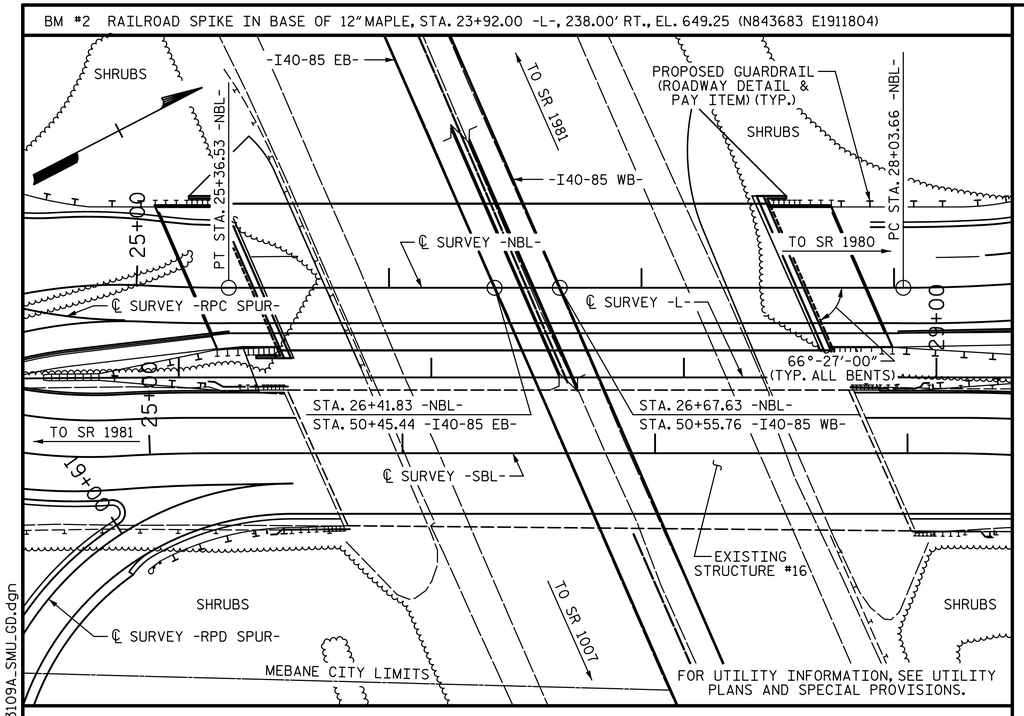

LOCATION SKETCH

TOTAL BILL OF MATERIAL

	4'-0" DIA. DRILLED PIERS IN SOIL	4'-0" DIA. DRILLED PIERS NOT IN SOIL	PDA TESTING	SID INSPECTIONS	SPT TESTING	CSL TESTING	REINFORCED CONCRETE DECK SLAB (SAND LIGHTWEIGHT CONCRETE)	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL
	LF	LF	EA	EA	EA	EA	SF	SF	CY	LS	LB
SUPERSTRUCTURE							12,644	12,400		LS	
END BENT 1									58.6		8220
BENT 1	70.3	31.0							105.8		17,805
END BENT 2									57.5		8097
TOTAL	70.3	31.0	1	3	3	1	12,644	12,400	221.9	LS	34,122

TOTAL BILL OF MATERIAL (CONT'D.)

	SPIRAL COLUMN REINFORCING STEEL	STRUCTURAL STEEL	PILE DRIVING EQUIPMENT SETUP HP 12 X 53 STEEL PILES	HP 12x53 STEEL PILES		TWO BAR METAL RAIL	1'-2" X 2'-6" CONCRETE PARAPET	1'-2" X 3'-0½" CONCRETE PARAPET	4" SLOPE PROTECTION	ELASTOMERIC BEARINGS	EXPANSION JOINT SEALS	2 BAR METAL RAIL RETROFIT
	LB	APPROX. LB	EA	NO.	LF	LF	LF	LF	SY	LS	LS	LF
SUPERSTRUCTURE		446,250				472.38	243.69	243.69		LS	LS	426.69
END BENT 1			8	8	400				305			
BENT 1	3337											
END BENT 2			8	8	480				400			
TOTAL	3337	446,250	16	16	880	472.38	243.69	243.69	705	LS	LS	426.69

NOTES:

ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

CLASS AA CONCRETE IN DECK AND SIDEWALK SHALL BE SAND LIGHTWEIGHT CONCRETE. FOR SAND LIGHTWEIGHT CONCRETE, SEE SPECIAL PROVISIONS.

CLASS AA CONCRETE IN CONCRETE PARAPETS SHALL BE NORMAL WEIGHT CONCRETE.

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS. PAYMENT FOR THE SAMPLES OF REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

THE ELEVATIONS AND CLEARANCES SHOWN ON THE PLANS AT THE POINTS OF MINIMUM VERTICAL CLEARANCE ARE FROM THE BEST INFORMATION AVAILABLE. PRIOR TO BEGINNING BRIDGE CONSTRUCTION, VERIFY THE ELEVATIONS ON THE EXISTING PAVEMENT AND CHECK THE CLEARANCE. REPORT ANY VARIATIONS TO THE ENGINEER. ANY PLAN REVISIONS NECESSARY TO ACHIEVE THE REQUIRED MINIMUM VERTICAL CLEARANCE WILL BE PROVIDED BY THE DEPARTMENT.

FOR MAINTENANCE AND PROTECTION OF TRAFFIC BENEATH PROPOSED STRUCTURE, SEE SPECIAL PROVISIONS.

ALL PAVEMENT MARKING WILL BE IN ACCORDANCE WITH THE PAVEMENT MARKING PLANS AND SHALL PROVIDE FOR BICYCLES.

REMOVABLE FORMS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.

NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR APPROVED BY THE ENGINEER.

ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 50W AND PAINTED IN ACCORDANCE WITH SYSTEM 4 OF ARTICLE 442-8 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS.

THE CLASS AA CONCRETE IN THE BRIDGE DECK SHALL CONTAIN FLY ASH OR GROUND GRANULATED BLAST FURNACE SLAG AT THE SUBSTITUTION RATE SPECIFIED IN ARTICLE 1024-1 AND IN ACCORDANCE WITH ARTICLES 1024-5 AND 1024-6 OF THE STANDARD SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR THIS SUBSTITUTION AS IT IS CONSIDERED INCIDENTAL TO THE COST OF THE REINFORCED CONCRETE DECK SLAB (SAND LIGHTWEIGHT CONCRETE).

THE LOCATION OF THE CONSTRUCTION JOINT IN THE DRILLED PIERS IS BASED ON AN APPROXIMATE PAVED SHOULDER ELEVATION. THE TOP OF DRILLED PIER SHALL BE ADJUSTED AS REQUIRED TO MAINTAIN THE TOP OF THE DRILLED PIER 1 FOOT BELOW THE PAVED SHOULDER ELEVATION.

FOR PLACING LOAD ON STRUCTURE MEMBERS, SEE SPECIAL PROVISIONS.

FOR 2 BAR METAL RAIL RETROFIT, SEE SPECIAL PROVISIONS.

PROJECT NO. U-3109A

ALAMANCE COUNTY

STATION: 26+54.73 -NBL-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR NBL BRIDGE ON NC 119 OVER I40-85 WB AND I40-85 EB BETWEEN SR 1981 AND SR 1980

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S01-3
1			3			TOTAL SHEETS
2			4			S01-49

PLANS PREPARED BY:

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LICENSURE NO. C-2521

NORTH CAROLINA PROFESSIONAL SEAL 24390 ENGINEER TED J. BEACH
5/8/2017

DRAWN BY: S. D. COOPER DATE: 5-15
CHECKED BY: B.S. COX DATE: 5-15
DESIGN ENGINEER OF RECORD: T.J. BEACH DATE: 5-15

5/8/2017 9:55:34 AM G:\Projects\2014\U-3109A\Structures\Site 1-Bridge 434 (NBL)\Drawings\Final\401_U3109A_SMU_GD.dgn