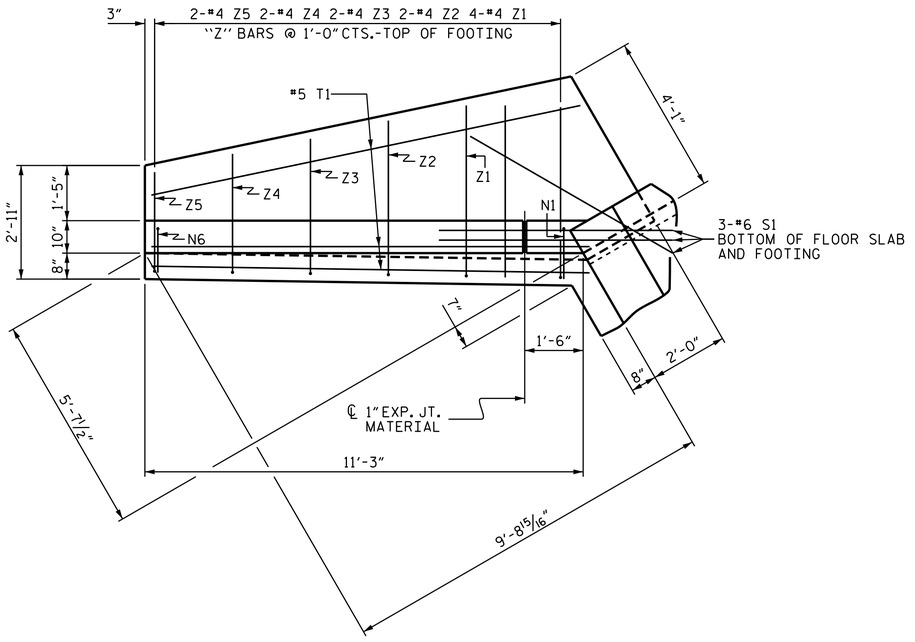
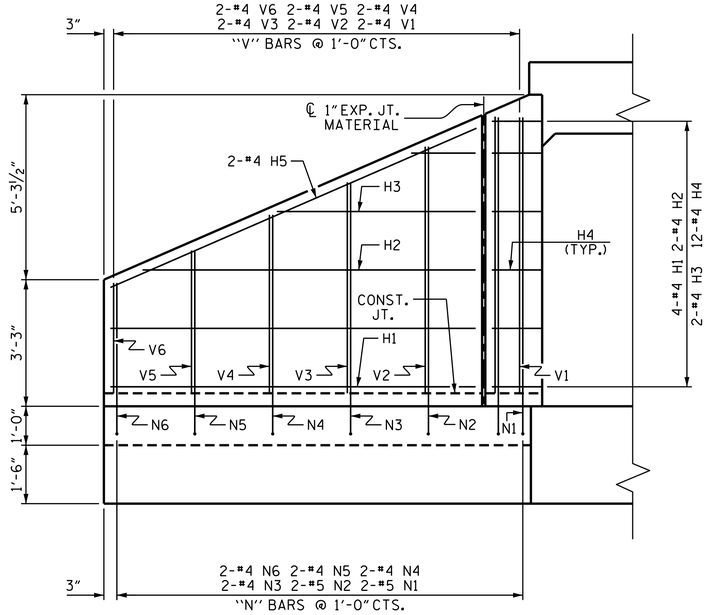
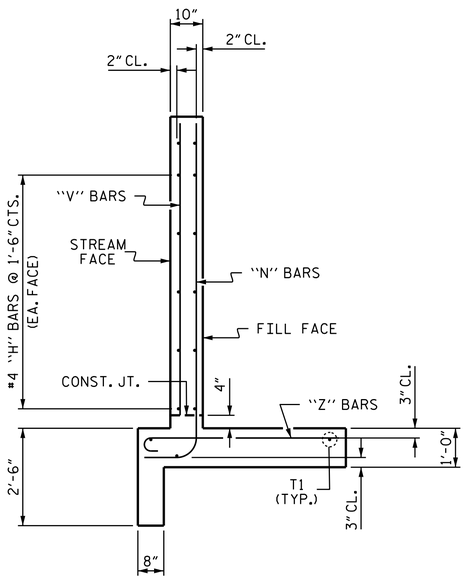


PLAN



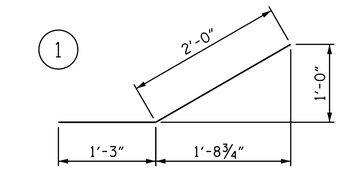
ELEVATION

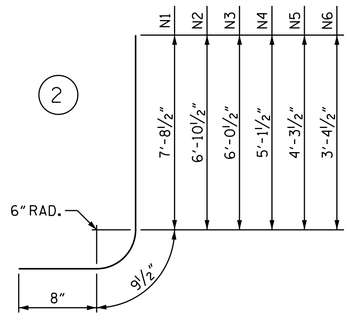


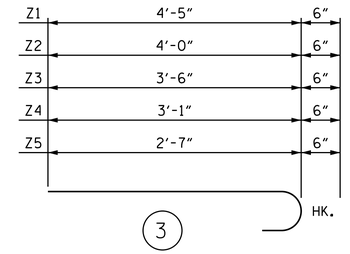
TYPICAL WING SECTION

BAR TYPES

ALL BAR DIMENSIONS ARE OUT TO OUT.







BILL OF MATERIAL

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
H1	16	#4	STR	9'-4"	100
H2	8	#4	STR	8'-6"	45
H3	8	#4	STR	5'-1"	27
H4	48	#4	1	3'-3"	104
H5	8	#4	STR	10'-3"	55
N1	8	#5	2	9'-2"	76
N2	8	#5	2	8'-4"	70
N3	8	#4	2	7'-6"	40
N4	8	#4	2	6'-7"	35
N5	8	#4	2	5'-9"	31
N6	8	#4	2	4'-10"	26
S1	12	#6	STR	6'-0"	108
T1	12	#5	STR	11'-3"	141
V1	8	#4	STR	7'-1"	38
V2	8	#4	STR	6'-4"	34
V3	8	#4	STR	5'-5"	29
V4	8	#4	STR	4'-7"	24
V5	8	#4	STR	3'-8"	20
V6	8	#4	STR	2'-10"	15
Z1	16	#4	3	4'-11"	53
Z2	8	#4	3	4'-6"	24
Z3	8	#4	3	4'-0"	21
Z4	8	#4	3	3'-7"	19
Z5	8	#4	3	3'-1"	16

TOTAL REINFORCING STEEL
FOR 4 WINGS 1,151 LBS

CLASS A CONCRETE
4 WINGS 17.1 CY
2 HEADWALLS 1.0 CY
2 END CURTAIN WALLS 1.0 CY
TOTAL 19.1 CY

PROJECT NO. R-2915A
WATAUGA/ASHE COUNTY
STATION: 16+10.00 -LPC-/
16+87.00 -RPC-
SHEET 4 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD WINGS FOR CONCRETE BOX CULVERT

H = 7'-0" SLOPE = 2:1
90° SKEW

NORTH CAROLINA PROFESSIONAL SEAL 17230 ENGINEER WAEL S. ARAFAT

DocuSigned by: Wael Arafat 45D9C0232324046... 7/28/2015

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	C-19
1			3			TOTAL SHEETS
2			4			20

STR. #4 STD. NO. CW9007

ASSEMBLED BY : M.K. BEARD	DATE : 2/23/15
CHECKED BY : H.T. BARBOUR	DATE : 3/2015
DRAWN BY : CCJ 10/99	
CHECKED BY : RWW 03/00	

24-JUL-2015 14:32
R:\Structures\FinalPlans\STR#4\R2915A_SD_CU_03.dgn
warafat