



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

October 5, 2017

Addendum No. 1

RE: Contract # C203977

WBS # 53022.3.1

F. A. # NHPIM-0040(050)

Johnston County (I-5781)

I-40 From SR-1010 (Cleveland Road) To West of SR-1211 (Morgan Road)

October 17, 2017 Letting

To Whom It May Concern:

Reference is made to the plans and proposal form furnished to you on this project.

The following revisions have been made to the Roadway plans:

Sheet No.	Revisions
2A-1	Revised to add Note #5
PMP-1 and PMP-2	Revised to reflect the change in pavement markings as noted below

Please void the above listed sheets in your plans and staple the revised sheets thereto.

The following revisions have been made to the proposal:

Page No.	Revisions
Proposal Cover	Note added that reads "Includes Addendum No. 1 Dated 10-05-2017".
Table Of Contents	Revised to reflect the addition of the Black Epoxy Pavement Marking Special Provision
G-3	Added two new items to the list within the project special provision entitled "Specialty Items"
R-35 and New R-36	Revised to add the project special provisions entitled "Removal Of Existing Snowplowable Pavement Markers" and "Patching Concrete Pavement Spalls"
PM-1 thru PM-4	New pages added to include the project special provision entitled "Black Epoxy Pavement Marking Material"

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
CONTRACT STANDARDS AND DEVELOPMENT
1591 MAIL SERVICE CENTER
RALEIGH, NC 27699-1591

Telephone: (919) 707-6900
Fax: (919) 250-4127
Customer Service: 1-877-368-4968

Location:
1020 BIRCH RIDGE DR.
RALEIGH, NC 27610

Website: www.ncdot.gov

Please void the above listed pages in your proposal and staple the revised pages thereto.
Please add New Page Nos. PM-1 thru PM-4 after existing Page No. TC-10.

On the item sheets the following pay items has been deleted, added or quantities revised:

<u>Item</u>	<u>Description</u>	<u>Old Quantity</u>	<u>New Quantity</u>
026-4685000000-E-1205	Thermoplastic Pavement Marking Lines (4", 90 Mils)	1,723 LF	DELETED
027-4686000000-E-1205	Thermoplastic Pavement Marking Lines (4", 120 Mils)	388 LF	DELETED
028-4688000000-E-1205	Thermoplastic Pavement Marking Lines (6", 90 Mils)	347,656 LF	DELETED
029-4690000000-E-1205	Thermoplastic Pavement Marking Lines (6", 120 Mils)	49,158 LF	DELETED
030-4695000000-E-1205	Thermoplastic Pavement Marking Lines (8", 90 Mils)	280 LF	DELETED
031-4700000000-E-1205	Thermoplastic Pavement Marking Lines (12", 90 Mils)	11,000 LF	DELETED
032-4702000000-E-1205	Thermoplastic Pavement Marking Lines (12", 120 Mils)	2,900 LF	DELETED
033-4710000000-E-1205	Thermoplastic Pavement Marking Lines (24", 120 Mils)	55 LF	DELETED
034-4725000000-E-1205	Thermoplastic Pavement Marking Symbol (90 Mils)	46 EA	DELETED
035-4905000000-N-1253	Snowplowable Pavement Markers	2,700 EA	2,844 EA
072-1737000000-SP	Patching Concrete Pavement Spalls	NEW ITEM	4,000 SF
073-4780000000-E-1205	Cold Applied Plastic Pavement Marking Lines Type II (8")	NEW ITEM	280 LF
074-4785000000-E-1205	Cold Applied Plastic Pavement Marking Lines Type II (12")	NEW ITEM	11,000 LF
075-4795000000-E-1205	Cold Applied Plastic Pavement Marking Lines Type II (24")	NEW ITEM	55 LF
076-4805000000-N-1205	Cold Applied Plastic Pavement Marking Symbol Type II	NEW ITEM	46 EA
077-4815000000-E-1205	Paint Pavement Marking Lines, 6"	NEW ITEM	793,628 LF
078-4825000000-E-1205	Paint Pavement Marking Lines, 12"	NEW ITEM	22,000 LF
079-4845000000-N-1205	Paint Pavement Marking Symbols	NEW ITEM	40 EA


<u>Item</u>	<u>Description</u>	<u>Old Quantity</u>	<u>New Quantity</u>
080-4847000000-E-1205	Polyurea Pavement Marking Lines (4") (Highly Reflective Elements)	NEW ITEM	2,111 LF
081-4847100000-E-1205	Polyurea Pavement Marking Lines (6") (Highly Reflective Elements)	NEW ITEM	396,814 LF
082-4847120000-E-1205	Polyurea Pavement Marking Lines (12") (Highly Reflective Elements)	NEW ITEM	2,900 LF
083-4855000000-E-1205	Removal Of Pavement Marking Lines (6")	NEW ITEM	396,814 LF
084-4865000000-E-1205	Removal Of Pavement Marking Lines (12")	NEW ITEM	11,000 LF
085-4875000000-N-1205	Removal Of Pavement Marking Symbols and Characters	NEW ITEM	40EA
086-4891000000-E-1205	Epoxy Pavement Marking Lines,(Black) 8"	NEW ITEM	45,708 LF
087-7132000000-E-1705	Vehicle Signal Head (12", 4 Section)	NEW ITEM	1 EA

The Contractor's bid must include these new pay items and quantity change.

The Expedite File has been updated to reflect these revisions. Please download the Expedite Addendum File and follow the instructions for applying the addendum. Bid Express will not accept your bid unless the addendum has been applied.

The contract will be prepared accordingly.

Sincerely,

DocuSigned by:

F81B6038A47A442...
 Ronald. E. Davenport, Jr., PE
 State Contract Officer

RED/jag
 Attachments

cc: Mr. Lamar Sylvester, PE
 Mr., Ronnie Keeter, PE
 Mr. Chris Werner, PE
 Mr. Ken Kennedy, PE
 Mr. Jon Weathersby, PE
 Ms. Jaci Kincaid
 Project File (2)

Mr. Ray Arnold, PE
 Ms. Theresa Canales, PE
 Mr. Mike Gwyn
 Ms. Penny Higgins
 Mr. Mitchell Dixon
 Ms. Lori Strickland

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH, N.C.

PROPOSAL

INCLUDES ADDENDUM No. 1 DATED 10-05-2017

DATE AND TIME OF BID OPENING: **OCTOBER 17, 2017 AT 2:00**

PM

CONTRACT ID C203977

WBS 53022.3.1

FEDERAL-AID NO. NHPIM-0040(050)

COUNTY JOHNSTON

T.I.P. NO. I-5781

MILES 16.340

ROUTE NO. I 40

LOCATION I-40 FROM SR-1010 (CLEVELAND ROAD) TO WEST OF SR-1211
(MORGAN ROAD).

TYPE OF WORK SIGNALS, PAVEMENT AND BRIDGE REHABILITATION.

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

BIDS WILL BE RECEIVED AS SHOWN BELOW:

THIS IS A ROADWAY PROPOSAL

5% BID BOND OR BID DEPOSIT REQUIRED

UNIT PROJECT SPECIAL PROVISIONS

TRAFFIC CONTROL	TC-1
PAVEMENT MARKING.....	PM-1
EROSION CONTROL	EC-1
TRAFFIC SIGNALS	TS-1
STRUCTURE / CULVERTS.....	BP-1
RAILROAD INSURANCE (Structures)	BP-60

PROPOSAL ITEM SHEET

ITEM SHEET(S) (TAN SHEETS)

MAJOR CONTRACT ITEMS:

(2-19-02)

104

SP1 G28

The following listed items are the major contract items for this contract (see Article 104-5 of the 2012 Standard Specifications):

Line #	Description
12	— Diamond Grinding PCC Pavement

SPECIALTY ITEMS:

(7-1-95)(Rev. 1-17-12)

108-6

SP1 G37

Items listed below will be the specialty items for this contract (see Article 108-6 of the 2012 Standard Specifications).

Line #	Description
11	Joint Construction Repair and Sealing
12	Diamond Grinding PCC Pavement
73 thru 76 and 80-82 and 86	Long-Life Pavement Markings
35	Permanent Pavement Markers
37 thru 40	Erosion Control
41 thru 49	Signals/ITS System

FUEL PRICE ADJUSTMENT:

(11-15-05) (Rev. 2-18-14)

109-8

SP1 G43

Revise the 2012 Standard Specifications as follows:

Page 1-83, Article 109-8, Fuel Price Adjustments, add the following:

The base index price for DIESEL #2 FUEL is \$ **1.7069** per gallon. Where any of the following are included as pay items in the contract, they will be eligible for fuel price adjustment.

The pay items and the fuel factor used in calculating adjustments to be made will be as follows:

Description	Units	Fuel Usage Factor Diesel
Unclassified Excavation	Gal/CY	0.29
Borrow Excavation	Gal/CY	0.29
Class IV Subgrade Stabilization	Gal/Ton	0.55
Aggregate Base Course	Gal/Ton	0.55
Sub-Ballast	Gal/Ton	0.55
Asphalt Concrete Base Course, Type _____	Gal/Ton	2.90
Asphalt Concrete Intermediate Course, Type _____	Gal/Ton	2.90
Asphalt Concrete Surface Course, Type _____	Gal/Ton	2.90
Open-Graded Asphalt Friction Course	Gal/Ton	2.90
Permeable Asphalt Drainage Course, Type _____	Gal/Ton	2.90
Sand Asphalt Surface Course, Type _____	Gal/Ton	2.90
Aggregate for Cement Treated Base Course	Gal/Ton	0.55
Portland Cement for Cement Treated Base Course	Gal/Ton	0.55
___ " Portland Cement Concrete Pavement	Gal/SY	0.245
Concrete Shoulders Adjacent to ___ " Pavement	Gal/SY	0.245

Drawing No. 1101.02, Sheet 13, TEMPORARY LANE CLOSURES, replace General Note #12 with the following:

12- TRUCK MOUNTED CHANGEABLE MESSAGE SIGNS (TMCMS) USED ON SHADOW VEHICLES FOR "IN LANE" ACTIVITIES SHALL BE A MINIMUM OF 43" X 73". THE DISPLAY PANEL SHALL HAVE FULL MATRIX CAPABILITY WITH THE CAPABILITY TO PROVIDE 2 MESSAGE LINES WITH 7 CHARACTERS PER LINE WITH A MINIMUM CHARACTER HEIGHT OF 18". FOR ADDITIONAL MESSAGING, CONTACT THE WORK ZONE TRAFFIC CONTROL SECTION.

13- TMCMS USED FOR ADVANCED WARNING ON VEHICLES LOCATED ON THE SHOULDER MAY BE SMALLER THAN 43" X 73". THE DISPLAY PANEL SHALL HAVE THE CAPABILITY TO PROVIDE 2 MESSAGE LINES WITH 7 CHARACTERS PER LINE WITH A MINIMUM CHARACTER HEIGHT OF 18". FOR ADDITIONAL MESSAGING, CONTACT THE WORK ZONE TRAFFIC CONTROL SECTION.

REMOVAL OF EXISTING SNOWPLOWABLE PAVEMENT MARKERS

The Contractor's attention is directed to the fact that there are snowplowable pavement markers on this project. Remove and dispose of these markers as part of the diamond grinding operation.

No direct payment will be made for this work, as it will be incidental to the other items in this contract.

PATCHING CONCRETE PAVEMENT SPALLS:

(1-19-16)

710

SPI 7-13

Description

The work covered by this provision consists of the partial and full depth patching of spalls in existing Portland cement concrete pavement by sawing and removing the broken, damaged or disintegrated concrete pavement from the spalled areas of the pavement surface and patching the areas with approved patching materials at locations as directed by the Engineer in accordance with this provision.

Alternate methods and materials for patching concrete spalls may be submitted by the Contractor for approval by the Engineer.

Materials

The pavement shall not be opened to traffic until concrete is appropriately cured, per manufacturer's recommendations.

The Contractor may at his option use any approved material from the NCDOT Approved Products List or an approved equal as per the Engineer.

The material shall be mixed and installed, handled and stored, and cured in accordance with the manufacturer's instructions.

Construction Methods

When the Contractor is working under a lane closure, concrete patching operations shall be conducted in one lane at a time or as directed by the Engineer. The work shall be accomplished with other operations in progress within the same area.

The surface within the repair areas shall be cleaned so as to be free of oil, dust, dirt, deteriorated concrete and other contaminants immediately before placement of the epoxy and patching material.

Epoxy shall be applied to the vertical and flat surface of the cleaned spall areas prior to placing concrete.

Measurement and Payment

Patching Concrete Pavement Spalls will be paid for will be the actual number of square feet of existing concrete which has been patched and accepted. The actual length and width of each completed patch will be measured along the surface of the patch.

The above prices and payments will be full compensation for all work covered by this provision for furnishing all labor, materials, tools, equipment and incidentals for doing all work involved in sawing concrete pavement, removing deteriorated concrete, cleaning surfaces, epoxying, furnishing, placing, finishing, and curing concrete patch.

Payment will be made under:

Pay Item

Patching Concrete Pavement Spalls

Pay Unit

Square Foot



DocuSigned by:
Renee Roach
 B3C6C6F7CF4640D...

9/28/2017

BLACK EPOXY PAVEMENT MARKING MATERIAL:

1-26-2017

Description

This work shall consist of applying black epoxy pavement marking material on concrete.

Epoxy Pavement Marking Material

(A) Formulation

Use epoxy pavement marking material consisting of 100% solid two-part system formulated and designed to provide a simple volumetric mixing ratio of the two components.

(B) Epoxide Value: ASTM D1652

WPE of the epoxy resin shall be 250 ± 50 for component A on a pigment free basis.

(C) Amine Value ASTM D2074

The total amine value of the curing agent (component B) shall be 450 ± 50

(D) Requirements

(1) Color

Black: Must meet ASTM standard

(2) Hardness: ASTM D2240

Minimum Shore D hardness: 80

(3) Abrasion Resistance: ASTM C-501

Minimum wear index of catalyzed sample: 80

- (4) Adhesion to Concrete: ASTM D4541
 At 100% concrete failure: greater than 325 psi
- (5) Tensile Strength: ASTM D638
 Minimum average tensile strength: 6000 psi
- (6) Compressive Strength: ASTM D695
 Minimum compressive strength: 12000 psi
- (7) Drying Time: ASTM D711
 Maximum drying time at 75±2°F: 10 minutes
- (8) Gel Time: ASTM D2471
 Maximum gel time: 3 minutes

(E) Material Certification: Type 3 Material Certification and Type 4 Material Certification

Construction Methods

Epoxy Pavement Marking Material shall conform to the requirements of Section 1205 of the *Standard Specifications*.

(A) Application Equipment

Use epoxy application equipment, which is equipped with or capable of the following:

Precisely metering the two components in the ratio of proportion recommended by the manufacturer.

Producing the required amount of heat at the mixing head and gun tip.

Maintaining temperatures within the tolerances recommended.

Gauges for each proportioning pump so that any pressure difference can be easily monitored.

A minimum 24" long static mixer unit for proper mixing of the two components of the epoxy marking material.

Each component of the epoxy pavement marking shall be in a homogeneous state prior to mixing,

Have the capability to totally mix component A with component B immediately prior to the marking application.

Have the capability to spray pavement marking material and have the equipment mounted on a truck of sufficient size and stability with an adequate power source to produce uniform lines of the specified dimension.

A metering device to register the accumulated installed footage for each gun

(B) Weather Limitations

Apply epoxy pavement marking only when the ambient air temperature and the pavement surface temperature is a minimum of 35°F and rising.

(C) Application

Produce epoxy pavement marking lines that have a minimum dry thickness of 15 mils when placed on concrete pavements and 20 mils when placed on asphalt pavements.

Use **Type I** epoxy material (fast dry) for epoxy pavement markings except when otherwise specified in the contract documents.

Type II epoxy material may be used with lane closures as approved by the Engineer to allow for curing time.

Do not place epoxy markings on fresh asphalt pavements until 15 days have elapsed after the last asphalt layer is placed.

Using the epoxy application equipment, apply the pavement marking materials simultaneously. Hot-spray the epoxy resin, mixed in accordance with the manufacturer's recommendations, onto the pavement surface within an application temperature range recommended by the manufacturer. Inject retroreflective glass beads into the molten (liquid) Epoxy Marking.

Individual Components: Before mixing, heat the individual components to within the temperature range of 100°F to 170°F. Do not exceed the upper limit of the manufacturer's recommended heating temperature at any time under any circumstances.

Mixed Material: After mixing, ensure that the application temperatures for the combined materials at the gun tip are within the temperature range recommended by the manufacturer for the particular product used.

Produce marking, which upon cooling, has the ability to resist deformation caused by traffic throughout its entire length.

(D) Observation Period

Epoxy pavement markings will be subject to a 30 day observation period.

Maintain responsibility for the pavement markings for a 30 day observation period beginning upon the satisfactory completion of all work required in the plans. Guarantee the markings under the payment and performance bond in accordance with Article 105-17.

Have traffic operating on the facility during the entire 30 day observation period unless otherwise directed.

Provide pavement marking material, which during the 30 day observation period, shows no signs of failure due to blistering, excessive cracking, chipping, bleeding, staining, discoloration, oil content of the pavement materials, smearing or spreading under heat, deterioration due to contact with grease deposits, oil, diesel fuel, or gasoline drippings, spilling, poor adhesion to the pavement materials, vehicular damage, debonding and normal wear.

Replace, at no additional expense to the Department, any pavement markings that do not perform satisfactorily under traffic during the 30 day observation period.

Measurement and Payment

Epoxy Pavement Marking Lines (Black) ____" will be measured and paid for as the actual number of linear feet of pavement marking lines that have been satisfactorily placed and accepted.

Payment will be made under:

Pay Item	Pay Unit
Epoxy Pavement Marking Lines, (Black) ____"	Linear Foot

County : Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
ROADWAY ITEMS						
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0000400000-N	801	CONSTRUCTION SURVEYING	Lump Sum	L.S.	
0003	0043000000-N	226	GRADING	Lump Sum	L.S.	
0004	1110000000-E	510	STABILIZER AGGREGATE	100 TON		
0005	1297000000-E	607	MILLING ASPHALT PAVEMENT, **** DEPTH (1-1/2")	2,600 SY		
0006	1297000000-E	607	MILLING ASPHALT PAVEMENT, **** DEPTH (3")	1,450 SY		
0007	1489000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0B	530 TON		
0008	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	130 TON		
0009	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	31 TON		
0010	1858000000-E	710	***** PORT CEM CONC PAVEMENT, RAMPS (WITH DOWELS) (8")	1,250 SY		
0011	1881000000-E	SP	GENERIC PAVING ITEM JOINT CONSTRUCTION, REPAIR, & SEALING	823,400 LF		
0012	1891000000-E	SP	GENERIC PAVING ITEM DIAMOND GRINDING PCC PAVEMENT	525,000 SY		
0013	1913000000-E	720	CONCRETE SHOULDERS ADJACENT TO ***** PAVEMENT (8")	630 SY		
0014	1924000000-N	725	FIELD LABORATORY RENTAL, PORT CEM CONC PAVEMENT	Lump Sum	L.S.	
0015	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	24 SF		
0016	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	669 SF		
0017	4410000000-E	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	24 SF		

County : Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0018	4415000000-N	1115	FLASHING ARROW BOARD	4 EA		
0019	4420000000-N	1120	PORTABLE CHANGEABLE MESSAGE SIGN	16 EA		
0020	4430000000-N	1130	DRUMS	300 EA		
0021	4445000000-E	1145	BARRICADES (TYPE III)	40 LF		
0022	4480000000-N	1165	TMA	2 EA		
0023	4600000000-N	SP	GENERIC TRAFFIC CONTROL ITEM SEQUENTIAL FLASHING WARNING LIGHTS	21 EA		
0024	4600000000-N	SP	GENERIC TRAFFIC CONTROL ITEM WORK ZONE DIGITAL SPEED LIMIT SIGNS	10 EA		
0025	4600000000-N	SP	GENERIC TRAFFIC CONTROL ITEM WORK ZONE PRESENCE LIGHTING	15 EA		
0035	4905000000-N	1253	SNOWPLOWABLE PAVEMENT MARKERS	2,844 EA		
0036	5255000000-N	1413	PORTABLE LIGHTING	Lump Sum	L.S.	
0037	6000000000-E	1605	TEMPORARY SILT FENCE	5,000 LF		
0038	6071010000-E	SP	WATTLE	4,000 LF		
0039	6084000000-E	1660	SEEDING & MULCHING	1 ACR		
0040	6132000000-N	SP	GENERIC EROSION CONTROL ITEM CONCRETE WASHOUT STRUCTURE	2 EA		
0041	7060000000-E	1705	SIGNAL CABLE	210 LF		
0042	7300000000-E	1715	UNPAVED TRENCHING (*****) (1, 2")	70 LF		
0043	7324000000-N	1716	JUNCTION BOX (STANDARD SIZE)	2 EA		
0044	7444000000-E	1725	INDUCTIVE LOOP SAWCUT	380 LF		

County : Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0045	7456000000-E	1726	LEAD-IN CABLE (***** (14-2)	290 LF		
0046	7575142060-N	SP	MODIFY RADIO INSTALLATION	1 EA		
0047	7756000000-N	1751	CONTROLLER WITH CABINET (TYPE 2070L, BASE MOUNTED)	1 EA		
0048	7780000000-N	1751	DETECTOR CARD (TYPE 2070L)	6 EA		
0049	7901000000-N	1753	CABINET BASE EXTENDER	1 EA		
0072	1737000000-E	SP	PATCHING CONCRETE PAVEMENT SPALLS	4,000 SF		
0073	4780000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (8") (II)	280 LF		
0074	4785000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (12") (II)	11,000 LF		
0075	4795000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (24") (II)	55 LF		
0076	4805000000-N	1205	COLD APPLIED PLASTIC PAVEMENT MARKING SYMBOL, TYPE ** (II)	46 EA		
0077	4815000000-E	1205	PAINT PAVEMENT MARKING LINES (6")	793,628 LF		
0078	4825000000-E	1205	PAINT PAVEMENT MARKING LINES (12")	22,000 LF		
0079	4845000000-N	1205	PAINT PAVEMENT MARKING SYMBOL	40 EA		
0080	4847000000-E	1205	POLYUREA PAVEMENT MARKING LINES (4", *****) (HIGHLY REFLECTIVE ELEMENTS)	2,111 LF		
0081	4847100000-E	1205	POLYUREA PAVEMENT MARKING LINES (6", *****) (HIGHLY REFLECTIVE ELEMENTS)	396,814 LF		
0082	4847120000-E	1205	POLYUREA PAVEMENT MARKING LINES (12", *****) (HIGHLY REFLECTIVE ELEMENTS)	2,900 LF		

County : Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0083	4855000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (6")	396,814	LF	
0084	4865000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (12")	11,000	LF	
0085	4875000000-N	1205	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS	40	EA	
0086	4890000000-E	SP	GENERIC PAVEMENT MARKING ITEM EPOXY PAVEMENT MARKING LINES, (BLACK) 8"	45,708	LF	
0087	7132000000-E	1705	VEHICLE SIGNAL HEAD (12", 4 SECTION)	1	EA	

STRUCTURE ITEMS

0050	8161000000-E	420	GROOVING BRIDGE FLOORS	100,040.5	SF	
0051	8296000000-N	442	POLLUTION CONTROL	Lump Sum	L.S.	
0052	8559000000-E	SP	CLASS II, SURFACE PREPARATION	10	SY	
0053	8590000000-E	876	RIP RAP, CLASS ** (II)	70	TON	
0054	8664000000-E	SP	SHOTCRETE REPAIRS	54.7	CF	
0055	8678000000-E	SP	EPOXY RESIN INJECTION	69.5	LF	
0056	8860000000-N	SP	GENERIC STRUCTURE ITEM PAINTING CONTAINMENT FOR BRIDGE NO 486	Lump Sum	L.S.	
0057	8860000000-N	SP	GENERIC STRUCTURE ITEM PAINTING CONTAINMENT FOR BRIDGE NO 487	Lump Sum	L.S.	
0058	8860000000-N	SP	GENERIC STRUCTURE ITEM PAINTING CONTAINMENT FOR BRIDGE NO 488	Lump Sum	L.S.	

County : Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0059	8860000000-N	SP	GENERIC STRUCTURE ITEM PAINTING CONTAINMENT FOR BRIDGE NO 489	Lump Sum	L.S.	
0060	8860000000-N	SP	GENERIC STRUCTURE ITEM PAINTING EXISTING WEATHERING STEEL STRUCTURE FOR BRIDGE NO 486	Lump Sum	L.S.	
0061	8860000000-N	SP	GENERIC STRUCTURE ITEM PAINTING EXISTING WEATHERING STEEL STRUCTURE FOR BRIDGE NO 487	Lump Sum	L.S.	
0062	8860000000-N	SP	GENERIC STRUCTURE ITEM PAINTING EXISTING WEATHERING STEEL STRUCTURE FOR BRIDGE NO 488	Lump Sum	L.S.	
0063	8860000000-N	SP	GENERIC STRUCTURE ITEM PAINTING EXISTING WEATHERING STEEL STRUCTURE FOR BRIDGE NO 489	Lump Sum	L.S.	
0064	8867000000-E	SP	GENERIC STRUCTURE ITEM FOAM JOINT SEALS	109 LF		
0065	8867000000-E	SP	GENERIC STRUCTURE ITEM SILICON JOINT SEALANT	2,127.5 LF		
0066	8881000000-E	SP	GENERIC STRUCTURE ITEM PPC MATERIALS	335.4 CY		
0067	8892000000-E	SP	GENERIC STRUCTURE ITEM EPOXY COATING	5,979 SF		
0068	8893000000-E	SP	GENERIC STRUCTURE ITEM CONCRETE DECK REPAIR FOR PPC OVERLAY	37.9 SY		
0069	8893000000-E	SP	GENERIC STRUCTURE ITEM PLACING AND FINISHING PPC OVERLAY	12,070.5 SY		
0070	8893000000-E	SP	GENERIC STRUCTURE ITEM SCARIFYING BRIDGE DECK	12,067.5 SY		

County : Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
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0071	8893000000-E	SP	GENERIC STRUCTURE ITEM SHOTBLASTING BRIDGE DECK	12,067.5 SY		
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1228/Oct05/Q3200544.0/D438497872060/E78

Total Amount Of Bid For Entire Project :

6/2/09

9/28/2017 10:15:15 AM Project: I-5781_rdy_tjip.dgn
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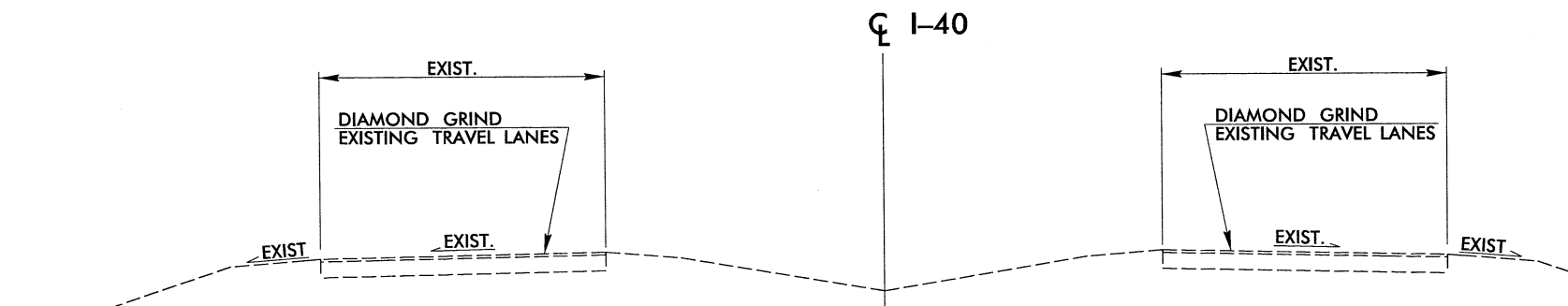
PAVEMENT SCHEDULE	
A1	8" JOINTED CONCRETE PAVEMENT WITH DOWELS.
A2	CONCRETE SHOULDER ADJACENT TO 8" PAVEMENT WITH DOWELS
C	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	MILLING EXISTING ASPHALT PAVEMENT, 1.5" DEPTH
V2	MILLING EXISTING ASPHALT PAVEMENT, 3" DEPTH

SEPI
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 CONSTRUCTION

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 Fax: 919-789-9591
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PROJECT REFERENCE NO.	SHEET NO.
1-5781	2A-1
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
 Steven L. Scott	 W. Matthew Clarke
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

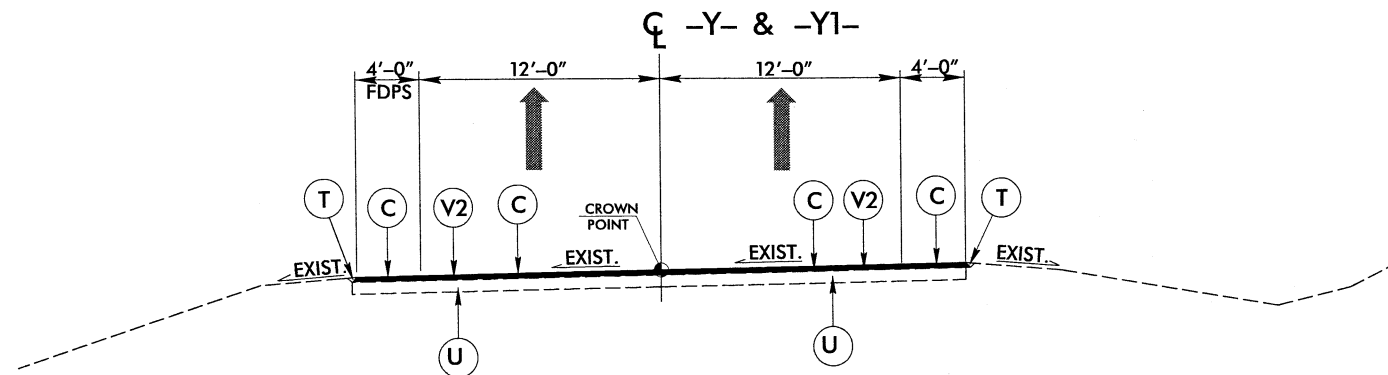
- NOTES:
1. ALL PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE NOTED.
 2. SHOULDER ROLLOVER NOT TO EXCEED 0.06 (TYP).
 3. REMOVE EXISTING ASPHALT PAVEMENT & PAVED SHOULDER & REPLACE WITH CONCRETE PAVEMENT
 4. PROP. CONCRETE PAVEMENT SURFACE ELEVATION TO MATCH EXISTING CONCRETE SURFACE ELEVATION AND CROSS SLOPE
 5. PRIOR TO PLACING PAVEMENT MARKING MATERIAL ON CONCRETE SURFACES THAT ARE DIAMOND GROUND, USE AN ACCEPTABLE METHOD TO GRIND RIDGES SMOOTH ONLY WHERE PAVEMENT MARKINGS WILL BE INSTALLED.



TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1

I-40 STA. 65+87.79 TO STA. 905+02.00

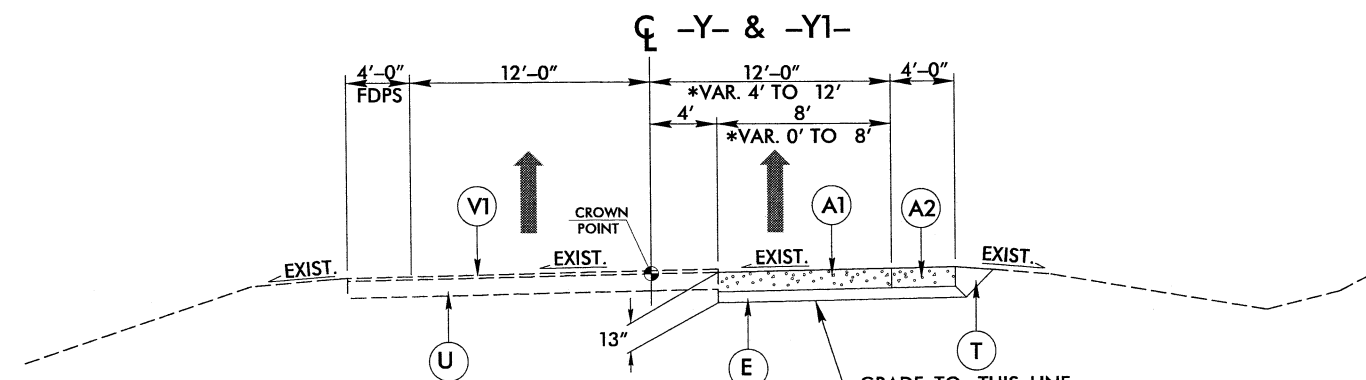


TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2

-Y- STA. 10+18.16 TO STA. 11+33.31

-Y1- STA. 10+21.21 TO STA. 11+34.74



TYPICAL SECTION NO. 3

USE TYPICAL SECTION NO. 3

-Y- STA. 11+33.31 TO STA. 15+00.00

*-Y- STA. 15+00.00 TO STA. 18+32.23

-Y1- STA. 11+34.74 TO STA. 14+00.00

*-Y1- STA. 14+00.00 TO STA. 17+67.65

NOTE: DIAMOND GRINDING TO BE COMPLETED AFTER ASPHALT MILLING.


PROJECT: I-5781

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING PLAN
JOHNSTON COUNTY**

**LOCATION: I-40 FROM SR 1010 (CLEVELAND ROAD) TO
WEST OF SR 1211 (MORGAN ROAD)**

**TYPE OF WORK: PAVEMENT REHABILITATION, BRIDGE
REHABILITATION, AND SIGNALS**

TIP NO. I-5781	SHEET NO. PMP-1
APPROVED: <i>Joseph Kopaskie</i> <small>REGISTERED PROFESSIONAL ENGINEER</small>	
DATE: 10/3/2017	
	
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INDEX

SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKING PLAN COVER SHEET AND SCHEDULE
PMP-2	PAVEMENT MARKING DETAIL

GENERAL NOTES

- THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.
- A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	POLYUREA WITH HIGHLY REFLECTIVE ELEMENTS	SNOWPLOWABLE
SYMBOLS AND SHORT MARKING LINES	COLD APPLIED PLASTIC TYPE II	
 - B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
 - C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.
 - D) REMOVE ALL RESIDUE AND SURFACE LAITANCE BY ACCEPTABLE METHODS ON CONCRETE BRIDGE DECKS PRIOR TO PLACING POLYUREA PAVEMENT MARKING MATERIAL.
 - E) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF COLD APPLIED PLASTIC FOR STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS ON ASPHALT OR CONCRETE ROADWAYS. IF HEATED-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE COLD APPLIED PAY ITEM.
 - F) TYPE III COLD APPLIED PLASTIC MAY BE USED IN LIEU OF TYPE II COLD APPLIED PLASTIC. IF TYPE III COLD APPLIED PLASTIC IS USED, IT SHALL BE PAID FOR USING THE TYPE II COLD APPLIED PLASTIC PAY ITEM.

PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
	POLYUREA(4") WITH HIGHLY REFLECTIVE ELEMENTS
VA	WHITE EDGELINE
VB	YELLOW EDGELINE
VD	3 FT. - 9 FT./SP WHITE MINISKIP
VE	WHITE SOLID LANE LINE
	POLYUREA(6") WITH HIGHLY REFLECTIVE ELEMENTS
V6	WHITE EDGELINE
V7	YELLOW EDGELINE
VJ	10 FT. WHITE SKIP
VK	3 FT. - 9 FT./SP WHITE MINISKIP
	POLYUREA(12") WITH HIGHLY REFLECTIVE ELEMENTS
V14	3 FT. - 9 FT./SP WHITE MINISKIP
VT	WHITE SOLID LANE LINE
	COLD APPLIED PLASTIC(8")
CN	WHITE GORELINE
CO	WHITE DIAGONAL
	COLD APPLIED PLASTIC (8") TYPE 2 - PERMANENT HIGH PERFORMANCE
C4	10 FT. CONTRAST WHITE/BLACK SKIP
	COLD APPLIED PLASTIC(12")
CS	WHITE GORELINE
	COLD APPLIED PLASTIC(24")
C2	WHITE STOPBAR
	COLD APPLIED PLASTIC PAVEMENT MARKING SYMBOL
DB	RIGHT TURN ARROW
DD	COMBO. STRAIGHT/LEFT
DP	MERGE ARROW
	SNOWPLOWABLE RAISED PAVEMENT MARKERS
MF	CRYSTAL & RED

ROADWAY STANDARD DRAWING


- THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:
- | STD. NO. | TITLE |
|----------|---|
| 1205.01 | PAVEMENT MARKINGS - LINE TYPES AND OFFSETS |
| 1205.02 | PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS |
| 1205.03 | PAVEMENT MARKINGS - EXIT AND ENTRANCE RAMP |
| 1205.04 | PAVEMENT MARKINGS - INTERSECTIONS |
| 1205.05 | PAVEMENT MARKINGS - TURN LANES |
| 1205.08 | PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES |
| 1205.09 | PAVEMENT MARKINGS - PAINTED ISLANDS |
| 1205.12 | PAVEMENT MARKINGS - BRIDGES |
| 1250.01 | RAISED PAVEMENT MARKERS - INSTALLATION SPACING |
| 1253.01 | RAISED PAVEMENT MARKERS - SNOWPLOWABLE |

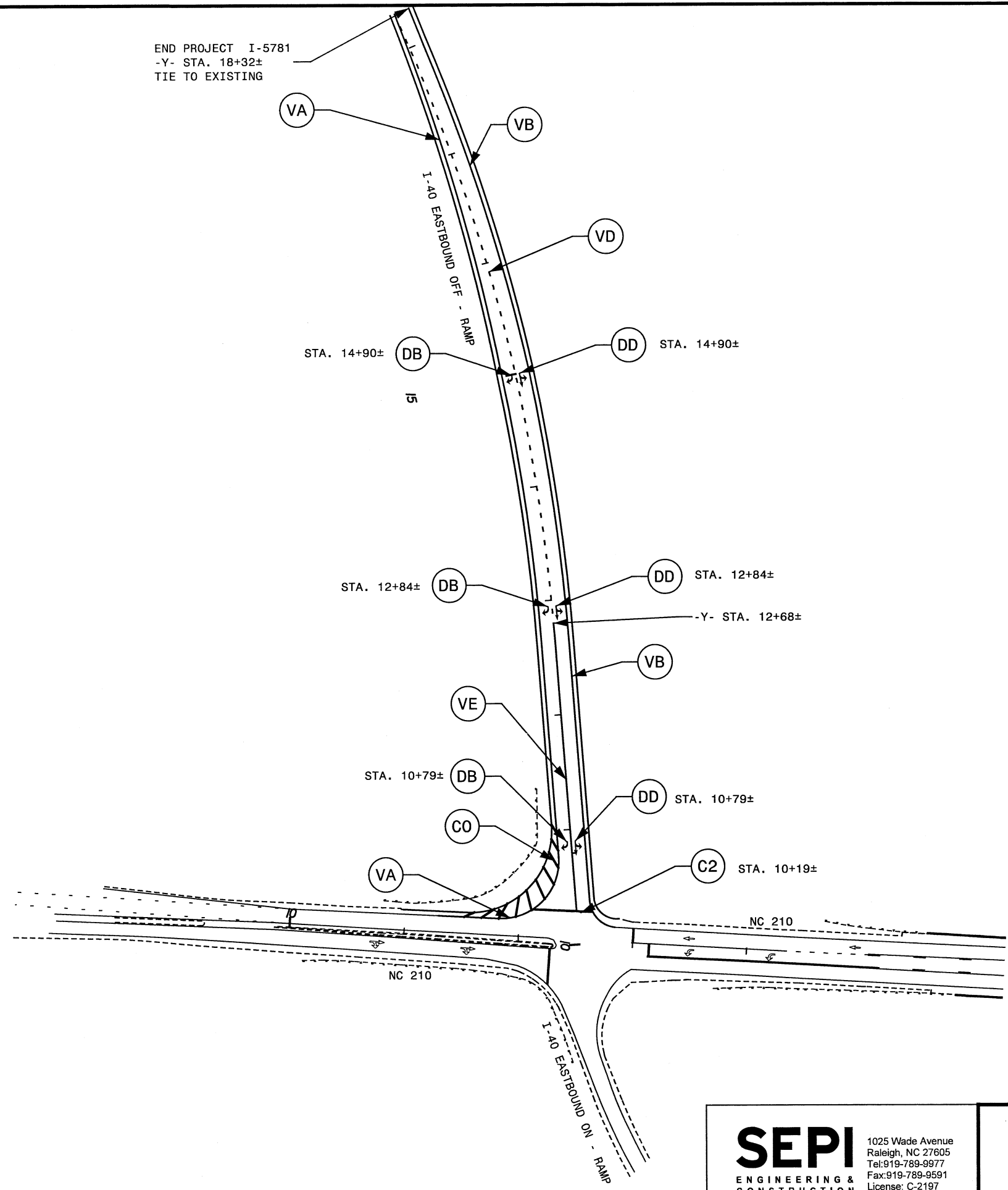
PLAN PREPARED BY: SEPI Engineering

JOSEPH KOPASKIE, P.E. TRANSPORTATION PROJECT MANAGER
JOHN BAUMAN TRAFFIC ENGINEER

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TIP NO. I-5781	SHEET NO. PMP-2
APPROVED: <i>Joseph Kopaske</i> DATE: 10/3/2017	
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PAVEMENT MARKING DETAIL