



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

January 10, 2018

Addendum No. 1

RE: Contract # C204060

WBS # 34929.3.3

STATE FUNDED

Johnston County (U-3334B)

SR-1923 (Booker Dairy Road) From SR-1003 (Buffalo Road) To US-301

January 16, 2018 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 plans:

Sheet No.	Revisions
5 and 8	Revised to show trenchless installation of welded steel pipe under the existing road
3D-1 thru 3D-7	Revised to update the Drainage Summaries to reflect the below mentioned quantity changes and pay item additions
TMP-7	Revised to double 36" pipes to one 42" bore under existing roadway

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 01-10-2018".
Table of Contents	Revised to reflect the addition of the project special provision "Building Removals" on Page No. G-28
G-28	Revised to add the project special provision entitled "Building Removals"
UbO-2	Revised the information in paragraph E) concerning when Johnston County-Water will be relocated within the "Utility by Others" special provisions. The overall contract time was re-evaluated based on this revised date and it was determined that no change is warranted.

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

Page No.	Revisions
TS-10	Revised the last paragraph on this page within the project special provision entitled "Video Imaging Loop Emulator Detector Systems"
ST-1 and ST-2	Revised the project special provisions for Culverts to remove the Station call out for "Optional Precast Reinforced Concrete Box Culvert"

Please void the above listed pages in your proposal and staple the revised pages thereto.

On the item sheets the following pay item has been deleted and new items added:


<u>Item</u>	<u>Description</u>	<u>Old Quantity</u>	<u>New Quantity</u>
023-0354000000-E-310	36" RC Pipe Culverts, Class V	428 LF	212 LF
024-0345000000-E-310	42" RC Pipe Culverts, Class V	244 LF	92 LF
039-0995000000-E-340	Pipe Removal	2,885 LF	1,886 LF
222-0973100000-E-330	36" Welded Steel Pipe, 0.25" Thick, Grade B In Soil	NEW ITEM	108 LF
223-0973100000-E-330	42" Welded Steel Pipe, 0.25" Thick, Grade B In Soil	NEW ITEM	76 LF
224-0973300000-E-330	36" Welded Steel Pipe, 0.25" Thick, Grade B Not In Soil	NEW ITEM	108 LF
225-0973300000-E-330	42" Welded Steel Pipe, 0.25" Thick, Grade B Not In Soil	NEW ITEM	76 LF

The Contractor's bid must be based on the revised pay item quantities and must include the new pay items.

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 Weathersbee, 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 01-10-2018

DATE AND TIME OF BID OPENING: **JANUARY 16, 2018 AT 2:00 PM**

CONTRACT ID C204060
WBS 34929.3.3

FEDERAL-AID NO. STATE FUNDED

COUNTY JOHNSTON

T.I.P. NO. U-3334B

MILES 2.130

ROUTE NO. SR 1923

LOCATION SR-1923 (BOOKER DAIRY RD) FROM SR-1003 (BUFFALO RD) TO US-301.

TYPE OF WORK GRADING, DRAINAGE, PAVING, SIGNALS, AND CULVERT.

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 & STRUCTURE PROPOSAL

5% BID BOND OR BID DEPOSIT REQUIRED

TABLE OF CONTENTS

**COVER SHEET
PROPOSAL SHEET**

PROJECT SPECIAL PROVISIONS

CONTRACT TIME AND LIQUIDATED DAMAGES: G-1
 INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES: G-1
 INTERMEDIATE CONTRACT TIME NUMBER 2 AND LIQUIDATED DAMAGES: G-2
 INTERMEDIATE CONTRACT TIME NUMBER 3 AND LIQUIDATED DAMAGES: G-3
 PERMANENT VEGETATION ESTABLISHMENT:..... G-3
 MAJOR CONTRACT ITEMS: G-4
 SPECIALTY ITEMS: G-4
 FUEL PRICE ADJUSTMENT:..... G-4
 SCHEDULE OF ESTIMATED COMPLETION PROGRESS:..... G-5
 MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE: G-5
 CONTRACTOR'S LICENSE REQUIREMENTS: G-19
 SUBSURFACE INFORMATION:..... G-19
 MAINTENANCE OF THE PROJECT: G-20
 COOPERATION BETWEEN CONTRACTORS:..... G-20
 TWELVE MONTH GUARANTEE: G-20
 OUTSOURCING OUTSIDE THE USA: G-21
 EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION: G-21
 PROCEDURE FOR MONITORING BORROW PIT DISCHARGE:..... G-27
 DELAY IN RIGHT OF ENTRY: G-28
 BUILDING REMOVAL: G-28

ROADWAY..... R-1

STANDARD SPECIAL PROVISIONS

AVAILABILITY FUNDS – TERMINATION OF CONTRACTS SSP-1
 NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY SSP-2
 ERRATA..... SSP-5
 PLANT AND PEST QUARANTINES SSP-6
 MINIMUM WAGES SSP-7
 ON-THE-JOB TRAINING SSP-8

UNIT PROJECT SPECIAL PROVISIONS

UTILITY BY OTHERS UBO-1
 EROSION CONTROL EC-1
 TRAFFIC SIGNALS TS-1
 STRUCTURE / CULVERTS..... ST-1

PERMITS P-1

PROPOSAL ITEM SHEET

ITEM SHEET(S) (TAN SHEETS)

The Contractor shall use the *NCDOT Turbidity Reduction Options for Borrow Pits Matrix*, available at http://www.ncdot.gov/doh/operations/dp_chief_eng/roadside/fieldops/downloads/Files/TurbidityReductionOptionSheet.pdf to plan, design, construct, and maintain BMPs to address water quality standards. Tier I Methods include stilling basins which are standard compensatory BMPs. Other Tier I methods are noncompensatory and shall be used when needed to meet the stream turbidity standards. Tier II Methods are also noncompensatory and are options that may be needed for protection of rare or unique resources or where special environmental conditions exist at the site which have led to additional requirements being placed in the DWQ's 401 Certifications and approval letters, Isolated Wetland Permits, Riparian Buffer Authorization or a DOT Reclamation Plan's Environmental Assessment for the specific site. Should the Contractor exhaust all Tier I Methods on a site exclusive of rare or unique resources or special environmental conditions, Tier II Methods may be required by regulators on a case by case basis per supplemental agreement.

The Contractor may use cation exchange capacity (CEC) values from proposed site borings to plan and develop the bid for the project. CEC values exceeding 15 milliequivalents per 100 grams of soil may indicate a high potential for turbidity and should be avoided when dewatering into surface water is proposed.

No additional compensation for monitoring borrow pit discharge will be paid.

DELAY IN RIGHT OF ENTRY:

(7-1-95)

108

SP1 G22 A

The Contractor will not be allowed right of entry to the parcels listed below before 3-06-2018 unless otherwise permitted by the Engineer.

<u>Parcel No.</u>	<u>Property Owner</u>
002Z	Mable W. Hamilton
041	Brian T. Grant

BUILDING REMOVAL:

(1-1-02) (Rev. 11-15-16)

215

SP2 R15 C

Remove the buildings and appurtenances listed below in accordance with Section 215 of the *2018 Standard Specifications*:

<u>Item No.</u>	<u>Parcel</u>	<u>Location</u>	<u>Description</u>
1	21	Right of SS 74+50; Survey Line -L	2 Story Apartment Building
2	26	Left of SS 16+00; Survey Line -Y5-	2 Story Frame Dwelling
3	28	Left of SS 18+00; Survey Line -Y5-	1 Story Frame Dwelling
4	36	Left of SS 124+80; Survey Line -L-	1 Story Brick Office Building
5	36A	Left of SS 126+55; Survey Line -L-	1 Story Brick Office Building

When the description of the work for an item indicates a building partially inside and partially outside the right of way and/or construction area, but does not require the building to be cut off, the entire building shall be removed.

PROJECT SPECIAL PROVISIONS

Utilities by Others

C) Century Link - Communications

- 1) Century Link will relocate facilities by Date of Availability.
- 2) Contact person for Century Link is:
Kevin Godwin 910 366-2142 Kevin.Godwin@CenturyLink.com

D) Charter Communications - Communications

- 1) Charter Communications will relocate facilities by Date of Availability.
- 2) Contact person for Charter Communications is:
Clay Rollins 252 265-4170 clay.rollins@charter.com

E) Johnston County - Water

- 1) Johnston County Water will relocate their water lines located adjacent to the project by April 30, 2018.
- 2) Contact person for Johnston County Water is:
Chandra Farmer 919 209 8333 chandra.farmer@johnstonnc.com

F) Town of Smithfield – Water

- 1) Town of Smithfield will relocate facilities by Date of Availability.
- 2) Contact person for Town of Smithfield (Water) is:
Ted Credle 919 934 2116 ted.credle@smithfield-nc.com

- For 16-7 cable: white, yellow, red, green, yellow with black stripe tracer, red with black stripe tracer, and green with black stripe tracer. Apply continuous stripe tracer on conductor insulation with a longitudinal or spiral pattern.

Provide a ripcord to allow the cable jacket to be opened without using a cutter. IMSA specification 19-1 will not be acceptable. Provide a cable jacket labeled with the IMSA specification number and provide conductors constructed of stranded copper.

3. VIDEO IMAGING LOOP EMULATOR DETECTOR SYSTEMS

3.1. DESCRIPTION

Design, furnish, provide training, and install video imaging loop emulator detection systems with all necessary hardware in accordance with the plans and specifications.

Unless otherwise specified in the contract, all loop emulator detection equipment will remain the property of the contractor.

3.2. MATERIALS

A. General:

Material and equipment furnished under this section must be pre-approved on the Department's QPL by the date of installation except miscellaneous hardware such as cables and mounting hardware do not need to be pre-approved.

Used equipment will be acceptable provided the following conditions have been met:

- Equipment is listed on the current QPL.
- Equipment is in good working condition.
- Equipment is to remain the property of the contractor.

Ensure that software is licensed for use by the Department and by any other agency responsible for maintaining or operating the loop emulation system. Provide the Department with a license to duplicate and distribute the software as necessary for design and maintenance support.

Design and furnish video imaging loop emulator detection systems that detect vehicles at signalized intersections by processing video images and providing detection outputs to the signal controller in real time (within 112 milliseconds of vehicle arrival).

Furnish all required camera sensor units, loop emulator processor units, hardware and software packages, cabling, poles, luminaire arms, harnesses, camera mounting assemblies, surge protection panels, grounding systems, messenger cable and all necessary hardware. Furnish systems that allow the display of detection zones superimposed on an image of the roadway on a Department-furnished monitor or laptop computer screen. Ensure detection zones can be defined and data entered using a simple keyboard or mouse and monitor, or using a laptop PC with software.

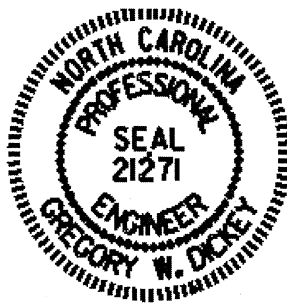
Provide design drawings showing design details and camera sensor unit locations for review and acceptance before installation. Provide mounting height and location requirements for camera sensor units on the design based on site survey. Design video imaging loop emulator detection systems with all necessary hardware. Indicate all necessary poles, spans, mast arms, luminaire arms, cables, camera mounting assemblies and hardware to achieve the required detection zones where Department owned poles are not adequate to locate the camera sensor units. When required to obtain the desired detection zones, luminaire arms shall be no more than 12 feet in length and may be installed on wood or metal strain poles. Luminaire arms may be truss type or a single member design. Do not design for the installation of poles in medians.

Project Special Provisions

Culvert

Table of Contents

		Page #
Optional Precast Reinforced Concrete Box Culvert	(12-12-13)	ST-2
Falsework and Formwork	(4-5-12)	ST-9
Submittal of Working Drawings	(6-28-17)	ST-16
Crane Safety	(8-15-05)	ST-22
Grout for Structures	(11-30-11)	ST-23



DocuSigned by:
Greg Dickey
884E46B8CE5B4B6...

1/5/2018

**OPTIONAL PRECAST REINFORCED CONCRETE
BOX CULVERT**

(12-12-13)

1.0 GENERAL

This Special Provision covers the design, fabrication and construction of precast reinforced concrete box culverts intended for the conveyance of storm water.

If the option is indicated on the plans, the submittal for a precast reinforced box culvert in lieu of a cast-in-place culvert is permitted. Design the precast culvert sections in accordance with ASTM C1577 or the current edition of the AASHTO LRFD Bridge Design Specifications. Rate all sizes of precast reinforced concrete box culverts in accordance with the current edition of the AASHTO Manual for Bridge Evaluation. Ensure the culvert rates for the AASHTO design loads and North Carolina's legal loads (see Section 2.0 for North Carolina's legal loads). Provide the size and number of barrels as indicated on the plans. Detail the culvert with cast-in-place wings walls and footings. Precast wing walls and footings will not be allowed. Provide a precast box culvert that meets the requirements of Section 1077 and any other applicable parts of the Standard Specifications.

The design and rating of the precast and cast-in-place members is the responsibility of the Contractor and is subject to review, comments and approval. Submit two sets of detailed plans and rating sheets for review. Include all details in the plans, including the size and spacing of the required reinforcement necessary to build the precast box and cast-in-place members. Have a North Carolina Registered Professional Engineer check and seal the plans, rating sheets and design calculations. After the plans, rating sheets and design calculations are reviewed and, if necessary, the corrections made, submit one set of plans and rating sheets on 22" x 34" sheets to become part of the contract plans.

If the span, rise and design earth cover for the precast reinforced concrete box culvert are identical to a previously approved submittal, the Contractor may request the previously approved design calculations and plans be considered as the submittal for review and approval. However, a set of plans and rating sheets will need to be submitted to become part of the contract plans.

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	0001000000-E	200	CLEARING & GRUBBING .. ACRE(S)	Lump Sum	L.S.	
0004	0008000000-E	200	SUPPLEMENTARY CLEARING & GRUB- BING	1 ACR		
0005	0015000000-N	205	SEALING ABANDONED WELLS	1 EA		
0006	0022000000-E	225	UNCLASSIFIED EXCAVATION	19,000 CY		
0007	0036000000-E	225	UNDERCUT EXCAVATION	6,400 CY		
0008	0106000000-E	230	BORROW EXCAVATION	126,000 CY		
0009	0134000000-E	240	DRAINAGE DITCH EXCAVATION	1,360 CY		
0010	0156000000-E	250	REMOVAL OF EXISTING ASPHALT PAVEMENT	8,340 SY		
0011	0192000000-N	260	PROOF ROLLING	20 HR		
0012	0195000000-E	265	SELECT GRANULAR MATERIAL	35,000 CY		
0013	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZA- TION	47,300 SY		
0014	0318000000-E	300	FOUNDATION CONDITIONING MATE- RIAL, MINOR STRUCTURES	1,330 TON		
0015	0320000000-E	300	FOUNDATION CONDITIONING GEO- TEXTILE	4,180 SY		
0016	0335200000-E	305	15" DRAINAGE PIPE	280 LF		
0017	0335300000-E	305	18" DRAINAGE PIPE	16 LF		
0018	0335600000-E	305	36" DRAINAGE PIPE	844 LF		
0019	0335700000-E	305	42" DRAINAGE PIPE	16 LF		

County: Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0020	0354000000-E	310	**** RC PIPE CULVERTS, CLASS ***** (15", V)	1,788	LF	
0021	0354000000-E	310	**** RC PIPE CULVERTS, CLASS ***** (18", V)	236	LF	
0022	0354000000-E	310	**** RC PIPE CULVERTS, CLASS ***** (24", V)	44	LF	
0023	0354000000-E	310	**** RC PIPE CULVERTS, CLASS ***** (36", V)	212	LF	
0024	0354000000-E	310	**** RC PIPE CULVERTS, CLASS ***** (42", V)	92	LF	
0025	0366000000-E	310	15" RC PIPE CULVERTS, CLASS III	860	LF	
0026	0372000000-E	310	18" RC PIPE CULVERTS, CLASS III	148	LF	
0027	0378000000-E	310	24" RC PIPE CULVERTS, CLASS III	1,420	LF	
0028	0384000000-E	310	30" RC PIPE CULVERTS, CLASS III	24	LF	
0029	0390000000-E	310	36" RC PIPE CULVERTS, CLASS III	692	LF	
0030	0414000000-E	310	60" RC PIPE CULVERTS, CLASS III	276	LF	
0031	0448000000-E	310	***** RC PIPE CULVERTS, CLASS IV (66")	168	LF	
0032	0448200000-E	310	15" RC PIPE CULVERTS, CLASS IV	1,841	LF	
0033	0448300000-E	310	18" RC PIPE CULVERTS, CLASS IV	1,304	LF	
0034	0448400000-E	310	24" RC PIPE CULVERTS, CLASS IV	1,260	LF	
0035	0448500000-E	310	30" RC PIPE CULVERTS, CLASS IV	192	LF	

County: Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0036	0448600000-E	310	36" RC PIPE CULVERTS, CLASS IV	392 LF		
0037	0582000000-E	310	15" CS PIPE CULVERTS, 0.064" THICK	61 LF		
0038	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (15", 0.064")	2 EA		
0039	0995000000-E	340	PIPE REMOVAL	1,886 LF		
0040	1011000000-N	500	FINE GRADING	Lump Sum	L.S.	
0041	1099500000-E	505	SHALLOW UNDERCUT	3,100 CY		
0042	1099700000-E	505	CLASS IV SUBGRADE STABILIZATION	7,000 TON		
0043	1111000000-E	SP	CLASS IV AGGREGATE STABILIZATION	250 TON		
0044	1121000000-E	520	AGGREGATE BASE COURSE	24,300 TON		
0045	1220000000-E	545	INCIDENTAL STONE BASE	1,000 TON		
0046	1275000000-E	600	PRIME COAT	24,357 GAL		
0047	1297000000-E	607	MILLING ASPHALT PAVEMENT, **** DEPTH (1-1/2")	13,970 SY		
0048	1297000000-E	607	MILLING ASPHALT PAVEMENT, **** DEPTH (3")	5,250 SY		
0049	1330000000-E	607	INCIDENTAL MILLING	4,860 SY		
0050	1489000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0B	18,090 TON		
0051	1498000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	18,880 TON		
0052	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	16,570 TON		
0053	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	2,700 TON		

County: Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0054	1693000000-E	654	ASPHALT PLANT MIX, PAVEMENT REPAIR	570 TON		
0055	2000000000-N	806	RIGHT-OF-WAY MARKERS	78 EA		
0056	2022000000-E	815	SUBDRAIN EXCAVATION	1,344 CY		
0057	2033000000-E	815	SUBDRAIN FINE AGGREGATE	672 CY		
0058	2044000000-E	815	6" PERFORATED SUBDRAIN PIPE	4,000 LF		
0059	2070000000-N	815	SUBDRAIN PIPE OUTLET	8 EA		
0060	2077000000-E	815	6" OUTLET PIPE	48 LF		
0061	2209000000-E	838	ENDWALLS	9 CY		
0062	2220000000-E	838	REINFORCED ENDWALLS	11.9 CY		
0063	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	131 EA		
0064	2297000000-E	840	MASONRY DRAINAGE STRUCTURES	22.093 CY		
0065	2308000000-E	840	MASONRY DRAINAGE STRUCTURES	8.6 LF		
0066	2354200000-N	840	FRAME WITH GRATE, STD 840.24	1 EA		
0067	2364000000-N	840	FRAME WITH TWO GRATES, STD 840.16	13 EA		
0068	2364200000-N	840	FRAME WITH TWO GRATES, STD 840.20	19 EA		
0069	2365000000-N	840	FRAME WITH TWO GRATES, STD 840.22	5 EA		
0070	2366000000-N	840	FRAME WITH TWO GRATES, STD 840.24	13 EA		
0071	2367000000-N	840	FRAME WITH TWO GRATES, STD 840.29	1 EA		
0072	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	17 EA		

County: Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0073	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	35 EA		
0074	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	28 EA		
0075	2396000000-N	840	FRAME WITH COVER, STD 840.54	2 EA		
0076	2418000000-E	SP	FRAME WITH GRATES, DRIVEWAY DROP INLET	84 LF		
0077	2451000000-N	852	CONCRETE TRANSITIONAL SECTION FOR DROP INLET	9 EA		
0078	2538000000-E	846	***.*** CONCRETE CURB & GUTTER (2'-9")	3,250 LF		
0079	2542000000-E	846	1'-6" CONCRETE CURB & GUTTER	11,700 LF		
0080	2549000000-E	846	2'-6" CONCRETE CURB & GUTTER	10,950 LF		
0081	2580000000-E	846	CONCRETE VALLEY GUTTER	170 LF		
0082	2591000000-E	848	4" CONCRETE SIDEWALK	4,320 SY		
0083	2605000000-N	848	CONCRETE CURB RAMPS	25 EA		
0084	2612000000-E	848	6" CONCRETE DRIVEWAY	160 SY		
0085	2655000000-E	852	5" MONOLITHIC CONCRETE ISLANDS (KEYED IN)	2,020 SY		
0086	2860000000-N	859	CONVERT EXISTING CATCH BASIN TO JUNCTION BOX	1 EA		
0087	3030000000-E	862	STEEL BEAM GUARDRAIL	500 LF		
0088	3150000000-N	862	ADDITIONAL GUARDRAIL POSTS	10 EA		
0089	3210000000-N	862	GUARDRAIL END UNITS, TYPE CAT-1	2 EA		
0090	3287000000-N	SP	GUARDRAIL END UNITS, TYPE TL-3	2 EA		

County: Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0091	3503000000-E	866	WOVEN WIRE FENCE, 47" FABRIC	6,910 LF		
0092	3509000000-E	866	4" TIMBER FENCE POSTS, 7'-6" LONG	450 EA		
0093	3515000000-E	866	5" TIMBER FENCE POSTS, 8'-0" LONG	84 EA		
0094	3628000000-E	876	RIP RAP, CLASS I	550 TON		
0095	3649000000-E	876	RIP RAP, CLASS B	70 TON		
0096	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	1,290 SY		
0097	4048000000-E	902	REINFORCED CONCRETE SIGN FOUN- DATIONS	1 CY		
0098	4060000000-E	903	SUPPORTS, BREAKAWAY STEEL BEAM	174 LB		
0099	4072000000-E	903	SUPPORTS, 3-LB STEEL U-CHANNEL	1,442 LF		
0100	4102000000-N	904	SIGN ERECTION, TYPE E	98 EA		
0101	4108000000-N	904	SIGN ERECTION, TYPE F	3 EA		
0102	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (B)	1 EA		
0103	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (D)	2 EA		
0104	4138000000-N	907	DISPOSAL OF SUPPORT, STEEL BEAM	2 EA		
0105	4155000000-N	907	DISPOSAL OF SIGN SYSTEM, U- CHANNEL	33 EA		
0106	4192000000-N	907	DISPOSAL OF SUPPORT, U-CHANNEL	2 EA		
0107	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	548 SF		
0108	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	524 SF		

County : Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0109	4410000000-E	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	200 SF		
0110	4415000000-N	1115	FLASHING ARROW BOARD	1 EA		
0111	4430000000-N	1130	DRUMS	420 EA		
0112	4435000000-N	1135	CONES	50 EA		
0113	4445000000-E	1145	BARRICADES (TYPE III)	144 LF		
0114	4455000000-N	1150	FLAGGER	240 DAY		
0115	4480000000-N	1165	TMA	1 EA		
0116	4507000000-E	1170	WATER FILLED BARRIER	30 LF		
0117	4510000000-N	1190	LAW ENFORCEMENT	40 HR		
0118	4516000000-N	1180	SKINNY DRUM	200 EA		
0119	4650000000-N	1251	TEMPORARY RAISED PAVEMENT MARKERS	928 EA		
0120	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	21,963 LF		
0121	4686000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	16,182 LF		
0122	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	2,904 LF		
0123	4697000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS)	1,092 LF		
0124	4700000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	777 LF		
0125	4710000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	944 LF		
0126	4721000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)	42 EA		

County: Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0127	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	80 EA		
0128	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	140,275 LF		
0129	4820000000-E	1205	PAINT PAVEMENT MARKING LINES (8")	700 LF		
0130	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	1,650 LF		
0131	4840000000-N	1205	PAINT PAVEMENT MARKING CHARACTER	42 EA		
0132	4845000000-N	1205	PAINT PAVEMENT MARKING SYMBOL	110 EA		
0133	4850000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (4")	14,346 LF		
0134	4875000000-N	1205	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS	4 EA		
0135	4900000000-N	1251	PERMANENT RAISED PAVEMENT MARKERS	813 EA		
0136	4915000000-E	1264	7' U-CHANNEL POSTS	9 EA		
0137	4955000000-N	1264	OBJECT MARKERS (END OF ROAD)	9 EA		
0138	6000000000-E	1605	TEMPORARY SILT FENCE	21,025 LF		
0139	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	860 TON		
0140	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	2,300 TON		
0141	6012000000-E	1610	SEDIMENT CONTROL STONE	2,670 TON		
0142	6015000000-E	1615	TEMPORARY MULCHING	23.5 ACR		
0143	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	1,300 LB		
0144	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEEDING	7.5 TON		

County : Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0145	6024000000-E	1622	TEMPORARY SLOPE DRAINS	1,745 LF		
0146	6029000000-E	SP	SAFETY FENCE	3,600 LF		
0147	6030000000-E	1630	SILT EXCAVATION	7,750 CY		
0148	6036000000-E	1631	MATTING FOR EROSION CONTROL	9,000 SY		
0149	6037000000-E	SP	COIR FIBER MAT	100 SY		
0150	6038000000-E	SP	PERMANENT SOIL REINFORCEMENT MAT	100 SY		
0151	6042000000-E	1632	1/4" HARDWARE CLOTH	6,405 LF		
0152	6043000000-E	SP	LOW PERMEABILITY GEOTEXTILE	170 SY		
0153	6045000000-E	SP	*** TEMPORARY PIPE (54")	220 LF		
0154	6069000000-E	1638	STILLING BASINS	502 CY		
0155	6071010000-E	SP	WATTLE	2,100 LF		
0156	6071012000-E	SP	COIR FIBER WATTLE	180 LF		
0157	6071020000-E	SP	POLYACRYLAMIDE (PAM)	1,010 LB		
0158	6071030000-E	1640	COIR FIBER BAFFLE	2,440 LF		
0159	6071050000-E	SP	*** SKIMMER (1-1/2")	8 EA		
0160	6071050000-E	SP	*** SKIMMER (2")	1 EA		
0161	6084000000-E	1660	SEEDING & MULCHING	22 ACR		
0162	6087000000-E	1660	MOWING	11 ACR		
0163	6090000000-E	1661	SEED FOR REPAIR SEEDING	250 LB		
0164	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	1 TON		

County : Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0165	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	625 LB		
0166	6108000000-E	1665	FERTILIZER TOPDRESSING	18.25 TON		
0167	6111000000-E	SP	IMPERVIOUS DIKE	480 LF		
0168	6114500000-N	1667	SPECIALIZED HAND MOWING	10 MHR		
0169	6117000000-N	SP	RESPONSE FOR EROSION CONTROL	75 EA		
0170	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	6 EA		
0171	6123000000-E	1670	REFORESTATION	0.1 ACR		
0172	7048500000-E	1705	PEDESTRIAN SIGNAL HEAD (16", 1 SECTION W/COUNTDOWN)	12 EA		
0173	7060000000-E	1705	SIGNAL CABLE	9,069 LF		
0174	7120000000-E	1705	VEHICLE SIGNAL HEAD (12", 3 SECTION)	44 EA		
0175	7132000000-E	1705	VEHICLE SIGNAL HEAD (12", 4 SECTION)	14 EA		
0176	7144000000-E	1705	VEHICLE SIGNAL HEAD (12", 5 SECTION)	5 EA		
0177	7264000000-E	1710	MESSENGER CABLE (3/8")	3,075 LF		
0178	7279000000-E	1715	TRACER WIRE	6,060 LF		
0179	7300000000-E	1715	UNPAVED TRENCHING (*****) (1, 2")	12,845 LF		
0180	7300000000-E	1715	UNPAVED TRENCHING (*****) (2, 2")	245 LF		
0181	7300000000-E	1715	UNPAVED TRENCHING (*****) (3, 2")	110 LF		
0182	7301000000-E	1715	DIRECTIONAL DRILL (*****) (1,2")	1,305 LF		
0183	7324000000-N	1716	JUNCTION BOX (STANDARD SIZE)	47 EA		

County : Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0184	7348000000-N	1716	JUNCTION BOX (OVER-SIZED, HEAVY DUTY)	26 EA		
0185	7372000000-N	1721	GUY ASSEMBLY	6 EA		
0186	7408000000-E	1722	1" RISER WITH WEATHERHEAD	1 EA		
0187	7420000000-E	1722	2" RISER WITH WEATHERHEAD	3 EA		
0188	7444000000-E	1725	INDUCTIVE LOOP SAWCUT	5,032 LF		
0189	7456000000-E	1726	LEAD-IN CABLE (***** (14-2)	19,300 LF		
0190	7481000000-N	SP	SITE SURVEY	2 EA		
0191	7481200000-N	SP	LUMINAIRE ARM FOR VIDEO SYSTEM	8 EA		
0192	7481240000-N	SP	CAMERA WITHOUT INTERNAL LOOP EMULATOR PROCESSING UNIT	8 EA		
0193	7481260000-N	SP	EXTERNAL LOOP EMULATOR PRO- CESSING UNIT	2 EA		
0194	7481280000-N	SP	RELOCATE CAMERA SENSOR UNIT	2 EA		
0195	7516000000-E	1730	COMMUNICATIONS CABLE (**FIBER) (12)	360 LF		
0196	7516000000-E	1730	COMMUNICATIONS CABLE (**FIBER) (24)	6,420 LF		
0197	7540000000-N	1731	SPLICE ENCLOSURE	5 EA		
0198	7552000000-N	1731	INTERCONNECT CENTER	5 EA		
0199	7566000000-N	1733	DELINEATOR MARKER	4 EA		
0200	7576000000-N	SP	METAL STRAIN SIGNAL POLE	20 EA		
0201	7613000000-N	SP	SOIL TEST	20 EA		
0202	7614100000-E	SP	DRILLED PIER FOUNDATION	140 CY		

County : Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0203	7636000000-N	1745	SIGN FOR SIGNALS	1	EA	
0204	7642200000-N	1743	TYPE II PEDESTAL WITH FOUNDATION	12	EA	
0205	7684000000-N	1750	SIGNAL CABINET FOUNDATION	4	EA	
0206	7686000000-N	1752	CONDUIT ENTRANCE INTO EXISTING FOUNDATION	5	EA	
0207	7696000000-N	1751	CONTROLLERS WITH CABINET (***** (TYPE 2070E, BASE MOUNTED)	4	EA	
0208	7708000000-N	1751	DETECTOR CARD (***** (TYPE 2070)	30	EA	
0209	7901000000-N	1753	CABINET BASE EXTENDER	4	EA	
0210	7901010000-N	1753	CABINET BASE ADAPTER	1	EA	
0211	7960000000-N	SP	METAL POLE FOUNDATION REMOVAL	4	EA	
0212	7972000000-N	SP	METAL POLE REMOVAL	4	EA	
0213	7980000000-N	SP	GENERIC SIGNAL ITEM ETHERNET EDGE SWITCH	5	EA	
0214	7980000000-N	SP	GENERIC SIGNAL ITEM JUNCTION BOX MARKER	16	EA	
0215	7980000000-N	SP	GENERIC SIGNAL ITEM MICROWAVE VEHICLE DETECTION SYSTEM-MULTIPLE ZONES	1	EA	
0222	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (36", 0.25")	108	LF	
0223	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (42", 0.25")	76	LF	
0224	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (36", 0.25")	108	LF	

County: Johnston

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0225	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (42", 0.25")	76 LF		

CULVERT ITEMS

0216	8056000000-N	402	REMOVAL OF EXISTING STRUCTURE AT STATION ***** (11+51.56 -DRW1-)	Lump Sum	L.S.	
0217	8126000000-N	414	CULVERT EXCAVATION, STA ***** (11+51.56 -DRW1-)	Lump Sum	L.S.	
0218	8126000000-N	414	CULVERT EXCAVATION, STA ***** (120+01.00 -L-)	Lump Sum	L.S.	
0219	8133000000-E	414	FOUNDATION CONDITIONING MATER- IAL, BOX CULVERT	363 TON		
0220	8196000000-E	420	CLASS A CONCRETE (CULVERT)	550.5 CY		
0221	8245000000-E	425	REINFORCING STEEL (CULVERT)	59,687 LB		

1540/Jan09/Q850209.443/D916346862000/E225

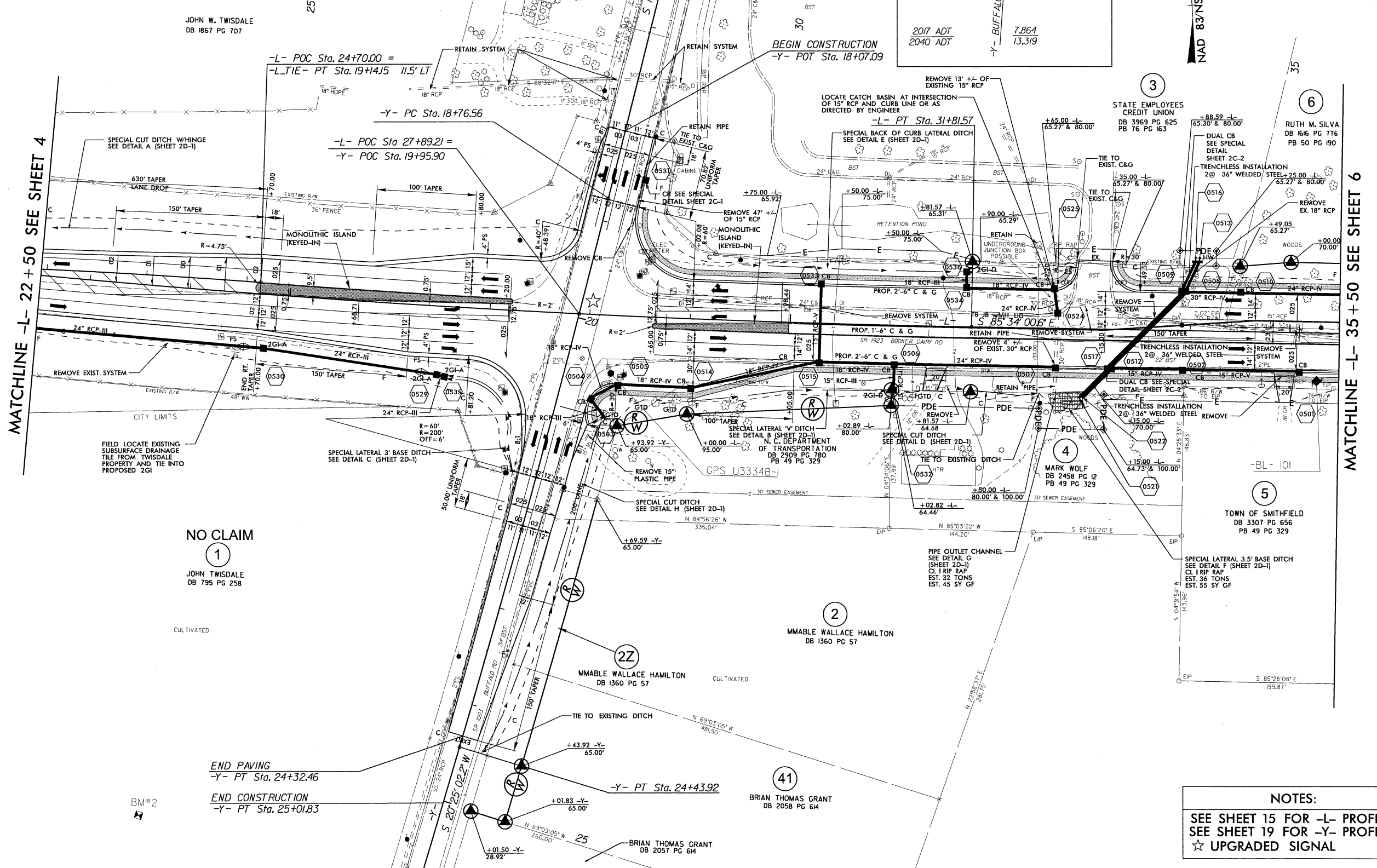
Total Amount Of Bid For Entire Project :

8/17/99

-L-TIE-	-L-TIE-	-L-	-Y-
PI Sta 13+24.14	PI Sta 17+81.02	PI Sta 25+21.18	PI Sta 21+60.30
$\Delta = 4' 56" 57.6" (LT)$	$\Delta = 2' 02" 03.4" (RT)$	$\Delta = 6' 18" 45.6" (LT)$	$\Delta = 2' 50" 12.5" (RT)$
$D = 0' 45" 50.2"$	$D = 0' 45" 50.2"$	$D = 0' 28" 38.9"$	$D = 0' 30" 00.0"$
$L = 647.87'$	$L = 266.28'$	$L = 1,322.12'$	$L = 567.36'$
$T = 324.14'$	$T = 133.16'$	$T = 661.73'$	$T = 283.74'$
$R = 7,500.00'$	$R = 7,500.00'$	$R = 12,000.00'$	$R = 11,459.13'$
$Se = N/A$	$Se = N/A$	$Se = NC$	$Se = NC$



PROJECT REFERENCE NO. U-3334B	SHEET NO. 5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER <i>[Signature]</i>	HYDRAULICS ENGINEER <i>[Signature]</i>
1/9/2018	1/9/2018
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS

1/9/2018 1:32:08 P:\proj\U3334B_rdy_psh_s5.dgn

NAD 83/NSRS 2007

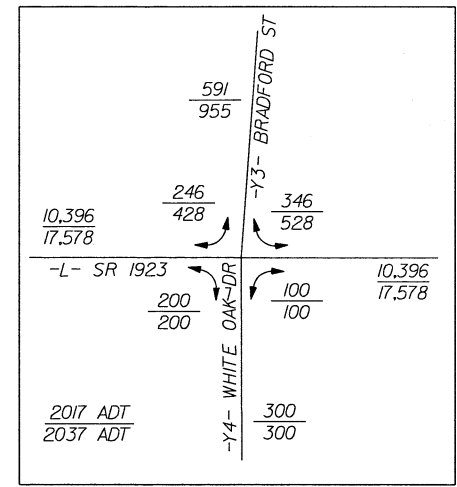
NOTES:
 SEE SHEET 15 FOR -L- PROFILE
 SEE SHEET 19 FOR -Y- PROFILE
 ☆ UPGRADED SIGNAL

8/17/99

TIMOTHY W. & NETA J. KETTERMAN
DB 1719 PG 531



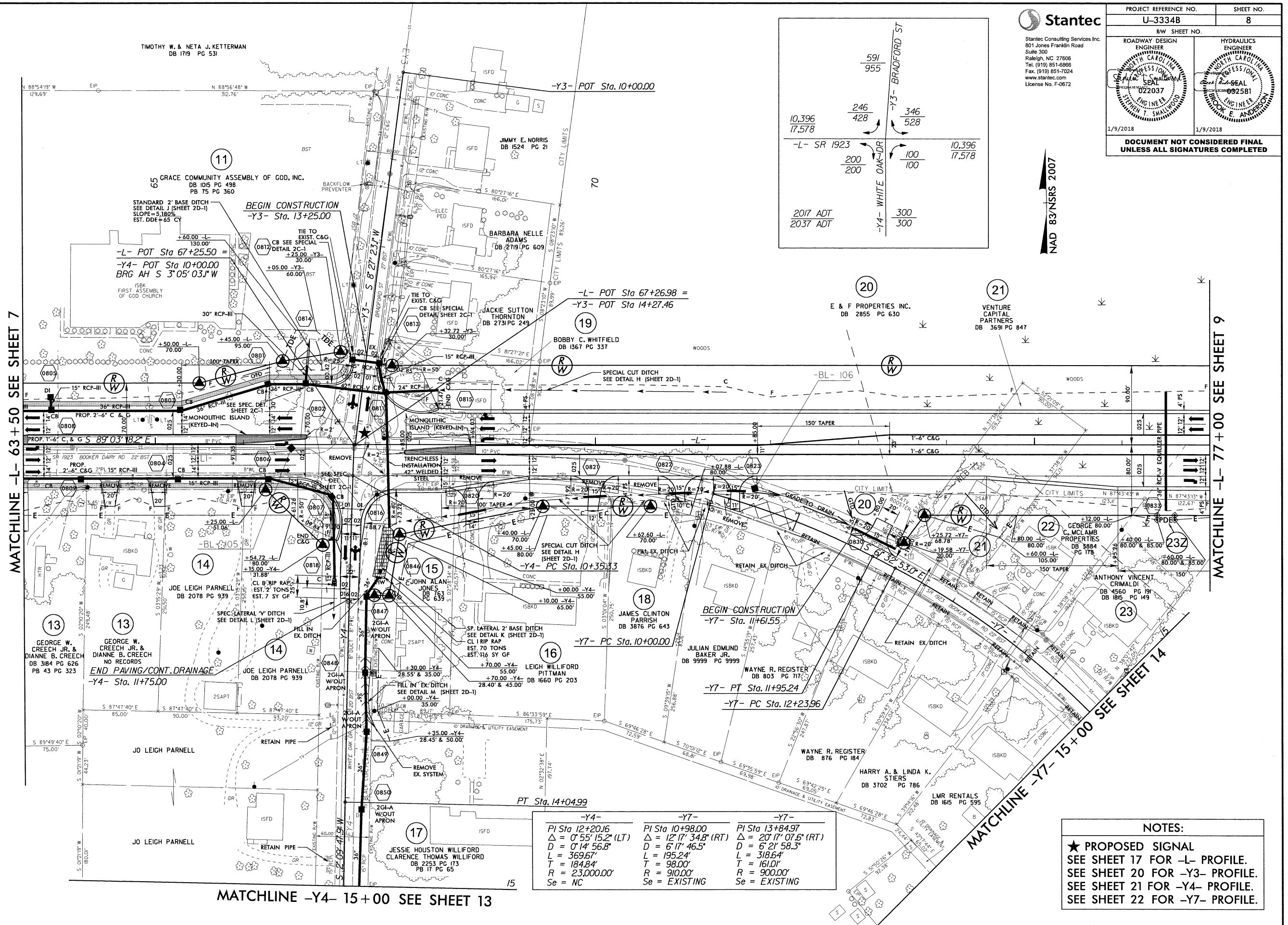
PROJECT REFERENCE NO. U-3334B	SHEET NO. 8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER SEAL 022037 TERREN T. SMALLWOOD	HYDRAULICS ENGINEER SEAL 032581 BROOK E. ANDERSON
1/9/2018	1/9/2018
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



NAD 83 NSRS 2007

MATCHLINE -L- 63+50 SEE SHEET 7

MATCHLINE -L- 77+00 SEE SHEET 9



-Y4-	-Y7-	-Y7-
PI Sta 12+20.16	PI Sta 10+98.00	PI Sta 13+84.97
$\Delta = 0' 55' 15.2''$ (LT)	$\Delta = 12' 17' 34.8''$ (RT)	$\Delta = 20' 17' 07.6''$ (RT)
$D = 0' 14' 56.8''$	$D = 6' 17' 46.5''$	$D = 6' 21' 58.3''$
$L = 369.67'$	$L = 195.24'$	$L = 318.64'$
$T = 184.84'$	$T = 98.00'$	$T = 161.01'$
$R = 23,000.00'$	$R = 910.00'$	$R = 900.00'$
Se = NC	Se = EXISTING	Se = EXISTING

NOTES:

- ★ PROPOSED SIGNAL SEE SHEET 17 FOR -L- PROFILE. SEE SHEET 20 FOR -Y3- PROFILE. SEE SHEET 21 FOR -Y4- PROFILE. SEE SHEET 22 FOR -Y7- PROFILE.

MATCHLINE -Y4- 15+00 SEE SHEET 13

MATCHLINE -Y7- 15+00 SEE SHEET 14

REVISIONS

U:\32018\Buesy\Pro\U3334B_r.dwg_s8.dgn
1/3/2018 10:52:10 AM

RD-20510

COMPUTED BY: NCDOT DATE:
CHECKED BY: C. MOZINGO DATE: 11/7/2017

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO. U-3334B SHEET NO. 3D-1

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

Table with columns for Line & Station, Structure Number, Drainage Pipe, C.S. Pipe, R.C. Pipe Class III, R.C. Pipe Class IV, R.C. Pipe Class V, Quantities for Drainage Structures, Frame, Grates, and Hood, and Remarks. Includes a SHEET TOTALS row at the bottom.

RD-285(1)

COMPUTED BY: NCDOT DATE:
CHECKED BY: C. MOZINGO DATE: 11/7/2017

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO. U-3334B SHEET NO. 3D-3

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

Main data table with columns for LINE & STATION, SIZE, THICKNESS OR GAUGE, OFFBET, STRUCTURE NUMBER, TOP ELEVATION, INVERT ELEVATION, MINIMUM REQUIRED SLOPE, Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC), C. S. PIPE, R. C. PIPE CLASS III, R. C. PIPE CLASS IV, R. C. PIPE CLASS V, ENDWALLS, QUANTITIES FOR DRAINAGE STRUCTURES, FRAME, GRATES, AND HOOD, CONCRETE TRANSITIONAL SECTION, and REMARKS.

SHEET TOTALS

344 64 104 548 224 40 216 44 92

25 1.5 19 5 4 10 2 4 4 1 1 1 1 1

Table with 4 columns: COMPUTED BY, CHECKED BY, NCDOT, C. MOZINGO, DATE, 11/7/2017

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

Table with 2 columns: PROJECT NO. U-3334B, SHEET NO. 3D-5

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

Main data table with columns for LINE & STATION, OFFSET, STRUCTURE NUMBER, ELEVATIONS, PIPE TYPES (Drainage Pipe, C.S. PIPE, R.C. PIPE CLASS III, IV, V), ENDWALLS, QUANTITIES FOR DRAINAGE STRUCTURES, FRAME, GRATES, AND HOOD, CONCRETE TRANSITIONAL SECTION, and REMARKS.

SHEET TOTALS

ABBREVIATIONS table listing codes like C.A.A., C.B., C.S., etc. and their corresponding material descriptions.

REMARKS

RD-260613

Table with columns: COMPUTED BY, CHECKED BY, DATE, NCDOT, C. MOZINGO, 11/7/2017

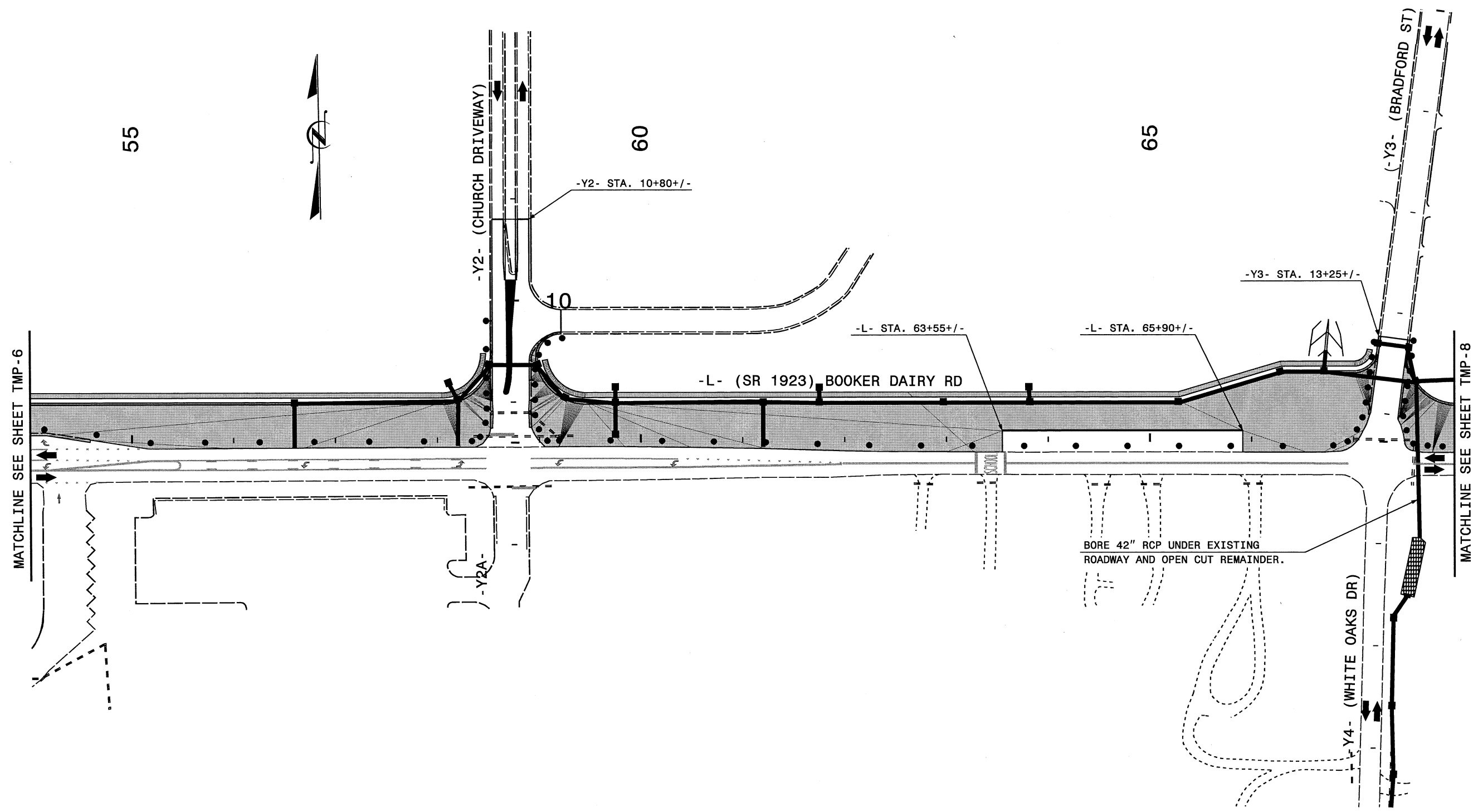
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

Table with columns: PROJECT NO., SHEET NO., U-3334B, 3D-6

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

Main data table with columns: LINE & STATION, SIZE, THICKNESS OR GAUGE, OFFSET, STRUCTURE NUMBER, TOP ELEVATION, INVERT ELEVATION, MINIMUM REQUIRED SLOPE, Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC), C. S. PIPE, R. C. PIPE CLASS III, R. C. PIPE CLASS IV, R. C. PIPE CLASS V, ENDWALLS, QUANTITIES FOR DRAINAGE STRUCTURES, FRAME, GRATES, AND HOOD, CONCRETE TRANSITIONAL SECTION, GRATE TYPE, PIPE REMOVAL, ABBREVIATIONS, REMARKS, SHEET TOTALS.



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

Prepared In the Office of:

PROGRESSIVE
DESIGN GROUP, INC.

ENGINEERS • CONSULTANTS

APPROVED: _____ DATE: 1/9/2018

SEAL



TRANSPORTATION
MANAGEMENT PLAN
PHASE I DETAILS