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BILL OF MATERIAL

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
H1	6	#4	STR	5'-4"	21
H2	2	#4	STR	2'-9"	4
H3	10	#4	1	3'-3"	22
H4	2	#4	STR	6'-1"	8
H5	6	#4	STR	16'-1"	64
H6	2	#4	STR	9'-6"	13
H7	10	#4	2	3'-3"	22
H8	2	#4	STR	16'-5"	22
H9	32	#6	STR	11'-8"	561
H10	14	#4	2	3'-3"	30
H11	4	#4	1	4'-1"	11
H12	14	#4	STR	25'-8"	240
H13	2	#4	STR	14'-1"	19
H14	2	#4	STR	25'-8"	34
H15	10	#4	STR	28'-9"	192
H16	2	#4	STR	20'-9"	28
H17	2	#4	STR	4'-4"	6
H18	2	#4	STR	28'-10"	39
N1	2	#4	3	8'-4"	11
N2	2	#4	3	7'-5"	10
N3	2	#4	3	6'-4"	8
N4	2	#4	3	5'-4"	7
N5	2	#4	3	8'-9"	12
N6	5	#4	3	7'-9"	26
N7	3	#4	3	7'-2"	14
N8	3	#4	3	6'-7"	13
N9	3	#4	3	5'-11"	12
N10	3	#4	3	5'-4"	11
N11	9	#4	3	8'-9"	53
N12	13	#5	3	9'-8"	131
N13	3	#5	3	9'-7"	30
N14	5	#5	3	9'-5"	49
N15	5	#5	3	9'-2"	48
N16	5	#5	3	8'-11"	47
N17	5	#5	3	8'-9"	46
N18	5	#5	3	8'-7"	45
N19	4	#5	3	8'-5"	35
N20	5	#5	3	8'-2"	43
N21	5	#5	3	8'-0"	42
N22	5	#5	3	7'-9"	40
N23	5	#5	3	7'-7"	40
N24	5	#5	3	7'-5"	39
N25	5	#5	3	7'-2"	37
N26	5	#5	3	7'-0"	37
N27	5	#5	3	6'-9"	35
S1	9	#6	STR	6'-0"	81
T1	2	#5	STR	7'-3"	15
T2	1	#5	STR	8'-0"	8
T3	3	#5	STR	18'-0"	56
T4	12	#5	STR	28'-9"	230

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
V1	2	#4	STR	6'-4"	8
V2	2	#4	STR	5'-5"	7
V3	2	#4	STR	4'-4"	6
V4	2	#4	STR	3'-4"	4
V5	2	#4	STR	6'-9"	9
V6	5	#4	STR	5'-9"	19
V7	3	#4	STR	5'-2"	10
V8	3	#4	STR	4'-6"	9
V9	3	#4	STR	3'-11"	8
V10	3	#4	STR	3'-3"	7
V11	9	#4	STR	7'-10"	47
V12	13	#4	STR	7'-6"	65
V13	3	#4	STR	7'-4"	15
V14	5	#4	STR	7'-2"	24
V15	5	#4	STR	6'-11"	23
V16	5	#4	STR	6'-9"	23
V17	5	#4	STR	6'-7"	22
V18	5	#4	STR	6'-4"	21
V19	4	#4	STR	6'-2"	16
V20	5	#4	STR	5'-11"	20
V21	5	#4	STR	5'-9"	19
V22	5	#4	STR	5'-7"	19
V23	5	#4	STR	5'-4"	18
V24	5	#4	STR	5'-2"	17
V25	5	#4	STR	5'-0"	17
V26	5	#4	STR	4'-9"	16
V27	5	#4	STR	4'-6"	15
Z1	2	#4	4	4'-8"	6
Z2	2	#4	4	4'-1"	5
Z3	2	#4	4	3'-6"	5
Z4	2	#4	4	2'-11"	4
Z5	2	#4	4	4'-11"	7
Z6	5	#4	4	4'-4"	14
Z7	3	#4	4	4'-0"	8
Z8	3	#4	4	3'-8"	7
Z9	3	#4	4	3'-3"	7
Z10	3	#4	4	2'-11"	6
Z11	82	#6	4	6'-10"	842

SPLICE LENGTH CHART

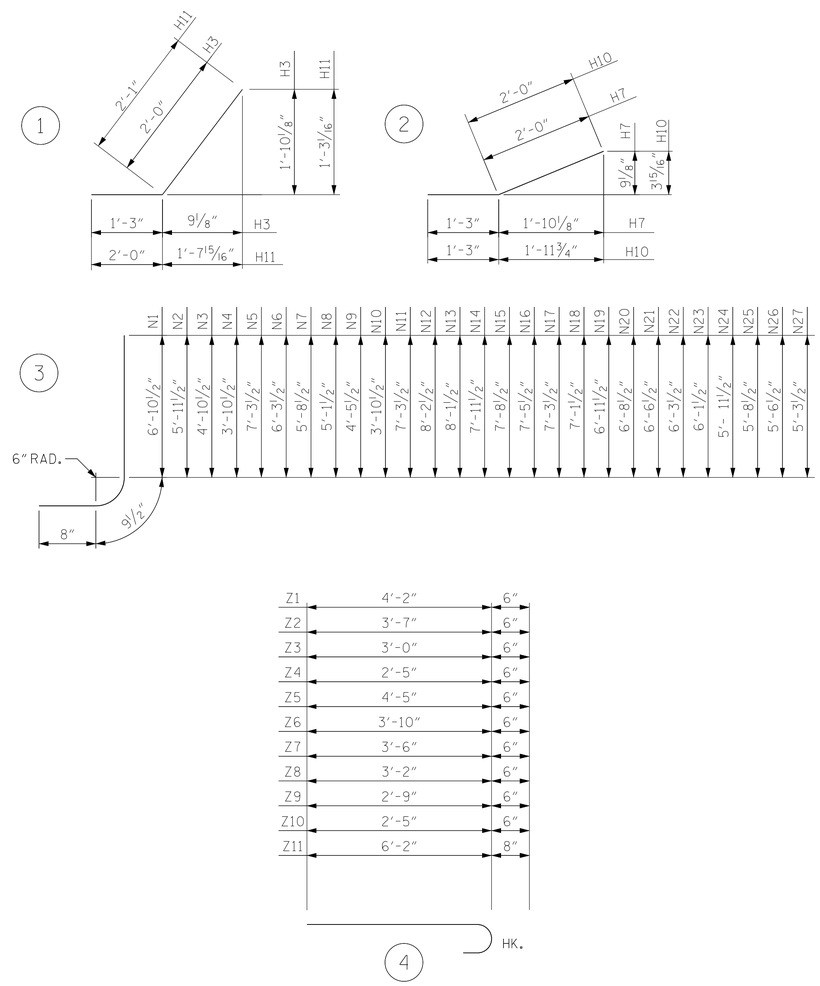
BAR SIZE	SPLICE LENGTH
#4	1'-9"
#5	2'-2"
#6	2'-9"

REINFORCING STEEL FOR 4 WINGS 4172 LBS

CLASS A CONCRETE

4 WINGS	37.0	CY
2 HEADWALLS	2.4	CY
2 END CURTAIN WALLS	6.1	CY
TOTAL	45.5	CY

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

PROJECT NO. 14SP.20201.1

CHEROKEE COUNTY

STATION: 11+97.95 -L-

SHEET 9 OF 11

REVISED FINAL
02/03/17

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER HOLLY L. WILLIS
DocuSigned by: Holly L. Willis
7/20/2018 1:49:14 PM EDT

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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

WING DETAILS FOR CONCRETE BOX CULVERT

H = 6'-0" SLOPE = 2:1
45° OR 135° SKEW

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	C-9
1			3			TOTAL SHEETS
2			4			11