

See Sheet 1-A For Index of Sheets

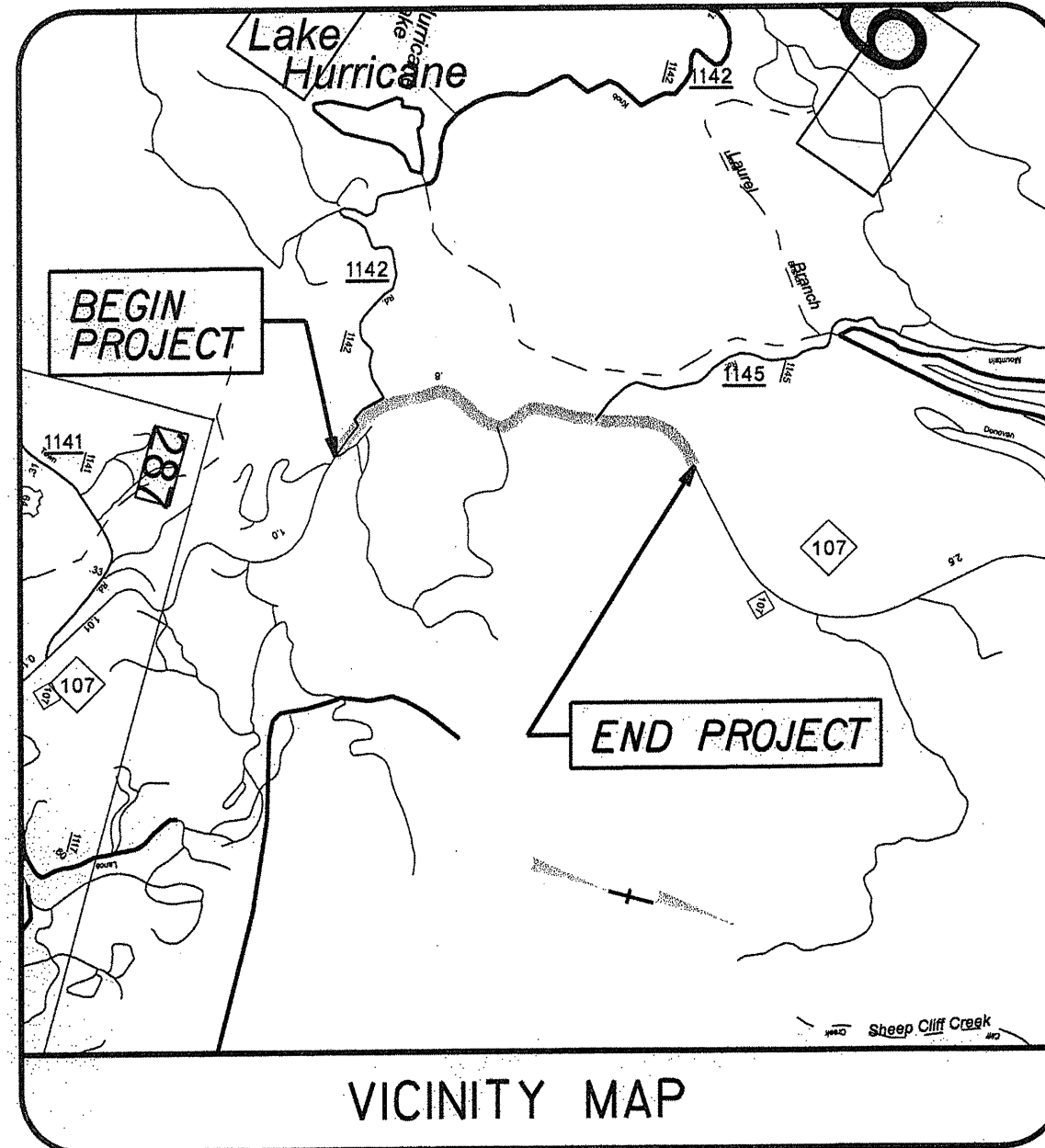
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

JACKSON COUNTY

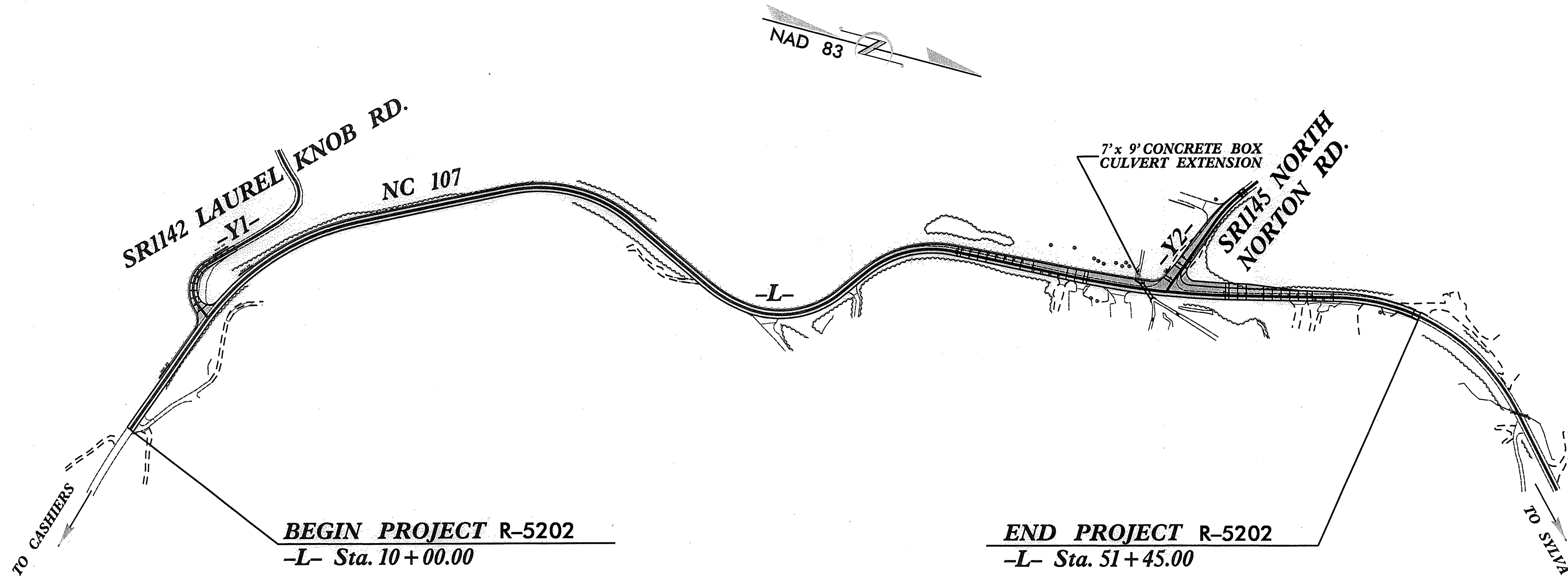
LOCATION: NC 107 FROM JUST SOUTH OF SR 1142 (LAUREL KNOB ROAD) TO JUST NORTH OF SR 1145 (NORTH NORTON ROAD)

TYPE OF WORK: GRADING, PAVING, STRUCTURE, DRAINAGE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5202	1	7
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
42803.1.ST1	STM-0107(11)	PE	
42803.3.ST1	STM-0107(11)	CONST	

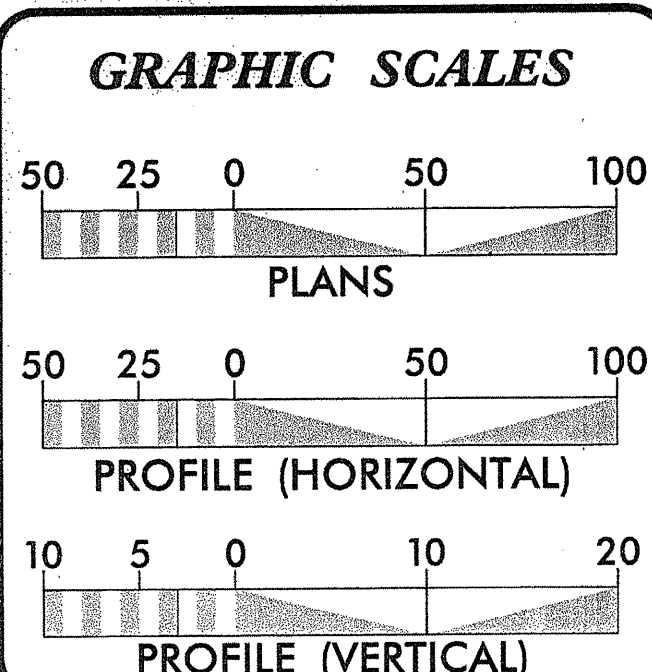


PROJECT: R-5202



DESIGN EXCEPTION REQUIRED FOR HORIZONTAL ALIGNMENT, VERTICAL ALIGNMENT, SHOULDER WIDTH, AND STOPPING SIGHT DISTANCE.

CONTRACT:



DESIGN DATA

ADT 2005 = 6700
V = 50 MPH

PROJECT LENGTH

Length Roadway
Project MA14029R 0.785 Mi.
TOTAL LENGTH
Project MA14029R 0.785 Mi.

PLANS PREPARED BY :
RUMMEL, KLEPPER & KAHL, LLP
consulting engineers
900 RIDGEFIELD DRIVE, SUITE 350
RALEIGH, NORTH CAROLINA 27609
(919) 878-9560
FOR
DIVISION OF HIGHWAYS

2006 STANDARD SPECIFICATIONS
ROW DATE:
April 16, 2007
LETTING DATE:
February 16, 2010

B. Keith Skinner, P.E.
PROJECT ENGINEER

Brandon J. McInnis, P.E.
PROJECT DESIGN ENGINEER

STRUCTURAL ENGINEER

David B. Peterson
10-9-09

SEAL
17428
ENGINEER
LAWD & PETERSON

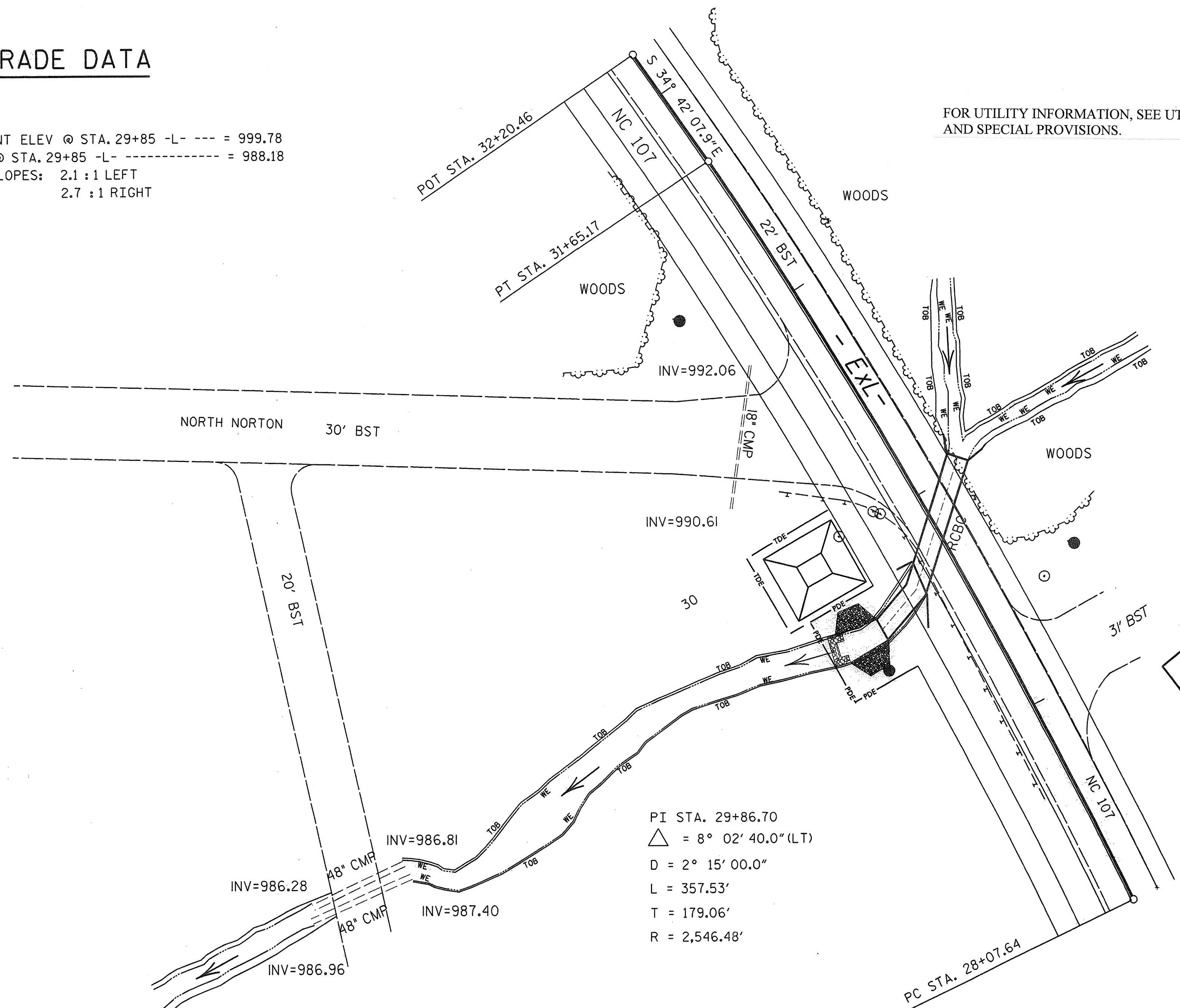
SIGNATURE: _____ P.E.

**DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA**

STATE HIGHWAY DESIGN ENGINEER

GRADE DATA

GRADE POINT ELEV @ STA. 29+85 -L- --- = 999.78
 BED ELEV @ STA. 29+85 -L- ----- = 988.18
 ROADWAY SLOPES: 2.1 : 1 LEFT
 2.7 : 1 RIGHT



LOCATION SKETCH

HYDRAULIC DATA

DESIGN DISCHARGE ----- = 576 ft³/s
 FREQUENCY OF DESIGN FLOOD ----- = 50 yr.
 DESIGN HIGH WATER ELEVATION ----- = 996.41
 DRAINAGE AREA ----- = 0.70 sq. miles
 BASIC DISCHARGE (Q100) ----- = 697 ft³/s
 BASIC HIGH WATER ELEVATION ----- = 997.94

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE ----- = 725 ft³/s
 FREQUENCY OF OVERTOPPING FLOOD ----- = 100+ yr.
 OVERTOPPING FLOOD ELEVATION ----- = 998.25

TOTAL STRUCTURE QUANTITIES		
CLASS A CONCRETE		
BARREL @	0.992	CY/FT 26.6 C.Y.
WING ETC.		11.2 C.Y.
TOTAL		37.8 C.Y.
REINFORCING STEEL		
BARREL		4,427 LBS.
WINGS ETC.		639 LBS.
TOTAL		5,066 LBS.
CULVERT EXCAVATION ----- LUMP SUM		
FOUNDATION COND. MAT'L ----- 20 TONS		

NOTES:

- ASSUMED LIVE LOAD ----- HS20-44 OR ALTERNATE LOADING.
- DESIGN FILL ----- 6'-0"
- FOR OTHER DESIGN DATA AND NOTES SEE STANDARD NOTE SHEET.
- 3" Ø WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.
- CONCRETE IN CULVERTS TO BE POURED IN THE FOLLOWING ORDER:
 1. WING FOOTINGS AND FLOOR SLAB INCLUDING 4" OF ALL VERTICAL WALLS.
 2. THE REMAINING PORTIONS OF THE WALLS AND WINGS FULL HEIGHT FOLLOWED BY ROOF SLAB AND HEADWALLS.
- THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF CULVERT BEFORE STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE OF THE FILL.
- THIS BARREL STANDARD TO BE USED ONLY ON CULVERT ON 75° SKEW AND TO BE USED WITH STANDARD WING SHEET WITH THE SAME SKEW AND VERTICAL CLEARANCE.
- DIMENSIONS FOR WING LAYOUT AS WELL AS ADDITIONAL REINFORCING STEEL EMBEDDED IN BARREL ARE SHOWN ON WING SHEET.
- AT THE CONTRACTOR'S OPTION, HE MAY SPLICE THE VERTICAL REINFORCING STEEL IN THE INTERIOR FACE OF EXTERIOR WALL ABOVE LOWER WALL CONSTRUCTION JOINT. THE SPLICE LENGTH SHALL BE AS PROVIDED IN THE SPLICE LENGTH CHART SHOWN ON THE PLANS. EXTRA WEIGHT OF STEEL DUE TO THE SPLICES SHALL BE PAID FOR BY THE CONTRACTOR.
- NO PRECAST REINFORCED BOX CULVERT OPTION WILL BE ALLOWED.
- IF APPROVED BY THE ENGINEER, THE CONTRACTOR MAY USE THE EXISTING WINGS AS TEMPORARY SHORING FOR THE CONSTRUCTION OF THE CULVERT EXTENSIONS. IN THIS CASE, THE BOTTOM SLAB OF THE EXTENSION SHALL BE POURED AT LEAST 72 HOURS PRIOR TO CUTTING THE WINGS. THE WINGS MAY BE CUT EARLIER PROVIDED THE SLAB CONCRETE STRENGTH HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 1500 psi.
- FOR CULVERT DIVERSION DETAILS AND PAY ITEM, SEE CULVERT EXTENSION CONSTRUCTION SEQUENCE PLAN AND WRITE UP.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR CURING CONCRETE, SEE SPECIAL PROVISIONS.

PROJECT NO. R-5202
JACKSON COUNTY
 STATION: 29+85.00 -L-

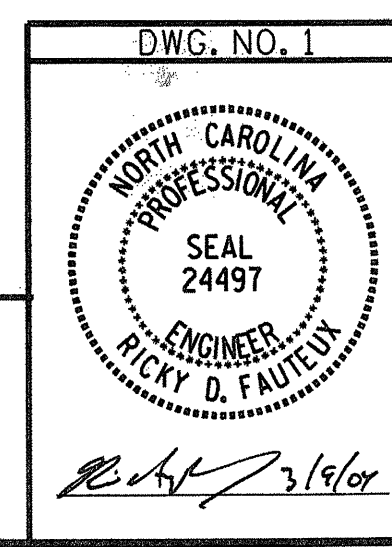
SHEET 1 OF 5

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**BARREL STANDARD
 SINGLE 7 FT. X 9 FT.
 CONCRETE BOX CULVERT EXT.
 75° SKEW**

MARCH 2004

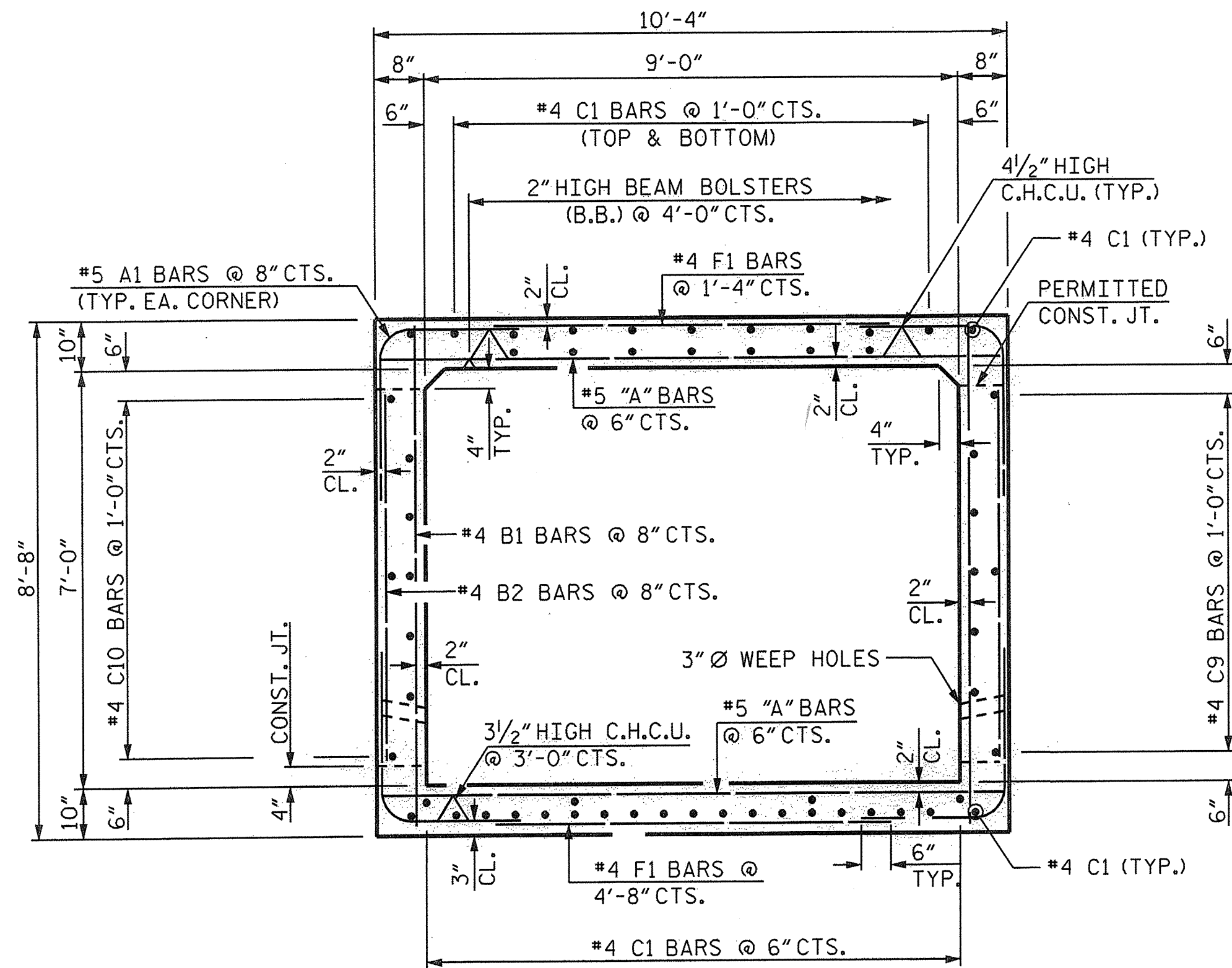
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2			4			7



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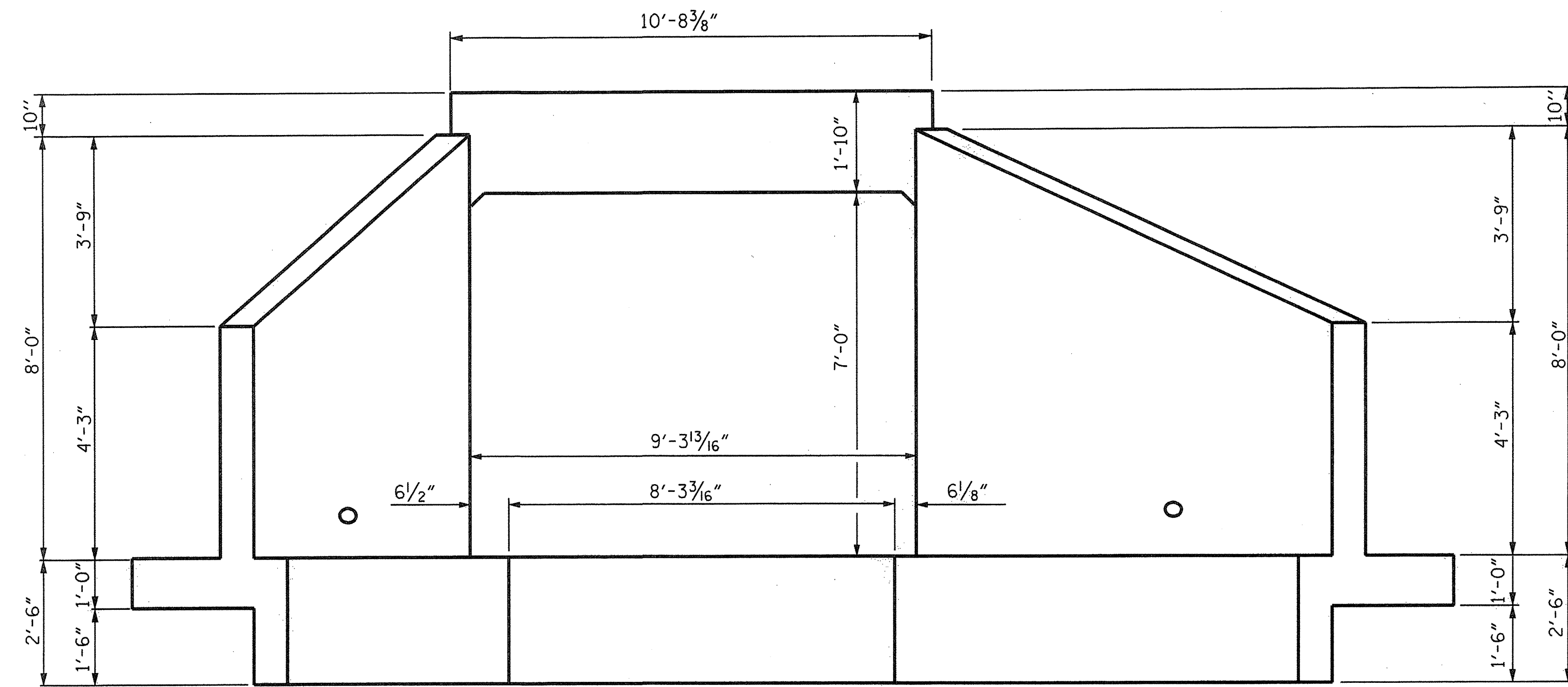
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DRAWN BY: F. WEEDEN DATE: 03/2004
 CHECKED BY: R. FAUTEUX DATE: 03/2004



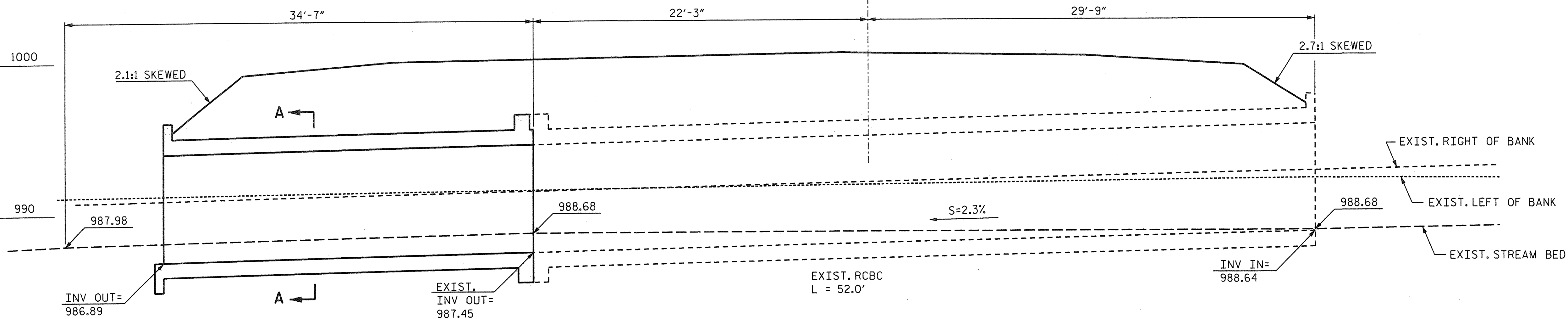
SECTION A-A
RIGHT ANGLE SECTION OF BARREL

(NOTE: THERE ARE 57 "C" BARS IN SECTION OF BARREL)



END ELEVATION NORMAL TO SKEW

CL - STA. 29+85
ELEV. = 999.78
SKEW = 47°55'06"

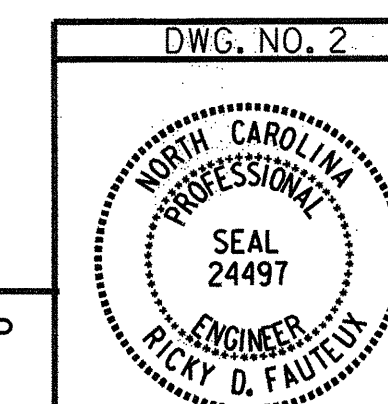


PROFILE ALONG CL OF CULVERT

PROJECT NO. R-5202
JACKSON COUNTY
STATION: 29+85.00 -L-

SHEET 2 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
BARREL STANDARD
SINGLE 7 FT. X 9 FT.
CONCRETE BOX CULVERT EXT.
75° SKEW
MARCH 2004



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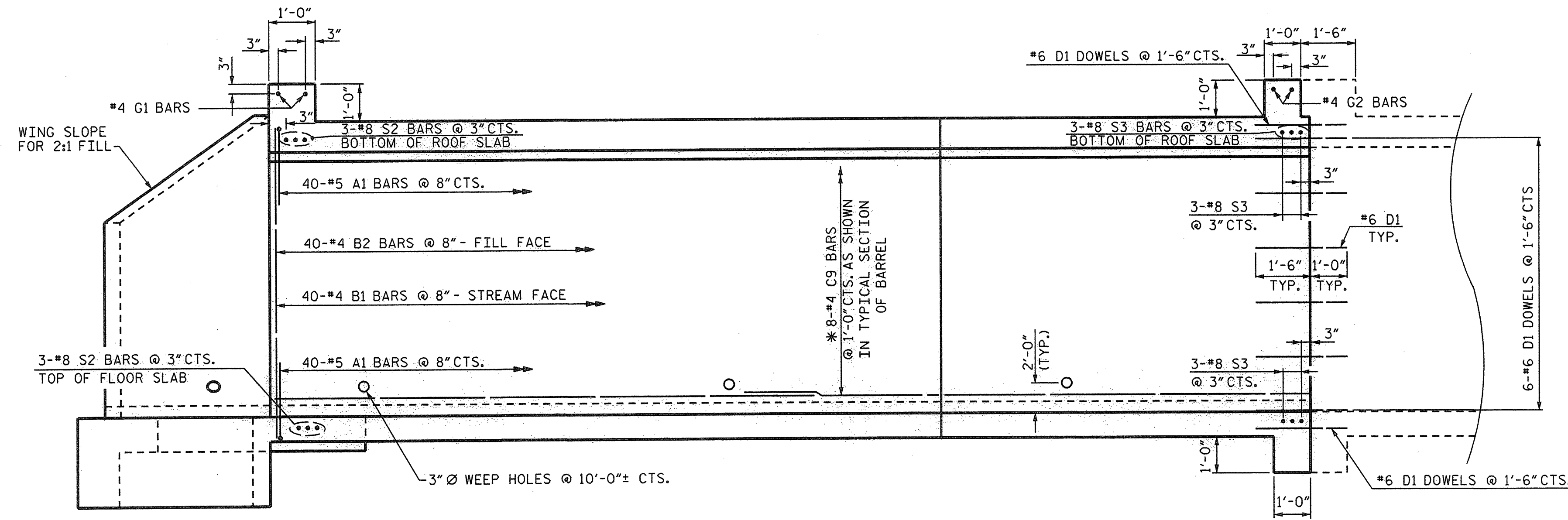
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CHECKED BY : R.D. FAUTEUX DATE : 03/2004

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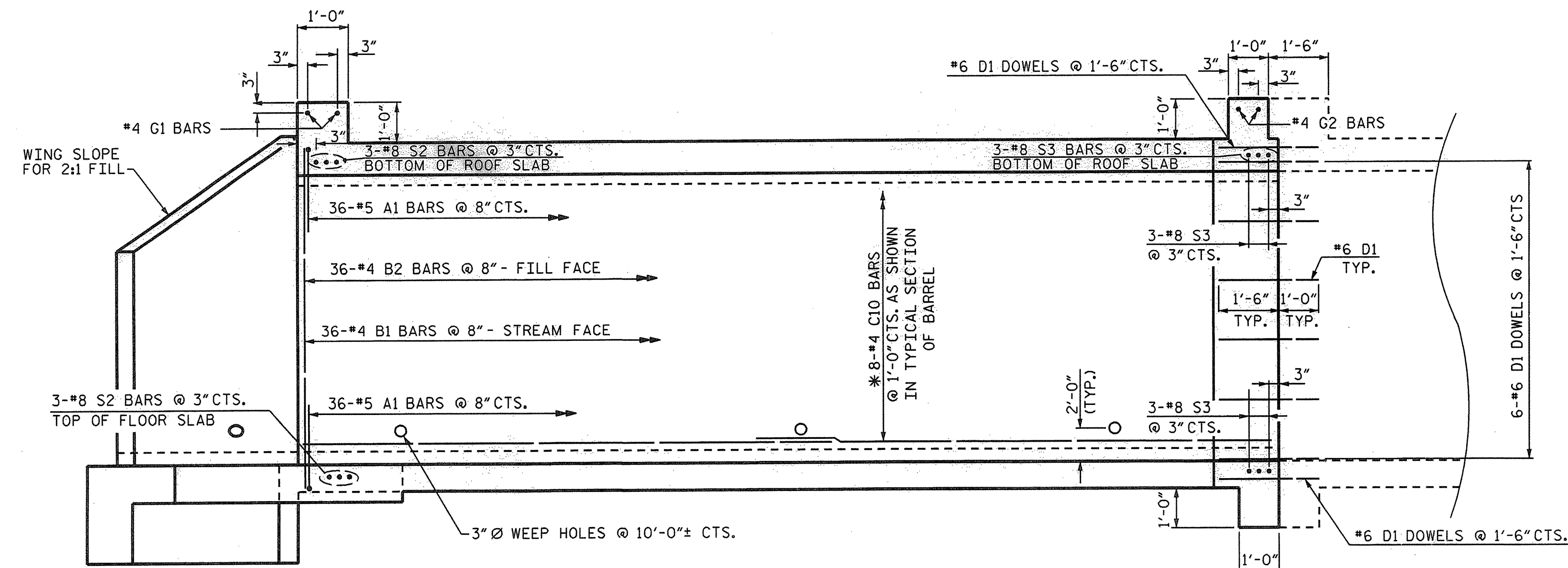
DOWELS SHALL BE USED TO CONNECT THE CULVERT EXTENSION TO THE EXISTING CULVERT AS SHOWN. FOR NOTE REGARDING SETTING OF DOWELS, SEE SHEET SN.



W2 SIDE WALL ELEVATION NORMAL TO SKEW

ELEVATION OF STREAM FACE

* FIELD BEND #4 C9 & #4 C10 BARS AS REQUIRED.



W1 SIDE WALL ELEVATION NORMAL TO SKEW

ELEVATION OF FILL FACE

PROJECT NO. R-5202
JACKSON COUNTY
 STATION: 29+85.00 -L-

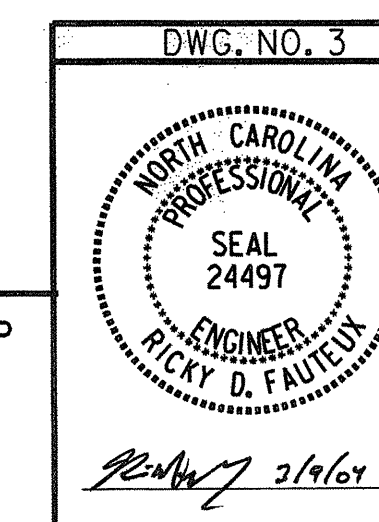
SHEET 3 OF 5

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SIDE WALL ELEVATION
 AND DETAILS**

MARCH 2004

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2			4				

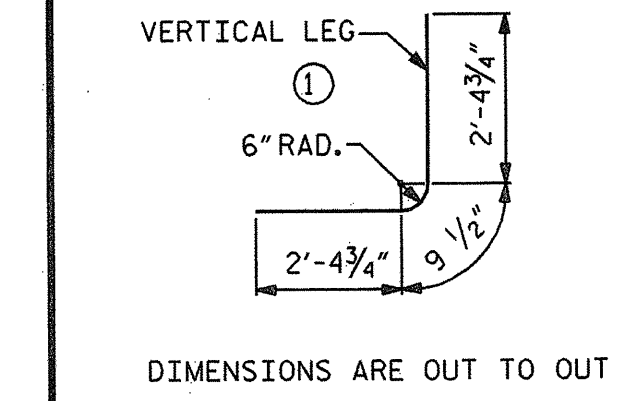


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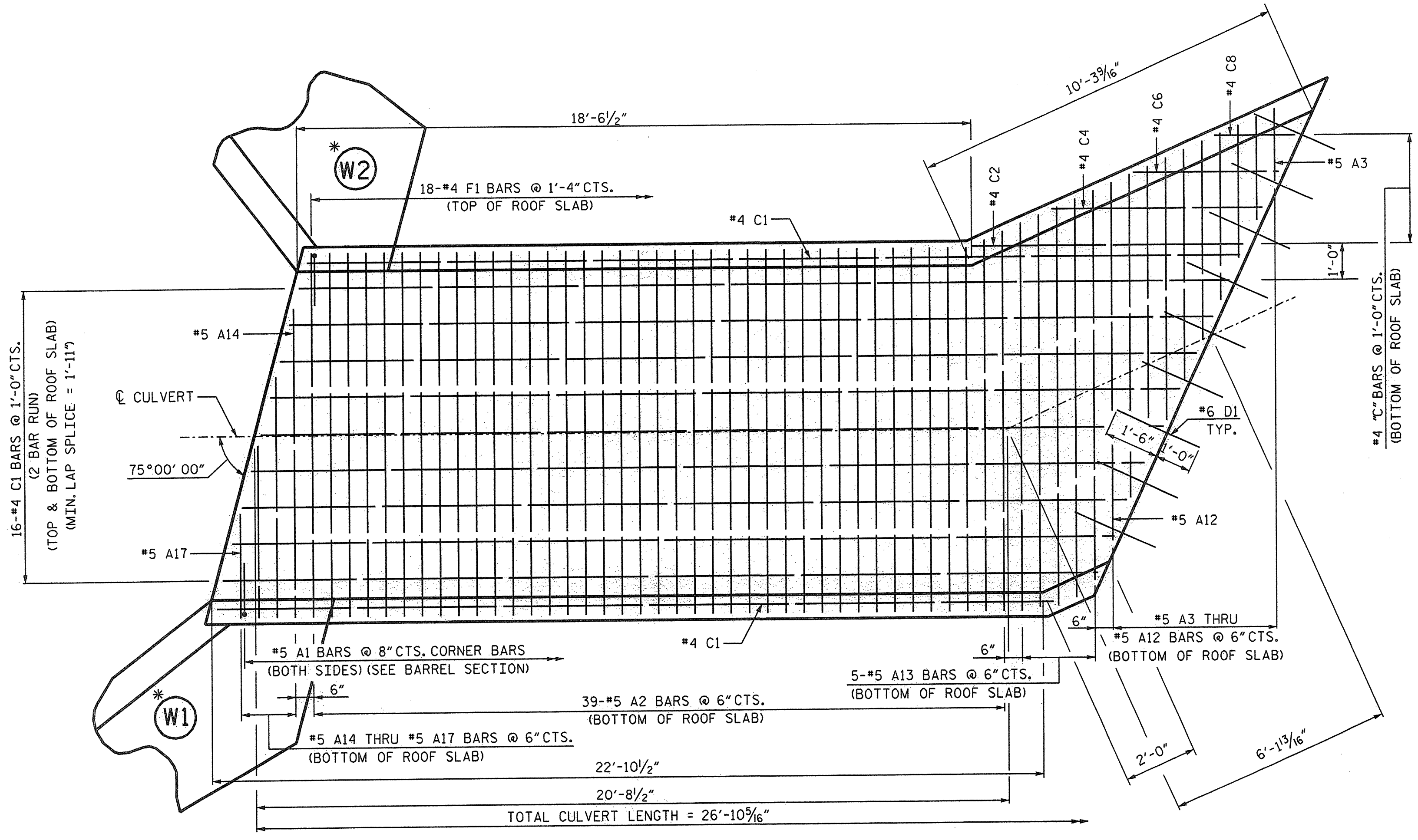
DRAWN BY : F. WEEDEN DATE : 03/2004
 CHECKED BY : R. FAUTEUX DATE : 03/2004

BAR TYPE		BILL OF MATERIAL				
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	
A1	152	#5	1	5'-7"	885	
A2	78	#5	STR	10'-0"	814	
A3	2	#5	STR	2'-0"	4	
A4	2	#5	STR	2'-10"	6	
A5	2	#5	STR	3'-8"	8	
A6	2	#5	STR	4'-7"	10	
A7	2	#5	STR	5'-5"	11	
A8	2	#5	STR	6'-4"	13	
A9	2	#5	STR	7'-2"	15	
A10	2	#5	STR	8'-1"	17	
A11	2	#5	STR	8'-11"	19	
A12	2	#5	STR	9'-9"	20	
A13	10	#5	STR	10'-7"	110	
A14	2	#5	STR	8'-5"	18	
A15	2	#5	STR	6'-7"	14	
A16	2	#5	STR	4'-8"	10	
A17	2	#5	STR	2'-10"	6	
B1	76	#4	STR	8'-4"	423	
B2	76	#4	STR	6'-0"	305	
C1	82	#4	STR	13'-11"	762	
C2	2	#4	STR	7'-6"	10	
C3	1	#4	STR	6'-8"	5	
C4	2	#4	STR	5'-9"	8	
C5	1	#4	STR	4'-10"	3	
C6	2	#4	STR	4'-0"	5	
C7	1	#4	STR	3'-1"	2	
C8	2	#4	STR	2'-2"	3	
C9	8	#4	STR	24'-2"	129	
C10	8	#4	STR	28'-5"	152	
D1	30	#6	STR	2'-6"	113	
F1	24	#4	STR	5'-2"	83	
G1	2	#4	STR	10'-4"	14	
G2	2	#4	STR	15'-3"	20	
S2	6	#8	STR	10'-4"	166	
S3	6	#8	STR	15'-3"	244	
REINFORCING STEEL					4,427 LBS.	



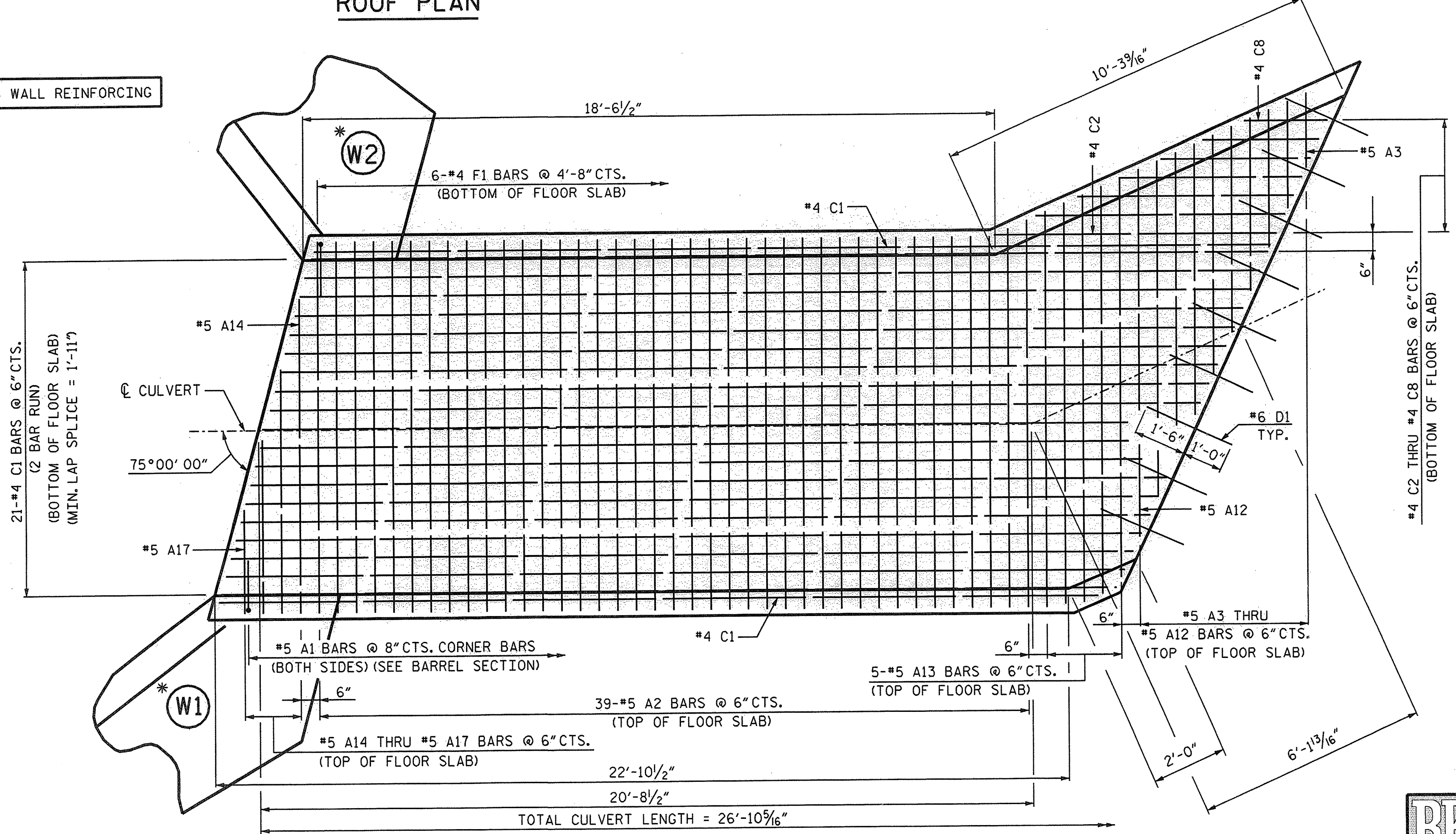
SPLICE LENGTHS		
BAR	SIZE	SPLICE LENGTHS
B2	#4	1'-9"
C	#4	1'-11"

NOTE:
FOR NOTES REGARDING DOWELS, SEE SHEET 3 OF 5.



ROOF PLAN

* SEE DWG. NO. 5 FOR WING WALL REINFORCING



FLOOR PLAN

PROJECT NO. R-5202
JACKSON COUNTY
STATION: 29+85.00 -L-

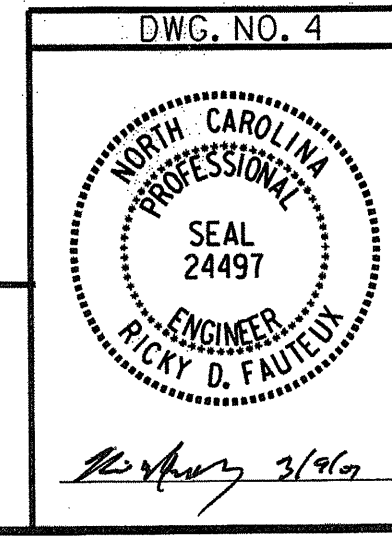
SHEET 4 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

FLOOR AND ROOF DETAILS

MARCH 2004

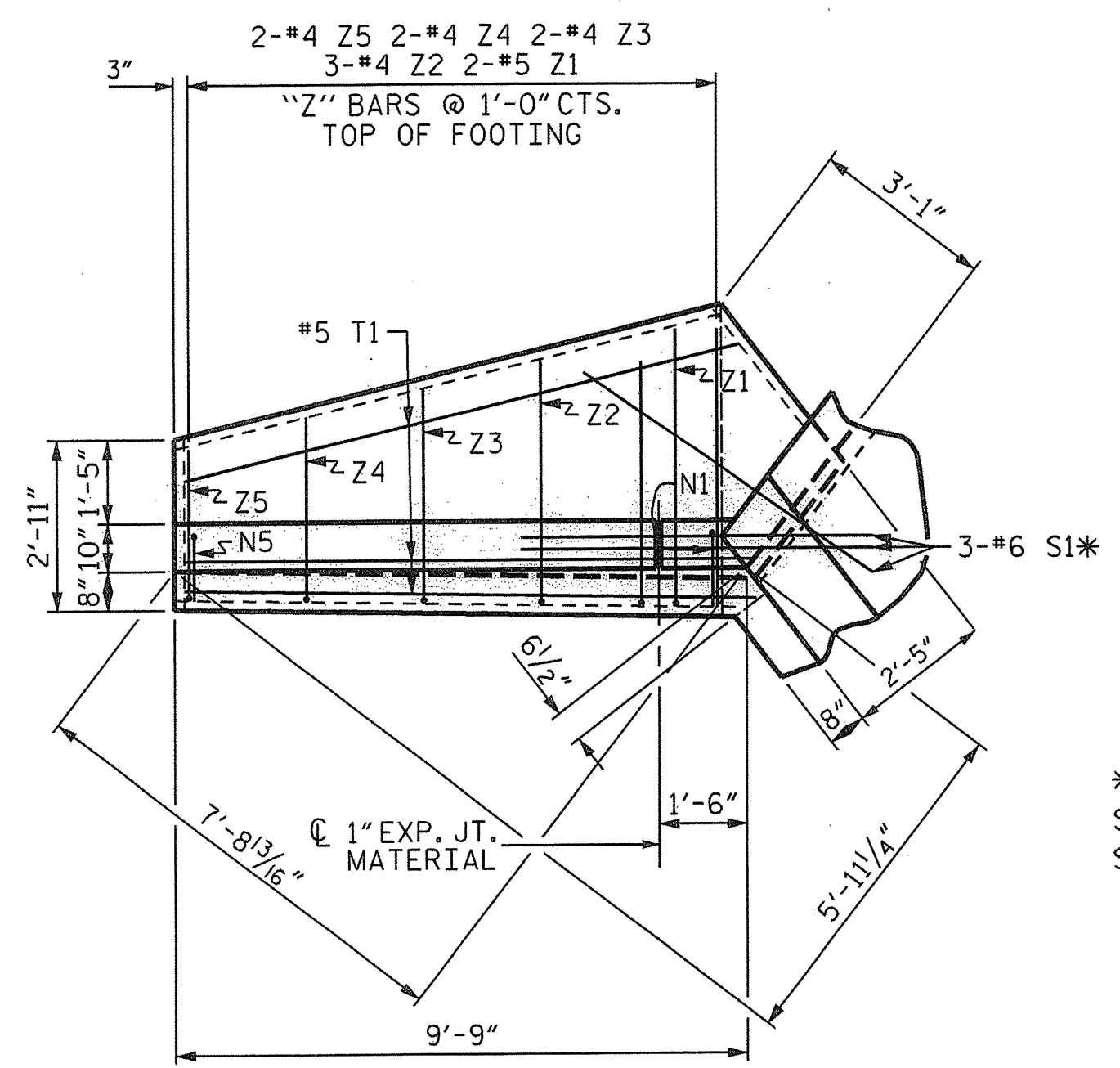
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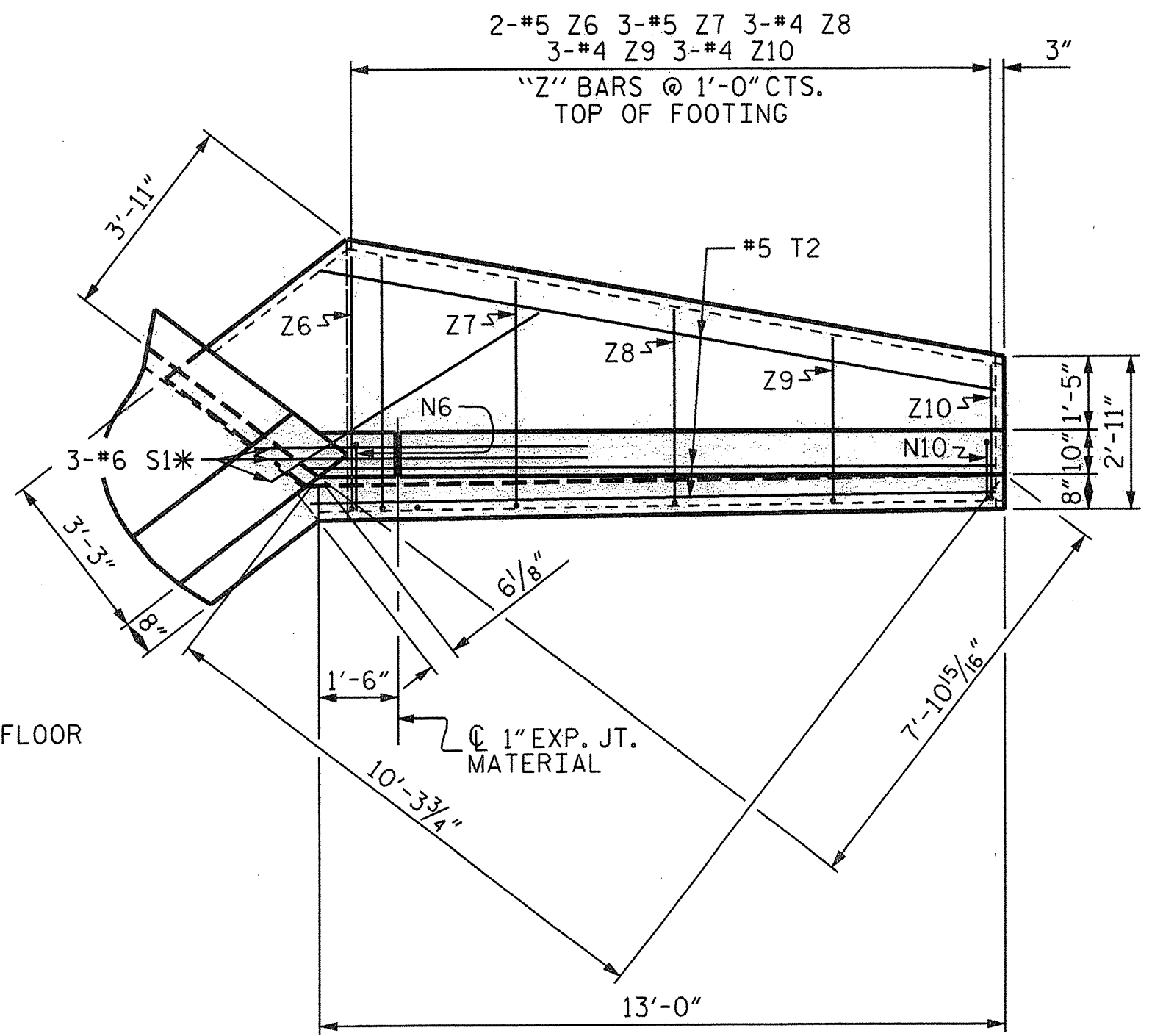
R&K
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consulting engineers
5800 FARINGDON PLACE - SUITE 105
RALEIGH, NORTH CAROLINA 27609-3960

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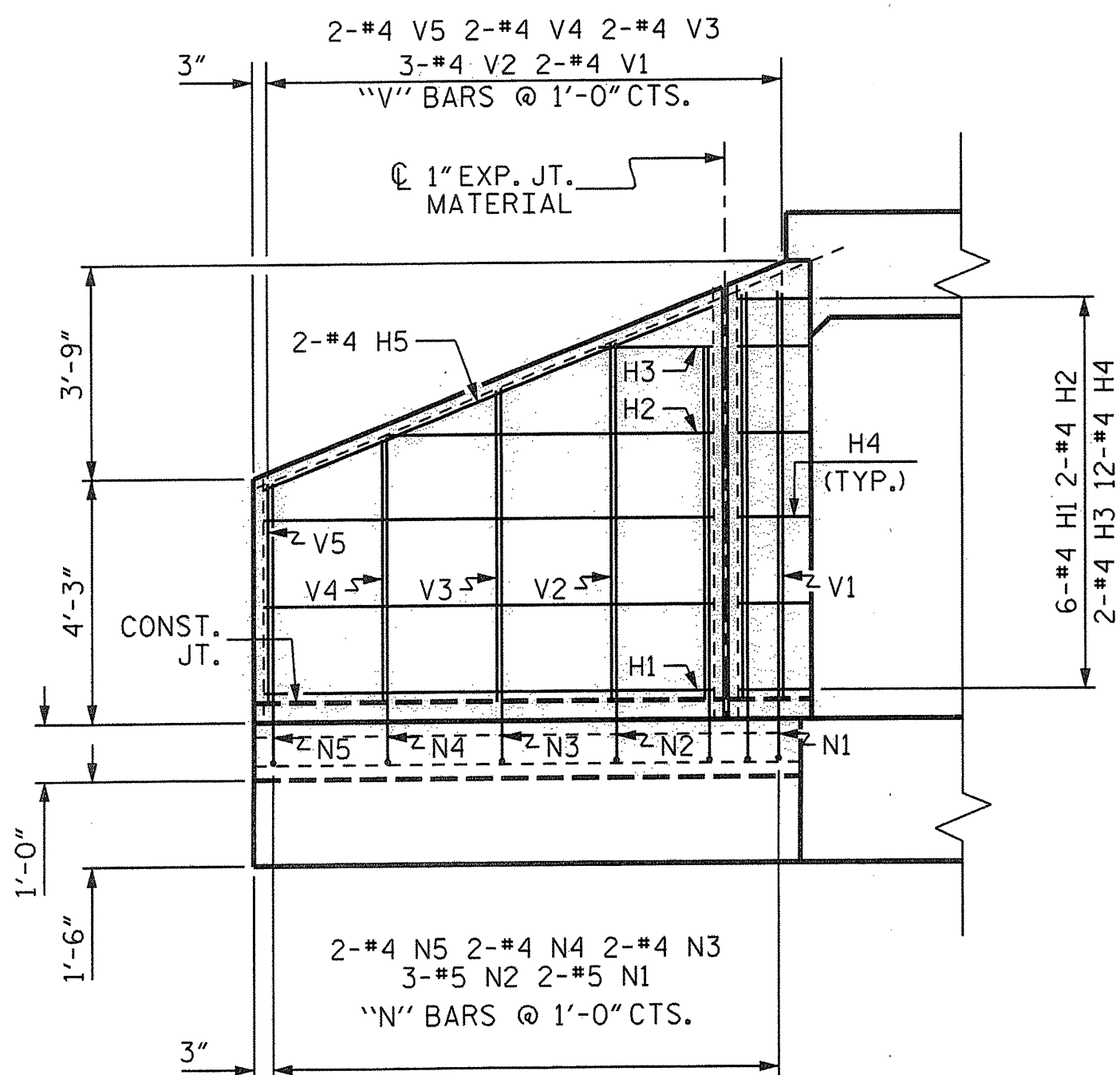
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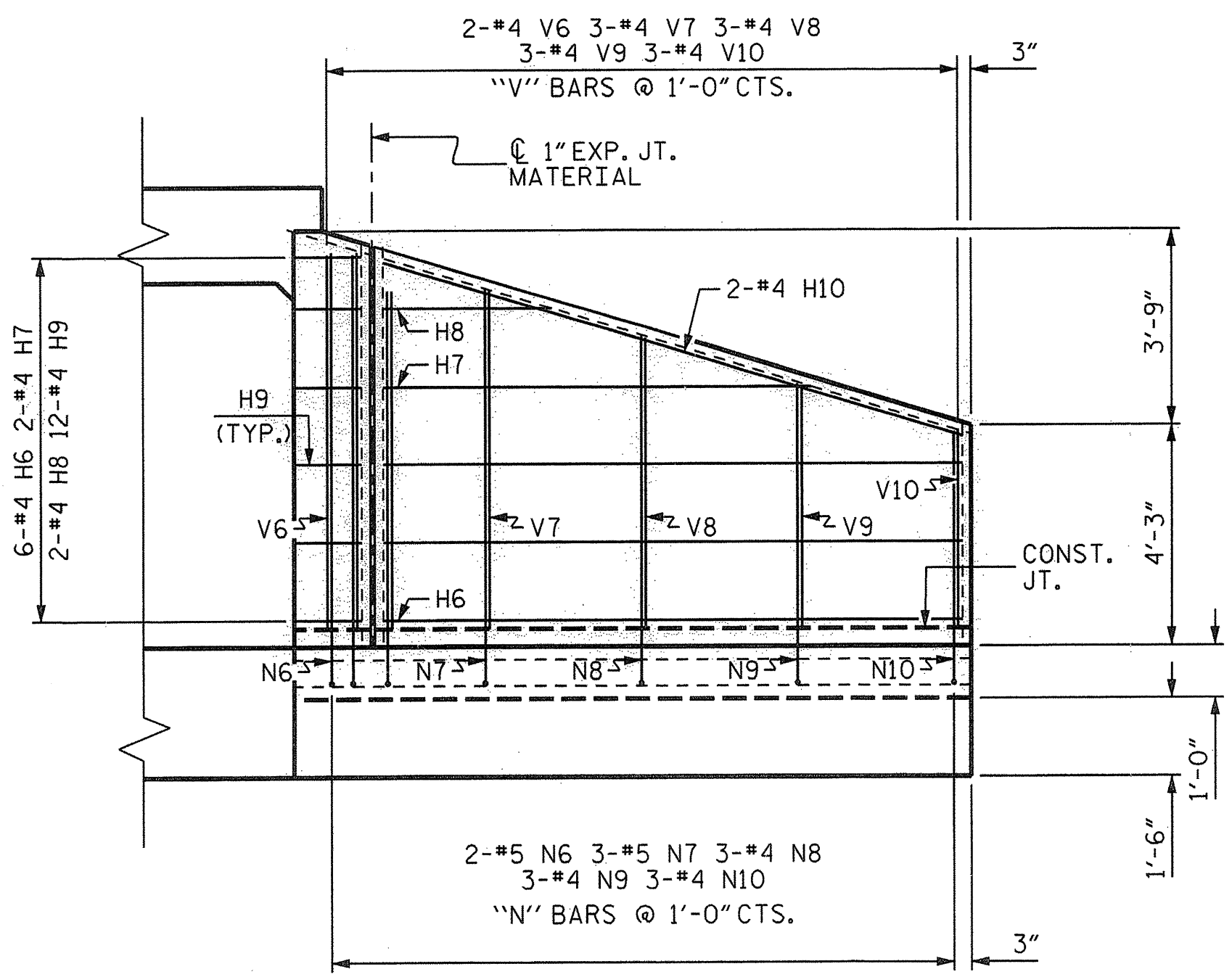
PLAN W2



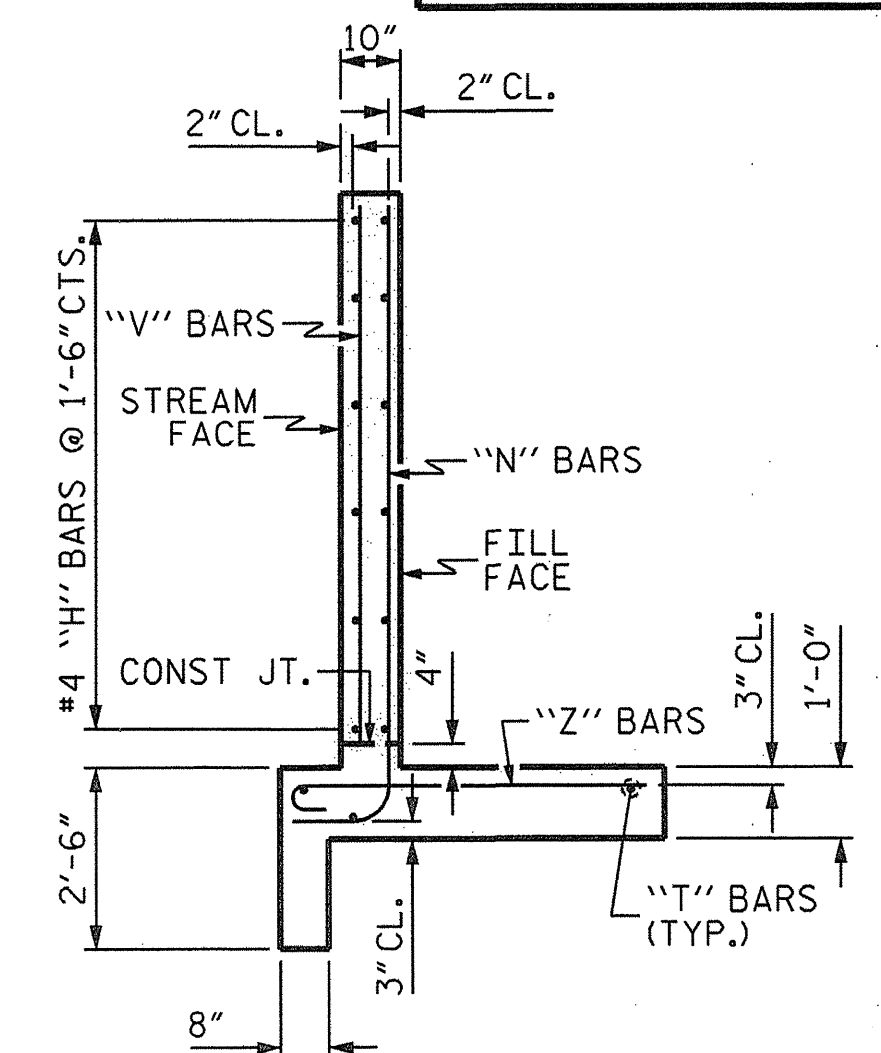
PLAN W1



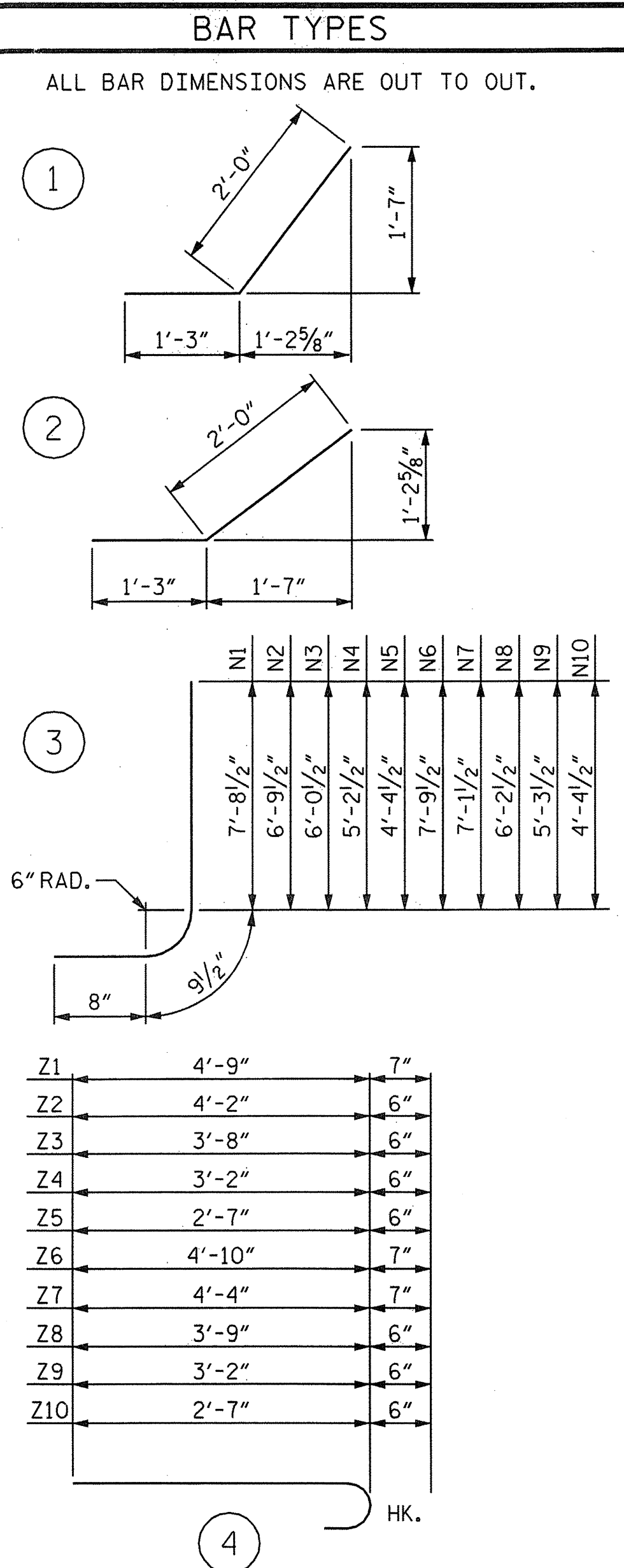
ELEVATION W2



ELEVATION W1



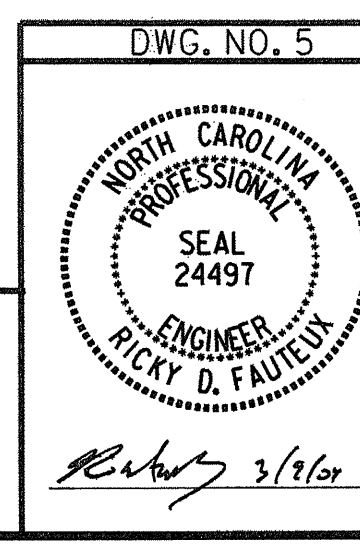
TYPICAL WING SECTION



BILL OF MATERIAL					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
H1	6	#4	STR	7'-10"	31
H2	2	#4	STR	5'-8"	8
H3	2	#4	STR	2'-0"	3
H4	12	#4	1	3'-3"	26
H5	2	#4	STR	8'-5"	11
H6	6	#4	STR	11'-1"	44
H7	2	#4	STR	8'-2"	11
H8	2	#4	STR	3'-3"	4
H9	12	#4	2	3'-3"	26
H10	2	#4	STR	11'-7"	15
N1	2	#5	3	9'-2"	19
N2	3	#5	3	8'-3"	26
N3	3	#4	3	7'-6"	10
N4	2	#4	3	6'-8"	9
N5	2	#4	3	5'-10"	8
N6	2	#5	3	9'-3"	19
N7	2	#5	3	8'-7"	27
N8	3	#4	3	7'-8"	15
N9	3	#4	3	6'-9"	14
N10	3	#4	3	5'-10"	12
S1	6	#6	STR	6'-0"	54
T1	3	#5	STR	9'-9"	31
T2	3	#5	STR	13'-0"	41
V1	2	#4	STR	7'-1"	10
V2	3	#4	STR	6'-3"	13
V3	2	#4	STR	5'-5"	7
V4	2	#4	STR	4'-7"	6
V5	2	#4	STR	3'-10"	5
V6	2	#4	STR	7'-3"	10
V7	3	#4	STR	6'-6"	13
V8	3	#4	STR	5'-7"	11
V9	3	#4	STR	4'-8"	9
V10	3	#4	STR	3'-10"	8
Z1	2	#5	4	5'-4"	11
Z2	3	#4	4	4'-8"	9
Z3	2	#4	4	4'-2"	6
Z4	2	#4	4	3'-8"	5
Z5	2	#4	4	3'-1"	4
Z6	2	#5	4	5'-5"	11
Z7	3	#5	4	4'-11"	15
Z8	3	#4	4	4'-3"	9
Z9	3	#4	4	3'-8"	7
Z10	3	#4	4	3'-1"	6
REINFORCING STEEL					639 LBS
FOR 2 WINGS					
CLASS A CONCRETE					
2 WINGS					9.1 CY
3 HEADWALLS					1.6 CY
1 END CURTAIN WALLS					0.5 CY
TOTAL					11.2 CY

PROJECT NO. R-5202
 JACKSON COUNTY
 STATION: 29+85.00 -L-

SHEET 5 OF 5
 STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD WINGS
 FOR
 CONCRETE BOX CULVERT
 H = 7'-0" SLOPE = 2:1
 75° SKEW



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2			4		

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ASSEMBLED BY : B. PARRISH DATE : 03/2004
 CHECKED BY : R. D. FAUTEUX DATE : 03/2004
 DRAWN BY : CCJ 12/99
 CHECKED BY : RWW 03/00

STANDARD NOTES

DESIGN DATA:

SPECIFICATIONS	-----	A.A.S.H.T.O. (CURRENT)
LIVE LOAD	-----	SEE PLANS
IMPACT ALLOWANCE	-----	SEE A.A.S.H.T.O.
STRESS IN EXTREME FIBER OF		
STRUCTURAL STEEL - AASHTO M270 GRADE 36	-	20,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50W	-	27,000 LBS. PER SQ. IN.
- AASHTO M270 GRADE 50	-	27,000 LBS. PER SQ. IN.
REINFORCING STEEL IN TENSION		
GRADE 60	--	24,000 LBS. PER SQ. IN.
CONCRETE IN COMPRESSION	-----	1,200 LBS. PER SQ. IN.
CONCRETE IN SHEAR	-----	SEE A.A.S.H.T.O.
STRUCTURAL TIMBER - TREATED OR		
UNTREATED - EXTREME FIBER STRESS	-----	1,800 LBS. PER SQ. IN.
COMPRESSION PERPENDICULAR TO GRAIN OF TIMBER	-----	375 LBS. PER SQ. IN.
EQUIVALENT FLUID PRESSURE OF EARTH	-----	30 LBS. PER CU. FT.
		(MINIMUM)

MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2006 "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N.C. DEPARTMENT OF TRANSPORTATION.

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED 3/4" WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 1-1/2" RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A 1/4" FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A 1/4" RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE.

ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER.

IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.

WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE 7/8" Ø SHEAR STUDS FOR THE 3/4" Ø STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - 7/8" Ø STUDS FOR 4 - 3/4" Ø STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF 7/8" Ø STUDS ALONG THE BEAM AS SHOWN FOR 3/4" Ø STUDS BASED ON THE RATIO OF 3 - 7/8" Ø STUDS FOR 4 - 3/4" Ø STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-0".

EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST 5/16" IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.

WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES, ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY 1/16" INCH OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB.

METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINIS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

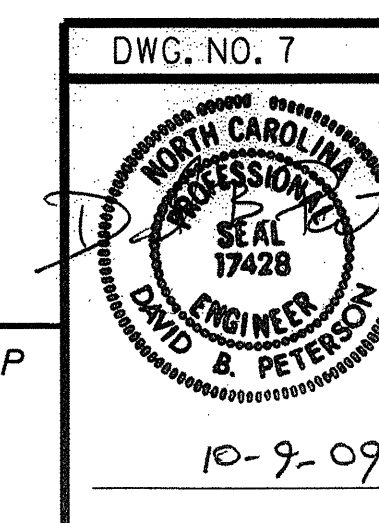
SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.

PROJECT NO. R-5202
JACKSON COUNTY
 STATION: 29+85.00 -L-

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

STANDARD NOTES



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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			7
2			4			7

2/4/2009 J:\COMMONS\303061\F01\structures\notes.dgn

DRAWN BY : F.D. WEEDEN DATE : FEB. 09
 CHECKED BY : YING TAN DATE : FEB. 09