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PROJECT REFERENCE NO.	SHEET NO.
R-2561CA	2C-6

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

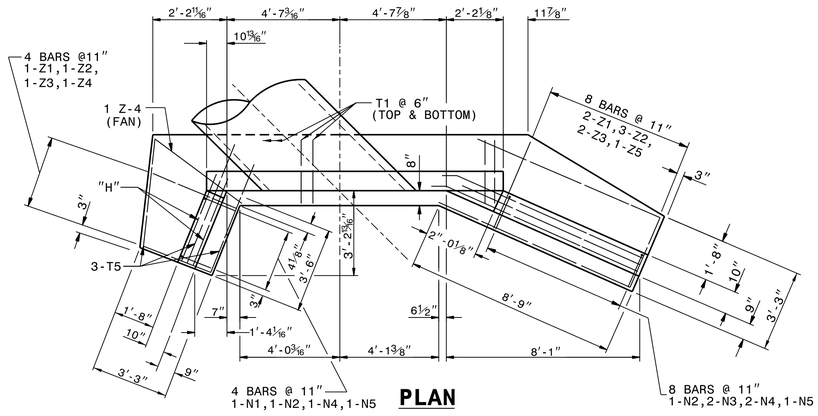
ENGLISH DETAIL DRAWING FOR

REINFORCED CONCRETE ENDWALL

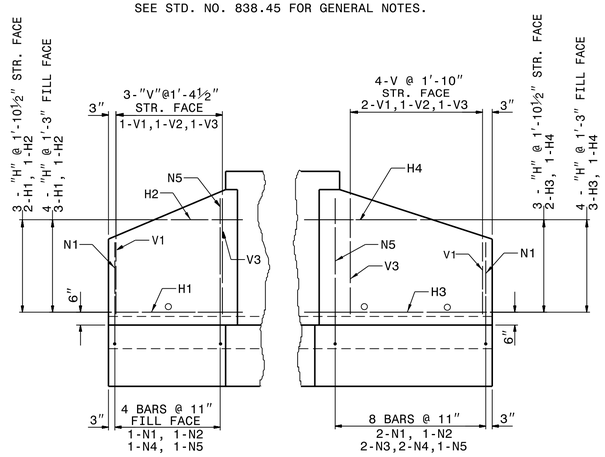
FOR 54" PIPE 45° OR 135° SKEW

SHEET 1 OF 1

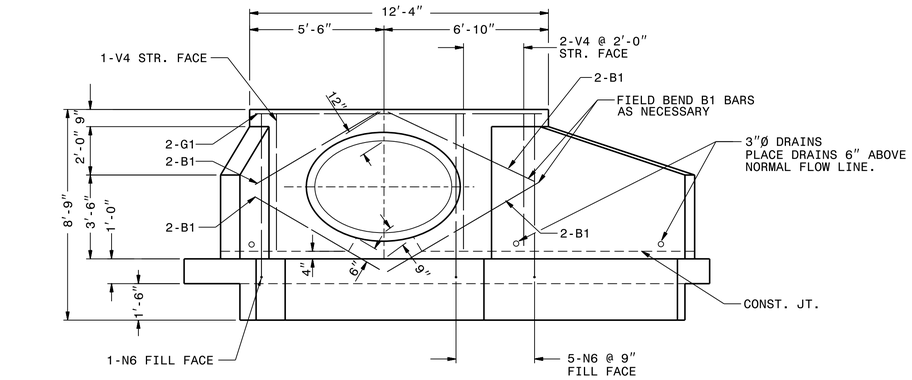
838D25



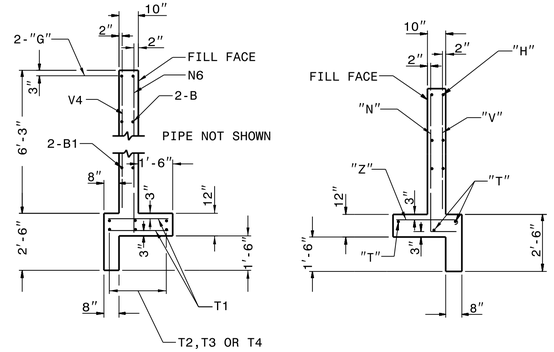
PLAN



WING ELEVATION

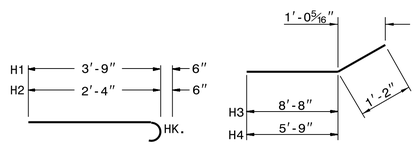


ELEVATION



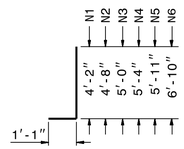
SECTION - BB

SECTION - AA

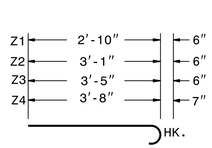


"H" BARS

"H" BARS



"N" BARS



"Z" BARS

"H", "N", & "Z" BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL FOR ENDWALLS

REINFORCING STEEL				
BAR	SIZE	LENGTH	NO.	WEIGHT
Z1	#4	3'-4"	3	7
Z2	#4	3'-7"	4	10
Z3	#4	3'-11"	3	8
Z4	#5	4'-3"	3	13
N1	#4	5'-3"	3	11
N2	#4	5'-9"	2	8
N3	#4	6'-1"	2	8
N4	#4	6'-5"	3	13
N5	#5	7'-0"	2	15
N6	#4	7'-11"	6	32
V1	#4	3'-1"	3	6
V2	#4	3'-11"	2	5
V3	#4	4'-8"	2	6
V4	#4	5'-9"	3	12
H1	#4	4'-3"	5	14
H2	#4	2'-10"	2	4
H3	#4	9'-10"	5	33
H4	#4	6'-11"	2	9
G1	#7	12'-0"	2	49
T1	#4	2'-6"	50	84
T2	#4	15'-2"	6	61
T5	#4	4'-3"	3	9
T6	#4	8'-0"	3	16
B1	#4	5'-9"	8	31
REINF. STEEL LBS.				464
CONC/C.M. CU. YDS.				6.9
CONC/R.C. CU. YDS.				6.6

DocuSigned by:
Ken Davenport
F81B6038A47A442...
2022.08.17

NORTH CAROLINA PROFESSIONAL SEAL 022071 ENGINEER KENNETH DAVENPORT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE PLATE FOR TITLE

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MODIFIED BY: E. Ward DATE: 10-25-03
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FOR 54" PIPE 45° OR 135° SKEW

SHEET 1 OF 1

838D25

02-MAY-2018 08:41
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jhowerton AT CSD-292995