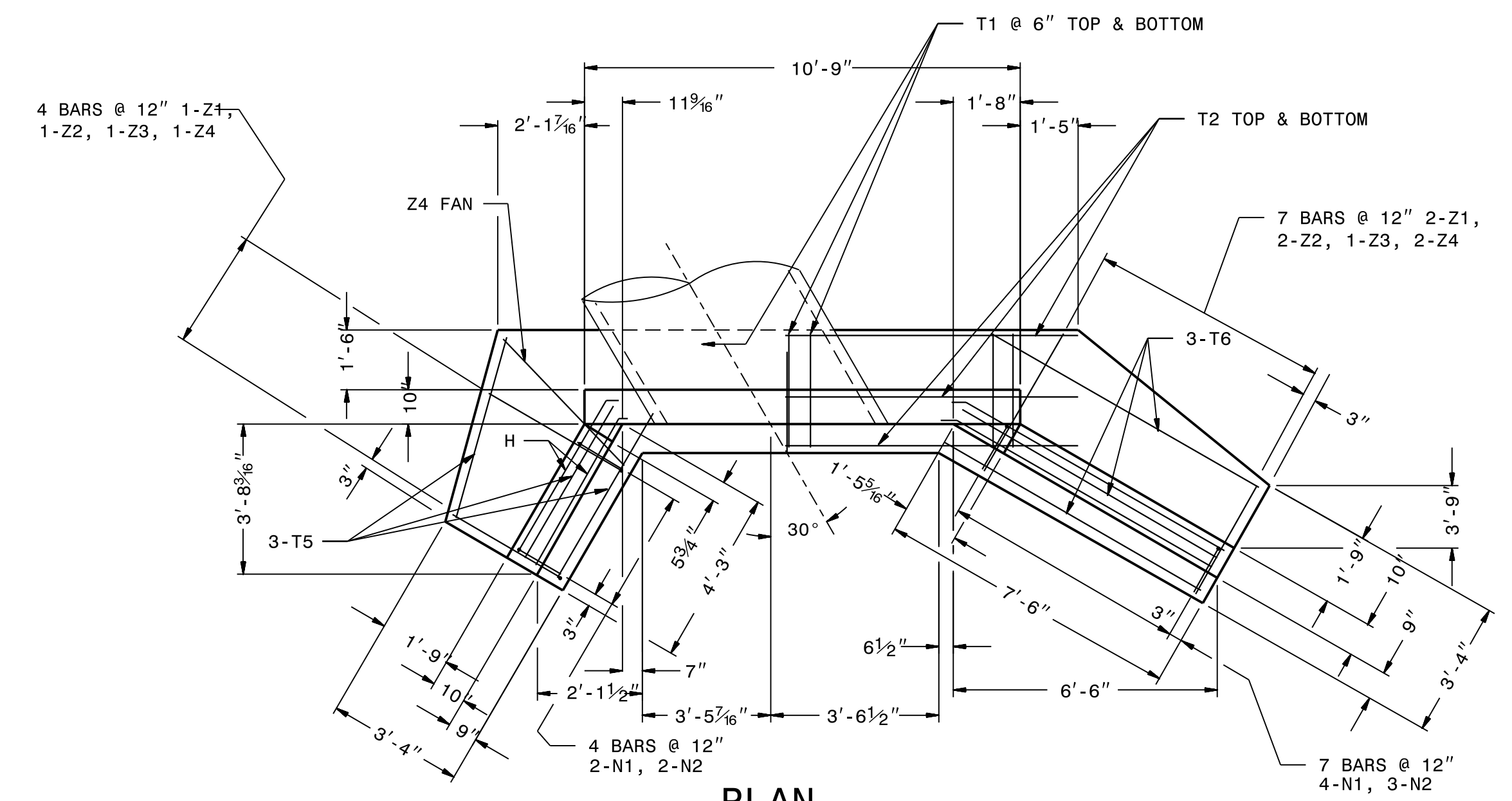


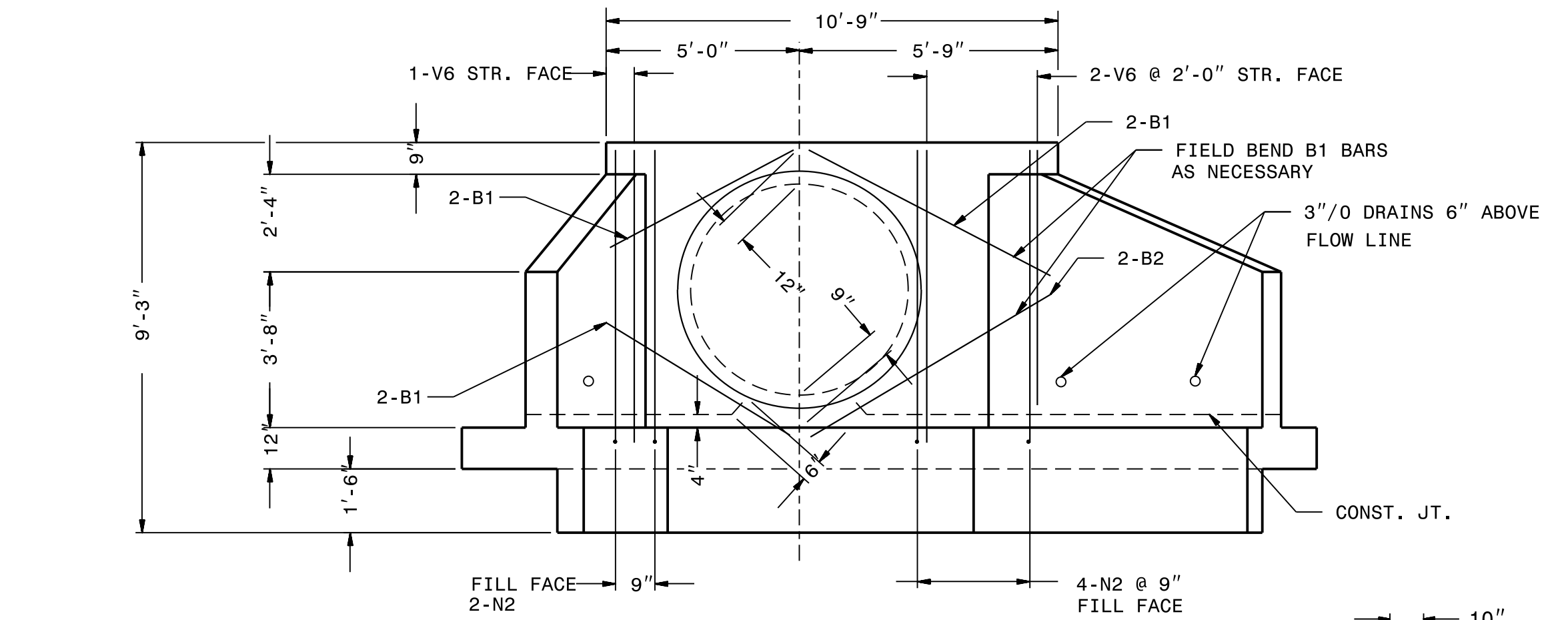
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
REINFORCED CONCRETE ENDWALL
FOR SINGLE 60" PIPE 60° OR 120° SKEW

SHEET OF
838d27

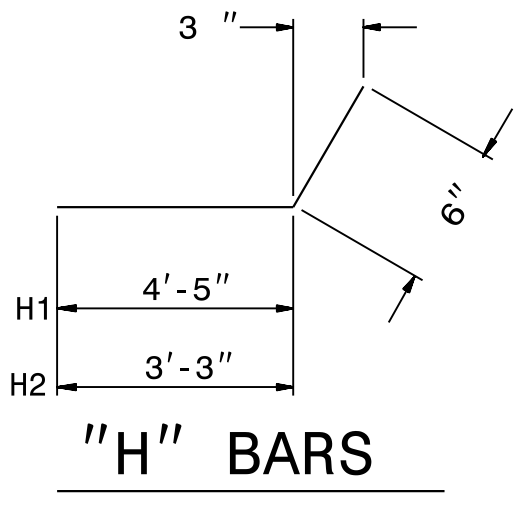


PLAN

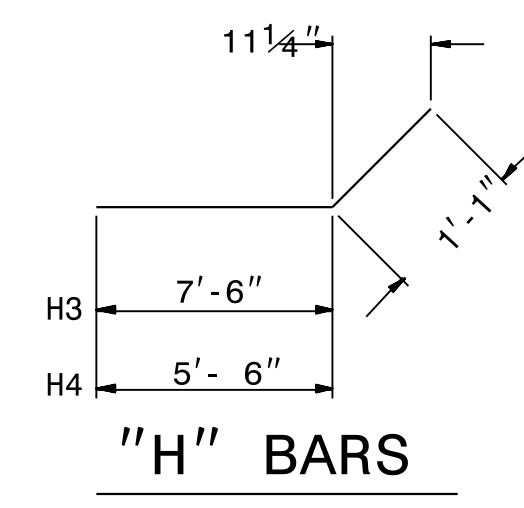


ELEVATION

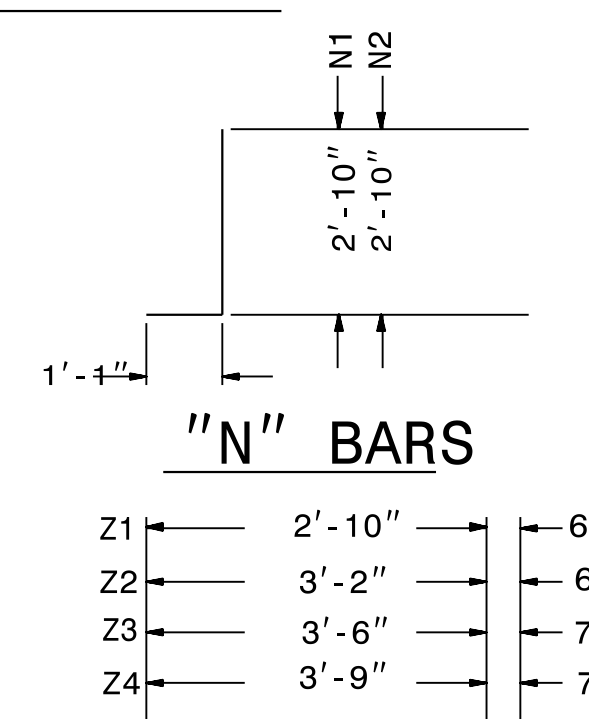
"H", "N", & "Z" BAR DIMENSIONS ARE OUT TO OUT.



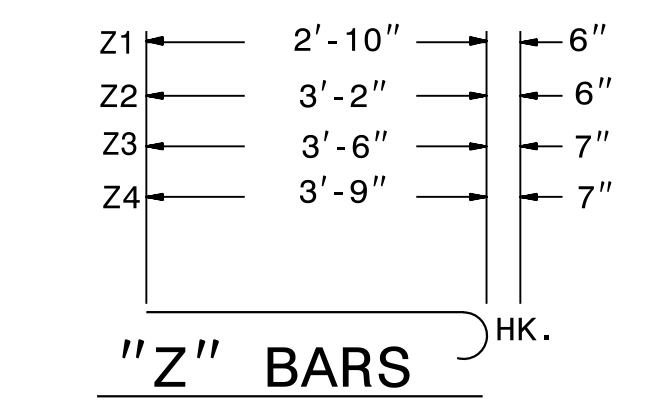
"H" BARS



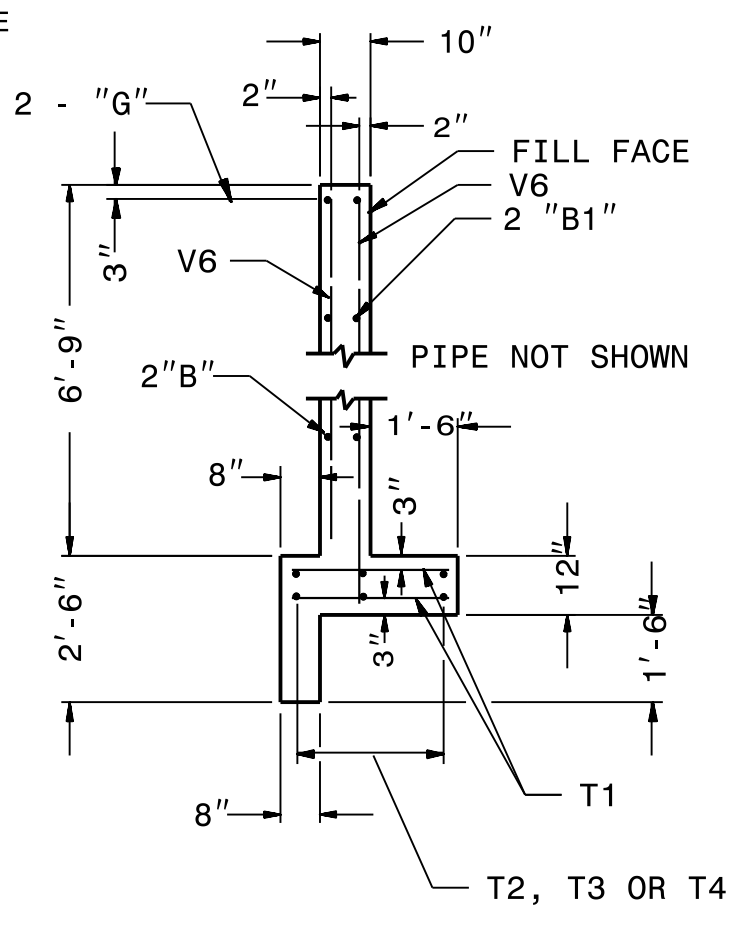
"H" BARS



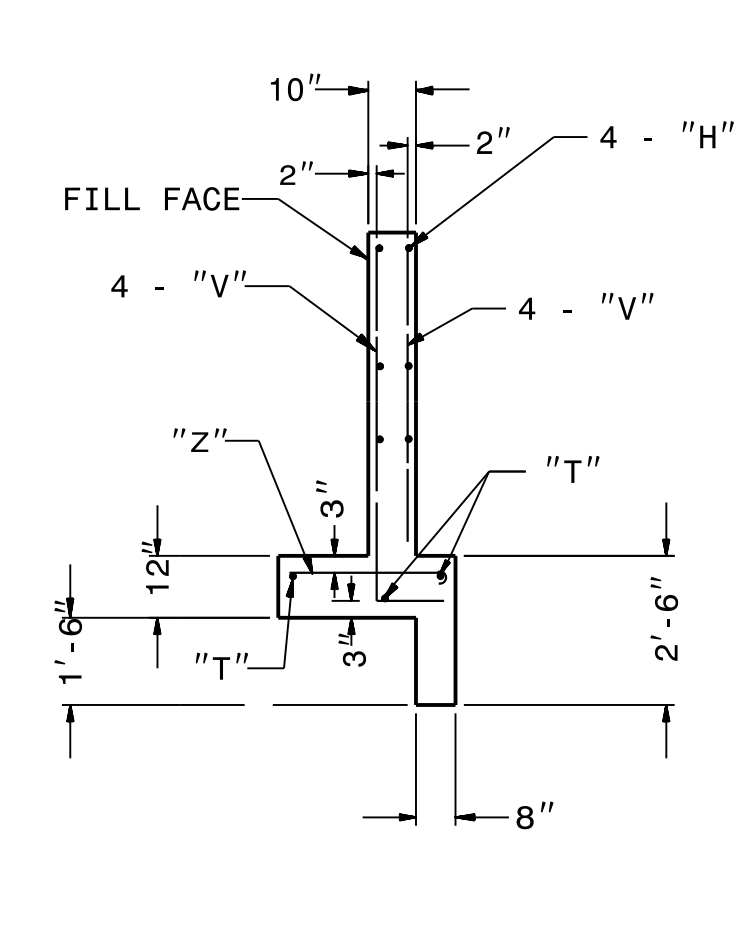
"N" BARS



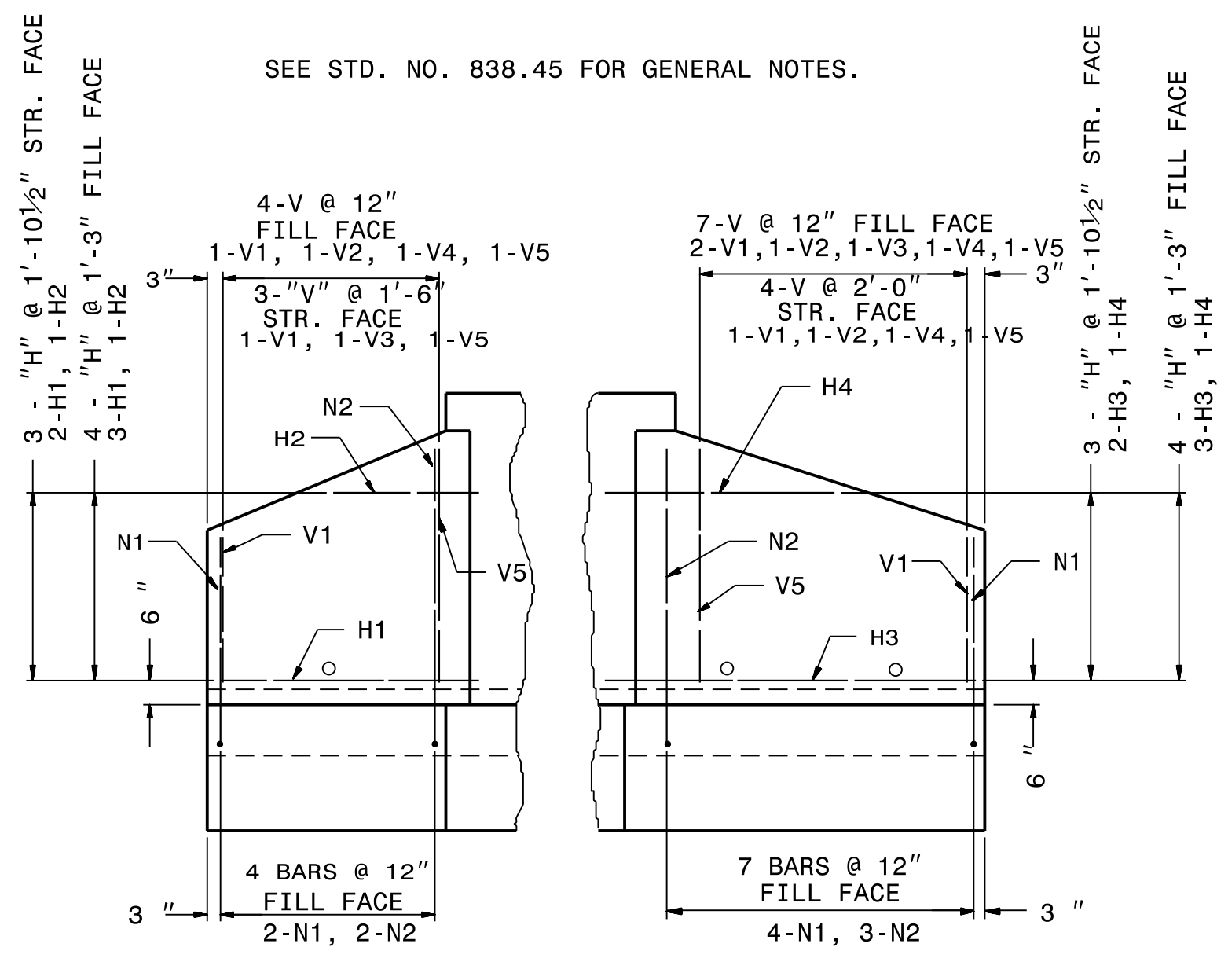
"Z" BARS



SECTION - BB



SECTION - AA



WING ELEVATION

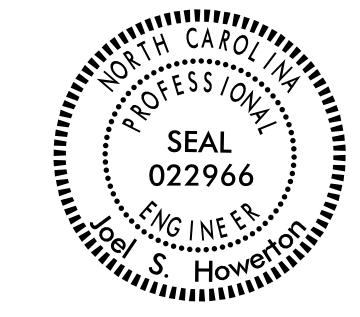
SEE STD. NO. 838.45 FOR GENERAL NOTES.

| BILL OF MATERIAL FOR ENDWALLS | | | | |
|-------------------------------|------|---------|-----------|--------|
| REINF. STEEL | | | 1 - PIPES | |
| BAR | SIZE | LENGTH | NO. | WEIGHT |
| Z1 | #4 | 3'-4" | 3 | 7 |
| Z2 | #4 | 3'-7" | 3 | 7 |
| Z3 | #5 | 4'-1" | 2 | 9 |
| Z4 | #5 | 4'-4" | 4 | 18 |
| N1 | #4 | 3'-5" | 6 | 14 |
| N2 | #4 | 3'-11" | 11 | 45 |
| V1 | #4 | 3'-3" | 5 | 11 |
| V2 | #4 | 3'-11" | 3 | 8 |
| V3 | #4 | 4'-3" | 2 | 6 |
| V4 | #4 | 4'-6" | 3 | 9 |
| V5 | #4 | 5'-1" | 5 | 17 |
| V6 | #4 | 6'-3" | 9 | 38 |
| H1 | #4 | 4'-11" | 5 | 16 |
| H2 | #4 | 3'-9" | 2 | 5 |
| H3 | #4 | 8'-7" | 5 | 29 |
| H4 | #4 | 6'-7" | 2 | 9 |
| G1 | #7 | 10'-5" | 2 | 43 |
| T1 | #4 | 2'-6" | 42 | 70 |
| T2 | #4 | 13'-11" | 6 | 56 |
| T5 | #4 | 4'-6" | 3 | 9 |
| T6 | #4 | 7'-0" | 3 | 14 |
| B1 | #4 | 5'-0" | 6 | 20 |
| B2 | #4 | 6'-6" | 2 | 9 |
| REINF. STEEL LBS. | | | 469 | |
| CONC./C.M. CU. YDS. | | | 6.7 | |
| CONC./R.C. CU. YDS. | | | 6.4 | |

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SHEET OF
838d27



DocuSigned by:
Joel S. Howerton
8733D1FDCC45F

8/3/2021

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

SEE PLATE FOR TITLE

ORIGINAL BY: _____ DATE: _____
MODIFIED BY: rnbritt DATE: 05-08-06
CHECKED BY: _____ DATE: _____
FILE SPEC.: s:nbritt/english/hydro/838d24_54_endwall_60sk.dgn