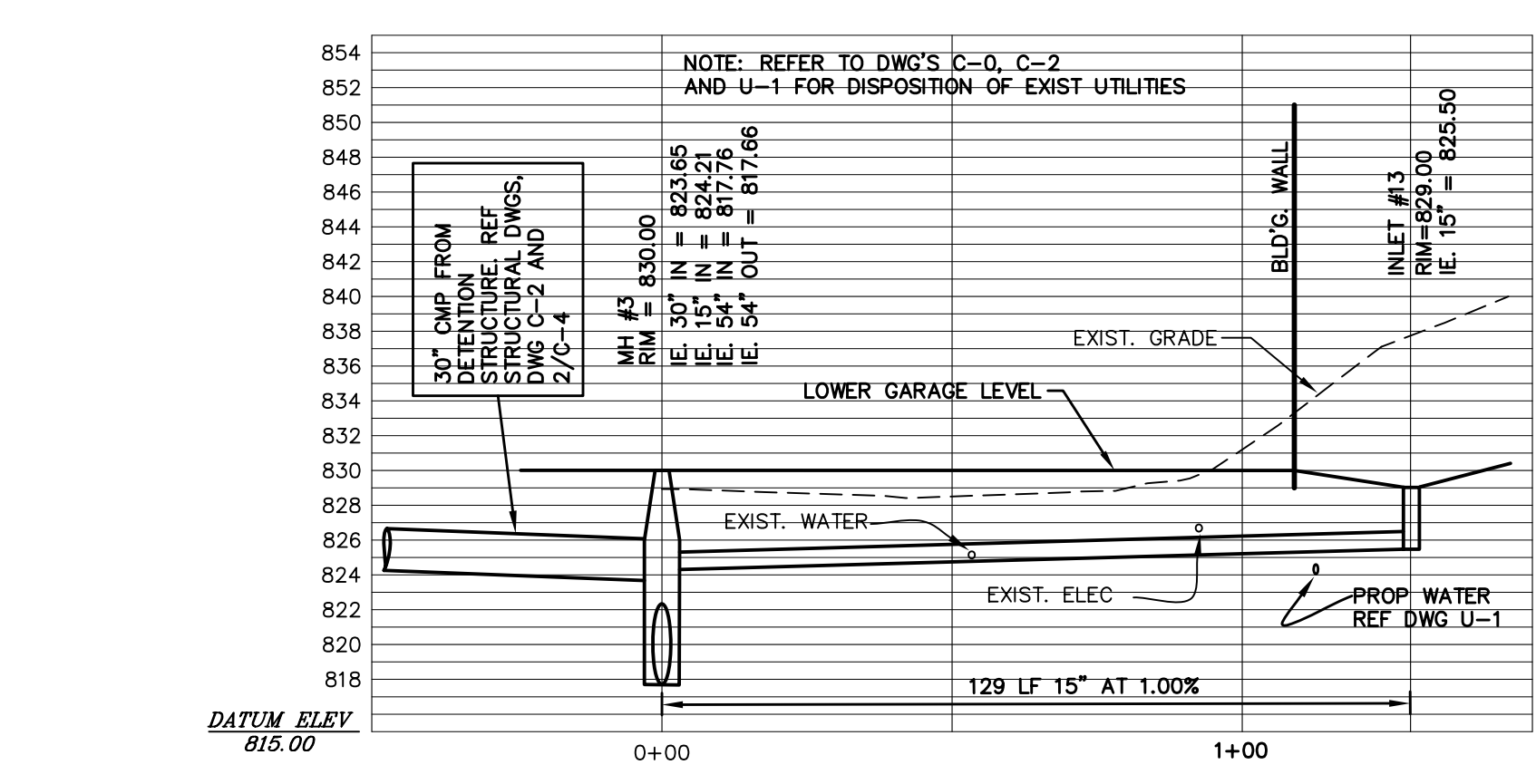
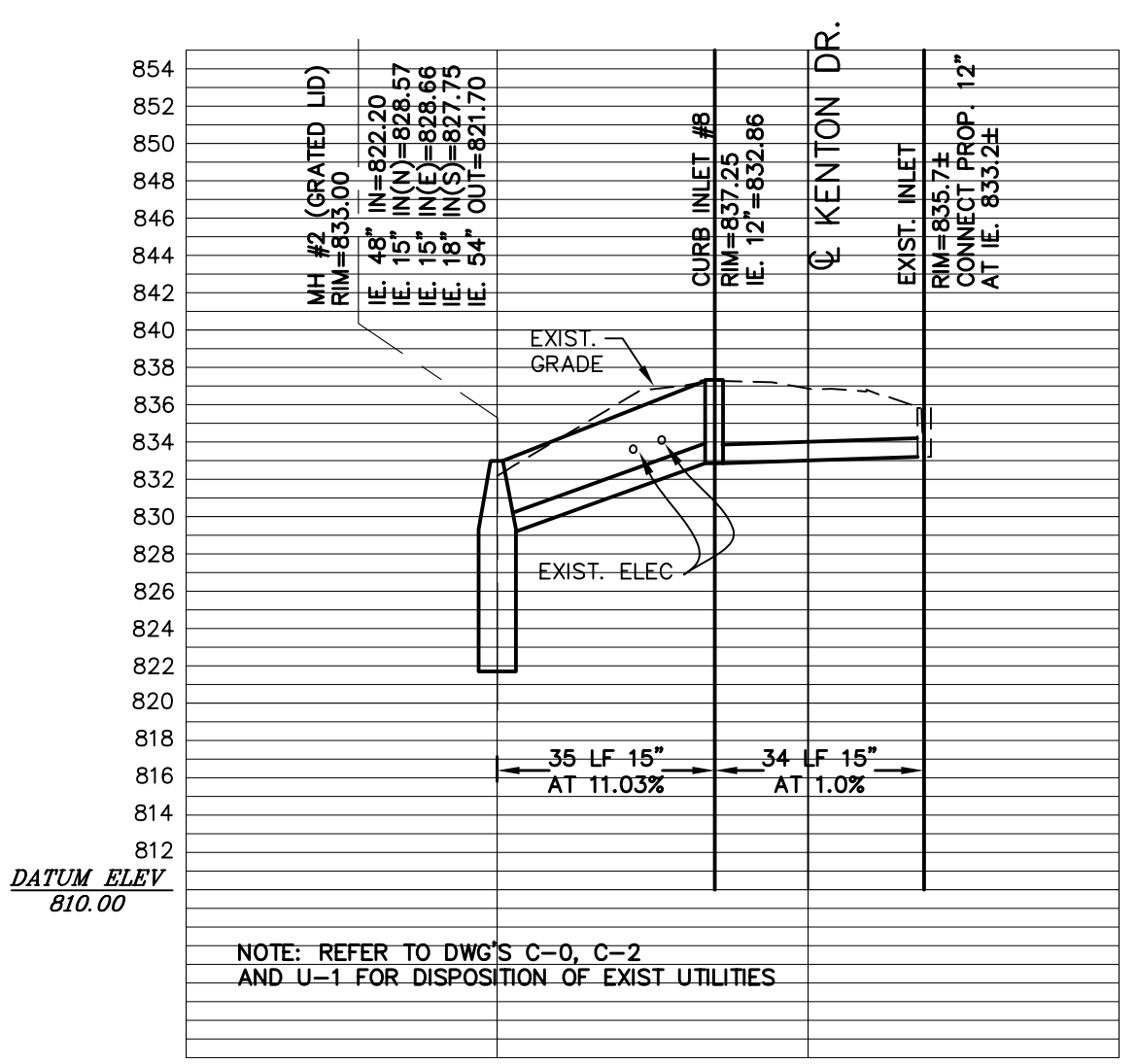


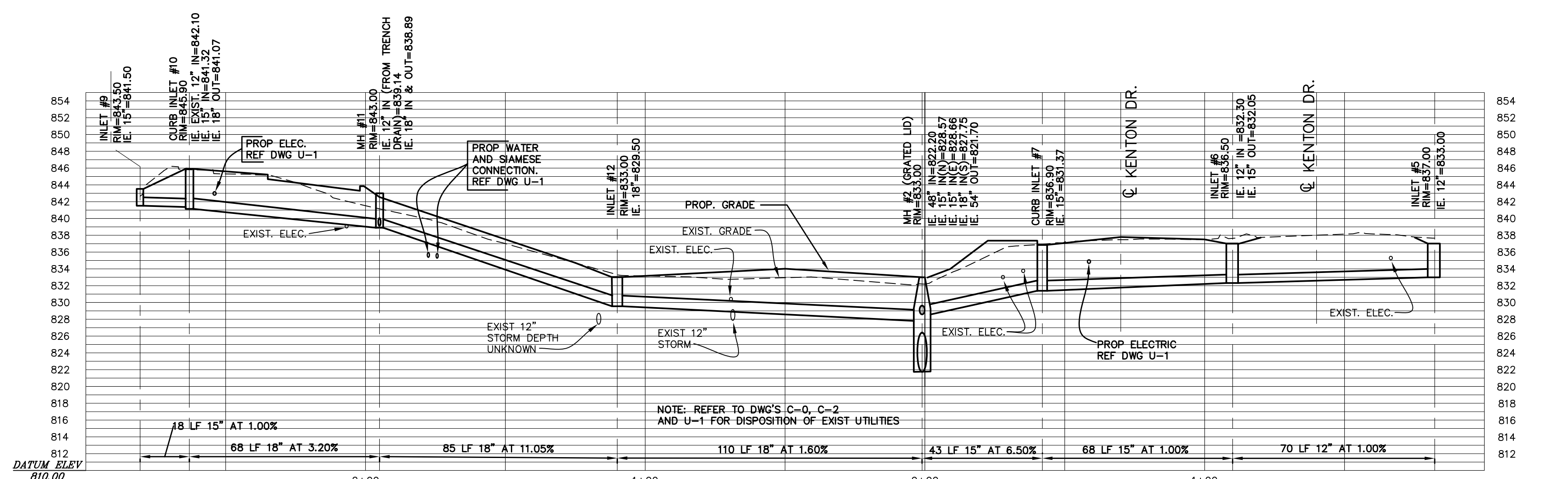
PROFILE - MANHOLE #1 TO OUTLET
SCALE: 1" = 30' HORIZ.
1" = 10' VERT.



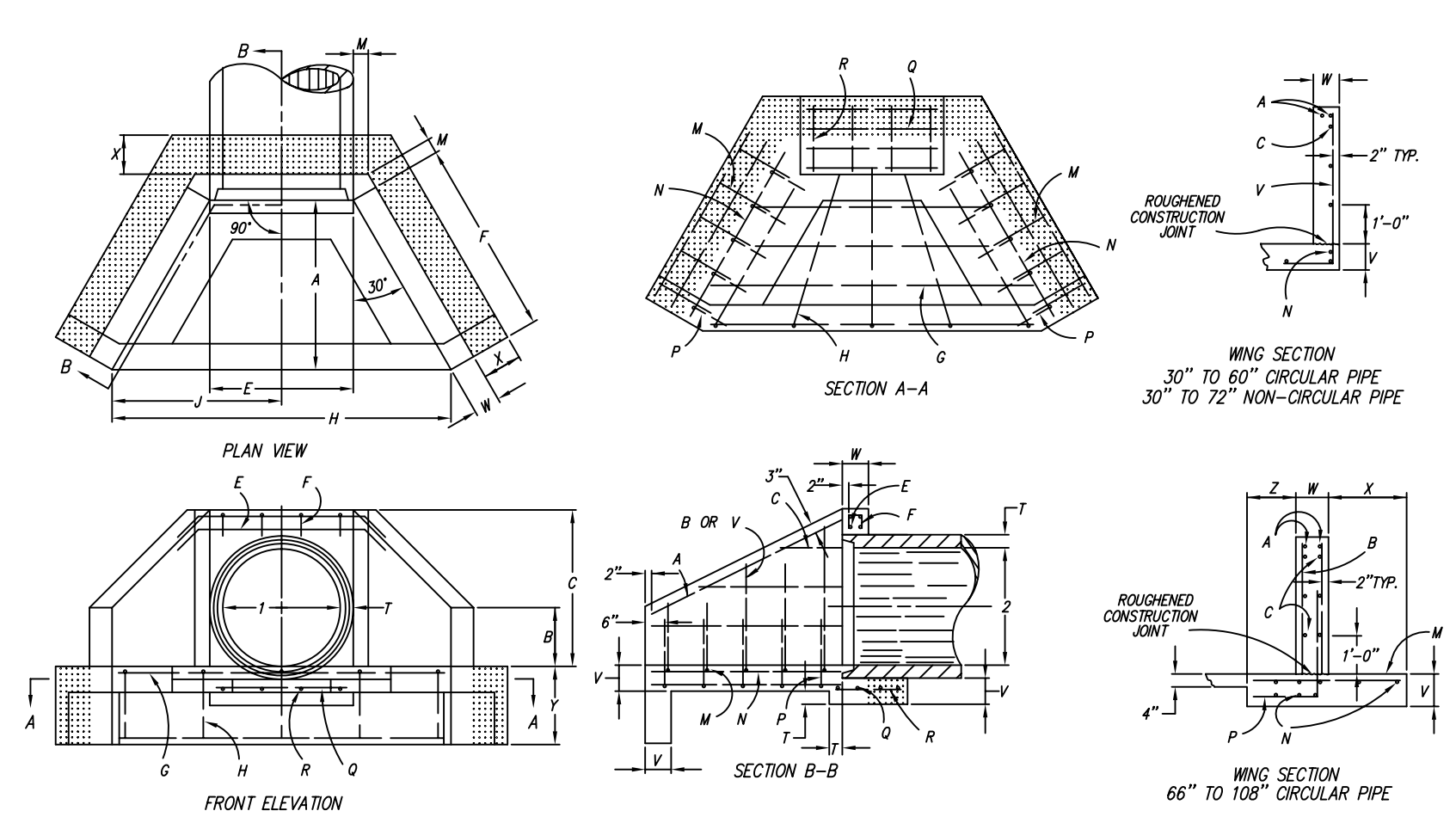
PROFILE - STORM SEWER AT NORTH SIDE OF BUILDING
SCALE: 1" = 30' HORIZ.
1" = 10' VERT.



PROFILE - STORM SEWER ACROSS KENTON DRIVE
SCALE: 1" = 30' HORIZ.
1" = 10' VERT.



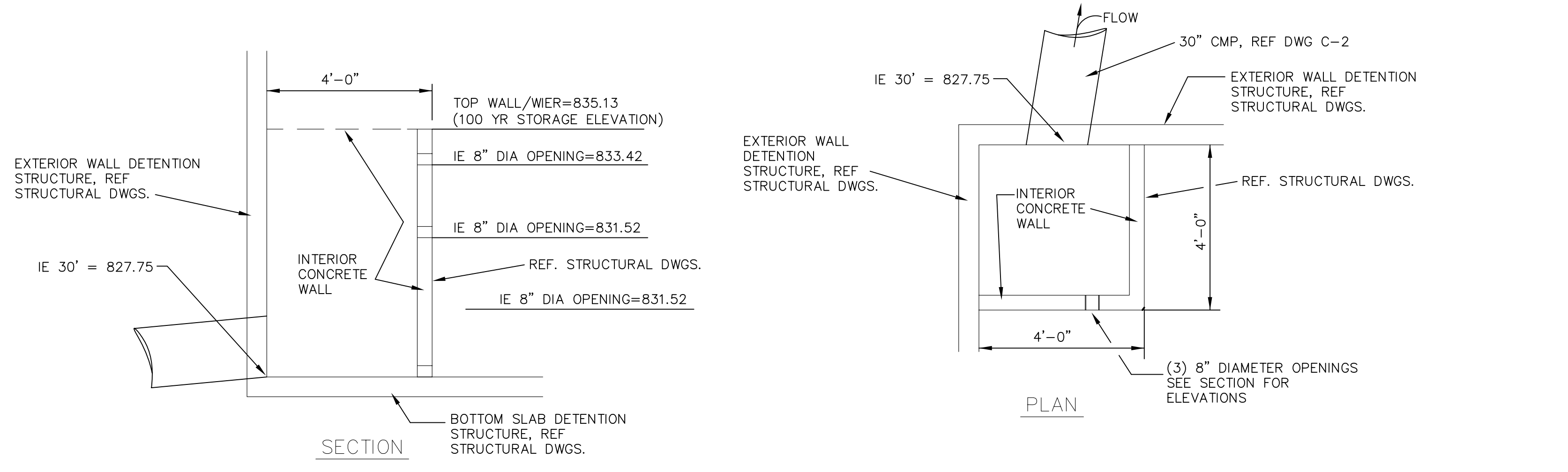
PROFILE - STORM SYSTEM ALONG KENTON DRIVE
SCALE: 1" = 30' HORIZ.
1" = 10' VERT.



- DIAMETER OF CIRCULAR PIPE OR SPAN OF NON-CIRCULAR PIPE
- DIAMETER OF CIRCULAR PIPE OR SPAN OF NON-CIRCULAR PIPE
- COMPARED TO ITS DIAMETER AND ORIGIN (CIRCULAR PIPE)
- SEE CURRENT STANDARD DRAWINGS RHM-200 AND 300 SERIES FOR DIMENSIONS, QUANTITIES, AND BILL OF REINFORCEMENT.
- DIMENSIONS FROM FACE OF CONCRETE TO STEEL SHALL BE 1" CLEAR DISTANCE.
- ENRICHED LETTERS - INDICATE STEEL BAR LOCATIONS
- BAR S, C, E, P, M, V ARE SPACED 1'-0" O.C. ALL OTHER BARS SHALL BE EVENLY SPACED.
- BAR S AND V ARE PLACED IN ORDER OF INCREASING LENGTH, BEGINNING AT THE END OF EACH WING.
- BAR S ARE PLACED IN ORDER OF INCREASING LENGTH, BEGINNING AT THE TOP OF EACH WING.
- REINFORCEMENT LOCATED AT EDGE OF SHOULDER SHALL BE PARALLEL TO CENTERLINE OF THE ROAD.
- APRON BETWEEN WINGS SHALL BE SLOPED IN DIRECTION OF FLOW EQUAL TO SLOPE OF PIPE. FRONT FACE OF HEADWALL AND ENDS OF WINGS SHALL BEAM VERTICAL.

DIMENSION	DIAMETER OF PIPE													DIMENSION	
	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	102"		108"
A	3'-9"	4'-4"	4'-11"	5'-6"	6'-1"	6'-8"	7'-5"	8'-0"	8'-7"	9'-2"	9'-9"	10'-4"	10'-11"	11'-6"	A
B	1'-3"	1'-6"	1'-9"	2'-0"	2'-3"	2'-6"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-6"	B
C	3'-6"	4'-0"	4'-7"	5'-1"	5'-8"	6'-2"	7'-0"	7'-5"	8'-0"	8'-6"	9'-1"	9'-7"	10'-2"	10'-8"	C
E	3'-1"	3'-8"	4'-3"	4'-10"	5'-5"	6'-0"	6'-7"	7'-2"	7'-9"	8'-4"	8'-11"	9'-6"	10'-1"	10'-8"	E
F	4'-4"	5'-0"	5'-8"	6'-4"	7'-0"	7'-8"	8'-7"	9'-3"	9'-11"	10'-7"	11'-3"	12'-7"	13'-3"	F	
H	7'-8"	8'-0"	10'-0"	11'-2"	12'-6"	13'-8"	15'-2"	16'-8"	17'-8"	19'-0"	20'-2"	21'-8"	24'-0"	H	
J	3'-9"	4'-4"	5'-0"	5'-7"	6'-3"	6'-10"	7'-7"	8'-3"	8'-10"	9'-6"	10'-1"	10'-9"	11'-4"	12'-0"	J
M	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	M
T	0'-3.5"	0'-4.0"	0'-4.5"	0'-5.0"	0'-5.5"	0'-6.0"	0'-6.5"	0'-7.0"	0'-7.5"	0'-8.0"	0'-8.5"	0'-9.0"	0'-9.5"	0'-10.0"	T
V	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	V
W	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	W
X	---	---	---	---	---	---	---	2'-0"	---	---	---	---	2'-6"	---	X
Y	---	---	---	---	---	---	---	2'-6"	---	---	---	---	3'-0"	---	Y
Z	---	---	---	---	---	---	---	1'-3"	---	---	---	---	1'-9"	---	Z
DIAGONAL HEADWALLS	3.36	4.30	5.35	6.53	7.82	9.22	10.76	12.45	14.25	16.15	18.15	20.25	22.45	24.75	DIAGONAL HEADWALLS
WING HEADWALLS	281	363	430	496	563	632	702	774	848	924	1002	1082	1164	1248	WING HEADWALLS

DIMENSIONS & QUANTITIES
30"-108" HEADWALLS CIRCULAR PIPE 0° SKEW
N.T.S.
(REFERENCE KYTC STANDARD DRAWING RHM-210)



DETAIL
DETENTION RELEASE
2
C-4

RECORD DRAWING

REVISIONS	DATE	BID PACKAGE	ISSUED
1	RECORD DWGS.	4/29/08	
2			
3			
4			
5			
6			
7			
8			

RECORD DATE: 4/29/08
 DRAWN BY: GEG
 CHECKED BY: SAJ
 A&E FILE NO.:
 SCALE: AS NOTED
 DATE: 10-30-2003

PARKING GARAGE NO. 2
NORTHERN KENTUCKY UNIVERSITY
 HIGHLAND HEIGHTS, KENTUCKY

DETAILS
 COMMONWEALTH OF KENTUCKY
 FINANCE AND ADMINISTRATION CABINET
 DEPARTMENT FOR FACILITIES MANAGEMENT
 DIVISION OF ENGINEERING
 FRANKFORT, KENTUCKY

CARDINAL
 ENGINEERING ARCHITECTURE
 LAND SURVEYING
 ONE MADDOCK ROAD
 WILDER, KENTUCKY 40371
 PHONE: (502) 881-1800 FAX: (502) 881-1804
 WEBSITE: WWW.CARDINALENGINEERING.COM

REVIEWED: DIV. OF ENGR.
 FOR INTENT ONLY
 ENGR. FILE NO.: PNU0590

APPROVED FOR PROGRAM CONCEPT ONLY