



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

March 3, 2020

**Addendum No. 1**

RE: Contract # C204356

WBS # 34518.3.8

STATE FUNDED

Ashe County (R-2915E)

US-221 FROM US-221 BYPASS TO US-221 BUSINESS/NC-88 IN JEFFERSON.

**March 17, 2020 Letting**

To Whom It May Concern:

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

The following revision has been made to the Plan Sheets:

Sheet No.	Revision
SBW 1	Quantity change under Sound Barrier Wall Bill of Material

Please void the above listed existing Plan Sheet in your plan set and staple the revised Page thereto.

The following revisions have been made to the proposal:

Page No.	Revision
Proposal Cover	Note added that reads "Includes Addendum No. 1 Dated 03-03-2020"
Table of Contents	"Trout Buffer Variance" added under Project Special Provisions
G-1	Dates revised under Contract Time and Liquidated Damages
G-1	Dates revised under Intermediate Contract Time Number 1 and Liquidated Damages
G-5	Schedule of Estimated Completion Process revised
G-31	Trout Buffer Variance provision added

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

On the item sheets the following pay item revision has been made:

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

Telephone: (919) 707-6900  
Fax: (919) 250-4119  
Customer Service: 1-877-368-4968

Location:  
1020 BIRCH RIDGE DR.,  
RALEIGH, NC 27610

Website: [www.ncdot.gov](http://www.ncdot.gov)

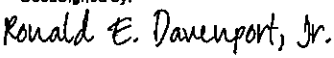
<u>Item</u>	<u>Description</u>	<u>Old Quantity</u>	<u>New Quantity</u>
0278-8847000000-E- SP	ARCHITECTURAL SURFACE TREATMENT (SOUND BARRIER WALL)	17,080 SF	34,160 SF

The Contractor's bid must include this pay item revision.

The electronic bidding file has been updated to reflect this revision. Please download the 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/cms

Attachments

cc: Mr. Lamar Sylvester, PE  
 Mr. Michael A. Pettyjohn, PE  
 Mr. Chris Peoples, PE  
 Mr. Jon Weathersbee, PE  
 Mr. Ken Kennedy, PE  
 Mr. Ray Arnold, PE  
 Project File (2)

Ms. Jaci Kincaid  
 Mr. Kyle Kempf  
 Ms. Penny Higgins  
 Ms. Lori Strickland  
 Mr. Mike Gwyn  
 Mr. Mitchell Dixon

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

PROPOSAL

**INCLUDES ADDENDUM No. 1 DATED 03-03-2020**

DATE AND TIME OF BID OPENING: **MARCH 17, 2020 AT 2:00 PM**

CONTRACT ID C204356  
WBS 34518.3.8

FEDERAL-AID NO. STATE FUNDED

COUNTY ASHE

T.I.P. NO. R-2915E

MILES 3.537

ROUTE NO. US 221

LOCATION US-221 FROM US-221 BYPASS TO US-221 BUSINESS/NC-88 IN  
JEFFERSON.

TYPE OF WORK WIDENING, GRADING, DRAINAGE, PAVING, SIGNALS, AND CULVERTS.

**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 & CULVERT PROPOSAL**

**5% BID BOND OR BID DEPOSIT REQUIRED**

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**PROJECT SPECIAL PROVISIONS****GENERAL****CONTRACT TIME AND LIQUIDATED DAMAGES:**

(8-15-00) (Rev. 12-18-07)

108

SP1 G07 A

The date of availability for this contract is **July 1, 2020**, except that work in jurisdictional waters and wetlands shall not begin until a meeting between the DOT, Regulatory Agencies, and the Contractor is held as stipulated in the permits contained elsewhere in this proposal. This delay in availability has been considered in determining the contract time for this project.

The completion date for this contract is **November 11, 2024**.

Except where otherwise provided by the contract, observation periods required by the contract will not be a part of the work to be completed by the completion date and/or intermediate contract times stated in the contract. The acceptable completion of the observation periods that extend beyond the final completion date shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are **Two Hundred Dollars (\$200.00)** per calendar day. These liquidated damages will not be cumulative with any liquidated damages which may become chargeable under Intermediate Contract Time Number 1.

**INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:**

(7-1-95) (Rev. 2-21-12)

108

SP1 G13 A

Except for that work required under the Project Special Provisions entitled *Planting, Reforestation* and/or *Permanent Vegetation Establishment*, included elsewhere in this proposal, the Contractor will be required to complete all work included in this contract and shall place and maintain traffic on same.

The date of availability for this intermediate contract time is **July 1, 2020**.

The completion date for this intermediate contract time is **May 15, 2024**.

The liquidated damages for this intermediate contract time are **Two Thousand Dollars (\$ 2,000.00)** per calendar day.

Upon apparent completion of all the work required to be completed by this intermediate date, a final inspection will be held in accordance with Article 105-17 and upon acceptance, the Department will assume responsibility for the maintenance of all work except *Planting, Reforestation* and/or *Permanent Vegetation Establishment*. The Contractor will be responsible for and shall make corrections of all damages to the completed roadway caused by his planting operations, whether occurring prior to or after placing traffic through the project.

**FUEL PRICE ADJUSTMENT:**

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

109-8

SP1 G43

Revise the 2018 *Standard Specifications* as follows:

Page 1-87, Article 109-8, **Fuel Price Adjustments**, add the following:

The base index price for DIESEL #2 FUEL is \$ 1.8495 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

**SCHEDULE OF ESTIMATED COMPLETION PROGRESS:**

(7-15-08) (Rev. 5-13-19)

108-2

SP1 G58

The Contractor's attention is directed to the Standard Special Provision entitled *Availability of Funds Termination of Contracts* included elsewhere in this proposal. The Department of Transportation's schedule of estimated completion progress for this project as required by that Standard Special Provision is as follows:

	<b><u>Fiscal Year</u></b>	<b><u>Progress (% of Dollar Value)</u></b>
2021	(7/01/20 - 6/30/21)	33% of Total Amount Bid
2022	(7/01/21 - 6/30/22)	29% of Total Amount Bid
2023	(7/01/22 - 6/30/23)	25% of Total Amount Bid
2024	(7/01/23 - 6/30/24)	13% of Total Amount Bid

The Contractor shall also furnish his own progress schedule in accordance with Article 108-2 of the 2018 *Standard Specifications*. Any acceleration of the progress as shown by the Contractor's progress schedule over the progress as shown above shall be subject to the approval of the Engineer.

**TROUT BUFFER VARIANCE:**

No in-water work or land disturbance may occur within any trout stream buffer zone until the trout variance is acquired by the Department and permission is granted by the Engineer.

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
<b>ROADWAY ITEMS</b>						
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	2 ACR		
0005	0022000000-E	225	UNCLASSIFIED EXCAVATION	220,830 CY		
0006	0036000000-E	225	UNDERCUT EXCAVATION	2,400 CY		
0007	0106000000-E	230	BORROW EXCAVATION	35,080 CY		
0008	0134000000-E	240	DRAINAGE DITCH EXCAVATION	18,200 CY		
0009	0141000000-E	240	BERM DITCH CONSTRUCTION	400 LF		
0010	0156000000-E	250	REMOVAL OF EXISTING ASPHALT PAVEMENT	32,700 SY		
0011	0177000000-E	250	BREAKING OF EXISTING ASPHALT PAVEMENT	810 SY		
0012	0192000000-N	260	PROOF ROLLING	20 HR		
0013	0195000000-E	265	SELECT GRANULAR MATERIAL	2,000 CY		
0014	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZA- TION	7,150 SY		
0015	0199000000-E	SP	TEMPORARY SHORING	16,000 SF		
0016	0223000000-E	275	ROCK PLATING	3,900 SY		
0017	0318000000-E	300	FOUNDATION CONDITIONING MATE- RIAL, MINOR STRUCTURES	1,750 TON		
0018	0320000000-E	300	FOUNDATION CONDITIONING GEO- TEXTILE	5,500 SY		
0019	0335200000-E	305	15" DRAINAGE PIPE	100 LF		



County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0020	0335300000-E	305	18" DRAINAGE PIPE	28	LF	
0021	0366000000-E	310	15" RC PIPE CULVERTS, CLASS III	6,992	LF	
0022	0372000000-E	310	18" RC PIPE CULVERTS, CLASS III	1,140	LF	
0023	0378000000-E	310	24" RC PIPE CULVERTS, CLASS III	1,768	LF	
0024	0384000000-E	310	30" RC PIPE CULVERTS, CLASS III	2,060	LF	
0025	0390000000-E	310	36" RC PIPE CULVERTS, CLASS III	20	LF	
0026	0396000000-E	310	42" RC PIPE CULVERTS, CLASS III	1,244	LF	
0027	0414000000-E	310	60" RC PIPE CULVERTS, CLASS III	520	LF	
0028	0420000000-E	310	66" RC PIPE CULVERTS, CLASS III	64	LF	
0029	0448300000-E	310	18" RC PIPE CULVERTS, CLASS IV	72	LF	
0030	0448500000-E	310	30" RC PIPE CULVERTS, CLASS IV	196	LF	
0031	0448700000-E	310	42" RC PIPE CULVERTS, CLASS IV	380	LF	
0032	0570000000-E	310	6" CS PIPE CULVERTS, 0.064" THICK (SPRING BOX)	32	LF	
0033	0576000000-E	310	*** CS PIPE CULVERTS, ***** THICK (36", 0.079")	40	LF	
0034	0576000000-E	310	*** CS PIPE CULVERTS, ***** THICK (42", 0.109")	36	LF	
0035	0576000000-E	310	*** CS PIPE CULVERTS, ***** THICK (60", 0.138")	96	LF	

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0036	0582000000-E	310	15" CS PIPE CULVERTS, 0.064" THICK	472	LF	
0037	0588000000-E	310	18" CS PIPE CULVERTS, 0.064" THICK	268	LF	
0038	0594000000-E	310	24" CS PIPE CULVERTS, 0.064" THICK	536	LF	
0039	0600000000-E	310	30" CS PIPE CULVERTS, 0.079" THICK	224	LF	
0040	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (15", 0.064")	16	EA	
0041	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (18", 0.064")	6	EA	
0042	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (24", 0.064")	18	EA	
0043	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (30", 0.079")	10	EA	
0044	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (36", 0.079")	4	EA	
0045	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (42", 0.109")	2	EA	
0046	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (6", 0.064")	4	EA	
0047	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (60", 0.138")	2	EA	
0048	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (30", 0.500")	92	LF	
0049	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (30", 0.500")	92	LF	

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0050	0986000000-E	SP	GENERIC PIPE ITEM 24" PIPE REHABILITATION CIPP LINER	567 LF		
0051	0986000000-E	SP	GENERIC PIPE ITEM 30" PIPE REHABILITATION CIPP LINER	180 LF		
0052	0986000000-E	SP	GENERIC PIPE ITEM 36" PIPE REHAB CEMENTITIOUS/ GEOPOLYMER SPRAY LINER	440 LF		
0053	0986000000-E	SP	GENERIC PIPE ITEM 48" PIPE REHAB CEMENTITIOUS/ GEOPOLYMER SPRAY LINER	317 LF		
0054	0986000000-E	SP	GENERIC PIPE ITEM 66" PIPE REHAB CEMENTITIOUS/ GEOPOLYMER SPRAY LINER	698 LF		
0055	0986000000-E	SP	GENERIC PIPE ITEM PRE INSTALLATION INSPECTION	2,202 LF		
0056	0995000000-E	340	PIPE REMOVAL	1,882 LF		
0057	1011000000-N	500	FINE GRADING	Lump Sum	L.S.	
0058	1044000000-E	501	LIME TREATED SOIL (SLURRY METHOD)	46,500 SY		
0059	1066000000-E	501	LIME FOR LIME TREATED SOIL	560 TON		
0060	1099500000-E	505	SHALLOW UNDERCUT	250 CY		
0061	1099700000-E	505	CLASS IV SUBGRADE STABILIZA- TION	500 TON		
0062	1110000000-E	510	STABILIZER AGGREGATE	500 TON		
0063	1115000000-E	SP	GEOTEXTILE FOR PAVEMENT STA- BILIZATION	23,700 SY		
0064	1121000000-E	520	AGGREGATE BASE COURSE	54,115 TON		
0065	1176000000-E	542	SOIL CEMENT BASE	46,500 SY		
0066	1187000000-E	542	PORTLAND CEMENT FOR SOIL CE- MENT BASE	1,310 TON		

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0067	1209000000-E	543	ASPHALT CURING SEAL	13,950 GAL		
0068	1220000000-E	545	INCIDENTAL STONE BASE	500 TON		
0069	1297000000-E	607	MILLING ASPHALT PAVEMENT, **** DEPTH (1-1/2")	1,900 SY		
0070	1330000000-E	607	INCIDENTAL MILLING	2,610 SY		
0071	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	18,640 TON		
0072	1503000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	31,745 TON		
0073	1523000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	25,915 TON		
0074	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	3,875 TON		
0075	1693000000-E	654	ASPHALT PLANT MIX, PAVEMENT REPAIR	1,888 TON		
0076	2000000000-N	806	RIGHT-OF-WAY MARKERS	13 EA		
0077	2020000000-N	806	CONTROL-OF-ACCESS MARKERS	26 EA		
0078	2022000000-E	815	SUBDRAIN EXCAVATION	3,461 CY		
0079	2026000000-E	815	GEOTEXTILE FOR SUBSURFACE DRAINS	7,300 SY		
0080	2033000000-E	815	SUBDRAIN FINE AGGREGATE	504 CY		
0081	2036000000-E	815	SUBDRAIN COARSE AGGREGATE	1,227 CY		
0082	2044000000-E	815	6" PERFORATED SUBDRAIN PIPE	10,300 LF		
0083	2070000000-N	815	SUBDRAIN PIPE OUTLET	21 EA		
0084	2077000000-E	815	6" OUTLET PIPE	126 LF		
0085	2143000000-E	818	BLOTTING SAND	20 TON		

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0086	2209000000-E	838	ENDWALLS	18 CY		
0087	2220000000-E	838	REINFORCED ENDWALLS	16.8 CY		
0088	2253000000-E	840	PIPE COLLARS	1.76 CY		
0089	2275000000-E	SP	FLOWABLE FILL	468 CY		
0090	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	147 EA		
0091	2297000000-E	840	MASONRY DRAINAGE STRUCTURES	30.83 CY		
0092	2308000000-E	840	MASONRY DRAINAGE STRUCTURES	218 LF		
0093	2364000000-N	840	FRAME WITH TWO GRATES, STD 840.16	17 EA		
0094	2364200000-N	840	FRAME WITH TWO GRATES, STD 840.20	44 EA		
0095	2365000000-N	840	FRAME WITH TWO GRATES, STD 840.22	48 EA		
0096	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	5 EA		
0097	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	3 EA		
0098	2396000000-N	840	FRAME WITH COVER, STD 840.54	24 EA		
0099	2451000000-N	852	CONCRETE TRANSITIONAL SECTION FOR DROP INLET	17 EA		
0100	2462000000-E	836	*** SLUICE GATE (8")	1 EA		
0101	2473000000-N	SP	GENERIC DRAINAGE ITEM 6" PVC CLEANOUTS	1 EA		
0102	2473000000-N	SP	GENERIC DRAINAGE ITEM REBAR TRASH RACK	1 EA		

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0103	2473000000-N	SP	GENERIC DRAINAGE ITEM REMOVEABLE ORIFICE TRASH RACK	1 EA		
0104	2484000000-E	SP	GENERIC DRAINAGE ITEM 6" PIPE - PERFORATED WITH FILTER SOCK	50 LF		
0105	2492000000-E	SP	GENERIC DRAINAGE ITEM WASHED #57 STONE	6 TON		
0106	2495000000-E	SP	GENERIC DRAINAGE ITEM ANTI-FLOTATION CONCRETE	3.3 CY		
0107	2495000000-E	SP	GENERIC DRAINAGE ITEM ENGINEERED SOIL MEDIA	2 CY		
0108	2538000000-E	846	***-*** CONCRETE CURB & GUTTER (2'-9")	14,860 LF		
0109	2549000000-E	846	2'-6" CONCRETE CURB & GUTTER	1,550 LF		
0110	2556000000-E	846	SHOULDER BERM GUTTER	6,680 LF		
0111	2591000000-E	848	4" CONCRETE SIDEWALK	250 SY		
0112	2605000000-N	848	CONCRETE CURB RAMPS	2 EA		
0113	2619000000-E	850	4" CONCRETE PAVED DITCH	166 SY		
0114	2655000000-E	852	5" MONOLITHIC CONCRETE ISLANDS (KEYED IN)	3,300 SY		
0115	2724000000-E	857	PRECAST REINFORCED CONCRETE BARRIER, SINGLE FACED	1,690 LF		
0116	2830000000-N	858	ADJUSTMENT OF MANHOLES	1 EA		
0117	2845000000-N	858	ADJUSTMENT OF METER BOXES OR VALVE BOXES	1 EA		
0118	2875000000-N	859	CONVERT EXISTING CATCH BASIN TO DROP INLET	1 EA		
0119	2938000000-N	859	CONVERT EXISTING DROP INLET TO JUNCTION BOX WITH MANHOLE	1 EA		

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0120	3030000000-E	862	STEEL BEAM GUARDRAIL	15,075 LF		
0121	3045000000-E	862	STEEL BEAM GUARDRAIL, SHOP CURVED	762.5 LF		
0122	3140000000-E	862	25' CLEAR SPAN GUARDRAIL SEC- TIONS	1 EA		
0123	3150000000-N	862	ADDITIONAL GUARDRAIL POSTS	15 EA		
0124	3195000000-N	862	GUARDRAIL END UNITS, TYPE AT-1	1 EA		
0125	3210000000-N	862	GUARDRAIL END UNITS, TYPE CAT-1	13 EA		
0126	3287000000-N	SP	GUARDRAIL END UNITS, TYPE TL-3	10 EA		
0127	3288000000-N	SP	GUARDRAIL END UNITS, TYPE TL-2	7 EA		
0128	3317000000-N	SP	GUARDRAIL ANCHOR UNITS, TYPE B-77	2 EA		
0129	3360000000-E	863	REMOVE EXISTING GUARDRAIL	10,820 LF		
0130	3380000000-E	862	TEMPORARY STEEL BEAM GUARDRAIL	1,700 LF		
0131	3389150000-N	SP	TEMPORARY GUARDRAIL END UNITS, TYPE ***** (TL-3)	3 EA		
0132	3436000000-N	862	GENERIC GUARDRAIL ITEM TEMPORARY GUARDRAIL END UNITS, TYPE CAT-1	1 EA		
0133	3503000000-E	866	WOVEN WIRE FENCE, 47" FABRIC	6,400 LF		
0134	3509000000-E	866	4" TIMBER FENCE POSTS, 7'-6" LONG	370 EA		
0135	3515000000-E	866	5" TIMBER FENCE POSTS, 8'-0" LONG	96 EA		
0136	3557000000-E	866	ADDITIONAL BARBED WIRE	100 LF		
0137	3628000000-E	876	RIP RAP, CLASS I	1,345 TON		

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0138	3635000000-E	876	RIP RAP, CLASS II	115 TON		
0139	3649000000-E	876	RIP RAP, CLASS B	2,685 TON		
0140	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	11,205 SY		
0141	4054000000-E	902	PLAIN CONCRETE SIGN FOUNDATIONS	1 CY		
0142	4060000000-E	903	SUPPORTS, BREAKAWAY STEEL BEAM	492 LB		
0143	4072000000-E	903	SUPPORTS, 3-LB STEEL U-CHANNEL	1,695 LF		
0144	4096000000-N	904	SIGN ERECTION, TYPE D	6 EA		
0145	4102000000-N	904	SIGN ERECTION, TYPE E	70 EA		
0146	4108000000-N	904	SIGN ERECTION, TYPE F	16 EA		
0147	4110000000-N	904	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (A)	2 EA		
0148	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (D)	5 EA		
0149	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (E)	3 EA		
0150	4155000000-N	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	58 EA		
0151	4158000000-N	907	DISPOSAL OF SIGN SYSTEM, WOOD	7 EA		
0152	4192000000-N	907	DISPOSAL OF SUPPORT, U-CHANNEL	5 EA		
0153	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	550 SF		
0154	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	384 SF		
0155	4410000000-E	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	215 SF		



County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0156	4415000000-N	1115	FLASHING ARROW BOARD	3 EA		
0157	4420000000-N	1120	PORTABLE CHANGEABLE MESSAGE SIGN	4 EA		
0158	4430000000-N	1130	DRUMS	718 EA		
0159	4435000000-N	1135	CONES	718 EA		
0160	4445000000-E	1145	BARRICADES (TYPE III)	160 LF		
0161	4455000000-N	1150	FLAGGER	240 DAY		
0162	4465000000-N	1160	TEMPORARY CRASH CUSHIONS	18 EA		
0163	4470000000-N	1160	REMOVE & RESET TEMPORARY CRASH CUSHION	25 EA		
0164	4480000000-N	1165	TMA	2 EA		
0165	4485000000-E	1170	PORTABLE CONCRETE BARRIER	8,990 LF		
0166	4500000000-E	1170	REMOVE & RESET PORTABLE CONCRETE BARRIER	9,160 LF		
0167	4510000000-N	1190	LAW ENFORCEMENT	800 HR		
0168	4516000000-N	1180	SKINNY DRUM	500 EA		
0169	4520000000-N	1266	TUBULAR MARKERS (FIXED)	46 EA		
0170	4650000000-N	1251	TEMPORARY RAISED PAVEMENT MARKERS	1,302 EA		
0171	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	300 LF		
0172	4700000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	675 LF		
0173	4720000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (90 MILS)	8 EA		
0174	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	97 EA		

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0175	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	446,770	LF	
0176	4820000000-E	1205	PAINT PAVEMENT MARKING LINES (8")	1,418	LF	
0177	4825000000-E	1205	PAINT PAVEMENT MARKING LINES (12")	23,060	LF	
0178	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	2,388	LF	
0179	4840000000-N	1205	PAINT PAVEMENT MARKING CHARAC- TER	32	EA	
0180	4845000000-N	1205	PAINT PAVEMENT MARKING SYMBOL	324	EA	
0181	4847010000-E	1205	POLYUREA PAVEMENT MARKING LINES (4", 20 MILS)	81,782	LF	
0182	4847050000-E	1205	POLYUREA PAVEMENT MARKING LINES (8", 20 MILS)	2,698	LF	
0183	4850000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (4")	70,440	LF	
0184	4860000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (8")	978	LF	
0185	4865000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (12")	6,405	LF	
0186	4870000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (24")	442	LF	
0187	4875000000-N	1205	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS	94	EA	
0188	4891000000-E	1205	GENERIC PAVEMENT MARKING ITEM THERMOPLASTIC PAVEMENT MARKING LINES (24", 90 MILS)	428	LF	
0189	4905000000-N	1253	SNOWFLOWABLE PAVEMENT MARKERS	1,302	EA	
0190	5325000000-E	1510	**" WATER LINE (1")	12	LF	
0191	5325200000-E	1510	2" WATER LINE	46	LF	

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0192	5325600000-E	1510	6" WATER LINE	2,928 LF		
0193	5326000000-E	1510	10" WATER LINE	384 LF		
0194	5329000000-E	1510	DUCTILE IRON WATER PIPE FITTINGS	3,310 LB		
0195	5536000000-E	1515	2" VALVE	1 EA		
0196	5540000000-E	1515	6" VALVE	7 EA		
0197	5666000000-N	1515	FIRE HYDRANT	2 EA		
0198	5672000000-N	1515	RELOCATE FIRE HYDRANT	1 EA		
0199	5673000000-E	1515	FIRE HYDRANT LEG	47 LF		
0200	5686500000-E	1515	WATER SERVICE LINE	12 LF		
0201	5800000000-E	1530	ABANDON 6" UTILITY PIPE	2,517 LF		
0202	5802000000-E	1530	ABANDON 10" UTILITY PIPE	324 LF		
0203	5815500000-N	1530	REMOVE FIRE HYDRANT	3 EA		
0204	5835600000-E	1540	12" ENCASEMENT PIPE	781 LF		
0205	5836000000-E	1540	24" ENCASEMENT PIPE	173 LF		
0206	6000000000-E	1605	TEMPORARY SILT FENCE	47,485 LF		
0207	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	1,750 TON		
0208	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	14,460 TON		
0209	6012000000-E	1610	SEDIMENT CONTROL STONE	5,970 TON		
0210	6015000000-E	1615	TEMPORARY MULCHING	113 ACR		
0211	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	5,500 LB		

County: Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0212	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEED- ING	29 TON		
0213	6024000000-E	1622	TEMPORARY SLOPE DRAINS	4,470 LF		
0214	6029000000-E	SP	SAFETY FENCE	24,460 LF		
0215	6030000000-E	1630	SILT EXCAVATION	37,050 CY		
0216	6036000000-E	1631	MATTING FOR EROSION CONTROL	234,250 SY		
0217	6037000000-E	SP	COIR FIBER MAT	1,860 SY		
0218	6038000000-E	SP	PERMANENT SOIL REINFORCEMENT MAT	10,400 SY		
0219	6042000000-E	1632	1/4" HARDWARE CLOTH	5,155 LF		
0220	6045000000-E	SP	*** TEMPORARY PIPE (15")	35 LF		
0221	6045000000-E	SP	*** TEMPORARY PIPE (18")	25 LF		
0222	6045000000-E	SP	*** TEMPORARY PIPE (36")	110 LF		
0223	6048000000-E	SP	FLOATING TURBIDITY CURTAIN	95 SY		
0224	6069000000-E	1638	STILLING BASINS	58 CY		
0225	6071010000-E	SP	WATTLE	140 LF		
0226	6071012000-E	SP	COIR FIBER WATTLE	2,660 LF		
0227	6071013000-E	SP	WATTLE BARRIER	8,800 LF		
0228	6071020000-E	SP	POLYACRYLAMIDE (PAM)	3,690 LB		
0229	6071030000-E	1640	COIR FIBER BAFFLE	5,800 LF		
0230	6071050000-E	SP	*** SKIMMER (1-1/2")	23 EA		

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0231	6071050000-E	SP	*** SKIMMER (2")	6	EA	
0232	6071050000-E	SP	*** SKIMMER (2.5")	3	EA	
0233	6071050000-E	SP	*** SKIMMER (3")	1	EA	
0234	6084000000-E	1660	SEEDING & MULCHING	78	ACR	
0235	6087000000-E	1660	MOWING	69	ACR	
0236	6090000000-E	1661	SEED FOR REPAIR SEEDING	1,150	LB	
0237	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	3	TON	
0238	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	1,850	LB	
0239	6108000000-E	1665	FERTILIZER TOPDRESSING	55	TON	
0240	6111000000-E	SP	IMPERVIOUS DIKE	100	LF	
0241	6114500000-N	1667	SPECIALIZED HAND MOWING	10	MHR	
0242	6117000000-N	SP	RESPONSE FOR EROSION CONTROL	100	EA	
0243	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	11	EA	
0244	6123000000-E	1670	REFORESTATION	0.1	ACR	
0245	6132000000-N	SP	GENERIC EROSION CONTROL ITEM DEWATERING	9	EA	
0246	7048500000-E	1705	PEDESTRIAN SIGNAL HEAD (16", 1 SECTION W/COUNTDOWN)	2	EA	
0247	7060000000-E	1705	SIGNAL CABLE	6,330	LF	
0248	7120000000-E	1705	VEHICLE SIGNAL HEAD (12", 3 SECTION)	46	EA	
0249	7132000000-E	1705	VEHICLE SIGNAL HEAD (12", 4 SECTION)	4	EA	

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0250	7144000000-E	1705	VEHICLE SIGNAL HEAD (12", 5 SECTION)	6 EA		
0251	7264000000-E	1710	MESSENGER CABLE (3/8")	2,780 LF		
0252	7300000000-E	1715	UNPAVED TRENCHING (*****) (1, 2")	3,100 LF		
0253	7300100000-E	1715	UNPAVED TRENCHING FOR TEMP- ORARY LEAD-IN	30 LF		
0254	7301000000-E	1715	DIRECTIONAL DRILL (*****) (1, 2")	70 LF		
0255	7324000000-N	1716	JUNCTION BOX (STANDARD SIZE)	34 EA		
0256	7360000000-N	1720	WOOD POLE	6 EA		
0257	7372000000-N	1721	GUY ASSEMBLY	14 EA		
0258	7420000000-E	1722	2" RISER WITH WEATHERHEAD	5 EA		
0259	7444000000-E	1725	INDUCTIVE LOOP SAWCUT	3,940 LF		
0260	7456000000-E	1726	LEAD-IN CABLE (*****) (14-2)	15,390 LF		
0261	7481000000-N	SP	SITE SURVEY	4 EA		
0262	7481200000-N	SP	LUMINAIRE ARM FOR VIDEO SYSTEM	7 EA		
0263	7481240000-N	SP	CAMERA WITHOUT INTERNAL LOOP EMULATOR PROCESSING UNIT	18 EA		
0264	7481260000-N	SP	EXTERNAL LOOP EMULATOR PRO- CESSING UNIT	4 EA		
0265	7481280000-N	SP	RELOCATE CAMERA SENSOR UNIT	27 EA		
0266	7576000000-N	SP	METAL STRAIN SIGNAL POLE	12 EA		
0267	7613000000-N	SP	SOIL TEST	12 EA		
0268	7614100000-E	SP	DRILLED PIER FOUNDATION	96 CY		

County : Ashe

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0269	7636000000-N	1745	SIGN FOR SIGNALS	2 EA		
0270	7642100000-N	1743	TYPE I POST WITH FOUNDATION	1 EA		
0271	7744000000-N	1751	DETECTOR CARD (TYPE 170)	26 EA		
0272	7756000000-N	1751	CONTROLLER WITH CABINET (TYPE 2070L, BASE MOUNTED)	3 EA		
0273	7901000000-N	1753	CABINET BASE EXTENDER	3 EA		

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**CULVERT ITEMS**


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0274	8126000000-N	414	CULVERT EXCAVATION, STA ***** (838+56.00 -L-)	Lump Sum	L.S.	
0275	8133000000-E	414	FOUNDATION CONDITIONING MATERIAL, BOX CULVERT	202 TON		
0276	8196000000-E	420	CLASS A CONCRETE (CULVERT)	245.9 CY		
0277	8245000000-E	425	REINFORCING STEEL (CULVERT)	33,075 LB		

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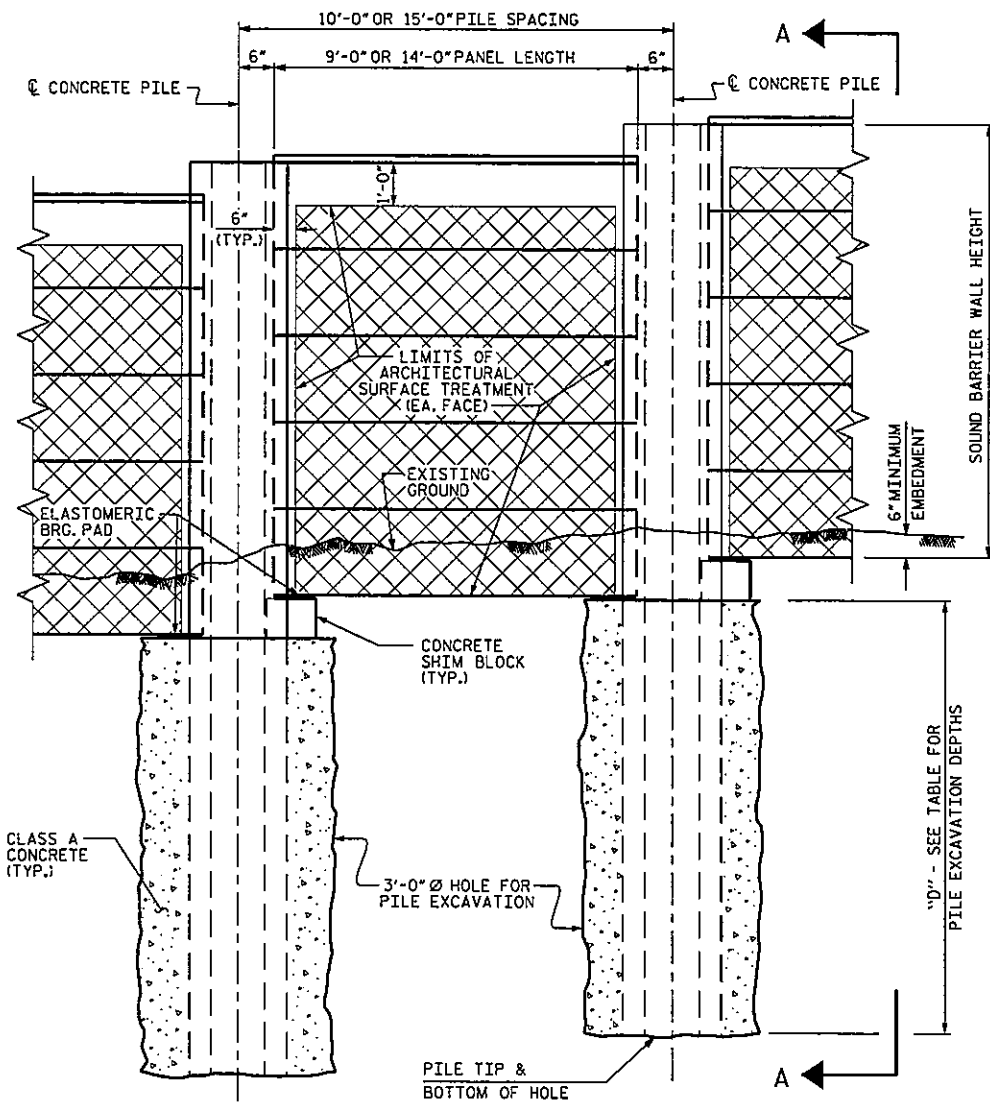
**WALL ITEMS**


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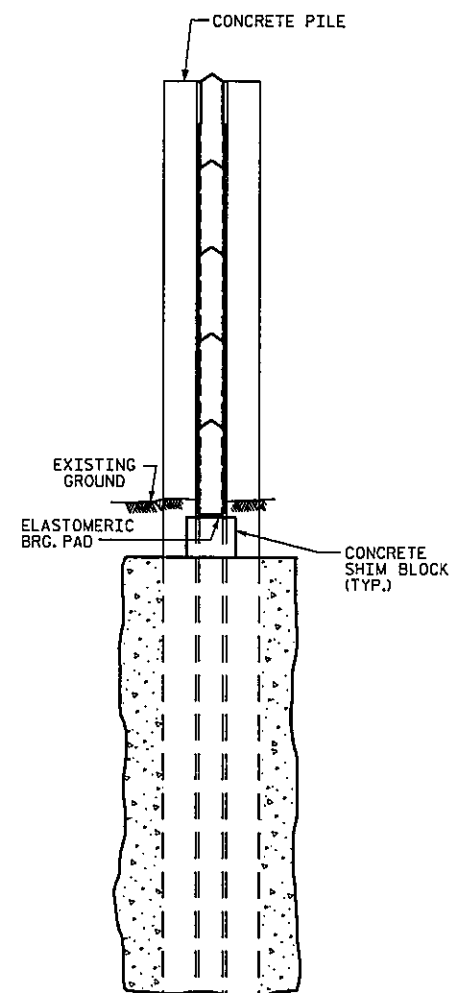
0278	8847000000-E	SP	GENERIC RETAINING WALL ITEM ARCHITECTURAL SURFACE TREATMENT (SOUND BARRIER WALL)	34,160 SF		
0279	8847000000-E	SP	GENERIC RETAINING WALL ITEM SOUND BARRIER WALL NW7B	20,100 SF		

1357/Mar02/Q1961847.19/D1037774175000/E279

Total Amount Of Bid For Entire Project :



ELEVATION



SECTION A-A

PILE EXCAVATION DEPTHS "D"				
WALL * NW7B		FROM : STA. 10+00.00 -NW7B- TO : STA. 26+80.00 -NW7B-		
3'-0" Ø HOLE	PILE SPACING	WALL HEIGHT		
		10'-0"	H ≤ 15'	15' < H ≤ 20'
	15'-0"	11	-	-

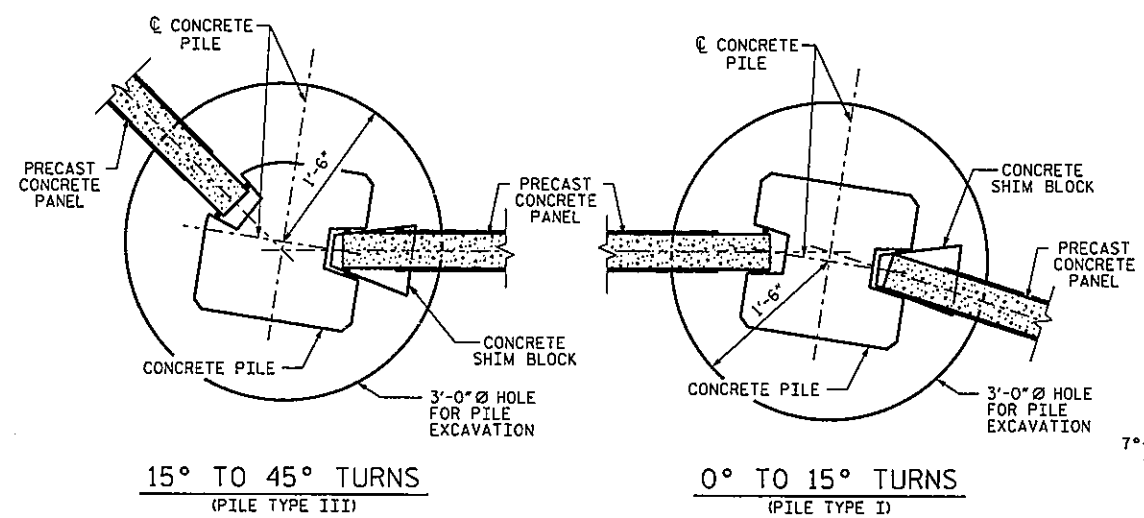
NOTES

- FOR SOUND BARRIER WALL, SEE SPECIAL PROVISIONS.
- CONSTRUCT SOUND BARRIER WALL TO LINES AND GRADES SHOWN ON THE ROADWAY PLANS.
- PROVIDE PANELS WITH A FLAT BOTTOM.
- VERIFY THE LOCATION OF UNDERGROUND UTILITIES BEFORE DRILLING HOLES TO ENSURE SUFFICIENT CLEARANCE IS AVAILABLE.
- ADJUST PILE EXCAVATION ELEVATIONS TO MAINTAIN 6" MINIMUM EMBEDMENT OF THE BOTTOM PANEL.
- USE CLASS AA FOR PANELS AND CLASS A CONCRETE PILE EXCAVATION BACKFILL, IN ACCORDANCE WITH ARTICLE 1000-4 OF THE STANDARD SPECIFICATIONS.
- AT THE CONTRACTOR'S OPTION, USE 10'-0" OR 15'-0" SPACINGS. STANDARD PRECAST CONCRETE PANELS MAY BE USED WITH THE 10'-0" AND 15'-0" PILE SPACING.
- FOR SOUND BARRIER WALL STATIONS, OFFSETS, AND WALL ENVELOPE, SEE ROADWAY PLANS.
- PLACE 1" Ø BACKER RODS FULL HEIGHT ON EACH SIDE OF THE PRECAST PANELS. SET AND SEAL THE BACKER ROD IN PLACE WITH SEALANT THAT CONFORMS WITH ARTICLE 1028-3 OF THE STANDARD SPECIFICATIONS.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

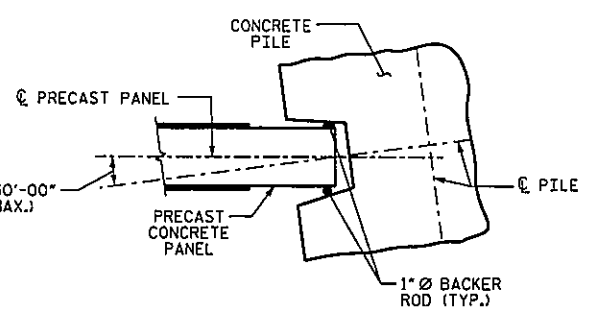
PILE REINFORCING STEEL DESIGN WIND PRESSURE = 40 PSF							
PILE TYPE I				PILE TYPE III			
PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES	PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES
10'-0"	H ≤ 25'	4 - #8 EA. FACE	#3 @ 1'-4" CTS.	10'-0"	H ≤ 25'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4" CTS.
	H ≤ 20'	4 - #8 EA. FACE	#3 @ 1'-4" CTS.		15'-0"	H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE
15'-0"	20' < H ≤ 25'	4 - #10 EA. FACE	#3 @ 1'-4" CTS.	15'-0"		20' < H ≤ 25'	3 - #11 SHORT FACE 4 - #11 LONG FACE

PILE TYPE II				PILE TYPE III ALT.			
PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES	PILE SPACING	MAXIMUM WALL HEIGHT (H)	VERTICAL REINFORCING STEEL	TIES
10'-0"	H ≤ 25'	4 - #6 EA. FACE	#3 @ 1'-4" CTS.	10'-0"	H ≤ 25'	3 - #9 SHORT FACE 4 - #9 LONG FACE	#3 @ 1'-4" CTS.
	H ≤ 20'	4 - #6 EA. FACE	#3 @ 1'-4" CTS.		15'-0"	H ≤ 20'	3 - #9 SHORT FACE 4 - #9 LONG FACE
15'-0"	20' < H ≤ 25'	4 - #7 EA. FACE	#3 @ 1'-4" CTS.	15'-0"		20' < H ≤ 25'	3 - #11 SHORT FACE 4 - #11 LONG FACE



TYPICAL WALL TURN DETAILS



PILE ROTATION LIMIT FOR WALL TURN

(ROTATE THE CONCRETE PILE ±7°-30'-00" TO ACCOMMODATE WALL TURN.)

BILL OF MATERIAL	
SOUND BARRIER WALL	20,100 S.F.
ARCHITECTURAL SURFACE TREATMENT	34,160 S.F.
QUANTITIES PROVIDED ARE APPROXIMATE AND ARE FOR BID PURPOSES ONLY.	
ARCHITECTURAL SURFACE TREATMENT	
TEXTURE OPTION:	DRY STACK
STAIN OPTION:	FS-36521

PROJECT NO. R-2915E  
 ASHE COUNTY  
 STATION: 10+00.00 -NW7B-

SHEET 1 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 STANDARD  
 SOUND BARRIER WALL

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

**RK&K**  
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 [Professional Engineer Seal]  
 R. V. KEITH  
 2/25/2020  
 DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED

2/25/2020 R:\Structures\es\DCN\Noise\wall\R-2915E\_NoiseWall\_1.dgn  
 drobinson

DRAWN BY : D. G. ROBINSON DATE : JAN 2019  
 CHECKED BY : D. M. RAGAN DATE : JAN 2019  
 DESIGN ENGINEER OF RECORD : R. V. KEITH DATE : JAN 2019