

January 26, 2024

A circular professional engineer seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "STATE ENGINEER" at the bottom, separated by small stars. Inside the ring, the word "SEAL" is at the top, followed by the license number "036837". Below the number, the name "J. M. W." is written. A large, stylized signature is written across the seal. To the right of the seal, the date "1/26/24" is handwritten.

Explanation: To allow for PVC, Part 3, Section B.3, Paragraph 2 was revised from "Pipe shall be considered for payment after CCTV inspection (when required), compaction and pipeline acceptance testing have been performed, completed and accepted. Contractor may provide DIP

in lieu of FRP where FRP is called for on the Bid Form.” to “Pipe shall be considered for payment after CCTV inspection (when required), compaction and pipeline acceptance testing have been performed, completed and accepted. Contractor may provide DIP and PVC in lieu of FRP where FRP is called for on the Bid Form.” Additionally, Item 59 was deleted and the Measurement and Payment was renumbered accordingly

Construction Plans

1. Sheet C-2

REPLACE plan sheet with attached revised sheet C-2.

Explanation: In “Recorded Easement Table” Parcel 72 information was revised and Parcel 72T was added. In “Phase 2 Easement Information” Parcel 72 information was removed and Parcel 72T was added.

2. Sheets EC-15 at station 28+75, EC-15 at station 30+75, and EC-17 at station 68+15

REPLACE the following callout on Plan View

“12’ PERMANENT AT-GRADE ACCESS CROSSING PER DETAIL 3-D”

WITH

“12’ PERMANENT AT-GRADE ACCESS CROSSING PER DETAIL 3-D (TO BE INCLUDED AS PART OF PHASE 1 CONTRACT)”

Explanation: All at-grade stream crossings shall be completed in Phase 1.

3. Sheet SS-2

REPLACE plan sheet with attached revised sheet SS-2.

Explanation: Clarification added to various labels referencing existing abandoned 30” gravity sewer main.

4. Sheet SS-11

ADD below note to “North Carolina Railroad (NCRR) Notes”.

“Existing pipe within right-of-way shall be CCTV inspected and tested per Ductile Iron Pipe specification section 33 05 19. Information to be reviewed and approved by Engineer prior to connecting proposed sewer.”

5. Sheet SS-13

ADD below note to plan sheet.

“Existing pipe within NCDOT right-of-way shall be CCTV inspected and tested per Ductile Iron Pipe specification section 33 05 19. Information to be reviewed and approved by Engineer prior to connecting proposed sewer.”

6. Sheet D-3, Detail 3-B

ADD notes 9, 10, and 11 below

9. Pipe and end walls shall comply with Section 305 and Section 1032 of the NCDOT Standard Specifications for Roads and Structures. Additionally, pipe shall conform to NCDOT Std. Drawing 300.01. Contractor may elect to use alternative pipe and end wall materials as per NCDOT specifications.
10. Detail specifies final configuration and dimensions of the permanent piped stream crossings.
11. The contractor shall be responsible for providing a pipe in new or like-new condition at the end of the project. Contractor shall be responsible for protection of installation during construction.
Explanation: Allow for alternative materials.

Clarification

1. Composite manhole ring and cover per detail 1-H, sheet D-1 to be 2600 DUROSTREET® or 3200 DUROSTREET® Composite Assembly Cover by EJ Company WSACC printed veil logo, with 1/4 turn positive engagement latch, or equal per Concrete Manholes specification section 33 05 61.
2. SpectraShield® is approved as an “or equal” for manhole polymer lining per Manhole Polymer Lining specification section 33 01 30.82.
3. All contractors are required to submit the Bidder Qualifications (Section 00 45 10) with the bid package even if a pre-qualification application was previously submitted. The Owner will use this information to evaluate the qualifications of the bidder to complete the work. Bidder should submit relevant information as appropriate to demonstrate their qualifications. PVC pipe installation experience may be provided (and noted as such) if Bidder does not have related experience installing FRP.

Attachments to Addendum 2

1. 00 30 00 Bid Form
2. 00 73 00 (c) Wage Determination Schedule
3. 01 22 00 Measurement and Payment
4. Plan sheet C-2
5. Plan sheet SS-2

END OF ADDENDUM 2

Section 00 30 00

BID FORM

PROJECT IDENTIFICATION:

LOWER CODDLE CREEK PARALLEL INTERCEPTOR PROJECT

THIS BID IS SUBMITTED TO:

Water and Sewer Authority of Cabarrus County
Attention: Chad VonCannon, PE
232 Davidson Highway
Concord, NC 28027

1.01. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

2.01. Bidder accepts all of the terms and conditions of the Invitation to Bid and the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the day of bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner. Bidder will sign and submit the Agreement with the Bonds and other documents required by the Bidding Documents within 10 days after the date of Owner's Notice of Award.

3.01. In submitting this Bid, Bidder represents that:

- A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:

No. _____ Dated _____

No. _____ Dated _____

No. _____ Dated _____

No. _____ Dated _____

No. _____ Dated _____

- B. Bidder has visited the site and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all technical data, if any, of subsurface and physical conditions at or contiguous to the site which have been identified Paragraph 5.03 of the General Conditions, and technical data of hazardous environmental conditions, if any, at the site which has been identified in Paragraph 5.06 of the General Conditions.
- E. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data not specifically identified in the Contract Documents concerning conditions (surface, subsurface, and underground facilities) at or contiguous to the site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including any specific means, methods, techniques, sequences, and procedures of construction required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto..
- F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid or performance of the Work at the price bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of Work to be performed by Owner and others at the site that relates to the Work indicated in the Bidding Documents.
- H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
- I. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding

Documents and confirmed that the written resolution thereof by Engineer is acceptable to Bidder.

- J. Bidder has determined that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- K. Bidder further represents that this Bid is genuine and is not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted pursuant to any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any individual or entity to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.

4.01. Bidder will complete the Work for the following unit prices, computed in accordance with Paragraph 13.03.B of the General Conditions. Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and that final payment for all Unit Price Bid items will be based on actual quantities provided, determined as provided in the Contract Documents.

Lower Coddle Creek Parallel Interceptor Bid Form					
ITEM	DESCRIPTION	QTY.	UNITS	UNIT PRICE	EXTENDED AMOUNT
Base Bid (Phase 1)					
1	Mobilization (3% of Base Bid)	1	LS		
2	Clearing and Grubbing	1	LS		
3	Installation of New Sanitary Sewer Pipe, including rock excavation				
3a	30-Inch FRP (8'-12' Deep) SN46	478	LF		
3b	30-Inch FRP (12'-16' Deep) SN46	255	LF		
3c	30-Inch FRP (16'-20' Deep) SN46	129	LF		
3d	30-Inch FRP (20'-24' Deep) SN46	188	LF		
3e	36-Inch DIP (Any Depth)	70	LF		
3f	48-Inch FRP (8'-12' Deep) SN46	20	LF		
3g	48-Inch FRP (12'-16' Deep) SN46	442	LF		
3h	48-Inch FRP (16.1'-20' Deep) SN46	9827	LF		
3i	48-Inch FRP (20.1'-24' Deep) SN46	6327	LF		
3j	48-Inch FRP (24'-28' Deep) SN46	636	LF		
3k	48-Inch FRP (28.1'-32' Deep) SN46	431	LF		
3l	48-Inch DIP (Any Depth)	2352	LF		
3m	54-Inch FRP (20'-24' Deep) SN46	39	LF		
3n	60-Inch FRP (24'-28' Deep) SN46	39	LF		
3o	Connect 60" to Existing Manhole	1	EA		
3p	Connect 48" to Existing Manhole	4	EA		
4	Buried Stream Crossings, including rock excavation				
4a	Station 10+93.52 to 11+53.52 (Inc. 60 lf of 48-inch DIP)	1	LS		
4b	Station 20+20.67 to 21+17.58 (Inc. 97 lf of 48-inch DIP)	1	LS		
4c	Station 29+78.76 to 30+88.76 (Inc. 110 lf of 48-inch DIP)	1	LS		
4d	Station 58+72.30 to 59+92.30 (Inc. 120 lf of 48-inch DIP)	1	LS		
4e	Station 95+83.79 to 96+43.79 (Inc. 60 lf of 48-inch DIP)	1	LS		
4f	Station 107+40.05 to 108+69.42 (Inc. 129 lf of 48-inch DIP)	1	LS		
4g	Station 109+55 to 110+65 (Inc. 100 lf of 48-inch DIP)	1	LS		
4h	Station 136+10.78 to 136+96.50 (Inc. 86 lf of 48-inch DIP)	1	LS		
4i	Station 145+59.18 to 146+74.18 (Inc. 115 lf of 48-inch DIP)	1	LS		
4j	Station 155+78.26 to 156+90.71 (Inc. 112 lf of 48-inch DIP)	1	LS		
4k	Station 160+21.03 to 161+21.03 (Inc. 100 lf of 48-inch DIP)	1	LS		
4l	Station 165+35.69 to 166+51.58 (Inc. 115 lf of 48-inch DIP)	1	LS		
4m	Station 186+48.33 to 188+18.28 (Inc. 112 lf of 48-inch DIP)	1	LS		
4n	Station 191+25.32 to 192+20.32 (Inc. 95 lf of 48-inch DIP)	1	LS		
4o	Station 203+37.62 to 204+47.95 (Inc. 110 lf of 48-inch DIP)	1	LS		
4p	Station 0+00 to 1+00.35 (Inc. 100 lf of 36-inch DIP) Collector (Wolf Meadow)	1	LS		
5	48" Interceptor constructed beneath Existing Sanitary Sewer Main, complete, in place, excluding Interceptor Sewer itself ("Go Under"), including bypass pumping				
5a	Approximate Station 95+57 (Ex. 6" Dia.)	1	LS		
5b	Approximate Station 146+72 (Ex. 30" Dia.)	1	LS		
5c	Approximate Station 149+53 (Ex. 8" Dia.)	1	LS		
5d	Approximate Station 164+46 (Ex. 8" Dia.)	1	LS		
5e	Approximate Station 168+61 (Ex. 8" Dia.)	1	LS		
5f	Approximate Station 186+00 (Ex. 30" Dia.)	1	LS		
5g	Approximate Station 204+52 (Ex. 24" Dia.)	1	LS		
6	New Manhole Installation with Specified Base Diameter and Depth				
6a	Precast Interceptor Manhole with 5' Dia. Base (0'-10' Deep)	1	EA		
6b	Precast Interceptor Manhole with 5' Dia. Base (10.1'-12' Deep)	3	EA		
6c	Precast Interceptor Manhole with 5' Dia. Base (12.1'-16' Deep)	3	EA		
6d	Precast Interceptor Manhole with 5' Dia. Base (16.1'-20' Deep)	1	EA		
6e	Precast Interceptor Manhole with 7' Dia. Base (16.1'-20' Deep)	26	EA		
6f	Precast Interceptor Manhole with 7' Dia. Base (20.1'-24' Deep)	40	EA		
6g	Precast Interceptor Manhole with 7' Dia. Base (24.1'-28' Deep)	4	EA		
6h	Precast Interceptor Manhole with 7' Dia. Base (28.1'-32' Deep)	2	EA		
6i	Precast Interceptor Manhole with 8' Dia. Base (20.1'-24' Deep)	1	EA		
6j	Precast Interceptor Manhole with 10' Dia. Base (16.1'-20' Deep)	2	EA		

ITEM	DESCRIPTION	QTY.	UNITS	UNIT PRICE	EXTENDED AMOUNT
6k	Precast Interceptor Manhole with 10' Dia. Base (24.1'-28' Deep)	1	EA		
6l	Flattop Precast Concrete Cut In Manhole with 7' Dia. Base on Existing Line (24.1'-28' Deep)	1	EA		
7	DIP Vent Pipes	25	EA		
8	Manhole Lining	1709	VF		
9	48" Concrete Anti-Seep Collars	2	EA		
10	Abandon Existing Manholes in Place	1	EA		
11	Remove and Dispose of Existing Pipe, Not in Same trench as New Sewer, where indicated on Drawings	40	LF		
12	Cast-in-Place Concrete Diversion Structures, complete, in place, including bypass pumping				
12a	Diversion Structure No. 1 (#27A)	1	LS		
12b	Diversion Structure No. 2 (#74A)	1	LS		
12c	Wolf Meadow Branch (#73A)	1	LS		
13	Remove and Replace Existing Storm Drain Culvert and Associated Appurtenances				
13a	24" HDPE	100	LF		
13b	15" RCP, Class III	150	LF		
13c	36" RCP, Class III	60	LF		
13d	36" Concrete Flared End Section	1	EA		
14	Permanent Piped Stream Crossings				
14a	Approximate Station 11+25, per Detail 3-B	1	LS		
14b	Approximate Station 40+75, per Detail 3-B	1	LS		
14c	Approximate Station 158+50, per Detail 3-B	1	LS		
14d	Approximate Station 185+25, per Detail 3-B	1	LS		
15	Permanent At Grade Stream Crossings, per Detail 3-D	8	EA		
16	Temporary Bridge Mat Stream Crossings, per Detail 3-C	1	LS		
17	Silt Fence	32200	LF		
18	Silt Fence Stone Outlets	215	EA		
19	Inlet Protection	2	EA		
20	Temporary Construction Entrance	19	EA		
21	Permanent Seeding and Mulching	1	LS		
22	Maintenance of Erosion and Sediment Control Devices (Must Equal 25% of the Sum of Items 16 to 21)	1	LS		
23	Streambank Stabilization				
23a	Rip Rap, per Detail 5-A	900	SY		
23b	Mat and Plantings, per Detail 5-A	1600	SY		
23c	Boulder Toe, per Detail 4-F	5100	SF		
23d	Vegetated Geogrid, per Detail 4-F	3500	SF		
24	Wetland Restoration				
24a	Herbaceous Seeding	2200	SY		
24b	Herbaceous Seeding plus Live Stakes	900	SY		
25	Subgrade Stabilization Stone	1000	CY		
26	Select Backfill Material	1000	CY		
27	Soil Stabilization Fabric - Trench (Type 4)	1500	SY		
28	Gravel Path	1950	SY		
29	Concrete Curb & Gutter, Remove & Replace				
29a	2'-0" Concrete Valley Gutter, CLDS 10.17B	50	LF		
29b	2'-6" Concrete Curb and Gutter	50	LF		
30	Asphalt Surface Repair, Asphalt Surface Course	100	TN		
31	Asphalt Surface Repair, ABC Base Course	100	TN		
32	Asphalt Milling, 0" to 3"	100	SY		
33	Temporary Access Gate	1	EA		
34	Tree Protection	1	EA		
Existing Pipeline Rehabilitation Pay Items					
35	Install New 5' Diameter Flattop Precast Concrete Cut In Manhole on Existing Line				
35a	10.1'-12' Deep	2	EA		
35b	12.1'-16' Deep	3	EA		
35c	16.1'-20' Deep	1	EA		
36	Pre-Rehabilitation Clean and CCTV (any size)	1898	LF		
37	CIPP Lining (30")	1898	LF		
38	4' Long CIPP Spot Repair (30")	4	EA		
39	Performing CIPP Product Tests	16	EA		

ITEM	DESCRIPTION	QTY.	UNITS	UNIT PRICE	EXTENDED AMOUNT
Existing Manhole Rehabilitation					
40	Epoxy Polymer Lining	454	VF		
41	Cementitious Lining	506	VF		
42	Install Frame Chimney Seal	6	EA		
43	Raise Ex. Manhole Frame and Cover (6")	1	EA		
44	Rebuild Bench & Invert	1	EA		
45	Seal Pipe Connections	7	EA		
46	Remove and Replace Manhole Vent	40	EA		
47	Remove and Replace Frame & Cover	1	EA		
48	Subtotal Base Bid (Sum of Items 1 to 47):				\$ -
Bid Alternate (Phase 2)					
49	Mobilization (3% of Bid Alternate)	1	LS		
50	Clearing and Grubbing	1	LS		
51	Installation of New Sanitary Sewer Pipe, including rock excavation				
51a	30-Inch FRP (8'-12' Deep) SN46	69	LF		
51b	30-Inch FRP (12'-16' Deep) SN46	259	LF		
51c	36-Inch FRP (12'-16' Deep) SN46	20	LF		
51d	36-Inch FRP (16.1'-20' Deep) SN46	4042	LF		
51e	36-Inch FRP (20.1'-24' Deep) SN46	2460	LF		
51f	36-Inch FRP (24'-28' Deep) SN46	349	LF		
51g	36-Inch DIP (Any Depth)	278	LF		
51h	Connect 36" to Existing Manhole	1	EA		
52	Buried Stream Crossings, including rock excavation				
52a	Station 16+78 to 18+38 (Inc. 160 lf of 36-inch DIP)	1	LS		
52b	Station 32+93 to 33+93 (Inc. 100 lf of 36-inch DIP)	1	LS		
52c	Station 40+77 to 41+73 (Inc. 96 lf of 36-inch DIP)	1	LS		
52d	Station 55+50 to 56+50 (Inc. 100 lf of 36-inch DIP)	1	LS		
52e	Station 66+73 to 67+73 (Inc. 100 lf of 36-inch DIP)	1	LS		
53	36" Interceptor constructed beneath Existing Sanitary Sewer Main, complete, in place, excluding Interceptor Sewer itself ("Go Under"), including bypass				
53a	Approximate Station 3+63 (4" Dia.)	1	LS		
53b	Approximate Station 7+20 (8" Dia.)	1	LS		
53c	Approximate Station 16+09 (8" Dia.)	1	LS		
53d	Approximate Station 27+84 (30" Dia.)	1	LS		
53e	Approximate Station 29+32 (8" Dia.)	1	LS		
53f	Approximate Station 43+93 (4" Dia.)	1	LS		
53g	Approximate Station 55+39 (30" Dia.)	1	LS		
53h	Approximate Station 68+17 (30" Dia.)	1	LS		
53i	Approximate Station 70+29 (8" Dia.)	1	LS		
54	Guaranteed Trenchless Crossings, per Project Specifications				
54a	Trenchless Installation of 36-Inch Sewer - Roberta Road (133.3 LF)	1	LS		
55	New Manhole Installation with Specified Base Diameter and Depth				
55a	Precast Interceptor Manhole with 5' Dia. Base (12.1'-16' Deep)	2	EA		
55b	Precast Interceptor Manhole with 5' Dia. Base (16.1'-20' Deep)	1	EA		
55c	Precast Interceptor Manhole with 6' Dia. Base (16.1'-20' Deep)	11	EA		
55d	Precast Interceptor Manhole with 6' Dia. Base (20.1'-24' Deep)	16	EA		
55e	Precast Interceptor Manhole with 6' Dia. Base (24.1'-28' Deep)	3	EA		
56	DIP Vent Pipes	9	EA		
57	Manhole Lining	664	VF		
58	Cast-in-Place Concrete Diversion Structures, complete, in place, including bypass pumping				
58a	Diversion Structure No. 4 (#105)	1	LS		
59	Temporary Bridge Mat Stream Crossings, per Detail 3-C	1	LS		
60	Silt Fence	15604	LF		
61	Silt Fence Stone Outlets	101	EA		
62	Temporary Construction Entrance	8	EA		
63	Permanent Seeding and Mulching	1	LS		
64	Maintenance of Erosion and Sediment Control Devices (Must Equal 25% of the Sum of Items 62 to 66)	1	LS		

ITEM	DESCRIPTION	QTY.	UNITS	UNIT PRICE	EXTENDED AMOUNT
65	Streambank Stabilization				
65a	Rip Rap, per Detail 5-A	450	SY		
65b	Mat and Plantings, per Detail 5-A	350	SY		
65c	Boulder Toe, per Detail 4-F	1600	SF		
65d	Vegetated Geogrid, per Detail 4-F	1000	SF		
66	Wetland Restoration				
66a	Herbaceous Seeding	400	SY		
66b	Herbaceous Seeding plus Live Stakes	50	SY		
67	Subgrade Stabilization Stone	200	CY		
68	Select Backfill Material	400	CY		
69	Soil Stabilization Fabric - Trench (Type 4)	400	SY		
70	Gravel Path	2200	SY		
71	Concrete Curb & Gutter, Remove & Replace				
71a	2'-0" Concrete Valley Gutter, CLDS 10.17B	50	LF		
71b	2'-6" Concrete Curb and Gutter	50	LF		
72	Asphalt Surface Repair, Asphalt Surface Course	100	TN		
73	Asphalt Surface Repair, ABC Base Course	100	TN		
74	Asphalt Milling, 0" to 3"	100	SY		
75	Subtotal Bid Alternate (Sum of Items 49 to 74):				
76	Grand Total (Base Bid plus Bid Alternate):				

5.01 Tabulation of Major Equipment Items

EQUIPMENT	VENDOR
Gravity Sewer Pipe	_____
Ductile Iron Gravity Sewer Pipe	_____
Steel Casing Pipe	_____
Precast Concrete Manholes	_____

The Owner's Contingency Allowance is to be used for minor change order items authorized by the Owner.

6.01. Bidder agrees that all excavation is unclassified.

6.02. Bidder agrees that the Work will be substantially completed within 700 days continuous calendar days and be completed and receive Engineer's written recommendation of final payment in accordance with Paragraph 15.06.B of the General Conditions within 730 days continuous calendar days, after the commencement of Contract Times as defined in the General Conditions.

6.03. Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the times specified above.

7.01. Communications concerning this Bid shall be sent to Bidder at the following address:

8.01. The terms used in this Bid have the meanings indicated in the Instructions to Bidders and General Conditions.

SIGNATURE OF BIDDER

Contractor's License Number _____

License Expiration Date _____

If an Individual

By _____
(signature of individual)

doing business as _____

Business address _____

Phone No. _____

Date _____, 20____

ATTEST _____ TITLE _____

If a Partnership

By _____
(firm name)

(signature of general partner)

Business address _____

Phone No. _____

Date _____, 20____

ATTEST _____ TITLE _____

If a Corporation

By _____
(corporation name)

By _____
(signature of authorized person)

(title)

Business address _____

Phone No. _____

Date _____, 20____

ATTEST _____ TITLE _____

(SEAL)

If a Joint Venture (Other party must sign below.)

Contractor's License Number _____

License Expiration Date _____

If an Individual

By _____
(signature of individual)

doing business as _____

Business address _____

Phone No. _____

Date _____, 20____

ATTEST _____ TITLE _____

If a Partnership

By _____
(firm name)

(signature of general partner)

Business address _____

Phone No. _____

Date _____, 20____

ATTEST _____ TITLE _____

If a Corporation

By _____
(corporation name)

By _____
(signature of authorized person)

(title)

Business address _____

Phone No. _____

Date _____, 20____

ATTEST _____ TITLE _____

(SEAL)

END OF SECTION 00 30 00

"General Decision Number: NC20240077 01/05/2024

Superseded General Decision Number: NC20230077

State: North Carolina

Construction Type: Heavy

Counties: Anson, Cabarrus and Gaston Counties in North Carolina.

HEAVY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/05/2024

SUNC2011-058 08/26/2011

	Rates	Fringes
CARPENTER, Includes Form Work....	\$ 13.98 **	0.69
ELECTRICIAN.....	\$ 15.41 **	3.13
LABORER: Common or General.....	\$ 11.22 **	1.36
LABORER: Pipelayer.....	\$ 12.79 **	2.50
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 15.96 **	2.19
OPERATOR: Bulldozer.....	\$ 14.63 **	0.00
OPERATOR: Loader.....	\$ 15.00 **	2.67
TRUCK DRIVER.....	\$ 13.80 **	1.36

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing

the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION"

SECTION 01 22 00

MEASUREMENT AND PAYMENT

PART 1 SCOPE

- A. This section covers methods of measurement and payment for items of Work under this Contract.
- B. Bid Alternate:
 - a. Decision to include or not include the Alternate in the Work resides with the sole discretion of the Owner.
 - b. If Owner elects to include Alternates in Work, requirement will be stated in Owner-Contractor agreement.
 - c. The bid alternate herein covers additional work to be “ADDED TO” the base bid by extending the length of the pipeline further upstream.

PART 2 GENERAL

- A. The total Bid Price shall cover all Work required by the Contract Documents. All costs in connection with the proper and successful completion of the Work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction plant, equipment, and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit prices bid. All Work not specifically set forth as a pay item in the Bid Form shall be considered a subsidiary obligation of Contractor and all costs in connection therewith shall be included in the prices bid.
- B. All quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used only (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the bids submitted for the Work. The actual amounts of work done and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished. Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts therefore.
- C. Except where otherwise specified, the unit or lump sum price bid for each item of Work shall include the following:
 - a. Excavation or Trenching: Excess materials (soil, rock, etc.) from sewer construction shall be hauled off-site and disposed of in approved manner. Ground elevation after construction shall match original grades;
 - b. Rock Excavation: No separate payment shall be made for rock excavation. Excavation and trenching work shall include the removal and subsequent handling of all materials excavated or otherwise removed in performance of the contract Work, regardless of the type, character, composition, or condition thereof.
 - c. Backfilling with Excavated Materials;
 - d. Exploratory excavation;
 - e. Bracing and Shoring;

- f. Trench Dewatering including well point system if needed. No additional payment for undercut will be allowed as a result of improper dewatering of trenches;
- g. Pipe Bedding;
- h. Stream Bypass including stream bypass pumping, coffer dams, and other required measures;
- i. Temporary sanitary sewer bypass pumping;
- j. Connection of Existing Sanitary Sewer Mains to New Manholes;
- k. Connection of New Sanitary Sewer Mains to Existing Manholes;
- l. Pipe plugs, temporary or permanent;
- m. Coordination with, Location and Protection of Existing Utilities;
- n. Tracer wire;
- o. Accessing Sewers and Manholes as Specified;
- p. Off-Site Disposal of Existing Soil, Trees, Debris, Organic material, Concrete, Asphalt, and Sewer Pipe and Manholes Excavated During Trench Excavation;
- q. Temporary Seeding;
- r. Traffic Control;
- s. Work Hours: No Additional Payment Shall Be Due the Contractor for Complying with Work Hour Requirements of the Owner and the NCDOT;
- t. Public Notification: Public Notification Including the Distribution of Door Hangars Is a Mandatory Subsidiary Obligation Under the Contract, And All Costs of Public Notification Shall Be Included in The Unit Prices Bid.
- u. Coordination with all with other regulatory agencies including Piedmont Gas, Duke Energy and NC Railroad or compliance with all requirements of those regulatory agencies to allow for use of easements for project access;
- v. Pre-construction photographs and videography of existing conditions;
- w. Construction progress photographs;
- x. Post-Construction CCTV;
- y. Testing, Inspection and Final Acceptance;
- z. Construction Surveying & Staking;
- aa. As-Built Surveying & Record Drawings;
- bb. Temporary Field Office: Providing a temporary field office for use of the Engineer is a mandatory subsidiary obligation under the Contract, and all costs of a temporary field office shall be included in the unit prices bid; and
- cc. Project Identification signs.

No direct payment shall be made for any item listed above.

PART 3 UNIT PRICE ITEMS

A. The Bid Form includes the following abbreviations:

- 1. CY = cubic yard
- 2. EA = per each
- 3. HR = per hour
- 4. LF = linear foot (horizontal)
- 5. LS = lump sum
- 6. SY = square yard
- 7. TN = ton
- 8. VF = vertical foot

B. The following items shall be measured in place and paid for using the unit prices indicated on the

Bid Form.

1. Items 1 and 49 - Mobilization: Mobilization consists of the movement of personnel, equipment, supplies and incidentals to the project site; obtaining all bonds and insurance; establishment of field offices; and all other activities required to begin performing the Work. Partial payments for the item of "Mobilization" will be made with the first and second partial pay estimates paid on the Contract and will be made at the rate of 50 percent of the lump sum price for "Mobilization" on each of these partial pay estimates, less retainage. Mobilization shall not exceed 3.0 percent of the total project cost. Mobilization will only be paid on the original contract amount, and not for change orders or added work. The only exception shall be if the Contractor has completely demobilized from the site prior to issuance of any change order.
2. Items 2 and 50 - Clearing and Grubbing: A separate payment will be provided for clearing and grubbing. Payment shall be made for the defined Limits of Disturbance as indicated on the Drawings. Work shall be in accordance with the Specifications and Standard Details. Payment will be made according to the lump sum bid price stated in the bid.
3. Items 3 and 51 - Installation of New Sanitary Sewer Pipe: Payment shall be made for each size, type and class of pipe to the nearest linear foot by depth ranges and as indicated on the Bid Form. This item includes all materials, equipment, and work required to install new gravity sewer. The work shall be performed as specified and in accordance with the plans, specifications, and details. Pipe material, pipe thickness, pipe lining, joint type, fittings, embedment and bedding as specified. Payment also includes tracer wire, dewatering, temporary bypass pumping, plugging, excavation, removal, and off-site disposal of existing sanitary sewer pipe and manholes encountered during installation of new sanitary sewer pipe.

Pipe shall be considered for payment after CCTV inspection (when required), compaction and pipeline acceptance testing have been performed, completed and accepted. Contractor may provide DIP and PVC in lieu of FRP where FRP is called for on the Bid Form.

No separate payment shall be made for rock excavation. No payment shall be made for any required over excavation due to improper dewatering of the trench.

If unsuitable materials are encountered and Engineer approves over excavation and replacement with suitable materials, payment quantities for stabilization stone, select backfill material, etc. shall be limited to the maximum trench width specified in the plans. No additional payment will be made for trench widths greater than maximum allowed.

Installation of new sanitary sewer pipe work shall include the removal and subsequent handling of all materials excavated or otherwise removed in performance of the contract Work, regardless of the type, character, composition, or condition thereof.

Item 3o – Connect 60” to Existing Manhole: Payment shall be made for each gravity main connection made to an existing manhole with a flexible sleeve. A Concrete Pipe Collar will be allowed if the existing manhole will not accommodate a tight seal with a flexible sleeve as approved by Owner.

Item 3p – Connect 48” to Existing Manhole: Payment shall be made for each gravity main connection made to an existing manhole with a flexible sleeve. A Concrete Pipe Collar will be allowed if the existing manhole will not accommodate a tight seal with a flexible sleeve as approved by Owner.

Item 51h – Connect 36” to Existing Manhole: Payment shall be made for each gravity main connection made to an existing manhole with a flexible sleeve. A Concrete Pipe Collar will be allowed if the existing manhole will not accommodate a tight seal with a flexible sleeve as approved by Owner.

4. Items 4 and 52 - Buried Stream Crossings: Lump sum payment shall be made for each Buried Stream Crossing as indicated on the bid form by station and diameter. Lump sum price shall include furnishing all labor, materials, tools, equipment, fittings, jointing materials and pipe to install the sewer as detailed in the plans, specifications and details. The lump sum price shall include:
- a. Furnishing and Installation of pipe material, pipe thickness, pipe lining, joint type, fittings, tracer wire and bedding as specified;
 - b. Installation of concrete anchor blocks and collars;
 - c. Installation of temporary coffer dams;
 - d. Install sediment and erosion control measures in the stream including pump-around with silt sack;
 - e. Removing existing sewers (in same trench) where encountered and disposing material offsite;
 - f. Plugging existing sewers to be abandoned (in same trench) where encountered;
 - g. Rock excavation;
 - h. Removal and subsequent handling of all materials, including rock, excavated or otherwise removed in performance of the contract Work, regardless of the type, character, composition, or condition thereof.

Related work which is provided under other bid items shall include the following:

- a. Streambank Stabilization – Rip Rap;
- b. Streambank Stabilization – Vegetated with Matting;
- c. Remove and Dispose of Existing Pipe (not in same alignment) where specified.

Pipe shall be considered for payment after CCTV inspection (when required), compaction and air testing have been performed, completed and accepted.

5. Item 5 and 53 - 48” and 36” Sewer Pipe Go Under: This lump sum pay item includes all work necessary to construct the interceptor beneath an existing sanitary sewer main as shown in Detail 2-B at the specified Stationing. Such payment shall be full compensation for temporary bypass pumping, protecting and supporting the existing pipe and/or replacing the existing pipe with mechanical joint DIP, stone backfill, geotextile fabric, concrete collars, couplings, mechanical joint sleeves, CCTV inspection of the existing main(s), and coordination with and attendance of meetings as required by the City of Concord (including applying for an encroachment permit).

Payment for the new interceptor sewer shall be made under pay item 3 and 51.

6. Items 6 and 55 - New Precast Manhole Installation: Payment shall be made for each size and type by depth ranges as indicated in the Bid Form. Manholes installed deeper than proposed (due to Contractor error) shall be paid for at the proposed depth. Manholes installed shallower than proposed shall be paid at the shallower depth. Depth shall be measured from the rim elevation to the invert out elevation. If accepted by Engineer, payment per each shall include:

- a. Excavation, removal and off-site disposal of existing soil, sewer pipe and manhole (when replacing existing manholes or junction boxes);
- b. Rock excavation;
- c. Removal and subsequent handling of all materials, including rock, excavated or otherwise removed in performance of the contract Work, regardless of the type, character, composition, or condition thereof.
- d. Temporary bypass pumping;
- e. Minimum 12-inches foundation stone beneath the new manhole;
- f. Complete installation of new manhole including new frame and cover (as noted on plans);
- g. Manhole steps;
- h. Connecting new manholes to existing sewers with minimum seven (7) linear feet of ductile iron pipe and associated repair coupling;
- i. Installing concrete benching and forming invert channel,
- j. Vacuum testing;

Related work which is provided under other bid items shall include the following:

- a. DIP Vent Pipe;
- b. Manhole Lining

Manholes shall be considered for payment after all work is completed including vacuum testing.

- 7. Items 7 and 56 - 3-Inch DIP Vent Pipe: Payment shall be made for each 3” steel manhole vent, any height, as indicated on the bid form. Manhole vents shall be installed in conformance with the Owner’s standards and the Drawings. The unit price bid shall include furnishing all labor, materials, tools, equipment, jointing materials, stainless steel mesh, pipe coating, and associated appurtenances required for the installation of the vent pipe and coating, complete, tested, and placed into satisfactory service, in accordance with the Contract Documents and Plans; and all other costs not included in other bid items.
- 8. Items 8 and 57 - Manhole Lining: This item includes furnishing all new materials, equipment, work and testing required to install polymer manhole linings of walls and benches on new manholes provided under pay Items 6 or 56. This item includes payment for furnishing and installing epoxy lining on the manhole walls to the limits shown on the Details or as directed by the Engineer (any height of manhole wall required or specified by the Engineer to be coated) and on the benching to the bottom of the invert channel, sealing around the manhole wall/pipe interfaces, providing inspector training, performing specified product tests and vacuum tests, accessing manholes as specified, traffic control, compliance with required working hours, complete restoration of all areas disturbed by the work, and all else incidental thereto for which separate payment is not provided under other bid items.

Installation of polymer lining in manholes will be measured in place on a vertical foot (VF) basis to the nearest one-tenth of a foot. Measurement will be from the point of intersection between the manhole benching and the manhole invert channel to the point of termination of the lining as specified by the Engineer and/or as shown in the details.

This pay item does not include payment for lining of diversion structures or existing manholes.

Payment will be made on the basis of the unit price in the Bid.

9. Item 9 - Concrete Anti-Seep Collars: Payment shall be made for each size and type as indicated in the bid form. Payment shall be made for each of concrete anchor block installed and accepted in place, as approved by the Engineer.

Payment will be made per the unit price in the Bid.

10. Item 10 - Abandon Existing Manholes in Place: This bid item includes all materials, equipment, and work required for abandonment of any diameter, depth, or material of manhole. This bid item does not include existing manholes excavated as a result of installation of new sewer in the same trench. Work shall include removal and disposal of frame and cover, and cone section of manhole, plugging existing pipes, and backfilling manhole and related voids with granular material as specified and approved by the Owner. Manholes which are to be abandoned will first have both influent and effluent lines plugged. The existing frame and cover shall be returned to the Owner.

Payment will be made for each manhole abandoned based on the unit price in the Bid.

11. Item 11 - Removal and Disposal of Existing Sewer Main: This bid item includes all materials, equipment, and work required for removal of existing sanitary sewer main of any diameter, depth, or material of main where noted on plan. This bid item does not include existing sewer main excavated as a result of installation of new sewer in the same trench. Work shall include excavation and disposal of main to be removed, plugging existing pipe to remain, and backfilling trench with native material.

Payment will be made for each linear foot of main removed based on the unit price in the bid.

12. Items 12 and 58 - Cast-in-Place Concrete Diversion Structures: Payment for the furnishing and construction of the diversion structures will be made for the Contract lump sum price for each diversion structure acceptably constructed. These items include all work including temporary bypass pumping, excavation, backfill, slope stabilization, cast-in-place reinforced concrete structure, floor grouting, pipe wall fittings, self-contained slide and weir gate assemblies with floor box nut operators, access hatches, ladders, stainless steel vents and mesh screen, concrete and gate testing, startup-services, operation and maintenance manuals, training, all other appurtenances, and all necessary materials and labor to complete the diversion structures in accordance with the project plans and specifications. Cost includes polymer lining of interior of structure to the extents shown on the drawing. Cost also includes coordination with the Owner and their representative and tie-in connection to the sanitary sewer system.

Cast-in-place concrete diversion structures will be measured and paid for per each complete structure installed and accepted by the Engineer.

13. Item 13 - Storm Drain Pipe Replacement: The quantity of any pipe material of the specified diameter measured will be paid for according to the actual number of linear feet of the specified diameter and material installed and accepted. The quantity measured as provided above will be paid for at the contract unit price per linear foot for the specified pipe material of the given diameter. Payment shall be full compensation for all work required including, but not limited to, removal and disposal of all existing pipe, all materials, fittings, appurtenances, labor, and all incidentals necessary to install the pipe, construction of joints, and connection to other pipes, drainage structures, flared end sections, and/or endwalls.

Cast-in-place concrete flared end sections (FES) will be measured and paid for per each complete FES installed and accepted by the Engineer.

14. Item 14 - Permanent Piped Stream Crossings: This lump sum bid item includes all materials, equipment, and work required for installation of permanent piped stream crossings, accepted in place, as specified on the drawings. Work shall include furnishing and installing storm drain piping of the size and length required, furnishing and installing stone and rip rap backfill, and maintenance of the crossing during construction.

This item shall be eligible for a 50% payment at initial acceptance by the Engineer and the remaining 50% at project substantial completion.

15. Items 15 - Permanent At Grade Stream Crossings: This per each bid item includes all materials, equipment, and work required for installation of permanent “at grade” stream crossings, accepted in place, as specified on the drawings. Work shall include furnishing and installing flexible, interlocking matrices of cellular concrete blocks, geotextile, stone, and rip rap, and maintenance of the crossing during construction.

This item shall be eligible for a 50% payment at initial acceptance by the Engineer and the remaining 50% at project substantial completion.

16. Items 16 and 59 - Temporary Bridge mat Stream Crossings: Lump sum payment shall be made for each Temporary Bridge mat Stream Crossing accepted in place, as per the details and noted on the plans. Such payment shall be full compensation for furnishing required timber mats, construction, maintenance, and removal of temporary bridge mat.

17. Items 17 and 60 - Silt Fence: Silt Fence will be measured and paid for in linear feet, accepted in place, along the ground line of the fence. Such payment shall be full compensation for furnishing material, construction, maintenance, and removal of silt fence in locations shown on the plans or in locations that require surface drainage to be filtered. Silt excavation and disposal for silt fence will be considered incidental to the cost of silt fence. No separate measurement or payment will be made.

18. Items 18 and 61 - Silt Fence Stone Outlets: Payment shall be made for each Silt Fence Outlet as indicated on the bid form. Such payment shall be full compensation for furnishing material, construction, maintenance, and removal of silt fence outlet in locations shown on the plans or as directed by the Engineer.

19. Item 19 - Inlet Protection, Catch Basin: Payment shall be made for each Catch Basin Inlet Protection as indicated on the bid form. Such payment shall be full compensation for furnishing material, construction, maintenance, and removal of inlet protection in locations shown on the plans or as directed by the Engineer.

20. Items 20 and 62 - Temporary Construction Entrance: This lump sum pay item includes all work required to provide and install stone temporary construction entrances, any dimension, in accordance with the Drawings. Work shall include crushed stone, required geotextile fabric, minor grading, temporary drainage piping, routine cleaning of the streets at the entrances to collect and dispose of soil deposited on streets, removal and disposal of construction entrance, and temporary seeding, as required. Work shall also include restoration of fencing, walls, and

other infrastructure impacted by construction. Temporary construction entrances will be measured and paid for per each complete entrance installed and accepted by the Engineer.

Temporary access gates will be paid for under separate pay item.

21. Items 21 and 63 - Permanent Seeding and Mulching: A separate payment will be provided for the permanent seeding of the right-of-way or temporary construction easement after construction. Payment will be made according to the lump sum bid price stated in the bid. Lump sum payment shall include all costs associated with seeding & mulching, including all necessary reseeding efforts, to obtain the required grass cover.

22. Items 22 and 64 - Maintenance of Erosion and Sediment Control Devices:

The Contractor shall include in the Bid a total Lump Sum amount to cover maintenance and repair of all sediment and erosion control devices throughout the length of the project from the Notice to Proceed to the Final Acceptance. The lump sum shall be minimum twenty five percent of the combined bid totals for Bid Items 16 through 20.

Payment shall be based on the following:

- a. The Contractor shall maintain records of all maintenance activities, rainfall events, discharge of sediment, and repair measures as required by the contract documents and the NCDEQ Erosion and Sediment Control Permit;
 - b. Payment for Maintenance of Sediment and Erosion Control Devices shall be made monthly by dividing the Lump Sum Amount into equal monthly payments according to the project schedule.
 - c. Engineer shall inspect all installed Sediment and Erosion Control Devices and records immediately prior to each monthly Contractor's Application for Payment. If this inspection demonstrates that the Sediment and Erosion Control Devices and record keeping have been properly maintained for the preceding monthly period, the Engineer will recommend payment of the monthly amount determined in accordance with the preceding paragraph.
 - d. If during any monthly period, the Contractor fails to properly maintain Sediment and erosion control devices and records, or Owner receives a Notice of Violation from NCDEQ for Contractor's failure to meet the record keeping provisions of the Sediment and Erosion Control Permit, monthly payment shall not be recommended by the Engineer.
 - e. Once any monthly payment has been forfeited, this amount will no longer be eligible to be earned by the Contractor. However, payment for subsequent months will be made if the requirements of this item are met.
23. Items 23a and 65a - Streambank Stabilization – Rip Rap: Riprap Stabilization used in the repair or stabilization of streambank associated with installation or removal of sanitary sewer pipe, where noted on the plans or where directed by the Engineer, as specified, complete in place. All payments will be made per square yard of rip rap, complete in place that has been incorporated into the project and accepted. Work shall include:
- a. Restoration of streambank to original contours
 - b. Supply and installation of rip rap stone;
 - c. Installation of temporary coffer dams;
 - d. Install sediment and erosion control measures in the stream including pump-around with silt sack;

- e. Required geotextile fabric;
 - f. Removal and disposal of existing material;
24. Items 23b and 65b - Streambank Stabilization – Mat and Plantings: Vegetated Streambank stabilization with Matting shall be used in the repair or stabilization of streambank associated with installation or removal of sanitary sewer pipe, where noted on the plans or where directed by the Engineer, as specified, complete in place. All payments will be made per square yard of stabilized area, complete in place that has been incorporated into the project and accepted. Work shall include:
- a. Restoration of streambank to pre-construction grade;
 - b. Supply and installation of Coir Fiber Mat and mat anchors;
 - c. Geotextile fabric;
 - d. Herbaceous plantings and live stakes, installed at appropriate planting seasons;
 - e. Earthwork;
 - f. Installation of temporary coffer dams;
 - g. Install sediment and erosion control measures in the stream including pump-around with silt sack;
 - h. Removal and disposal of existing material;
25. Items 23c and 65c - Streambank Restoration - Boulder Toe: Boulder Toe Stabilization used in the repair or stabilization of streambank associated with installation or removal of sanitary sewer pipe, where noted on the plans or where directed by the Engineer, as specified, complete in place. All payments will be made per square foot of boulder toe face from bottom of footer boulder to top of final boulder course, complete in place that has been incorporated into the project and accepted. Work shall include:
- a. Backfill
 - b. Restoration of streambank to original contours;
 - c. Supply and installation of boulders and geogrid;
 - d. Installation of temporary coffer dams;
 - e. Install sediment and erosion control measures in the stream including pump-around with silt sack;
 - f. Required geotextile fabric;
 - g. Removal and disposal of existing material;
26. Item 23d and 65d – Streambank Restoration – Vegetated Geogrid: Vegetated Geogrid used in the repair or stabilization of streambank associated with installation or removal of sanitary sewer pipe, where noted on the plans or where directed by the Engineer, as specified, complete in place. All payments will be made per square foot of vegetated geogrid face from bottom of lowest soil lift to top of final soil lift/beginning of erosion control matting, complete in place that has been incorporated into the project and accepted. Work shall include:
- a. Backfill
 - b. Restoration of streambank to original contours;
 - c. Supply and installation of Coir Fiber Mat and mat anchors;
 - d. Supply and installation live cuttings;
 - e. Installation of temporary coffer dams;
 - f. Install sediment and erosion control measures in the stream including pump-around with silt sack;
 - g. Required geotextile fabric;

h. Removal and disposal of existing material;

27. Items 24 and 66 - Wetland Restoration: This pay item includes the restoration of wetlands located in the permanent and temporary construction rights-of-way. All wetlands located in the permanent right-of-way shall be restored as herbaceous wetlands via seeding. Forested wetlands located in the temporary construction right-of-way shall be restored via herbaceous seeding and live stakes. Restoration of wetland areas shall be completed upon completion of all construction within delineated wetlands, where noted on the plans or where directed by the Engineer, as specified, complete in place. All payments will be made per square yard of reforested area, complete in place that has been incorporated into the project and accepted. Work shall include:

- a. Restoration of wetlands to pre-construction grade;
- b. Removal of all construction debris;
- c. Seeding as per project specifications in both herbaceous and forested wetland areas;
- d. Live stakes and native bare root trees installed at appropriate planting seasons in forested wetland areas outside the permanent right-of-way;
- e. Maintenance of restored areas for a one-year period.

All forested wetland areas with a survival rate of less than 300 plants per acre after one full growing season shall be replanted to achieve this final planting density.

This item shall not apply to any areas disturbed outside of the construction limits as shown on the plans. These areas shall be restored by the Contractor at no additional cost to the Owner, including any fines or financial penalties levied against the Contractor or Owner by local, State or Federal agency having jurisdiction over wetlands.

28. Items 25 and 67 - Subgrade Stabilization Stone: Use of this pay item due to unsuitable soils must be approved for use by the Engineer and Owner prior to performing the work. Stabilization stone shall be #5 or #57 stone and used to replace unstable soil, under or around pipe, under manholes, etc. The unit price bid for this item shall include removing the existing soil (i.e., undercut excavation) and disposing of it offsite and importing stabilization stone material.

Payment shall be limited to the maximum trench width specified in the plans. No additional payment will be made for trench widths greater than maximum allowed.

No additional payment will be allowed as a result of improper dewatering.

No additional payment will be made for required pipe embedment paid for under other bid items.

Payment shall be made for the number of cubic yards of stabilization stone used to stabilize the bottom of the trench prior to placing the new sewer pipe. Measurement shall be based on the volume of stabilization stone material compacted in place.

29. Items 26 and 68- Select Backfill Material: Payment shall be made for the number of cubic yards of select backfill used to backfill trenches in unpaved areas. Select backfill will only be required when the existing soil is not suitable for backfill. Use of select backfill must be approved by the Engineer and Owner prior to performing the work. The unit price bid for this

item shall include removing the existing soil and disposing of it offsite and importing select backfill material. Measurement shall be based on volume of material compacted in place.

Payment shall be limited to the maximum trench width specified in the plans. No additional payment will be made for trench widths greater than maximum allowed.

No additional payment will be allowed as a result of improper dewatering.

30. Items 27 and 69 - Soil Stabilization Fabric: Contractor will be required to install Type 4 Soil Stabilization Fabric during construction to line the trench bottom prior to backfill. Fabric shall only be installed where directed by the Engineer during construction. Soil Stabilization fabric installation shall be in accordance with Section 270 of the North Carolina Department of Transportation Standard Specifications for Roads and Structures. This bid item does not include any soil stabilization fabric specified as part of any other bid item.

Soil stabilization fabric shall be measured and paid for by the square yard, accepted in place.

Payment shall be limited to the maximum trench width specified in the plans. No additional payment will be made for trench widths greater than maximum allowed.

No additional payment will be allowed as a result of improper dewatering.

31. Items 28 and 70 – Permanent Gravel Path: Crushed Stone permanent access roads will be measured and paid for in square yards, accepted in place, as noted on the plans or as directed by Engineer. Such payment shall be full compensation for furnishing aggregate, geotextile fabric, and construction in locations shown on the plans. Removal and disposal of existing access road will be considered incidental to the access road.

32. Items 29 and 71 - Concrete Curb and Gutter, Remove and Replace: Replacement of curb and gutter shall be in accordance with the Owner's standards. Work includes payment for saw-cutting of existing asphalt or concrete and disposing of material, excavation, removal, and off-site disposal of debris, providing all materials, placing all concrete, excavating and backfilling, forming, finishing, constructing and sealing joints, and all incidentals necessary to complete the work.

Concrete Curb and Gutter will be measured and paid for by the linear foot, accepted in place, along the surface of the top of the curb. Payment will be made on the basis of the unit price on the Bid.

33. Items 30 and 72 – Asphalt Surface Repair, Asphalt Surface Course: Asphalt pavement used in the repair or repaving of existing asphalt material associated with excavation or in the resurfacing of existing roadways or greenways, as specified, complete in place. Asphalt Pavement will be paid for as the actual number of tons of material, complete in place that has been incorporated into the project and accepted. The asphalt surface course material will be measured by being weighed in trucks on certified platform scales or other certified weighing devices. The unit price bid for this item shall include removing the existing asphalt and disposing of it offsite.

34. Items 31 and 73 – Asphalt Surface Repair, ABC Course: Aggregate Base Course (ABC) stone will be paid for as the actual number of tons of material, complete in place that has been incorporated into the project and accepted. The ABC material will be measured by being

weighed in trucks on certified platform scales or other certified weighing devices. The unit price bid for this item shall include removing the existing ABC and disposing of it offsite.

35. Items 32 and 74 - Asphalt Milling: Milled asphalt pavement to be paid for will be the actual number of square yards of pavement surface that has been milled in accordance with the requirements of the Specifications. In measuring this quantity, the length will be the actual length milled, measured along the pavement surface. The width will be the width required by the plans or directed, measured along the pavement surface. Payment shall include any additional equipment necessary to remove pavement in the area of manholes, water valves, curb and gutter, and other obstructions and disposal of milled asphalt material. Where the Engineer directs multiple cuts to achieve the final depth, measurement will be made for each cut. Where the Contractor elects to make multiple cuts to achieve the final depth, no additional measurement will be made. Compensation will be made at the contract unit price per square yard for "Milling Asphalt Pavement" to the specified depth.

Asphalt Milling shall be measured and paid for by the square yard, accepted in place. Such payment shall be full compensation for all work covered by this Section, including but limited to milling the pavement, cleaning the milled surfaces, loading, and hauling the milled material for disposal

36. Item 33 – Temporary Access Gate(s): Temporary access gates will be measured and paid for as be the actual number of easement gates that have been installed and accepted per the Owner's Standards. Payment of the contract unit prices for the various items in the contract will be full compensation for all work required including restoration of existing fencing upon removal of gate. Payment will not be made if approved shop drawings have not been submitted. Easement gate (4') shall be per project documents. Clear span shall accommodate construction vehicles.
37. Item 34 - Tree Protection: Tree Protection will be measured and paid for as per the actual number of Tree protection devices that have been installed and accepted per the Owner's Standards. Such payment shall be full compensation for furnishing material, construction, maintenance, and removal in locations shown on the plans.
38. Item 35 - New Cut In Manhole: Payment shall be made for each size and type of 'cut in' manhole by depth ranges as indicated in the Bid Form. Price shall include all work necessary and incidental to the work such as bypass pumping, excavation, dewatering, bedding, backfill and compaction, supply and installation of new precast manhole and appurtenances, pipe cutting and removal, cast-in-place concrete work, reconnecting the existing sewer to the new manhole, step installation, frames and cover installation and testing. Manholes shall be considered for payment after all work is completed including vacuum testing.
39. Item 36 - Cleaning and CCTV Existing Sewers, as specified: This work shall include any required cleaning, any location, any length of sewer, complete in place, for various pipe diameters. This includes all work and equipment required to completely clean (remove debris, roots, grease, pipe tuberculation and other material) and televise existing sewer to further evaluate the condition of the sewers as specified. Costs shall include removal of all debris encountered in the work regardless of severity and disposing of all debris. Costs shall also include performing television inspections in NASSCO PACP format and submitting the digital inspections to the Engineer in a PACP export database format to be compatible with the Owner's Granite Net CCTV program. This pay item shall also include all costs associated with accessing the sewers and manholes to perform the work including removing and replacing

moveable objects such as fences and mailboxes, negotiating with property owners, traffic control, complete restoration of areas disturbed by the work, etc.

- a. Sewer cleaning and television inspection will be measured and paid for on a linear foot basis to the nearest one-tenth of a foot. Measurement will be along the horizontal centerline of the pipe with no deductions for manholes and will be from center of manhole to center of manhole.
- b. This item does not include televising sewers for final acceptance. Those costs shall be included in the unit prices bid for the various rehabilitation/construction methods – no separate payment shall be made.
- c. Payment will be made based on the unit price bid in the Bid Form.

40. Items 37 – Cured-in-Place Pipe Lining (CIPP): This item includes all materials, equipment, and work required to install cured-in-place pipe lining (CIPP) in existing 30” sewers in any location. Costs shall include any thickness required for installation based on design calculations, but not less than the specified minimum installed thicknesses cited in the specifications. Work shall be as specified and in accordance with the Specifications.

The CIPP installation Bid Item includes payment for preparing the existing sewer and performing pre-construction inspections including accessing sewers and manholes for lining installation as specified, additional pre-cleaning and television inspection of the sewer as required prior to CIPP installation, supplying and installing the pipe lining, installing waterstop material (Hydrotite or equal) between the CIPP and host pipe as specified, coating the invert channel with grout to raise the channel to the liner pipe elevation, bypass pumping of existing wastewater flow during construction, providing a watertight seal at the manhole-pipe interface using non-shrink grout, performing post-rehabilitation television inspections, distributing project notices, traffic control, coordination with and location of existing utilities, erosion control, complete restoration of all areas disturbed by the work, and for all else incidental thereto for which separate payment is not provided under the bid items. Payment will not be made until the final post rehabilitation television inspections are submitted and reviewed by the Engineer. In addition, results of the CIPP tests for each liner shall be submitted within 30 days after the liner is installed or payment will be withheld.

Installation of CIPP will be measured in place on a linear foot basis to the nearest one-tenth of a foot. Measurement will be along the horizontal centerline of the pipe with no deductions for manholes and will be from center of manhole to center of manhole.

Payment will be made on the basis of the unit price bid in the Bid.

41. Item 38 – CIPP Spot Repairs: This item includes the installation of a CIPP repair patch of the specified diameter and length. For CIPP Spot Repairs, work shall include bypass pumping, prepare manholes as required to install liner, install CIPP patch, make repairs to manholes related to CIPP installation, perform all surface restorations, perform all post-rehab CCTV inspections and testing, and all other work required.
42. Item 39 – Performing CIPP Product Tests: This item includes payment for capturing the sample, labeling the sample as to the sewer segment and date of installation, cutting the samples for testing and providing a 1-inch wide sample to the Engineer as specified, delivering the samples to the Engineer for signature, shipment to the independent testing laboratory for

testing, correspondence and coordination with the testing laboratory, testing of the samples by the testing lab to determine flexural strength, flexural modulus, tensile strength and thickness, and submitting the results to the Engineer.

The CIPP testing shall include determining flexural strength, flexural modulus, tensile strength and thickness of each sample. These four separate individual tests make up one completed CIPP test. Payment will be made for each completed CIPP test at the unit price bid after the test results are submitted to the Engineer.

Payment will be made on the basis of the unit prices bid in Bid.

43. Item 40 – Installation of Epoxy Lining in Manholes: This item includes all materials, equipment, and work required to install epoxy lining on existing manhole walls (any diameter) and benches as specified and in accordance with the details. Bid items are included for installing any specified product. This item includes working in any location (unpaved areas or paved areas) as defined above.

This item includes payment for pre-construction inspection of manholes, manhole cleaning, root removal and grease removal, other work required to prepare the manhole for lining including, but not limited to, stopping active leaks and filling voids in the manhole wall or between brick layers, furnishing and installing epoxy lining on the manhole walls to the limits shown on the Details or as directed by the Engineer (any diameter of manhole required or specified by the Engineer to be coated) and on the benching to the top of the invert channel, sealing around the manhole wall/pipe interfaces, providing inspector training, performing specified product tests and vacuum tests, accessing manholes as specified, traffic control, compliance with required working hours, complete restoration of all areas disturbed by the work, and all else incidental thereto for which separate payment is not provided under other bid items.

Installation of epoxy lining in manholes will be measured in place on a vertical foot (VF) basis to the nearest one-tenth of a foot. Measurement will be from the point of intersection between the manhole benching and the manhole invert channel to the point of termination of the lining as specified by the Engineer and/or as shown in the details.

Payment will be made on the basis of the unit price in the Bid.

44. Item 41 – Installation of 1-inch-thick Cementitious Mortar in Manholes: This item includes all materials, equipment, and work required to install 1-inch-thick cementitious mortar on existing manhole walls (any diameter) and benches as specified and in accordance with the details. Bid items are included for installing any specified product. This item includes working in any location (unpaved areas or paved areas) as defined above.

This item includes payment for pre-construction inspection of manholes, manhole cleaning, root removal and grease removal, other work required to prepare the manhole for lining including, but not limited to, stopping active leaks and filling voids in the manhole wall or between brick layers, furnishing and installing cementitious mortar lining on the manhole walls to the limits shown on the Details or as directed by the Engineer (any height of manhole wall required or specified by the Engineer to be coated) and on the benching to the top of the invert channel, sealing around the manhole wall/pipe interfaces, providing inspector training, performing specified product tests and vacuum tests, accessing manholes as specified, traffic control, compliance with required working hours, complete restoration of all areas disturbed

by the work, and all else incidental thereto for which separate payment is not provided under other bid items.

Installation of cementitious mortar lining in manholes will be measured in place on a vertical foot (VF) basis to the nearest one-tenth of a foot. Measurement will be from the point of intersection between the manhole benching and the manhole invert channel to the point of termination of the lining as specified by the Engineer and/or as shown in the details.

Payment will be made on the basis of the unit price in the Bid.

45. Item 42 – Furnish and Install Frame-Chimney Seal in Manhole: Installation of Manhole Frame-Chimney Seals will be measured on a per manhole basis as the number of existing manholes in paved areas having such rehabilitation work performed.

Payment for furnishing and installing manhole frame-chimney seals will be made for the respective quantity as determined above at the unit prices bid in the Bid Form. The prices and payment shall be full compensation for performing the work in paved or unpaved areas including all labor, materials, equipment and incidentals required for installation, including but not limited to pre-construction inspections of manholes, accessing the manholes, manhole wall and frame preparation, traffic control, compliance with required working hours, and for all else incidental thereto for which separate payment is not provided under other items in the Bid Form. The unit price bid will include payment for any size and shape of manhole frame-chimney seal that is required for installation as determined by the Contractor prior to and after bidding – no additional payment will be made for various shapes and sizes.

46. Item 43 – For Raising Existing Manhole Frames and Covers: Frames and covers shall be raised with bricks or concrete grade rings, height of adjustment as noted. Work shall include complete restoration of paved or unpaved areas, all materials, equipment, and work required to raise and reset existing frames and covers (and raising buried frames and covers) in unpaved areas and paved areas as specified and in accordance with the details. This item includes payment for saw cutting existing asphalt or concrete and disposing of material (in paved areas only), excavation, manhole wall and frame preparation, removal and off-site disposal of existing materials, backfilling (with imported ABC stone or pit gravel in paved areas) and compaction, accessing manholes as specified, traffic control, coordination with and location of existing utilities, erosion control, complete restoration of disturbed areas, and for all else incidental thereto for which separate payment is not provided under other bid items.

Payment will be made on the basis of the unit price in the Bid.

47. Items 44 - Manhole Invert Reconstruction: Rebuilding existing benches and inverts will be measured on a per manhole basis as the number of existing manholes having such rehabilitation work performed.

Payment for rebuilding existing benching and inverts will be made for the respective quantity as determined above at the unit prices bid in the Bid Form. The prices and payment shall be full compensation for performing the work in paved or unpaved areas including all labor, materials, equipment and incidentals required for installation, including but not limited to pre-construction inspections of manholes, accessing the manholes, manhole bench and invert preparation, removal and off-site disposal of existing materials, new concrete, traffic control,

and for all else incidental thereto for which separate payment is not provided under other items in the Bid Form.

48. Item 45 – Sealing Manhole Pipe Connections: Sealing pipe connections will be measured on a per manhole basis as the number of existing manholes having such rehabilitation work performed. Payment for sealing pipe connections will be made for the respective quantity as determined above at the unit prices bid in the Bid Form. The prices and payment shall be full compensation for performing the work in paved or unpaved areas including all labor, materials, equipment and incidentals required for installation, including but not limited to pre-construction inspections of manholes, accessing the manholes, manhole bench and invert preparation, removal and off-site disposal of existing materials, new concrete, traffic control, compliance with required working hours, and for all else incidental thereto for which separate payment is not provided under other items in the Bid Form.
49. Item 46 – Remove and Replace Manhole Vent: Payment will be made for removing and replacing 3” cast iron manhole vents in conformance with the Details. Vent Pipe will be paid at the unit price bid. The unit price bid shall include furnishing all labor, materials, tools, equipment, jointing materials, and associated appurtenances including stainless steel mesh required for the installation of the Vent Pipe complete, tested, and placed into satisfactory service, in accordance with the Contract Documents and Plans; and all other costs not included in other bid items.
50. Item 47 – Remove and Replace Frame and Cover: This pay item is to provide compensation for providing and installing a new manhole frame and cover on an existing manhole. Work shall include delivery of old frame and cover to WSACC’s shop and all else specified in the Standard Details. This item includes payment for saw cutting existing asphalt or concrete and disposing of material (in paved areas only), excavation, manhole wall and frame preparation, new frame and cover, removal and off-site disposal of existing materials, backfilling (with imported ABC stone or pit gravel in paved areas) and compaction, accessing manholes as specified, traffic control, coordination with and location of existing utilities, erosion control, complete restoration of disturbed areas, and for all else incidental thereto for which separate payment is not provided under other bid items. Frames and covers shall conform to the specifications.
51. Item 54 - Guaranteed Trenchless Crossing: Lump sum payment shall be made for each Guaranteed Trenchless Crossing as indicated on the bid form. The Contractor may elect to complete the Trenchless Crossing utilizing jack & bore construction or tunneling construction. The bore/tunnel installation shall be “Guaranteed”. The term “Guaranteed” indicates an absolute commitment by the Contractor to install the indicated casing and carrier piping per the specified lines and grades and in accordance with the Contract Documents. The Contractor assumes all risk for the accurate and successful casing installation. Payment will only be made for accurate casing installation. The Contractor will not receive payment for any direct or indirect costs related to failed attempts, abandoned installations or any other incorrect casing installation. The Contractor will remove or appropriately abandon incorrect casings as directed at no additional cost to the Owner. Lump sum price shall include furnishing all labor, materials, tools, equipment, fittings, jointing materials, casing pipe, and carrier pipes as detailed in the plans, specifications and details. The lump sum price shall include:
- c. Quality Control as Per NCDOT Standard Specifications for Roads and Structures Section 1550.5;
 - d. Installation as per the approved NCDOT permit;

- e. Excavation, shoring and backfilling of the bore pits;
- f. Tunnel shoring installation; Smooth steel casing pipe (Jack & Bore) or tunnel liner plates based on Contractor preferred method;
- g. Grouting of the outside annular space;
- h. The installation of DIP carrier pipe from manhole to manhole, including all skids, blocking, spiders, steel straps and jointing materials as shown on the Drawings;
- i. Bulkhead construction;
- j. Rock excavation/blasting including rock excavation required for bore pit construction;
- k. Dewatering;
- l. Associated Appurtenances;
- m. Furnishing and maintaining any safety barriers and/or traffic control devices as may be required by state and/or local permit requirements;
- n. All other costs not included under other bid items.

No payment will be made for abandoning defective installations. Pipe shall be considered for final payment after CCTV inspection, compaction and acceptance testing have been performed, completed and accepted.

PART 4 MEASUREMENTS AND CALCULATIONS

- A. Measurements shall be made daily for all unit price items and agreed upon by the Engineer or Owner's representative. Quantities for items not verified by the Engineer or Owner will not be approved for payment. Measurements shall be made as follows:
 - 1. Linear distances for gravity sewers, including services, shall be measured horizontally from center of manhole to center of manhole to the nearest one-tenth of a foot based on the actual length installed.
 - 2. Depth of gravity sewers shall be measured vertically from the finished grade to the invert of the sewer carrier pipe.
 - 3. Depth of manholes shall be measured vertically from the top of the frame (rim) to the finished invert in the center of the manhole.
 - 4. Volume quantities shall be based on the volume of material measured in place and compacted or in place prior to removal.
 - 5. Area quantities shall be calculated using horizontal length and width measurements of pay item in place.
 - 6. Weight quantities shall be calculated using length, width, and depth measurements times a density given in the appropriate specification section or by truck tickets obtained from certified scales.

PART 5 SUMMARY

- A. Payment as noted above shall constitute full compensation for all work shown and required by the construction drawings and contract documents. The cost of auxiliary operations and materials required to complete the project shall be absorbed in the appropriate bid item.

- B. The quantities listed in the Bid Form are estimated quantities only, and payment will be based on actual quantities installed on each bid item. The Contractor shall not be due any adjustments in unit prices because of quantity over-runs or under-runs.

END OF SECTION 01 22 00

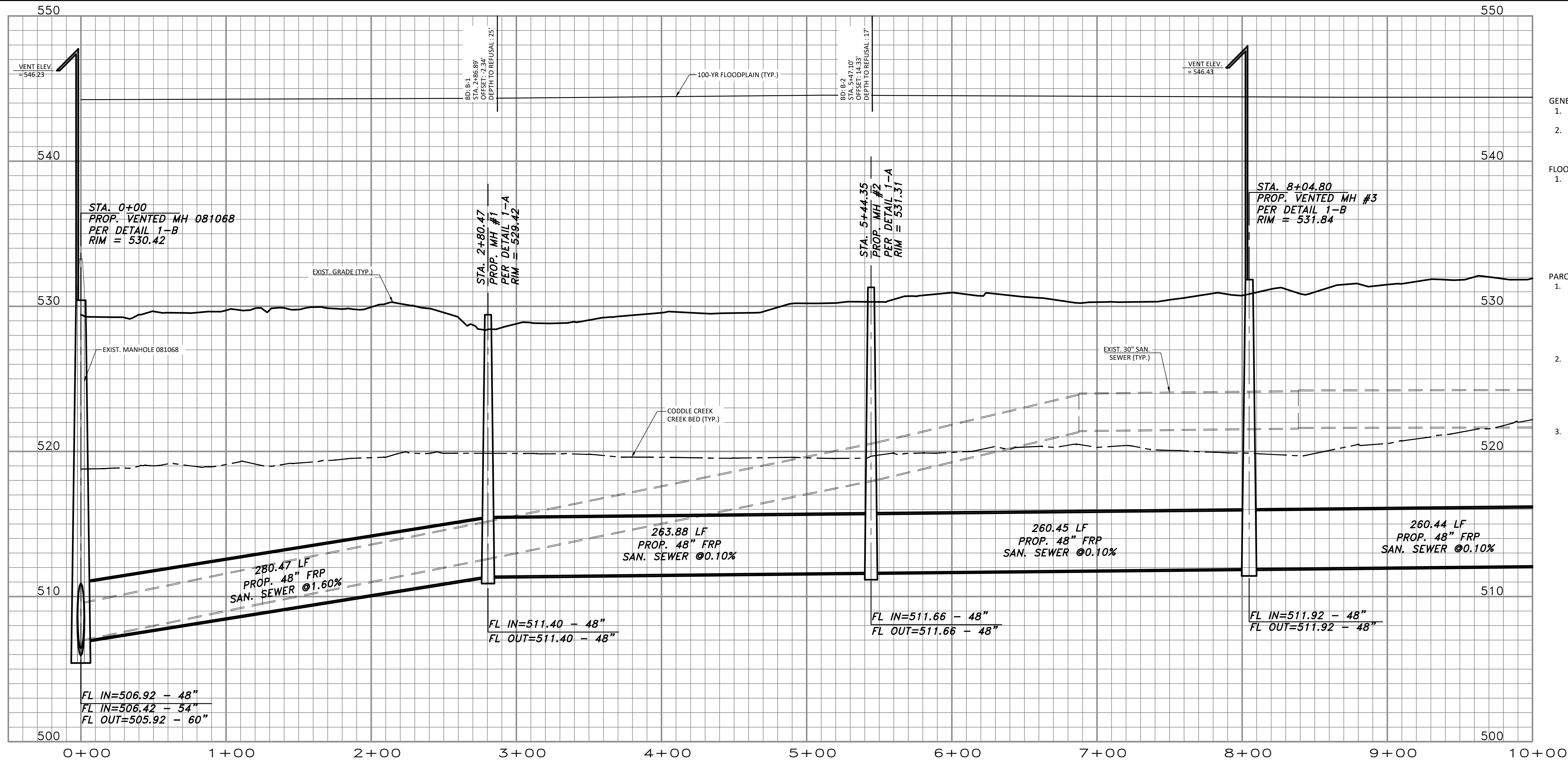
EASEMENTS

NC DEQ - NCG01 GROUND STABILIZATION & MATERIAL HANDLING

FINAL PLANS - FOR PERMITTING PURPOSES ONLY - NOT RELEASED FOR CONSTRUCTION

RECORDED EASEMENT INFORMATION																	
No.	PID #	Property Owner	PROPERTY		RECORDED EASEMENTS FOR PROJECT					ACQUIRED EASEMENTS							
			Deed Book	Page	Temp. Construction	Perm. Sewer	Perm. Access	Deed Book	Page	Deed Book	Page	Deed Book	Page	Map Book	Page	Map Book	Page
1	5527-37-9049	Elisha Walker	12778	278						605	589	3028	275	2301	236	-	-
2	5527-47-1520	Adam Wayne Thompson	477	742	X					606	669	3028	273	-	-	-	-
3	5527-48-3461	A.B. Bentley	5585	172	X	X		X	5585	463	3146	105	-	-	-	-	-
4	5527-49-1324	William D. Matthews	577	40	X	X		X	577	105	589	173	-	-	-	-	-
5	5527-37-3956	Greenway Waste Solutions of Harrisburg Inc	12426	41	X	X		X	12426	226	-	-	-	-	-	-	-
6	5528-11-8222	Greenway Waste Solutions of Harrisburg Inc	2658	76	X	X	X	X	2658	226	-	-	-	-	-	-	-
7	5528-01-3537	Greenway Waste Solutions of Harrisburg Inc	12426	41	X			X	12426	63	741	256	-	-	-	-	-
8	5528-31-0660	Autumn Ridge II Homeowners' Association Inc.	2816	275	X			X	606	58	3061	228	-	-	-	-	-
8A	5528-32-8194	Autumn Ridge II Homeowners' Association Inc.	2247	14	X			X	675	139	9470	340 & 344	2491	274	-	-	-
9	5528-32-9355	Randy Humphrey & Associates	2816	275	X			X	-	-	-	-	-	-	-	-	-
10	5528-21-1981	Autumn Ridge II Homeowners' Association Inc.	2816	275	X	X	X	X	3358	148	-	-	-	33	34	34	62
11	5528-03-8078	201 ConcordNC Inc	13814	220	X			X	606	58	-	-	-	-	-	-	-
12	5528-03-1275	201 ConcordNC Inc	13814	220	X		X	X	606	58	3061	228	-	-	-	-	-
13	5518-93-0799	Dimitri and Melody Karampourniotis	705	272	X	X	X	X	606	58	3028	279	-	-	-	-	-
14	5518-84-7198	Diane Lee Humphrey	9477	130	X	X	X	X	3376	168	596	776	-	-	-	-	-
15	5518-83-4682	EMIA PROPERTIES LLC	11711	58	X			X	637	139	9470	340 & 344	2491	274	-	-	-
16	5518-83-4550	EMIA PROPERTIES LLC	11711	58	X			X	675	139	9470	340 & 344	2491	274	-	-	-
17	5518-74-9619	McGrath Rentcorp	15893	164	X	X		X	3001	205	-	-	-	-	-	-	-
18	5518-75-5722	Kenneth Leon Stough and Patti Jean S Corzine	13651	196	X	X		X	3001	203	-	-	-	-	-	-	-
19	5518-44-8790	Jenaoi G Blackwelder	8890	159				X	627	835	-	-	-	-	-	-	-
20	5518-65-1950	Hawick Commons Homeowners Assoc.	9477	130	X			X	627	835	398	109	3146	100 & 1008	-	-	-
21	5518-66-1241	Adalinda Rivaz Diaz	13275	160	X			X	637	6	3001	201	-	-	34	32	-
22	5518-66-0421	Phillip R. Lapsis	3390	201	X			X	637	6	3001	201	-	-	34	32	-
23	5518-56-7757	Glengrove Homeowner Assn. INC	11531	204	X			X	627	847	3001	199	1845	307	-	-	-
24	5518-56-0455	Glengrove Homeowner Assn. INC	11531	204	X			X	627	847	3001	199	60	92	-	-	-
24A	5518-46-7303	Benjamin Dashawn and Latina Annette Russey	14453	314				X	-	-	-	-	60	92	60	93	-
25	5518-56-1973	Bernice Jean Page	558	399	X	X		X	622	340	3028	271	-	-	-	-	-
26	5518-46-8879	Deborah Staples Bradley	4952	283	X		X	X	1945	186	3028	271	622	340	-	-	-
27	5518-47-6126	Robert E. Gee	576	709	X	X		X	620	709	2965	173	-	-	-	-	-
28	5518-47-4296	Breeze Brenda Beatrice Furr	5770	217	X			X	3001	209	627	822	-	-	-	-	-
29	5518-47-3446	Paul Douglas Meyer	7098	335	X	X		X	625	22	3001	207	-	-	-	-	-
30	5518-47-2617	Paul Douglas Meyer	1332	179	X			X	627	826	2965	213	-	-	-	-	-
31	5518-47-1882	Dennis A. and Karen Rieck	6215	31	X	X		X	622	338	2965	179	-	-	-	-	-
32	5518-48-1005	Robin Elaine Winslow	16061	179	X	X		X	628	472	3001	217	-	-	-	-	-
33	5518-48-0289	Hilda Garbico Cuevas	11630	263	X	X		X	2965	117	-	-	-	-	-	-	-
34	5518-36-4862	Wendy M Austin-Sellers and Deloris B Austin	13538	14	X	X		X	627	853	3001	215	-	-	-	-	-
35	5518-48-0602	Juvenito Martinez Ruiz	14204	286	X	X		X	3120	114	-	-	-	-	-	-	-
36	5518-48-0758	Candido Rudi Soriano and Bruno Maria Castro	16551	246	X	X		X	3210	140	-	-	-	-	-	-	-
37	5518-48-0983	Robert & Lori Wallerius	13483	139	X	X		X	2965	181	-	-	-	-	-	-	-
38	5518-49-0200	Patrick R. & Catherine McIndoe	10227	92	X	X		X	5543	285	-	-	-	-	-	-	-
39	5518-39-4267	Glengrove Homeowner Assn. INC	9495	268	X		X	X	627	841	-	-	-	-	-	-	-
40	5518-49-1308	Benjamin Andrew Wilson and Randi J Wilson	13969	289	X	X	X	X	-	-	-	-	-	-	-	-	-
41	5518-49-1570	Patrick R. & Catherine McIndoe	9349	12	X			X	-	-	-	-	-	-	-	-	-
42	5518-49-2683	Hassell Oxendine	493	287	X			X	-	-	-	-	-	-	-	-	-
43	5518-49-3756	Sharon B Belanger	544	330	X			X	-	-	-	-	-	-	-	-	-
44	5519-40-3010	Phillip Linburg McCrary	1229	182			X	X	-	-	-	-	-	-	-	-	-
45	5518-39-7811	Michael Mysinger	16261	299	X		X	X	628	470	-	-	-	-	-	-	-
45T	5518-39-7811	See table below			See table below							See table below					
46	5518-39-5726	Michael Mysinger	16261	299	X				3115	215	800	6	-	-	-	-	-
46T	5518-39-5726	See table below			See table below							See table below					
47	5518-39-3878	See table below			See table below							See table below					
48	5518-39-0859	James J Burke	15991	24	X				895	91	3001	219	-	-	-	-	-
48T	5518-39-0859	See table below			See table below							See table below					
49	5518-29-8852	See table below			See table below							See table below					
50	5518-29-7789	Frank H Braswell Jr and Karen R Braswell	4138	223			X	X	895	91	3001	219	-	-	-	-	-
51	5519-20-4300	51 Talia Dr SW LLC	16067	62			X	X	800	8	3146	97	-	-	-	-	-
51T	5519-20-4300	See table below			See table below							See table below					
52	5518-29-3496	Mark Shane & Susan H Butler	2909	210	X				800	8	-	-	-	-	-	-	-
52A	5518-29-3401	Harry F and Lois Horne	7046	43	X				-	-	-	-	-	-	-	-	-
53	5518-29-4622	Windstream Concord Telephone Inc	7996	254	X				800	8	-	-	-	-	-	-	-
54	5188-29-1864	See table below			See table below							See table below					
55	5518-29-1920	See table below			See table below							See table below					
56	5518-29-0985	See table below			See table below							See table below					
57	5519-20-1030	See table below			See table below							See table below					
58	5519-10-8158	See table below			See table below							See table below					
59	5518-19-7975	See table below			See table below							See table below					
60	5518-19-5977	Susan Spaeth Northrup	2292	34	X			X	-	-	-	-	-	-	31	69	-
60T	5518-19-5977	See table below			See table below							See table below					
61	5519-10-4059	See table below			See table below							See table below					
62	5518-19-3947	See table below			See table below							See table below					
63	5518-09-8696	See table below			See table below							See table below					
64	5518-09-6672	See table below			See table below							See table below					
65	5519-01-6246	James Arthur & Ellen Jun Murray	1842	174			X	X	800	15	3001	211	-	-	29	5	-
65T	5519-01-6246	See table below			See table below							See table below					
66	5519-01-4536	Todd Wesley McGee	14279	169			X	X	3284	255	800	15	-	-	-	-	-
67	5519-01-4020	See table below			See table below							See table below					
68	5519-01-0247	John Patalek and Lydia Patalek	14190	326			X	X	800	3	4930	347	-	-	-	-	-
68T	5519-01-0247	See table below			See table below							See table below					
68A	5509-91-8074	John Patalek and Lydia Patalek	6142	240			X	X	800	3	4930	347	-	-	-	-	-
68AT	5509-91-8074	See table below			See table below							See table below					
69	5509-91-5377	See table below			See table below							See table below					
70	5509-91-2606	See table below			See table below							See table below					
71	5509-81-8727	See table below			See table below							See table below					
72	5509-81-8727	See table below			See table below							See table below					
73	5509-73-6179	See table below			See table below							See table below					
74	5509-73-6179	See table below			See table below							See table below					
75	5509-81-0841	Removed from project			Removed from project							Removed from project					
76	5509-82-0104	Lori Morris Brown and Ian A. Brown	8214	206			X	-	-	-	-	-	-	-	-	-	-
77	5518-27-9811	Removed from project			Removed from project							Removed from project					
78	5518-27-7622	Removed from project			Removed from project							Removed from project					

PHASE 2 EASEMENT INFORMATION (NOT RECORDED)															
No.	PID #	Property Owner	PROPERTY		EASEMENTS FOR PROJECT (NOT RECORDED)					ACQUIRED EASEMENTS					
			Deed Book	Page	Temp. Construction	Perm. Sewer	Perm. Access	Deed Book	Page	Deed Book	Page	Deed Book	Page	Map Book	Page
45T	5518-39-7811	Michael Mysinger	16261	299	X			628	470						
46T	5518-39-5726	Michael Mysinger	16261	299	X			3115	215	800	6				
47	5518-39-3878	Allen L Overkamp	555	330	X								17	32	
48T	5518-39-0859	James J Burke	15991	24	X			895	91	3001	219				
49	5518-29-8852	Fred S & Elizabeth D Brackett	8813	8	X										
51T	5519-20-4300	51 Talia Dr SW LLC	16067	62	X			800	8	3146	97				
54	5188-29-1864	Shawkat Jabr	8208	110	X			800	8				31	70	
55	5518-29-1000	Robert D and Suzanne A Huginin	2570	42	X			800	8	4931	4				
56	5518-29-0985	Lachasty A. Frouey	12044	65	X			800	8	4931	4				
57	5519-20-0130	Sue Sloan	12926	194	X			800	8	4931	4				
58	5519-10-8158	Daniel A. Lambert and Kimberly R Lambert	10108	16	X			800	8	4931	4				
59	5518-19-7975	Robin H. Shankle	3024	224	X			800	8	4931	4				
60T	5518-19-9977	Susan Sparr North	2282	34	X										
61	5519-10-4059	Peter J. Bartlett and Patti	2284	296	X								31	69	
62	5518-19-3947	Albert J. Salani & Deborah Salani	2257	219	X			800	8				31	69	
63	5518-09-8696	Jamie D and Amber N Catalano	14939	216	X			800	15	3001	211				
64	5518-09-6672	Charles P Catalano Sr	8519	42	X										
65T	5518-00-6246	James Arthur & Ellen Jun Murray	1842	174	X			800	15	3001	211		29	5	
66T	5517-00-4536	Todd Wesley McGee	14279	169	X			3284	255	800	15				
67	5519-01-4020	Agular Cruz & Alfaro Misael Antonio Hernandez	13836	59	X										
68T	5519-01-0247	John Patalak and Lydia Patalak	14190	326	X			800	3	4930	347				
68AT	5509-91-8074	John Patalak and Lydia Patalak	6142	240	X			800	3	4930	347				
69	5509-91-5377	APACO Southeast Inc	13274	1	X		X	3307	123						
70	5509-36-0650	Francis Lytle & Joan A Coyie	563	63	X			3292	149	3120	110				
72T	5509-81-8722	Francis Lytle & Joan A Coyie	563	63	X			3292	149	3120	110				
73T	5509-31-0125	Francis Lytle & Joan A Coyie	563	63	X			3292	149	3120	110				

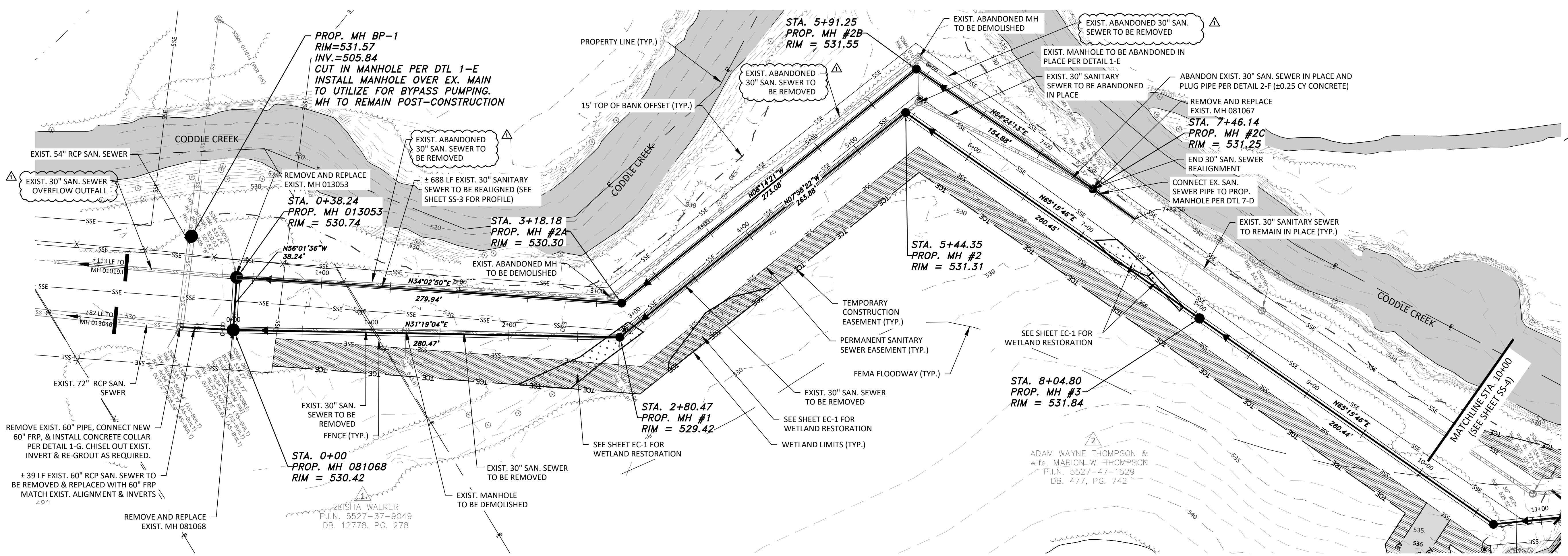


FINAL PLANS - FOR
PERMITTING PURPOSES
ONLY - NOT RELEASED FOR
CONSTRUCTION

- GENERAL NOTES:
- ALL NEW MANHOLE FRAMES AND COVERS SHALL BE COMPOSITE WATER TIGHT PER DETAIL 1-A.
 - CONTRACTOR SHALL PROVIDE ENGINEER WITH LAY SCHEDULE AND PROJECT SURVEY DATA AS PER SPECIFICATION 01 71 23.

- FLOODPLAIN DEVELOPMENT NOTES:
- ALL EXCESS MATERIALS RESULTING FROM CONSTRUCTION (DIRT, ROCK ETC.) OF THE SANITARY SEWER INTERCEPTOR SHALL BE HAULED OFF-SITE AND DISPOSED OF IN AN APPROVED MANNER. THERE SHALL BE NO EXCESS MATERIAL STORED, SPREAD, OR LEFT WITHIN THE 100-YEAR FLOODPLAIN DURING CONSTRUCTION. POST-CONSTRUCTION AND PRE-CONSTRUCTION GRADES SHALL MATCH.

- PARCEL 1 NOTES:
- CONTRACTOR TO ALLOW HORSES GRAZING ACCESS ON THE EASEMENT AREA PRIOR TO COMPLETION OF PROJECT. ADEQUATE GROUND COVER SHALL BE ESTABLISHED PER NCDEQ §8C REQUIREMENTS PRIOR TO RELEASING ANIMALS ONTO EASEMENT. ADEQUATE GROUND COVER TO BE APPROVED BY WSACC PRIOR TO PERMITTING ACCESS TO EASEMENT AREA.
 - GATES AND FENCING WITHIN THE EASEMENT AREAS AND OR AS AFFECTED BY CONSTRUCTION ACTIVITIES WILL BE REPLACED WITH LIKE KIND MATERIAL UPON PROJECT COMPLETION. THESE INSTALLATIONS INCLUDE BUT ARE NOT LIMITED TO THE INSTALLATION OF NEW POSTS, GATES, AND NUMBER OF FENCING STRANDS AS NEEDED TO MATCH THE EXISTING ELECTRICAL FENCING.
 - CONTRACTOR SHALL ESTABLISH TEMPORARY FENCING ALONG THE EASEMENT AREAS TO PREVENT HORSES FROM ACCESSING THE EASEMENT AREA DURING CONSTRUCTION. TEMPORARY FENCING WILL GENERALLY CONSIST OF A COMBINATION OF WOODEN POSTS, "T" POSTS, AND COMPARABLE ELECTRIC FENCE WIRE, ETC. TO THE EXISTING FENCING SYSTEM AND RUN THE LENGTH OF THE PROPERTY FOLLOWING THE PROPOSED TEMPORARY CONSTRUCTION EASEMENT AND EXISTING PERMANENT EASEMENT BOUNDARIES.



WATER & SEWER AUTHORITY OF CABARRUS COUNTY
CABARRUS COUNTY, NORTH CAROLINA
LOWER CODDLE CREEK PARALLEL INTERCEPTOR
PHASE 1: PLAN & PROFILE STATION 0+00 TO 10+00

PREPARED BY:
Gavel & Dorn Engineering, PLLC
6730 Freedom Drive
Charlotte, NC 28214
704-919-1900
License No. P-0601

REGIONS PER ADDENDUM #2
01/25/2024

Apprd:

Date: 09/30/23

Chkd: MLH

Drwn: MLH

Scale: 1" = 40'

Project No.: 2018-188

Sheet: SS-2