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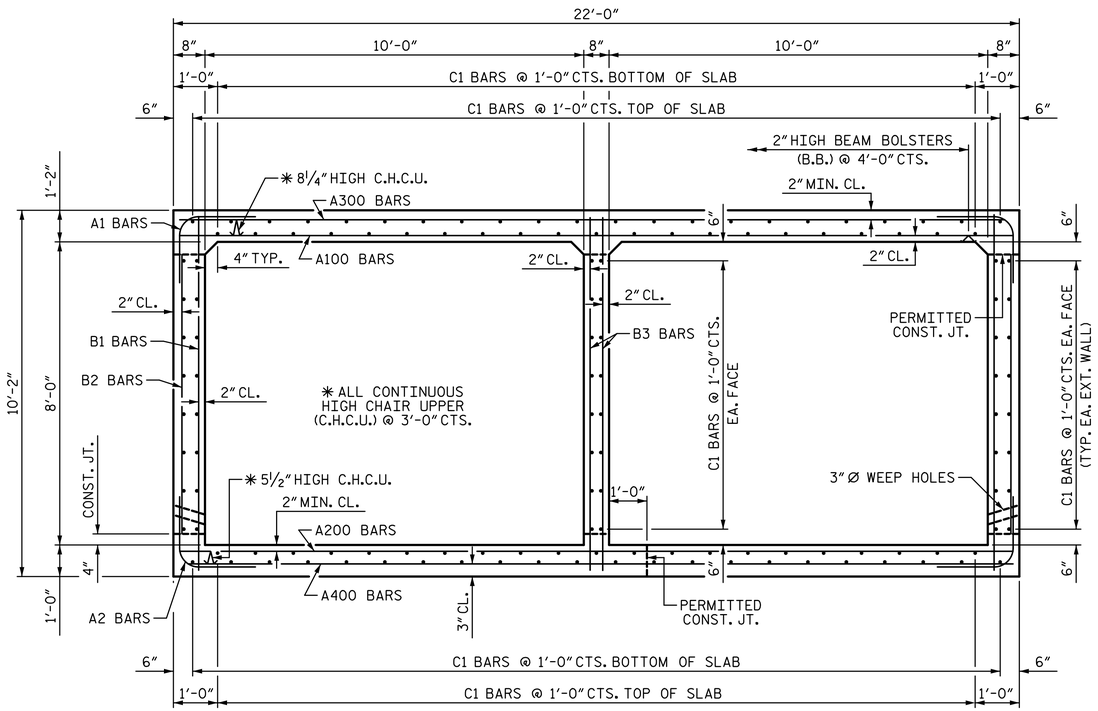
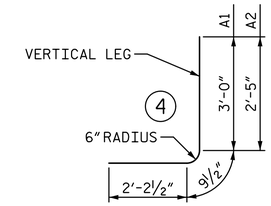


SECTION OF BARREL

(THERE ARE 134 C1 BARS IN SECTION OF BARREL)

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

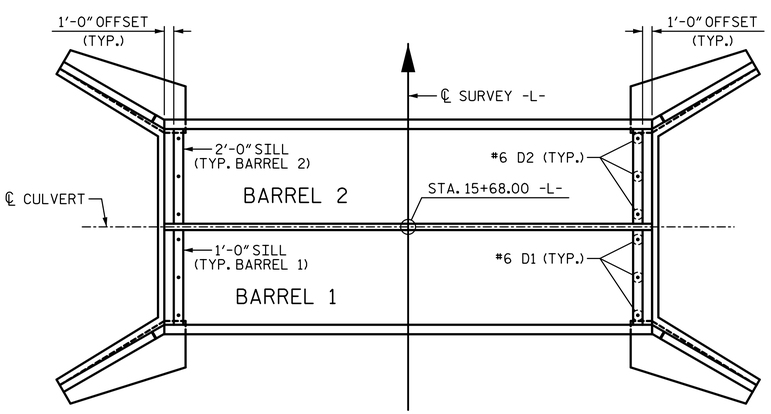
BILL OF MATERIAL

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
A1	206	5	4	6'-0"	1289
A2	206	5	4	5'-5"	1164
A100	89	5	STR	21'-7"	2004
A200	78	5	STR	21'-7"	1756
A300	103	6	STR	21'-7"	3339
A400	103	5	STR	21'-7"	2319
B1	104	4	STR	9'-8"	672
B2	206	4	STR	7'-4"	1009
B3	104	4	STR	9'-8"	672
C1	268	4	STR	26'-6"	4744
D1	6	6	STR	1'-6"	14
D2	6	6	STR	2'-6"	23
G1	8	5	STR	21'-7"	180
TOTAL REINFORCING STEEL					19185 LB

CLASS "A" CONCRETE BREAKDOWN	
BARREL	121.9 CY
HEADWALLS	2.0 CY
SILLS	2.2 CY

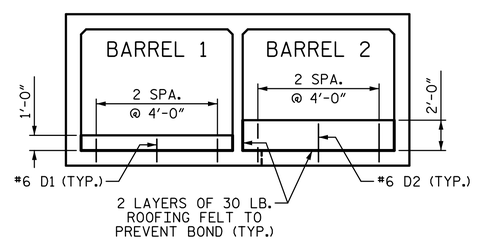
SPLICE CHART

- #4 B1 SPLICE LENGTH = 1'-9"
- #4 B3 SPLICE LENGTH = 1'-9"
- #4 C1 SPLICE LENGTH = 1'-11"
- #5 A200 SPLICE LENGTH = 2'-2"
- #5 A400 SPLICE LENGTH = 2'-2"

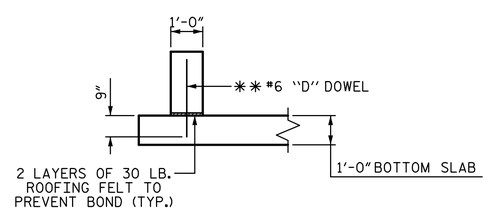


FLOOR PLAN

(SHOWING PLACEMENT OF SILLS)



ELEVATION - LOOKING DOWNSTREAM



SECTION THROUGH SILL

✱✱ DOWELS MAY BE PUSHED INTO GREEN CONCRETE AFTER SLAB HAS BEEN FLOAT FINISHED.

CULVERT SILL DETAILS

PROJECT NO. 17BP.5.R.51

WAKE COUNTY

STATION: 15+68.00 -L-

SHEET 3 OF 6

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DOUBLE 10 FT. X 8 FT. CONCRETE BOX CULVERT 90° SKEW

PLANS PREPARED BY:
SIMPSON ENGINEERS & ASSOCIATES
5640 Dillard Drive
Suite 200
Cary, NC 27518
(919) 852-0468
(919) 852-0598 (Fax)
www.simpsonengr.com
LICENSURE NO. C-2521

NORTH CAROLINA PROFESSIONAL SEAL 18056 ENGINEER JOHN A. BATTS
DocuSigned by: John A. Batts
2/5/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS							SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:		C-3
1			3				TOTAL SHEETS
2			4				6

DRAWN BY:	T. BANKOVICH	DATE:	2-18
CHECKED BY:	B.S. COX	DATE:	2-18
DESIGN ENGINEER OF RECORD:	J.A. BATTS	DATE:	2-18

2/5/2018 12:26:31 PM G:\Projects\2014\17BP5R51 (Wake 27)\Structures\Drawings\Final\Wake 27_smu_culvert.dgn