

## PROJECT MANUAL FOR YORK COUNTY– BAXTER CONVENIENCE CENTER DRIVEWAY IMPROVEMENTS

Date: January 2025

OWNER:

YORK COUNTY 220 PUBLIC WORKS ROAD YORK, SOUTH CAROLINA 29745 (803) 628-3200 (803) 628-3182 FAX

Engineer:

Smith Gardner, Inc. 1526 Richland Street Columbia, SC 29201 (919) 828.0577

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## **BID FORM**

Baxter Convenience Center Driveway Improvements

Submitted: \_\_\_\_\_, 2025

York County Government 6 South Congress Street York, SC 29745

Sir or Madam:

The undersigned, as Bidder, hereby declares that the only person or persons interested in the Bid, as principal or principals, is or are named herein and that no other person than herein mentioned has any interest in the Bid of the Contract to which the work pertains; that this Bid is made without connection or arrangement with any other person, company, or parties making a bid or proposal and that the Bid is in all respects fair and made in good faith without collusion or fraud.

The Bidder further declares that he has examined the site of the Work and, through personal knowledge and experience and/or subsurface investigations, has fully satisfied himself in regard to all conditions pertaining to such site and he assumes full responsibility therefore; that he has examined the Drawings and Specifications for the Work and from his own experience or from professional advice that the Drawings and Specifications are sufficient for the Work to be done; that he has examined the other Contract Documents and all addenda relating thereto, and that he has satisfied himself fully, relative to all matters and conditions with respect to the Work to which this Bid pertains.

The Bidder proposes and agrees, if this Proposal is accepted, to contract with York County Government (OWNER) in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, transportation and labor and to perform all work necessary to complete the Work specified in the Bid and other Contract Documents.

The Bidder further proposes and agrees to commence substantial work on this project within 15 days of a Notice to Proceed and agrees that the Work will be completed and ready for final payment <u>within</u> <u>120 days</u> of the Notice to Proceed. Construction will require closure of the Convenience Center. The Convenience Center is to be closed for a maximum of <u>45 days</u> during construction. Closure is to be coordinated and approved by the County in advance.

The Bidder further agrees that the deductions for liquidated damages, as stated in the Agreement and General Conditions, constitute fixed, agreed, and liquidated damages to reimburse the OWNER for additional costs to the OWNER resulting from the Work not being completed within the time limit stated in the Contract Form. The liquidated damages shall be \$500.00 for each consecutive calendar day thereafter.

The Bidder further agrees to execute a Contract and furnish satisfactory Performance and Indemnity and Payment Bonds, and the required Certificates of Insurance, within ten consecutive calendar days after receipt of Notice of Award of the Contract, and the undersigned agrees that in case of failure on his part to execute the said Contract and Performance and Indemnity and Payment Bonds within the ten (10) consecutive calendar days after the award of the Contract, the Bid guarantee accompanying his Bid and the money payable thereon shall be paid to the OWNER as liquidation of damages sustained by the OWNER; otherwise, the Bid guarantee shall be returned to the undersigned after the Contract is signed and the Performance and Indemnity and Payment Bonds are filed.

# Bid Form

# Baxter Convenience Center Driveway Improvements

# Base Bid Schedule (See Notes 1 and 2)

Pay Item Number	Description	Spec/ Standard Reference	Estimated Quantity <sup>2</sup>	Units	Unit Cost	Extended Cost
1	Clearing and Grubbing	02110	1	LS		
2	Remove Underbrush and Small Caliper Trees	12110	1	LS		
3	Landscaping	02110/02930	1	LS		
4	1.5" Depth Milling Asphalt Pavement		395	SY		
5	Type C Asphalt Course (1.5")		395	SY		
6	Type C Asphalt Course (3")		575	SY		
7	Type C Asphalt Intermediate Course (4")		575	SY		
8	Type B Asphalt Aggregrate Base Course (5")		575	SY		
9	Concrete Curb and Gutter (2'-0") Vertical Face	720-105-01	565	LF		
10	4" Concrete Sidewalk	720-155-00	115	SY		
11	Concrete Median	720-955-40	35	SY		
12	Pedestrian Ramp Construction	720-952-11	60	SY		
13	Surface Applied Detectable Warning	720-911-01, 720-910-02	102	SF		
14	4" White Line	630-215-00	70	LF		
15	4" Yellow Line	625-105-00	145	LF		
16	4" White 2'/6' SP Skip Line	625-305-00	10	LF		
17	8" White Line	625-305-00	145	LF		
18	24" White Line	630-215-00	50	LF		
19	24" x 36" White Triangle. Yield Bar	651-000	6	LF		
20	Right Turn Arrow	625-410-00	1	EA		
21	21 Sign (R1-1)		18.0	SF		
22	Sign (R1-2)	651-110-00	16.0	SF		
23	Sign (R3-2)	625-310-00	9.0	SF		
24	Sign (R4-7)	625-305-00	5.0	SF		
25	U-Section Post	651-110-00	56	LF		

Pay Item Number	Description	Spec/ Standard Reference	Estimated Quantity <sup>2</sup>	Units	Unit Cost	Extended Cost
26	Temporary Silt Fence	815-605-00	750	LF		
27	Inlet Protection	815-006-00	12	LF		
28	Adjust/Relocate Water Valve		1	EA		
29	Relocate Light Pole		1	EA		
30	Relocate Pull Box		3	EA		
31	Relocate Signage		1	EA		
32	Grading		1	LS		
33	30' Clear Span Automatic Sliding Gate with Opener		3	EA		
34	8' Black Chain Link		401	LF		
35	Traffic Control	610-025-00, 610-030-00	1	LS		
36	Construction Materials Testing		1	LS		
Bonds, Mobilization, & 37 Insurance (Max. = 5% of Total Bid Price)			1	LS		

## TOTAL BASE BID (SINGLE-PRIME)

\$

Total (use words) \_\_\_\_\_

## Notes:

- 1. Some of the line items in the Bid Schedule(s) may include approximate quantities as estimated by the Engineer. The Contractor shall not rely on the quantities given, but shall instead estimate all quantities independently as required to complete the Bid. The price associated with each lump sum item shall be the full compensation paid for the work described, regardless of the Engineer's or Contractor's estimated quantity. For Lump Sum items, no claim shall be made by the Contractor for deviations between the Contractor's estimated and the actual quantity required to complete the work described, wherein no measurement will be made.
- 2. Engineer's estimated quantities are based on in-place quantities. Areas and lengths are based on horizontally projected areas and lengths. No adjustments have been made for stripping topsoil, slopes, uneven contours, overlaps, seams, anchor trenches, compaction factors, etc.

## Alternate Bid Schedules (See Notes 1 and 2)

# Alternate 1 – Substitute 8' Trex Fencing for Black Coated Chain Link Fencing along SC 160.

Pay Item Number	Description	SCDOT Standard Reference	Estimated Quantity <sup>2</sup>	Units	Unit Cost	Extended Cost
1	8' Black Trex Fencing		401	LF		

# Alternate 2 – Replace All Fencing with 8' Black PVC Coated Chain Link Fencing with Screening Slats.

Pay Item Number	Description	SCDOT Standard Reference	Estimated Quantity <sup>2</sup>	Units	Unit Cost	Extended Cost
1	8' Black PVC Coated Chain Link Fencing with Screening Slats.		1,228	LF		

## Alternate 3 – Replace All Fencing with 8' Trex Fencing

Pay Item Number	Description	SCDOT Standard Reference	Estimated Quantity <sup>2</sup>	Units	Unit Cost	Extended Cost
1	8' Black Trex Fencing		1,228	LF		

## Notes:

- 1. Some of the line items in the Bid Schedule(s) may include approximate quantities as estimated by the Engineer. The Contractor shall not rely on the quantities given, but shall instead estimate all quantities independently as required to complete the Bid. The price associated with each lump sum item shall be the full compensation paid for the work described, regardless of the Engineer's or Contractor's estimated quantity. For Lump Sum items, no claim shall be made by the Contractor for deviations between the Contractor's estimated and the actual quantity required to complete the work described, wherein no measurement will be made.
- Engineer's estimated quantities are based on in-place quantities. Areas and lengths are based on horizontally projected areas and lengths. No adjustments have been made for stripping topsoil, slopes, uneven contours, overlaps, seams, anchor trenches, compaction factors, etc.

# Bid Bond:

Attached hereto is a cashier's check on the Bank of \_\_\_\_\_\_

or Bid Bond for the sum of \_\_\_\_\_\_

made payable to \_\_\_\_\_\_\_ (Owner).

Acknowledgement of Addenda
If any Addenda are issued, Bidder hereby acknowledges receipt of all Addenda through and including:
Addenda: #1 #2 #3 #4 #5

# **Contractor's Classifications and Subclassifications**

SC Contractor's License Number(s):\_\_\_\_\_ Classification(s) and Limits: \_\_\_\_\_

Subclassifications (s) & Limits\_\_\_\_\_

\_\_\_\_

\_\_\_\_

List of Subcontractor(s) Subcontractor(s)

License Number

Signature Page - OFFERORS MUST COMPLETE AND SIGN THE FORM BELOW The

submittal must be signed by an authorized representative of the Offeror accepting all terms and conditions contained in this document and any addenda. Modifying the terms and conditions of this solicitation may result in your response being rejected.

COMPANY NAME	FEDERAL TAX ID NUMBER
COMPANY ADDRESS	CITY, STATE, ZIP+4
PAYMENT/REMITTANCE ADDRESS	CITY, STATE, ZIP+4
EMAIL ADDRESS	COMPANY TELEPHONE
PRINT NAME	TITLE
AUTHORIZED SIGNATURE	DATE
Minority Status	
Not Minority Owned         African American Male         Caucasian Female         African American Female         African American Female         Aleut         Eskimo         Mative American         Asian         Other (Please Explain)	

# List of References

1. Company Name:	
Company Address:	
Point of Contact:	
2. Company Name:	
Company Address:	
Point of Contact:	Email:
3. Company Name:	
Company Address:	
Point of Contact:	Email:

Form <b>W-9</b>
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

# Request for Taxpayer Identification Number and Certification

► Go to www.irs.gov/FormW9 for instructions and the latest information.

1	Name (as shown on you	r income tax return).	Name is required	on this line: do not	leave this line blank.

	2 Business name/disregarded entity name, if different from above		
on page 3.	Check appropriate box for federal tax classification of the person whose name is entered on line 1. Ch following seven boxes.     Individual/sole proprietor or C Corporation S Corporation Partnership	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):	
	Individual/sole proprietor or C Corporation S Corporation Partnership single-member LLC	Trust/estate	Exempt payee code (if any)
Print or type. ecific Instructions	Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partner <b>Note:</b> Check the appropriate box in the line above for the tax classification of the single-member ov LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the or another LLC that is <b>not</b> disregarded from the owner for U.S. federal tax purposes. Otherwise, a single is disregarded from the owner should check the appropriate box for the tax classification of its own Otherwise, a single owner should check the appropriate box for the tax classification of its own	Exemption from FATCA reporting code (if any) (Applies to accounts maintained outside the U.S.)	
Spe	<ul> <li>Other (see instructions) ►</li> <li>5 Address (number, street, and apt. or suite no.) See instructions.</li> </ul>	Poquestor's pame o	nd address (optional)
See S		nd address (optional)	
	6 City, state, and ZIP code		
	7 List account number(s) here (optional)		
Par	t I Taxpayer Identification Number (TIN)		
		· · Casial and	under munch au

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

**Note:** If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number										
				-			-			
	or									
	Employer identification number									
			-							

#### Part II Certification

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and

4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Cian	
Sign	Signature of
Here	U U
nere	U.S. person ►

# **General Instructions**

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9.* 

#### Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid)

 Form 1099-DIV (dividends, including those from stocks or mutual funds)

• Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)

• Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)

• Form 1099-S (proceeds from real estate transactions)

Date >

- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest),
- 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

## **BID BOND**

STATE OF SOUTH CAROLINA COUNTY OF YORK

KNOW ALL MEN BY THESE PRESENTS, that	
as Principal, and	, as Surety, a
Corporation chartered and existing under the laws of the State of	
, with its principal offices in the City of	, and authorized to do business
in the State of South Carolina are held and firmly bound unto the OWN	ER,
in the penal Sum of	
Dollars (\$	) lawful money of the
United States, for the payment of which sum will and truly to be ma	ade, we bind ourselves, our heirs,
executors, administrators, and successors, jointly and severally, firmly l	by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted to the OWNER the accompanying bid, dated \_\_\_\_\_, 2024, for:

## **BAXTER CONVENIENCE CENTER**

NOW, THEREFORE,

A. If said Bid shall be rejected, or

B. If the principal shall not withdraw said Bid within twenty-four (24) hours after date of opening of the same, and shall within ten (10) days after the prescribed forms are presented to him for signature, enter into a written contract with the OWNER in accordance with the Bid as accepted, and give bonds with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract, then the above obligations shall be void and of no effect, otherwise to remain in full force and effect.

C. In the event of the withdrawal of said Bid within the period specified, or the failure to enter into such contract and give such bonds within the time specified, if the principal shall pay the OWNER the difference between the amount specified in said bid and the amount for which the OWNER may procure the required work and supplies, if the latter amount be in excess of the former, then the above obligations shall be void and of no effect, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under their several seals, this \_\_\_\_\_ day of \_\_\_\_\_\_, A.D., *2024*, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

WITNESS: (If Sole Ownership or Partnership, two (2) Witnesses required). (If Corporation, Secretary only will attest and affix seal).

WITNESSES:	PRINCIPAL:
	Name of Firm
	Signature of Authorized Officer (Affix Seal)
	Title
	Business Address
	City State
WITNESS:	SURETY:
	Corporate Surety
(Affix Attorney-in-Fact Seal)	
Business Address	
	City State

Name of Local Insurance Agency

CERTIFICATES AS TO CORPORATE PRINCIPAL

I,	, certify that I am the Secretary of the Corporation named as Principal in
the within bond; that	who signed the said bond on behalf of the
principal, was then	of said corporation; that I know his signature, and his signature
hereto is genuine; and that sa corporation by authority of its	id bond was duly signed, sealed, and attested for and in behalf of said governing body.

(Corporate Secretary Seal)

#### STATE OF SOUTH CAROLINA COUNTY OF YORK

Before me, a Notary Public duly commissioned, qualified and acting, personally appeared \_\_\_\_\_

to me well known, who being by me first duly sworn upon oath, says that he is

the Attorney-in-Fact, for the \_\_\_\_\_\_ and that he has been authorized by \_\_\_\_\_

to execute the foregoing bond on behalf of the Contractor

named therein in favor of the OWNER, the \_\_\_\_\_\_.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2024, A.D.

(Attach Power of Attorney to original Bid Bond)

Notary Public State of South Carolina-at-Large

My Commission Expires:

END OF SECTION

# **NON-COLLUSION AFFIDAVIT**

State c	of			)	
County	/ of			)	
			, bei	ng first duly swo	orn, deposes and says that:
(1)	He is	Title	_ of		, the Bidder
		l itle nitted the attached		Company Name	
(2)		ormed respecting t umstances respect			ents of the attached Bid and of all
(3)	Such Bid is g	enuine and is not a	a sham B	id;	
(4)	employees o connived or a collusive or s submitted or manner, direc conference w Bid or of any the Bid price conveyance of	r parties in interest, agreed, directly or i ham Bid in connec to refrain from bido ctly or indirectly, so vith any other Bidde other Bidder, or to of any other bidder	, including ndirectly tion with ling in con ought by a er, firm or fix any ov r, or to se lent any a	g this affiant, ha with any other E the Contract for nnection with su agreement or co person to fix the verhead, profit of cure through an	wners, agents, representatives, s in any way colluded, conspired, Bidder, firm, or person to submit a which the attached Bid has been uch Contract, or has in any Ilusion or communication or e price or prices in the attached or cost element of the Bid price or by collusion, conspiracy, list the OWNER or any person
(5)	any collusion	, conspiracy, conni	vance or	unlawful agreer	d proper and are not tainted by nent on the part of the Bidder or r parties in interest, including this
				(Signed)	
Subeci	ribed and swor	n to before me			(Title)
		, 20, 20,			
	(Title	)			
My cor	nmission expir	es			

# NOTICE OF AWARD

TO:	FROM: York County Engineering
	P.O. Box 148
	York, SC 29745

**PROJECT TITLE:** Baxter Convenience Center

PROJECT DESCRIPTION: Improvements at the Baxter Convenience Center consist of improvements at the public entrance as well as the truck entrance to the facility. At the public entrance to the facility improvements generally consist of the addition of a right turn lane off of SC-160 into the Convenience center, addition of concrete island, concrete sidewalk, curb and gutter, crosswalk, gate and widening the right lane out of the convenience center and associated striping and signage. At the truck entrance to the facility the improvements generally consist of realignment of the existing driveway, realigning concrete sidewalk, addition of crosswalk, curb and gutter, gate and associated striping and signage. All fencing fronting SC160 is to be replaced as part of this project as well as clearing along SC160 as indicated on the construction plans. An alternate is included in the bid for replacing all perimeter fencing at the site.

The Owner has considered the Bid submitted by you for the above-described work in response to its Advertisement for Bids dated \_\_\_\_\_\_ and Information for Bidders.

<u>(\$\_\_\_\_).</u>

You are required by the Information for Bidders to execute the Agreement and furnish the required Contractor's Performance Bond, Payment Bond and certificates of insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said Bonds within ten (10) days from the date of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid as abandoned and as forfeiture of your Bid Bond. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the Owner.

Dated this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_.

On behalf of the York County Council

By: \_\_\_\_\_

Title: County Engineer

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged

By:\_\_\_\_\_

Title:

This \_\_\_\_\_\_day of \_\_\_\_\_\_,20\_\_\_\_\_

NOTICE OF AWARD

# AGREEMENT

THIS AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2025 A.D., by and between the York County Government, party of the first part (hereinafter sometimes called the "OWNER"), and \_\_\_\_\_, party of the second part (hereinafter sometimes called the "CONTRACTOR").

WITNESSETH: That the parties hereto, for the consideration hereinafter set forth, mutually agree as follows:

- 1. SCOPE OF THE WORK
  - 1.1. The CONTRACTOR shall furnish all labor, materials, equipment, machinery, tools, apparatus, and transportation and perform all of the Work shown on the Drawings and described in the Specifications entitled:

#### Baxter Convenience Center Driveway Improvements

as prepared by York County Engineering Department acting as, and in the Contract Documents entitled the ENGINEER, and shall do everything required by this Contract and the other Contract Documents.

- 2. THE CONTRACT SUM
  - 2.1. The OWNER shall pay to the CONTRACTOR for the faithful performance of the Contract, in lawful money of the United States, and subject to addition and deductions as provided in the Contract Documents, a total sum as follows:

Based upon the prices shown in the Bid heretofore submitted to the OWNER by the CONTRACTOR, a copy of said Proposal being a part of these Contract Documents, the aggregate amount of this Contract (obtained from either the lump sum price, the application of unit prices to the quantities shown in the Bid, or the combination of both) being the sum of

(Spell out amount)

\_(\$\_\_\_\_).

- 3. COMMENCEMENT AND COMPLETION OF WORK
  - 3.1. The CONTRACTOR shall commence Work and the Contract Time will commence to run on the date fixed in the Notice to Proceed.
  - 3.2. The CONTRACTOR shall prosecute the Work with faithfulness and diligence and shall be completed and ready for final payment within <u>300 Calendar</u> days after commencement date fixed in the Notice to Proceed.
- 4. CONTRACTOR'S ACCEPTANCE OF CONDITIONS
  - 4.1. The CONTRACTOR hereby agrees that, by virtue of submitting a completed Bid including his declarations therein of full satisfaction, knowledge and understanding of the Contract Documents, site conditions (surface and subsurface) and all other conditions affecting the Work, he assumes full responsibility for performance of the Work as required under this Contract. It is expressly agreed that under no circumstances, conditions or situations shall this Contract be more strongly construed against the OWNER than against the CONTRACTOR and his Surety.

4.2. It is understood and agreed that the passing, approval and/or acceptance of any part of the Work or material by the OWNER. ENGINEER, or by any agent or representative, as being in compliance with the terms of this Contract and/or of the Contract Documents, shall not operate as a waiver by the OWNER of strict compliance with the terms of this Contract, and/or the Contract Documents covering said Work: and the OWNER may require the CONTRACTOR and/or his surety to repair, replace, restore and/or make to comply strictly and in all things with this Contract and the Contract Documents any and all of said Work and/or materials which within a period of two years from and after the date of the acceptance of any such Work or material, are found to be defective or to fail in any way to comply with this Contract or with the Contract Documents. This provision shall not apply to materials or equipment normally expected to deteriorate or wear out and become subject to normal repair and replacement before their condition is discovered. Failure on the part of the CONTRACTOR and/or his Surety, immediately after notice to either, to repair or replace any such defective materials and workmanship shall entitle the OWNER, if it sees fit, to replace or repair the same and recover the reasonable cost of such replacement and/or repair from the CONTRACTOR and/or his surety, who shall in any event be jointly and severally liable to the OWNER for all damage, loss and expense caused to the OWNER by reason of the CONTRACTOR's breach of this Contract and/or his failure to comply strictly and in all things with this Contract.

#### 5. PARTIAL AND FINAL PAYMENTS

- 5.1. In accordance with the provisions fully set forth in the General Conditions, and subject to additions and deductions as provided, the OWNER shall pay the CONTRACTOR as follows:
  - 5.1.1. Within 30 days after receipt by the OWNER of the CONTRACTOR's request for partial payment, the OWNER shall make partial payments to the CONTRACTOR, on the basis of the estimate of Work as approved by the ENGINEER, for work performed during the preceding calendar month, less ten percent (10%) of the amount of such estimate which is to be retained by the OWNER until all Work has been performed strictly in accordance with this Agreement and until such Work has been accepted by the OWNER.
  - 5.1.2. Upon submission by the CONTRACTOR of evidence satisfactory to the OWNER that all payrolls, material bills and other costs incurred by the CONTRACTOR in connection with the construction of the Work have been paid in full, including all retainage to subcontractors on the project, and also after all guarantees that may be required in the specifications have been furnished and are found acceptable by the OWNER, final payment on account of this Agreement shall be made within sixty (60) days after completion by the CONTRACTOR of all Work covered by this Agreement and acceptance of such Work by the OWNER.
  - 5.1.3. Retainage will be released in full at Final Completion.

#### 6. ADDITIONAL BOND

6.1. It is further mutually agreed between the parties hereto that if, at any time after the execution of this Agreement and the Performance and Payment Bonds hereto attached for its faithful performance, the OWNER shall deem the surety or sureties upon such bonds to be unsatisfactory, or if, for any reason, such bond(s) ceases to be adequate to cover the performance of the Work, the CONTRACTOR shall, at his expense, and within three days after the receipt of notice from the OWNER to do so, furnish an additional bond or bonds, in such form and amount, and with such sureties as shall be satisfactory to the OWNER. In such event, no further payment to the CONTRACTOR shall be deemed due under this Agreement until such new or additional security for the faithful performance of the Work shall be furnished in manner and form satisfactory to the OWNER.

### 7. CONTRACT DOCUMENTS

7.1. The Contract Documents, as stated in the Instructions to Bidders, including this Project Manual and General Conditions, and the accompanying Contract Drawings, shall form the Contract and are as fully a part of this Contract as if herein repeated.

IN WITNESS WHEREOF the parties hereto have executed this Agreement on the day and date first above written in three (3) counterparts, each of which shall, without proof or accounting for the other counterparts, be deemed an original Contract.\*

 Owner
 Contractor

 By:
 By:

 [Corporate Seal]
 [Corporate Seal]

Attest:	Attest:
Address for giving notices:	Address for giving notices:
	License No
	Agent for service of process:

(\*) In the event that the CONTRACTOR is a Corporation, a certificate of resolution of the Board of Directors of the Corporation, authorizing the officer who signs the Contract to do so in its behalf shall be completed and submitted with this form.

END OF SECTION

# NOTICE TO PROCEED

Date:

То:\_\_\_\_\_

Project: Baxter Convenience Center Driveway Improvements

You are hereby notified to commence work in accordance with the Agreement dated \_\_\_\_\_\_ on or before \_\_\_\_\_\_, and you are to complete the work within 180 consecutive calendar days thereafter. The date of completion of all work is therefore \_\_\_\_\_\_.

On behalf of the

YORK COUNTY GOVERNMENT

Ву: \_\_\_\_\_

Title: \_\_\_\_\_

## ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged by \_\_\_\_\_\_, this the \_\_\_\_\_day of \_\_\_\_\_\_, 2025.

Ву: \_\_\_\_\_

Title: \_\_\_\_\_

# PERFORMANCE AND INDEMNITY BOND

# STATE OF SOUTH CAROLINA COUNTY OF YORK

## KNOW ALL MEN BY THESE PRESENTS that \_\_\_\_\_

as Pri	ncipal, hereinafter called Contractor, and
	as Surety, hereinafter
called Surety, are held and firmly bound	d unto the York County Government, as Obligee, hereinafter called
owner, in the amount of	
Dollars (\$	) for the payment whereof Contractor and Surety bind
themselves, their heirs, executors, adm	inistrators, successors and assigns, jointly and severally, firmly by
these presents.	

WHEREAS, Contractor has by written agreement dated\_\_\_\_\_, 2024, entered into a Contract with Owner for:

#### Baxter Convenience Center

in accordance with Drawings and Specifications prepared by York County Engineering Department, ENGINEER, which Contract is by reference made a part hereof and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH, that, if the Principal shall in all respects promptly and faithfully perform and comply with the terms and conditions of said Contract and his obligations thereunder and shall indemnify the OWNER and the ENGINEER and save either or all of them harmless against and from all costs, expenses and damages arising from the performance of said Contract or the repair of any work thereunder, then this obligation shall be void; otherwise, this Bond shall remain in full force and effect, in accordance with the following terms and conditions:

A. The Principal and Surety jointly and severally agree to pay the OWNER any difference between the sum to which the said Principal would be entitled on the completion of the Contract, and that sum which the OWNER may be obliged to pay for the completion of said work by Contract or otherwise, and any damages, direct or indirect or consequential, which the said OWNER may sustain on account of such work, or on account of the failure of said CONTRACTOR to properly and in all things, keep and execute all of the provisions of said Contract.

B. And this Bond shall remain in full force and effect for a period of one (1) year from the date of final payment of the project by the OWNER and shall provide that the CONTRACTOR guarantees to repair or replace for said period of one (1) year all work performed and materials and equipment furnished that were not performed or furnished according to the terms of the Contract, and shall make good, defects thereof which have become apparent before the expiration of said period of two (1) year. If any part of the project, in the judgment of the OWNER, for the reasons above stated needs to be replaced, repaired or made good during that time, the OWNER shall so notify the CONTRACTOR in writing. If the CONTRACTOR refuses or neglects to do such work within five (5) days from the date of service of such Notice, the OWNER shall have the work done by others and the cost thereof shall be paid by the CONTRACTOR or his Surety.

C. And the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive Notice of any change, extension of time, alteration or addition to the terms of the Contract or to the Work or to the Specifications.

D. The surety represents and warrants to the OWNER that they have a minimum Best's Key Rating Guide General Policyholder's Rating of "<u>A –</u>" and Financial Category of "<u>Class VIII</u>".

IN WITNESS WHEREOF, the above bounded parties executed this instrument under their several seals, this \_\_\_\_\_ day of \_\_\_\_\_\_ 20\_\_\_\_, A.D., the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

WITNESS: (If Sole Ownership or Partnership, two (2) Witnesses required). (If Corporation, Secretary only will attest and affix seal).

PRINCIPAL:

Signature	e of Authorized Officer	
(Affix Sea	al)	

WITNESSES:

Title

**Business Address** 

City State

WITNESS:

SURETY:

Corporate Surety

Attorney-in-Fact (Affix Seal)

Business Address

City

State

Name of Local Insurance Agency

#### **CERTIFICATES AS TO CORPORATE PRINCIPAL**

I, \_\_\_\_\_, certify that I am the Secretary of the Corporation named as Principal in the within bond; that \_\_\_\_\_\_ who signed the said bond on behalf of the Principal, was then \_\_\_\_\_\_ of said Corporation; that I know his signature, and his signature hereto is genuine; and that said bond was duly signed, sealed, and attested for and in behalf of said Corporation by authority of its governing body.

Secretary

Corporate Seal

#### STATE OF SOUTH CAROLINA

#### COUNTY OF YORK

Before me, a Notary Public, duly commissioned, qualified and acting, personally appeared

to me well known, who being by me first duly sworn upon oath, says that

he is the Attorney-in-Fact, for the \_\_\_\_\_

\_\_\_\_\_ and that he has been authorized by \_\_\_\_\_

to execute the foregoing bond on behalf of the Contractor

named therein in favor of the \_\_\_\_\_\_.

Subscribed and sworn to before me this \_day of \_\_\_\_\_, 20\_\_\_, A.D.

(Attach Power of Attorney)

Notary Public State of South Carolina-at-Large

My Commission Expires:

END OF SECTION

# **PAYMENT BOND**

## STATE OF SOUTH CAROLINA COUNTY OF YORK

# KNOW ALL MEN BY THESE PRESENTS that

as Principal, hereinafter called CONTRACT					
and	a	s Sure	ety,	hereinafter	called
Surety, are held and firmly bound unto the Yo	ork County Govern	iment, a	as C	bligee, here	inafter
called OWNER, in the amount of					
	_Dollars(\$			)	for the

payment whereof CONTRACTOR and Surety bind themselves, their heirs, executors,

administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, CONTRACTOR has by written agreement dated\_\_\_\_\_\_, 2024. entered into a Contract with OWNER for:

#### Baxter Convenience Center Driveway Improvements

in accordance with Drawings and Specifications prepared by York County Engineering Department, ENGINEER, which Contract is by reference made a part hereof and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH, that, if the Principal shall promptly make payments to all claimants, as herein below defined, then this obligation shall be void; otherwise, this Bond shall remain in full force and effect, subject to the following terms and conditions:

- A. A claimant is defined as any person supplying the Principal with labor, material and supplies, used directly or indirectly by the said Principal or any subcontractor in the prosecution of the work provided for in said Contract.
- B. The above named Principal and Surety hereby jointly and severally agree with the OWNER that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after performance of the labor or after complete delivery of materials and supplies by such claimant, may sue on this Bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The OWNER shall not be liable for the payment of any costs or expenses of any such suit.
- C. No suit or action shall be commenced hereunder by any claimant:
  - 1. Unless claimant, other than one having a direct contract with the Principal, shall within forty-five (45) days after beginning to furnish labor, materials or supplies for the prosecution of the work, furnish the Principal with a notice that he intends to look to this bond for protection.
  - 2. Unless claimant, other than one having a direct contract with the Principal, shall within ninety (90) days after such claimant's performance of the labor or complete delivery of materials and supplies, deliver to the Principal written notice of the

performance of such labor or delivery of such material and supplies and the nonpayment therefore.

- 3. After the expiration of one (1) year from the performance of the labor or completion of delivery of the materials and supplies; it being understood, however, that if any limitation embodied in this Bond is prohibited by any law controlling the construction hereof such limitations shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
- 4. Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.
- D. The Principal and the Surety jointly and severally, shall repay the OWNER any sum which the OWNER may be compelled to pay because of any lien for labor or materials furnished for any work included in or provided by said Contract.
- E. The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration of or addition to the terms of the Contract or to the work to be performed thereunder or the Specifications applicable thereto shall in any way affect its obligations on this Bond, and the Surety hereby waives notice of any such change, extension of time, alterations of or addition to the terms of the Contract, or to the work or to the Specifications.
- F. The Surety represents and warrants to the Owner that they have a minimum Best's Key Rating Guide General Policyholder's rating of "A –" and Financial Category of "Class VIII".

IN WITNESS WHEREOF, the above bounded parties executed this instrument under their several seals, this \_\_\_\_\_ day of \_\_\_\_\_\_ 20\_\_\_\_, A.D., the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

WITNESS: (If Sole Ownership or Partnership, two (2) Witnesses required). (If Corporation, Secretary only will attest and affix seal).

PRINCIPAL:

TNESSES:	Signature of A (Affix Seal)	Authorized Officer
	Title	
	Business Add	dress
	City	State
WITNESS:	SURETY:	
	Corporate Su	irety
	Attorney-in-F (Affix Seal)	act
	Business Add	dress
	City	State
	Name of Loca	al Insurance Agency

#### CERTIFICATES AS TO CORPORATE PRINCIPAL

I, \_\_\_\_\_\_, certify that I am the Secretary of the Corporation named as Principal in the within bond; that \_\_\_\_\_\_ who signed the said bond on behalf of the Principal, was then \_\_\_\_\_\_ of said Corporation; that I know his signature, and his signature hereto is genuine; and that said bond was duly signed, sealed, and attested for and in behalf of said Corporation by authority of its governing body.

Secretary

Corporate Seal

## STATE OF SOUTH CAROLINA

COUNTY OF YORK

Before me, a Notary Public, duly commis	sioned,	qualifie	d and	acting	g, per	sonally
appearedto me	e well k	nown, w	/ho bei	ng by	me fir	st duly
sworn upon oath, says that he is the Attorney-in-Fact, f	or the					
		and	that	he	has	been
authorized by	to ex	ecute the	e foreg	oing b	ond on	behalf
of the CONTRACTOR named therein in favor of the					<u> </u>	
Subscribed and sworn to before me this day o	of			, 2	0, /	A.D.
(Attach Power of Attorney)						
		y Public of South		na-at-l	Large	

My Commission Expires:

END OF SECTION

# **CERTIFICATE OF INSURANCE** (May also use applicable Accord form)

THIS IS TO CERTIFY THAT THE				
	Insurance Company			
Address				
Of has issued policies of insurance, as de insured named below; and to certify the				
agreed that none of these policies will the York County Government (hereina after written notice of such cancellation	be cancelled or chang fter sometimes called	ed so as to affect the intention the ownER) until thirty (	erest(s) of (30) days	
Insured:				
Address:				
Status of Insured Corporation	Partnershi	p Inc	dividual	
Insured:				
Description of Work:				
INSURANCE POLICIES IN FORCE				
Forms of Coverage	Policy Number	Expiration Date		
*Worker's Comp./Employers' Liability				
**Comprehensive Auto Liability				
***Excess Liability				
Other (Please specify type)				

POLIC	Y INCLUDES COVERAGE FOR:	YES	NO
1.	Additional Insured: OWNER and ENGINEER		
2.	*Liability under the United States Longshore-men's and Harbor Workers' Compensation Act.		
3.	**All owned, hired, or nonowned automotive equipment used in connection with work done for the Owner.		
4.	Contractual Liability		
5.	Damage caused by explosion, collapse or structural injury, and damage to underground utilities.		
6.	Products/Completed Operations		
7.	Owners and Contractors Protective Liability		
8. 9.	Personal Injury Liability ***Excess Liability applies excess of: (a) Employers' Liability (b) Comprehensive General Liability (c) Comprehensive Automobile Liability		

Types of Coverage	Forms of Coverage	Minimum Limits of Liability	
Workers' Compensation	Bodily Injury	\$ 1,000,000	Statutory
Employers' Liability	Bodily Injury	\$ 500,000	Each Accident
	Disease	\$ 500,000	Each Person
	Disease	\$ 500,000	Policy Limit
Comprehensive Auto Liability	Combined Single Limit BI/PD	\$ 1,000,000	Each Accident
Comprehensive General Liability	Bodily Injury	\$ 1,000,000	Each Occurrence
		\$ 5,000,000	Aggregate

The Insurance Company hereby agrees to deliver, within ten (10) days, two (2) copies of the above policies to the Engineer when so requested.

NOTE: Entries on this certificate are limited to the Authorized Agent or Insurance Company Representative.

Date\_\_\_\_\_

(SEAL) \_\_\_\_\_ Insurance Company

Issued at

Authorized Representative

Insurance Agent or Company

- Send original and one copy to:

York County Engineering Post Office Box 148 6 South Congress Street York, South Carolina 29745

END OF SECTION

# APPLICATION FOR PAYMENT No.

Date:	Contractor:			
Project: Baxter Conv	venience Center Dr	iveway Improvements		
Project Number:		For Period	То	
Total value of work of	\$			
Total value of materi	als stored for proje	ect (see attached sheet)	\$	
		SUB TOTA	L <u>\$</u>	
		LESS%RETAINED	D <u>\$</u>	
		ΤΟΤΑ	L <u>\$</u>	
	l	ESS PREVIOUS PAYMENT	S \$	
		ges, additions, or deductions see attached sheet)	\$	
	TOTAL AMO	UNT DUE THIS PAYMEN	т <u>\$</u>	
Previous Payments				
1	4	7	10	
2	5		11	
3	6	9	12	

#### Submitted By:

I hereby certify to the best of the Contractor's knowledge, information and belief, the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, and that all amounts have been paid by the Contractor for Work which previous Applications for Payment were issued and payments received from the Owner, that current payment shown herein is now due.

Contractor:	
Signed By:	
Date:	
Notarized: (affix seal) My Commision Expires:	
Recommended By: Architect/Engineer:	Date:
Certified Amount: <u>\$</u>	

The Certified amount is payable only to the Contractor named herein. Issuance, payment, and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

Accepted By:

CHANGE ORDER NO:

PROJECT: BAXTER CONVENIENCE CENTER DRIVEWAY IMPROVEMENTS

DATE OF ISSUANCE:

DESCRIPTION OF CHANGE:

CONTRAC	T AMOUNT	CONTRACT TIME (	Calendar Days)
Original	\$ <u>0</u>	Original Durations	<u>0</u> Days
Previous Change Orde (Add/Deduct)	rs \$ <u>0</u>	Previous Change Order (Add/Deduct)	<u>0</u> Days
This Change Order (Add/Deduct)	\$ <u>0</u>	This Change Order (Add/Deduct)	<u>0</u> Days
Revised Contract Amount	\$ <u>0</u>	Revised Contract Time	<u>0</u> Days
		REVISED CONTRACT	COMPLETION DATE IS:

OWNER	CONTRACTOR	ENGINEER

# RELEASE AND WAIVER OF CLAIM BY PRIME CONTRACTOR

Know all men by these presents that the undersigned, \_\_\_\_\_\_\_of \_\_\_\_\_\_\_first being duly sworn, states that all payrolls, materials bills, sales tax, privilege tax or license, old age benefits tax, state and federal unemployment insurance, and other liabilities incurred for use in the performance of the contract for the *Baxter Convenience Center* located in York County, South Carolina have been paid in full and waives any and all claims and releases York County Government (York County, South Carolina) from any rights or claims for debts due and owing by virtue of the furnishing of any material or supplies or any lien thereon.

	(Name of Company)	
	Ву:	
	Its:	
Sworn to before me thisday of	, 20	
Notary Public for		
My Commission expires:		

#### **GENERAL CONDITIONS**

#### 1. DEFINITIONS

1.1. Whenever used in any of the Contract Documents, the following meanings shall be given to the terms herein defined:

1.1.1. *Addendum* or *Addenda* - Written or graphic instruments issued prior to the opening of Bids which clarify, correct or change the Bidding Requirements or the Contract Documents.

1.1.2. *Agreement* - The written contract between OWNER and CONTRACTOR covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.

1.1.3. *Application for Payment* - The form accepted by ENGINEER which is to be used by CONTRACTOR in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

1.1.4. *Bid* - The offer or proposal of the bidder on the prescribed Bid Form setting forth the prices for the Work to be performed.

1.1.5. *Bidder* - One who submits a Bid directly to OWNER, as distinct from sub-bidder, who submits a Bid to a Bidder.

1.1.6. *Bidding Documents* - The Invitation for Bids, Information to Bidders, the Bid Form, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

1.1.7. Bonds - Performance and Indemnity and Payment Bonds and other instruments of security.

1.1.8. *Change Order* - A document recommended by ENGINEER, which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

1.1.9. *Contract Documents* - Executed Agreement, Addenda (if any), Invitation for Bids, Information to Bidders, Signed Copy of Bid, Bid Guarantee, Statement of Bidder's Qualifications, Performance and Indemnity Bond, Payment Bond, Certification of Insurance, General Conditions, Supplemental Conditions (if any), Special Conditions (if any), Technical Specifications, and Drawings.

1.1.10. *Contract Price* - The moneys payable by OWNER for completion of the Work in accordance with the Contract Documents.

1.1.11. *Contract Times* - The numbers of days or the dates stated in the Agreement: (i) to achieve Substantial Completion, and (ii) to complete the work so that it is ready for final payment as evidenced by ENGINEER's written records.

1.1.12. *CONTRACTOR* - The person, firm, or corporation entering into Contract with the OWNER to construct and install the improvements embraced in this Contract.

1.1.13. *Defective* - An adjective which when modifying the word Work refers to Work that is unsatisfactory, faulty or deficient, in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or had been damaged prior to ENGINEER's recommendation or final payment.

1.1.14. *Drawings* - The construction drawings which graphically show the scope, extent, and character of the Work to be furnished and performed by the CONTRACTOR and which have been prepared or approved by ENGINEER and are referred to in the Contract Documents.

1.1.15. *ENGINEER* – The person, firm or corporation serving the OWNER with Engineering services, his successors, or any other person or persons, employed by said OWNER for the purpose of directing or having charge of the work embraced in this Contract.

1.1.16. *Laws and Regulations; Laws or Regulations* – Any and all applicable laws, rules, regulations, ordinances codes and orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.

1.1.17. *Liens* - Liens, charges, security interests or encumbrances upon project funds, real property or personal property.

1.1.18. Local Government - York County, South Carolina, within which the Project Areas are situated.

1.1.19. *Milestone* - A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

1.1.20. *Notice of Award* - The written notice by OWNER to the apparent successful Bidder stating that upon compliance by the apparent successful Bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the agreement.

1.1.21. *Notice to Proceed* - A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform, CONTRACTOR's obligations under the Contract Documents.

1.1.22. OWNER - The York County Government, which is authorized to undertake this Contract.

1.1.23. *Partial Utilization* - Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.

1.1.24. *Project* - The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

1.1.25. *Project Area* - The area within which are the specified limits of the improvements to be constructed in whole or in part under this Contract.

1.1.26. *Project Manual* – The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

1.1.27. *Resident Project Representative* – The authorized representative of ENGINEER who may be assigned to the Site or any part thereof.

1.1.28. *Samples* - Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

1.1.29. *Site* – Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of the CONTRACTOR.

1.1.30. *Shop Drawings* - All drawings, diagrams, illustrations, schedules and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Work.

1.1.31. *Special Conditions* - The part of the Contract Documents that amends or supplements the Technical Specifications.

1.1.32. *Subcontractor* - An individual, firm or corporation having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.

1.1.33. Substantial Completion - The Work (or specified part thereof) has progressed to the point where, in the opinion of ENGINEER as evidenced by ENGINEER's definitive certification of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended; or if no such certificate is issued, when the Work is complete and ready for final payment as evidenced by ENGINEER's written recommendation of final payment. The terms "substantially complete" and "substantially complete" as applied to all or part of the Work refer to Substantial Completion thereof.

1.1.34. *Successful Bidder* - The lowest, qualified, responsible and responsive Bidder to whom OWNER (on the basis of OWNER's evaluation as hereinafter provided) makes an award.

1.1.35. *Supplier* – A manufacturer, fabricator, supplier, distributor, material man or vendor having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any Subcontractor.

1.1.36. *Supplemental Conditions* - The part of the Contract Documents that amends or supplements these General Conditions.

1.1.37. *Technical Specifications* - The part of the Contract Documents that describes, outlines, and stipulates: the quality of materials, equipment and systems to be furnished; the quality of workmanship required; and the methods to be used in carrying out the construction work to be performed under this Contract.

1.1.38. Underground Facilities - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems, or water.

1.1.39. Unit Price Work - Work to be paid for on the basis of unit prices.

1.1.40. *Work* - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work includes and is the result of performing or furnishing and incorporating materials and equipment into the construction, and furnishing, installing and incorporating all materials and equipment into such construction, all as required by the Contract Documents..

1.2 Other technical terms not specifically defined within the Contract Documents shall have the meanings given in AIA Document "Glossary of Construction Industry Terms," current edition. Technical terms not defined as above and used to describe items of the Work, and which so applied have a well-known technical or trade meaning, shall be deemed to have such recognized meaning.

## 2. CONTRACTOR'S OBLIGATIONS

2.1. All work shall be done in strict accordance with the Contract Documents. Observations, construction reviews, tests, recommendations or approvals by the ENGINEER or persons other than the

CONTRACTOR, shall in no way relieve the CONTRACTOR of his obligations to complete all work in accordance with the Contract Documents. All work shall be done under the direct supervision of the CONTRACTOR. The CONTRACTOR shall be responsible for construction means, methods, techniques, and procedures, and for providing a safe place for the performance of the work by the CONTRACTOR, Subcontractors, suppliers, and their employees and for access, use, work, or occupancy by all authorized persons.

### 3. LANDS BY CONTRACTOR

3.1. OWNER shall furnish the Site. OWNER shall notify CONTRACTOR of any encumbrances or restrictions not of general application, but specifically related to the use of the Site with which the CONTRACTOR must comply in performing work.

3.2. Any land and access thereto not specifically shown to be furnished by the OWNER that may be required for temporary construction facilities or for storage of materials and equipment shall be provided by the CONTRACTOR with no liability to the OWNER. The CONTRACTOR shall confine his apparatus and storage to such additional areas as he may provide at his expense.

3.3. The CONTRACTOR shall not enter upon private property for any purpose without obtaining permission, and he shall be responsible for the preservation of all public property, trees, monuments, structures and improvements, along and adjacent to the street and/or right-of-way, and shall use every precaution necessary to prevent damage or injury thereto. He shall use suitable precautions to prevent damage to pipes, conduits, and other underground structures, and shall protect carefully from disturbance or damage all monuments and property marks until an authorized agent has witnessed or otherwise referenced their location and shall not remove them until directed.

### 4. SURVEYS BY CONTRACTOR

4.1. Based upon the Construction Documents and any additional information provided by the OWNER, the CONTRACTOR shall develop and make all detailed surveys necessary for construction, including working points, lines and elevations.

### 5. PUBLIC UTILITIES

5.1. The elevation and location of all public utilities shown on the Drawings were taken from existing public records. It shall be the duty of the CONTRACTOR to make final and exact determination of the location and extent of all utilities and he will be liable for any expense resulting from damage to them.

### 6. SUPERINTENDENT

6.1. A qualified superintendent, who is acceptable to the OWNER, shall be maintained on the Work and shall give efficient supervision to the Work until its completion. The superintendent shall have full authority to act in behalf of the CONTRACTOR, and all instruction given to the superintendent shall be considered as given to the CONTRACTOR. It shall be the responsibility of this CONTRACTOR's superintendent to coordinate the Work of all the Subcontractors. The superintendent shall be present on the site at all times required to perform adequate supervision and coordination.

### 7. SUBCONTRACTORS

7.1. At the time set forth in the Contract Documents or when requested by the OWNER, the CONTRACTOR shall submit in writing for review of the OWNER the names of the Subcontractors proposed for the work. Subcontractors may not be changed except at the request or with the approval of the OWNER. The CONTRACTOR is responsible to the OWNER for the acts and deficiencies of his Subcontractors, and of their direct and indirect employees, to the same extent as he is responsible for the acts and deficiencies of his employees. The Contract Documents shall not be construed as creating any

contractual relation between any Subcontractor and the OWNER. The CONTRACTOR shall bind every Subcontractor by the terms of the Contract Documents.

### 8. ASSIGNMENTS

8.1. The CONTRACTOR shall not assign the whole or any part of this Contract or any moneys due or to become due hereunder without written consent of the OWNER. In case the CONTRACTOR assigns all or any part of any moneys due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any moneys due or to become due to the CONTRACTOR shall be subject to prior claims of all persons, firms, and corporations for services rendered or materials supplied for the performance of the work called for in this Contract.

### 9. MUTUAL RESPONSIBILITY OF CONTRACTORS

9.1. If through acts of neglect on the part of the CONTRACTOR, any other CONTRACTOR or any Subcontractor shall suffer loss or damage on the work, the CONTRACTOR agrees to settle with such other CONTRACTOR or Subcontractor by agreement or arbitration if such other CONTRACTOR or Subcontractor will so settle. If such other CONTRACTOR or Subcontractor shall assert any claim against the OWNER on account of any damage alleged to have been sustained, the OWNER shall notify the CONTRACTOR, who shall indemnify and save harmless the OWNER against any such claim.

### 10. ORAL AGREEMENTS

10.1. No oral order, objection, claim or notice by any party to the others shall affect or modify any of the terms or obligations contained in any of the Contract Documents, and none of the provisions of the Contract Documents shall be held to be waived or modified by reason of any act whatsoever, other than by a definitely agreed waiver or modification thereof in writing, and no evidence shall be introduced in any proceeding of any other waiver or modification.

### 11. MATERIALS, SERVICE AND FACILITIES

11.1. It is understood that except as otherwise specifically stated in the Contract Documents, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, gas, light, power, transportation, superintendence, taxes, insurance, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.

11.2. Any work necessary to be performed after regular working hours, on Sundays or Legal Holidays, shall be performed without additional expense to the OWNER.

### 12. MATERIALS AND EQUIPMENT

The materials and equipment installed in the work shall meet the requirements of the Contract Documents and no materials or equipment shall be ordered until reviewed by the ENGINEER. The CONTRACTOR shall furnish all materials and equipment not otherwise specifically indicated or provided by the OWNER. The CONTRACTOR shall guarantee all materials and equipment he provides in accordance with Section 16 of these GENERAL CONDITIONS.

12.1. Substitutions: In order to establish standards of Quality, the ENGINEER has, in the detailed Specifications, referred to certain products by name and catalog number without consideration of possible substitute or "or equal" items. This procedure is not to be construed as eliminating from competition other products of equal or better quality by other manufacturers where fully suitable in design.

12.1.1. Whenever it is indicated in the Drawings or specified in the specifications that a substitute or "orequal" item of material or equipment may be furnished or used by the CONTRACTOR, application for such acceptance will not be considered by the ENGINEER until after the Effective Date of the agreement. The CONTRACTOR shall furnish the complete list of proposed desired substitutions, together with such engineering and catalog data as the ENGINEER may require. All proposals for substitutions shall be submitted in writing by the General Contractor and not by individual trades or material suppliers. The ENGINEER will review proposed substitutions and make his recommendations in writing within reasonable time.

12.1.2. The CONTRACTOR shall abide by the ENGINEER's recommendation when proposed substitute materials or items of equipment are not recommended for installation and shall furnish the specified material or item of equipment in such case.

12.2. Space Requirements: It shall be the responsibility of the CONTRACTOR to ensure that materials and equipment to be furnished fit the space available. He shall make necessary field measurements to ascertain space requirements, including those for connections, and shall order such sizes and shapes of equipment that the final installation shall suit the true intent and meaning of the Contract Documents.

12.3. Arrangement: Where equipment requiring different arrangement of connections from those shown is approved, it shall be the responsibility of the CONTRACTOR to install the equipment to operate properly, and in harmony with the intent of the work required by such arrangement.

12.4. Unacceptable Materials and Equipment: Materials and equipment which do not conform to the requirements of the Contract Documents, or are not equal to samples reviewed by the ENGINEER, or are in any way unsatisfactory or unsuited to the purpose for which they are intended, shall not be furnished nor installed.

12.5. Storage: Materials and equipment shall be so stored as to ensure the preservation of their quality and fitness for the work. When considered necessary, they shall be placed on wooden platforms or other hard, clean surfaces, and not on the ground and/or they shall be placed under cover. Stored materials and equipment shall be located so as to facilitate prompt inspection. Private property shall not be used for storage purposes without the written permission of the property owner or leasee. Materials, equipment, construction machinery, fuel, and oils shall not be stored or parked within the drip-line of any trees in or adjacent to the project site or additional off-site easements and right-of-ways.

12.6. Manufacturer's Directions: Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer.

### **13. INSPECTION AND TESTING OF MATERIALS**

13.1. Unless otherwise specifically provided for in the specifications, the inspection and testing of material and finished articles to be incorporated in the work at the site shall be made by bureaus, laboratories, or agencies approved by the OWNER. The cost of such inspection and testing shall be paid by the CONTRACTOR. The CONTRACTOR shall furnish evidence satisfactory to the OWNER that the material and finished articles have passed the required tests prior to the incorporation of such materials and finished articles in the work. The CONTRACTOR shall promptly segregate and remove rejected material and finished articles from the site of the work.

### 14. SAMPLES

14.1. All samples called for in the Specifications or required by the ENGINEER shall be furnished by the CONTRACTOR and shall be submitted to the ENGINEER for his review. Samples shall be furnished so as not to delay fabrication, allowing the ENGINEER reasonable time for the consideration of the samples submitted.

14.1.1. Samples for Tests: CONTRACTOR shall furnish such samples of material as may be required for examination and test. All samples of materials for tests shall be taken according to standard methods or as provided in the Contract Documents.

14.1.2. CONTRACTOR's Guaranty: All samples shall be submitted by the CONTRACTOR with a covering letter indicating that such samples are recommended by the CONTRACTOR for the service intended and that the CONTRACTOR's Guaranty will fully apply.

14.1.3. All materials, equipment and workmanship shall be in accordance with samples guaranteed by the CONTRACTOR and reviewed by the ENGINEER.

#### **15. SHOP DRAWINGS**

15.1. The CONTRACTOR shall provide shop drawings, setting schedules and such other drawings as may be necessary for the prosecution of the work in the shop and in the field as required by the Drawings, Specifications or the ENGINEER's instructions. Deviations from the Drawings and Specifications shall be called to the attention of the ENGINEER at the time of the first submission of shop drawings and other drawings for consideration. The ENGINEER's review of any drawings shall not release the CONTRACTOR from responsibility for such deviations. Shop drawings shall be submitted according to a schedule prepared jointly by the CONTRACTOR and the ENGINEER.

15.1.1. CONTRACTOR's Certification: When submitted for the ENGINEER's review, shop drawings shall bear the CONTRACTOR's certification that he has reviewed, checked and approved the shop drawings, that they are in harmony with the requirements of the Project and with the provisions of the Contract Documents, and that he has verified all field measurements and construction criteria, materials, catalog numbers and similar data. CONTRACTOR shall also certify that the work represented by the shop drawings is recommended by the CONTRACTOR and the CONTRACTOR's Guaranty will fully apply.

#### 16. GUARANTY

16.1. The CONTRACTOR shall guarantee all materials and equipment furnished and work performed for a period of two years from the date of final payment of the work.

16.1.1. The Performance and Indemnity Bond shall remain in full force and effect during the guaranty period.

16.1.2. Correction of faulty work after final payment shall be as provided in Paragraph 41.

### **17. INSURANCE**

17.1. The CONTRACTOR shall not commence any work until he obtains, at his own expense, all required insurance. Such insurance must have the approval of the OWNER as to the limit, form, and amount. The CONTRACTOR will not permit any Subcontractor to commence work on this project until such Subcontractor has complied with the same insurance requirements.

Types: The types of insurance the CONTRACTOR is required to obtain and maintain for the full period of the Contract will be: Workmen's Compensation Insurance, Automobile and Comprehensive General Liability Insurance as detailed in the following portions of this specification.

17.1.2. Evidence: As evidence of specified insurance coverage, the OWNER may, in lieu of actual policies, accept certificates issued by the insurance carrier showing such policies in force for the specified period. Each policy or certificate will bear an endorsement or statement waiving right of cancellation or reduction in coverage within ten days' notice in writing to be delivered by registered mail to the OWNER. Should any policy be cancelled before final payment by the OWNER to the CONTRACTOR and the CONTRACTOR fails immediately to procure other insurance as specified, the OWNER reserves the right to procure such insurance and to deduct the cost thereof from any sum due the CONTRACTOR under this Contract.

17.1.3. Adequacy of Performance: Any insurance bearing on adequacy of performance shall be maintained after completion of the project for the full guaranty period. Should such insurance be cancelled before the end of the guaranty period and the CONTRACTOR fails immediately to procure other insurance as specified, the OWNER reserves the right to procure such insurance and to charge the cost thereof to the CONTRACTOR.

17.1.4. Payment of Damages: Nothing contained in these insurance requirements is to be construed as limiting the extent of the CONTRACTOR's responsibility for payment of damages resulting from his operations under this Contract.

### 18. WORKMEN'S COMPENSATION INSURANCE

18.1. Before the Agreement between the OWNER and the CONTRACTOR is entered into, the CONTRACTOR shall submit written evidence that he and all Subcontractors have obtained, for the period of the Contract, full Workman's Compensation Insurance coverage for all persons whom they employ or may employ in carrying out the work under this Contract. This insurance shall be in strict accordance with the requirements and statutory limits of the most current and applicable South Carolina Workman's Compensation Insurance Laws.

#### 19. COMPREHENSIVE GENERAL LIABILITY AND AUTOMOBILE INSURANCE

19.1. Before commencement of the work, the CONTRACTOR shall submit written evidence that he and all his Subcontractors have obtained for the period of the Contract, full Comprehensive General Liability Insurance and automobile coverage. This coverage shall provide for both bodily injury and property damage.

19.1.1. Comprehensive General Liability Insurance shall include coverage for bodily injury, sickness or disease, death, or property damage arising directly or indirectly out of or in connection with the performance of work under this Contract, and shall provide for a combined single limit of not less than one million (\$1,000,000) dollars for all damages arising out of bodily injury, sickness or disease, death, or property damage for each occurrence.

19.1.2. Automobile insurance shall include coverage for bodily injury and property damage arising directly or indirectly out of or in connection with the performance of work under this Contract, and shall provide for a combined single limit of not less than one million (\$1,000,000) dollars for all damages arising out of bodily injury or property damage for each occurrence.

19.1.3. Indemnity: Included in such insurance will be contractual coverage sufficiently broad to insure the provisions of Paragraph 20.

#### 20. INDEMNITY

20.1. The CONTRACTOR shall hold harmless, indemnify and defend the OWNER, it's successors and assigns, the ENGINEER, their consultants, and each of their officers and employees and agents, from any and all liability claims, losses or damage arising or alleged to arise from the performance of the work described herein, but not including the sole negligence of the OWNER or the ENGINEER.

#### 21. PATENTS AND ROYALTIES

21.1. If any design, device, material or process covered by letters, patent or copyright is used by the CONTRACTOR, he shall provide for such use by legal agreement with the OWNER of the patent or a duly authorized licensee of such OWNER, and shall save harmless the OWNER, and the ENGINEER, from any and all loss or expense on account thereof, including its use by the OWNER.

#### 22. PERMITS

22.1. All permits and licenses necessary for the prosecution of the work shall be secured and paid for by the CONTRACTOR. This shall include all Business Licenses required by the Local Government.

#### 23. LAWS TO BE OBSERVED

23.1. The CONTRACTOR shall give all notices and comply with all Federal, State and local laws, ordinances and regulations in any manner affecting the conduct of the work, and all such orders and decrees as exist, or may be enacted by bodies or tribunals having any jurisdiction or authority over the work, and shall indemnify and save harmless the OWNER its successors and assigns, the ENGINEER, their consultants, and each of their officers and employees and agents against any claim or liability arising from, or based on, the violation of any such law, ordinance, regulation, order or decree, whether by himself or his employees.

#### 24. WARNING SIGNS AND BARRICADES

24.1. The CONTRACTOR shall provide adequate signs, barricades, and watchmen and take all necessary precautions for the protection of the work and the safety of the public.

#### 25. PUBLIC CONVENIENCE

25.1. The CONTRACTOR shall at all times so conduct his work as to ensure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the work, and to ensure the protection of persons and property. No road or street shall be closed to the public except with permission of the proper authorities. Fire hydrants on or adjacent to the work shall be kept accessible to fire-fighting equipment at all times. Temporary provisions shall be made by the CONTRACTOR to ensure the use of sidewalks and the proper functioning of all gutters, sewer inlets, drainage ditches, and irrigation ditches, which shall not be obstructed.

#### 26. SAFETY

26.1. The CONTRACTOR shall be solely and completely responsible for the conditions of the job site, including safety of all persons and property affected directly or indirectly by his operation during the performance of the work. This requirement will not be limited to normal working hours but will apply continuously 24 hours per day until written acceptance of the work by the OWNER and shall not be limited to normal working hours.

26.2. The ENGINEER's construction reviews of the CONTRACTOR's performance is not intended to include review of the adequacy of the CONTRACTOR's safety measures in, on, or near the construction site.

#### 27. NOTICE TO PROCEED

27.1. Following the execution of the Contract by the OWNER and the CONTRACTOR, written Notice to Proceed with the work shall be given by the OWNER to the CONTRACTOR. The CONTRACTOR shall begin and shall prosecute the work regularly and uninterruptedly thereafter (except as provided for herein) with such force as to secure the completion of the work within the Contract Time.

### 28. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

28.1. It is hereby understood and mutually agreed, by and between the CONTRACTOR and the OWNER, that the date of beginning and the time for completion as specified in the Contract of the work to be done hereunder are ESSENTIAL CONDITIONS of this Contract; and it is further mutually understood and agreed that the work embraced in this Contract shall be commenced on a date to be specified in the Notice to Proceed.

28.2. The CONTRACTOR agrees that said work shall proceed regularly, diligently, and uninterruptedly at such rate of progress as will ensure full completion thereof within the time specified. It is expressly understood and agreed, by and between the CONTRACTOR and the OWNER, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

28.3. If said CONTRACTOR shall neglect, fail, or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the OWNER, then the CONTRACTOR does hereby agree, as a part consideration for the awarding of this Contract, to pay to the OWNER the amount specified in the Contract, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the CONTRACTOR shall be in default after the time stipulated in the Contract for completing the work.

28.4. The said amount is fixed and agreed upon by and between the CONTRACTOR and the OWNER because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the OWNER would in such event sustain, and said amount is agreed to be the amount of damages which the OWNER would sustain and said amount shall be retained from time to time by the OWNER from current periodical estimates.

28.5. It is further agreed that time is of the essence of each and every portion of this Contract and of the Specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the Contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this Contract. PROVIDED, that the CONTRACTOR shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due to the following:

28.5.1. Any preference, priority or allocation order duly issued by the Federal or State Government.

28.5.2. Unforeseeable cause beyond the control and without the fault or negligence of the CONTRACTOR, including, but not restricted to, acts of God, or of the public enemy, acts of the OWNER, acts of another CONTRACTOR in the performance of a contract with the OWNER, fires, flood, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather; and

28.5.3. Any delays of Subcontractors or suppliers occasioned by any of the causes specified in subsection 28.5.1. and 28.5.2. of this article:

PROVIDED, FURTHER, that the CONTRACTOR shall, within 10 days from the beginning of such delay, unless the OWNER shall grant a further period of time prior to the date of final settlement of the contract, notify the OWNER, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify the CONTRACTOR within a reasonable time of its decision in the matter, and grant such extension of time as the OWNER shall deem equitable and just.

### 29. CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

29.1. Immediately after execution and delivery of the contract, and before the first partial payment is made, the CONTRACTOR shall deliver to the OWNER an estimated construction progress schedule in a form satisfactory to the OWNER, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents.

### 30. EXTENSION OF CONTRACT TIME

30.1. A delay beyond the CONTRACTOR's control occasioned by an Act of God, by act or omission on the part of the OWNER or by strikes, lockouts, fire, etc., may entitle the CONTRACTOR to any extension of time in which to complete the work as agreed by the OWNER, provided, however, that the CONTRACTOR shall immediately give written notice to the OWNER of the cause of such delay.

30.2. Act of God shall mean an earthquake, flood, cyclone, or other cataclysmic phenomenon. Storms of normal intensity for the locality shall not be construed as an Act of God and no reparation shall be made to the CONTRACTOR for damages to the work resulting there from.

### 31. EXTRA WORK

31.1. New and unforeseen items of work found to be necessary, and which cannot be covered by any item or combination of items for which there is a Contract price, shall be classed as Extra Work. It shall be the responsibility of the CONTRACTOR to identify necessary work items classed as Extra Work and for which no previous contract price has been arranged and advise the ENGINEER and the OWNER of the need for the aforesaid necessary Extra Work. The CONTRACTOR shall do such Extra Work and furnish such materials as may be required for the proper completion or construction of the whole work contemplated, upon written order from the OWNER as approved by the ENGINEER. In the absence of such written order, no claim for Extra Work shall be considered.

31.2. Extra Work shall be performed in accordance with these Contract Documents where applicable and work not covered by such shall be done in accordance with the best construction practice and in a workmanlike manner.

31.3. Extra Work required in an emergency to protect life and property shall be performed by the CONTRACTOR as required.

### 32. CLEANING UP

32.1. The CONTRACTOR shall at all times, keep the premises clean and shall remove from the OWNER's property, and from all public and private property, temporary structures, rubbish, waste materials resulting from his operation or caused by his employees, and all surplus materials, leaving the site smooth, clean and true to line and grade and in the same condition as existed prior to the work performed by the CONTRACTOR or his Subcontractors and as approved by the OWNER. Failure to maintain a clean project site or to complete clean-up of the project site at the completion of the work shall be cause for the OWNER to perform the necessary clean-up and the costs thereof shall be charged to the CONTRACTOR.

### 33. REQUEST FOR PAYMENT

33.1. The CONTRACTOR may submit to the OWNER periodically, but not more than once each month, a Request for Payment for work done and materials delivered to and stored on the site. The CONTRACTOR shall furnish the OWNER all reasonable information required for obtaining the necessary data relative to the progress and execution of the work. Payment for materials stored on the site will be conditioned upon evidence submitted to establish the OWNER's title to such materials. Each Request for Payment shall be computed on the basis of work completed on all items listed in the Detailed Breakdown of Contract (or on unit prices, as the case may be), less 10 percent to be retained until final completion and acceptance of the work and less previous payments.

### 34. ENGINEER'S ACTION ON REQUEST FOR PAYMENT

34.1. All CONTRACTOR's Requests for Payment shall be referred to the ENGINEER for his review and, within a reasonable period, the ENGINEER shall:

34.1.1. Recommend payment by the OWNER of the Request for Payment as submitted.

34.1.2. Recommend payment by the OWNER of such other amount as the ENGINEER shall consider as due the CONTRACTOR, informing the OWNER and the CONTRACTOR in writing of his reasons for recommending the amended amount.

34.1.3. Recommend to the OWNER that payment of the Request for Payment be withheld, informing the CONTRACTOR and the OWNER in writing of his reasons, for so recommending.

35. OWNER'S ACTION ON REQUEST FOR PAYMENT

35.1. Within thirty days after receipt of a Request for Payment from the CONTRACTOR, the OWNER shall:

35.1.1. Pay the Request for Payment as recommended by the ENGINEER.

35.1.2. Pay such other amount, in accordance with Paragraph 36, as he shall decide is due the CONTRACTOR, informing the CONTRACTOR and the ENGINEER in writing of this reasons for paying the amended amount.

35.1.3. Withhold payment in accordance with Paragraph 36, informing the CONTRACTOR and the ENGINEER of his reasons for withholding payment.

36. OWNER'S RIGHT TO WITHHOLD PAYMENT OF A REQUEST FOR PAYMENT

36.1. The OWNER may withhold payment, in whole or in part, of a Request for Payment to the extent necessary to protect himself from loss on account of any of the following:

36.1.1. Defective work.

36.1.2. Evidence indicating the probable filing of claims by other parties against the CONTRACTOR that may adversely affect the OWNER.

36.1.3. Failure of the CONTRACTOR to make payments due to Subcontractors, material suppliers, or employees.

36.1.4. Damage to another CONTRACTOR.

**37. PAYMENT FOR EXTRA WORK** 

37.1. Written notice of claims for payment for Extra Work shall be given by the CONTRACTOR within ten days after receipt of instructions from the OWNER to proceed with the Extra Work and also before any work is commenced, except in emergency endangering life or property. No claim shall be valid unless so made. In all cases, the CONTRACTOR's itemized estimate sheets showing all labor and material shall be submitted to the OWNER. The OWNER's order for Extra Work shall specify any extension of the Contract Time and one of the following methods of payment:

37.1.1. Unit prices or combination of unit prices which formed the basis of the original Contract.

37.1.2. A lump sum based on the CONTRACTOR's estimate and accepted by the OWNER.

37.1.3. Actual cost plus 15 percent for overhead and profit. Actual costs are defined as follows:

37.1.3.1. Labor costs, including time of foreman while engaged directly upon extra work.

37.1.3.2. Labor insurance and taxes.

37.1.3.3. Materials and supplies actually used on the work.

37.1.3.4. Associated General Contractors of America standard rental rates on each piece of equipment having a value in excess of \$50.00. Equipment and tools of lesser value are considered "small tools" and, as such, are considered to be part of overhead.

### 38. ACCEPTANCE AND FINAL PAYMENT

38.1. When the CONTRACTOR has completed the work in accordance with the terms of the Contract Documents, he shall certify completion of the work to the OWNER and submit a final Request for Payment, which shall be the Contract Amount plus all approved additions, less all approved deductions and less previous payments made. The CONTRACTOR shall furnish evidence that he has fully paid all debts for labor, materials, and equipment incurred in connection with the work, and upon acceptance by the OWNER, the OWNER will release the CONTRACTOR except as to the conditions of the Performance and Indemnity Bond and the Labor and Material Payment Bond, any legal rights of the OWNER, required guaranties, and Correction of Faulty Work after Final Payment, and will pay the CONTRACTOR's final Request of Payment. The CONTRACTOR shall allow sufficient time between the time of completion of the work and approval of the final Request for Payment for the ENGINEER to assemble and check the necessary data.

38.1.1. Release of Liens: The CONTRACTOR shall deliver to the OWNER a complete release of all liens arising out of this Contract before the retained percentage or before the final Request for Payment is paid. If any liens remains unsatisfied after all payments are made, the CONTRACTOR shall refund to the OWNER such amounts as the OWNER may have been compelled to pay in discharging such liens including all costs and a reasonable attorney's fees.

39. OWNER'S RIGHT TO TERMINATE AGREEMENT

39.1. The OWNER shall have the right to terminate his agreement with the CONTRACTOR after giving ten days' written notice of termination to the CONTRACTOR in the event of any default by the CONTRACTOR.

39.1.1 Default by CONTRACTOR: It shall be considered a default by the CONTRACTOR whenever he shall:

39.1.1.1. Declare bankruptcy, become insolvent, or assign his assets for the benefit of his creditors.

39.1.1.2. Disregard or violate provisions of the Contract Documents or fail to prosecute the work according to the agreed Schedule of Completion, including extensions thereof.

39.1.1.3. Fail to provide a qualified superintendent, competent workmen or Subcontractors, or proper materials, or fail to make prompt payment thereof.

39.1.2. Completion by the OWNER: In the event of termination of the Agreement by the OWNER because of default by the CONTRACTOR, the OWNER may take possession of the work and of all materials and equipment thereon and may finish the work by whatever method and means he may select.

### 40. TERMINATION OF CONTRACTOR'S RESPONSIBILITY

40.1. The Contract will be considered complete when all work has been finished and the project accepted in writing by the OWNER. The CONTRACTOR's responsibility shall then cease, except as set forth in his Performance and Indemnity Bond, as provided in Paragraph 16, Guaranty, and as provided in Paragraph 41, Correction of Faulty Work After Final Payment.

41 CORRECTION OF FAULTY WORK AFTER FINAL PAYMENT

41.1. The making of the final payment by the OWNER to the CONTRACTOR shall not relieve the CONTRACTOR of responsibility for faulty materials or workmanship. The CONTRACTOR shall promptly replace any such defects, as determined by the ENGINEER, discovered within two years from the date of final payment of the work.

### 42. INSPECTION

42.1. The authorized representatives of the ENGINEER and OWNER shall be permitted to inspect all materials, workmanship, and other relevant project records and data. Materials and workmanship will be subject to the approval of the OWNER and/or his representative.

### 43. CORRECTION OF WORK

43.1. All work, all materials, whether incorporated in the work or not, all processes of manufacture, and all methods of construction shall be, at all times and places, subject to the inspection of the ENGINEER who shall be the final judge of the quality and suitability of the work, materials, process of manufacturer, and methods of construction for the purposes for which they are used. Should they fail to meet his approval, they shall be forthwith reconstructed, made good, replaced and/or corrected, as the case may be, by the CONTRACTOR at his own expense. Rejected material shall immediately be removed from the site. If, in the opinion of the ENGINEER, it is undesirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the Contract hereunder shall be reduced by such amount as in the judgment of the ENGINEER shall be equitable.

### 44. SUBSURFACE CONDITIONS FOUND DIFFERENT

44.1. Should the CONTRACTOR encounter subsurface and/or latent conditions at the site materially differing from those shown on the Plans or indicated in the Specifications, he shall immediately give notice to the ENGINEER of such conditions before they are disturbed. The ENGINEER will thereupon promptly investigate the conditions, and if he finds and so determines that they materially differ from those shown on the Plans or indicated in the Specifications, he will at once make such changes in the Plans and/or Specifications, as he may find necessary. Any increase or decrease of cost resulting from such changes are to be adjusted in the manner provided in Paragraph 37 of the General Conditions.

### 45. CONTRACT SECURITY

45.1. The CONTRACTOR shall furnish a Performance Indemnity Bond and Payment Bond (forms attached) in an amount at least equal to 100% of the contract prices as security for the faithful performance of this Contract, as the security for the payment of all persons performing labor on the project under this Contract, and furnishing materials in connection with this Contract. The Performance and Indemnity Bond and the Payment Bond may be in one or in separate instruments in accordance with local law. Before final acceptance, each bond must be approved by the OWNER.

### 46. DISPUTE RESOLUTION

46.1 OWNER and CONTRACTOR agree to negotiate all disputes between them in good faith prior to exercising their rights under law.

46.2 Any claim, dispute or other matter in question arising from or related to this Agreement or the performance or breach thereof, which cannot be resolved through direct discussions between parties shall be subject to mediation as a condition precedent to the institution of legal or equitable proceedings by either party, and only after both parties have completed the mediation process.

46.3 Through mediation, CONTRACTOR and OWNER shall endeavor to resolve claims, disputes, or other matters in question between them by mediation in an informal process in which a third-party

mediator facilitates discussion between the parties. The parties may designate a mediator mutually agreeable to both CONTRACTOR and OWNER to conduct the mediation. If the parties are unable to agree upon a mediator, mediation shall be conducted in accordance with the mediation provision of the South Carolina Circuit Court Alternative Dispute Resolution Rules. The mediation shall be conducted in York County, South Carolina. A request for mediation shall be filed in writing with the other party to this Agreement, and legal or equitable proceedings shall be stayed pending mediation for a period of sixty (60) days from the date of the request for mediation is filed, unless stayed for a longer period of time by agreement of the parties or court order. The cost of a third-party mediator will be shared equally by the parties.

46.4 If the parties reach an agreement during the mediation process, they shall reduce the agreement to writing and sign it with their attorneys, if any. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

46.5 In any action or proceedings to enforce or interpret any provision of this Agreement, or where any provision herein is validity asserted as a defense, each Party shall bear its own attorney fees, costs, and expenses.

END OF SECTION

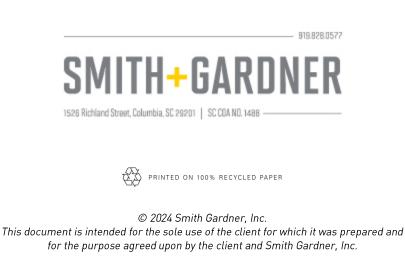
# **General Specifications**

York County – Baxter Convenience Center Driveway Improvements

Prepared for:

York County Department of Public Works York, South Carolina

December 2024



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# Baxter Convenience Center Driveway Improvements

# **General Specifications**

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# SECTION 01010

# SUMMARY OF WORK

# A. <u>Scope of Work</u>

1. The work to be done under this Contract and in accordance with these Specifications consists of furnishing all equipment, superintendence, labor, skill, material and all other items necessary for the construction of the Project.

The Contractor shall perform all work required for such construction in accordance with the Contract Documents and subject to the terms and conditions of the Contract, complete and ready for use.

2. The principal features of the work to be performed under this Contract include:

Improvements at the Baxter Convenience Center consist of improvements at the public entrance as well as the truck entrance to the facility. At the public entrance to the facility improvements generally consist of the addition of a right turn lane off of SC-160 into the Convenience center, addition of concrete island, concrete sidewalk, curb and gutter, crosswalk, gate and widening the right lane out of the convenience center and associated striping and signage. At the truck entrance to the facility the improvements generally consist of realignment of the existing driveway, realigning concrete sidewalk, addition of crosswalk, curb and gutter, gate and associated striping and signage. All fencing fronting SC160 is to be replaced as part of this project as well as clearing along SC160 as indicated on the construction plans. An alternative is included in the bid for replacing all perimeter fencing at the site.

The foregoing description(s) are general and shall not be construed as a complete description of all work required.

# B. <u>Contract Drawings</u>

The work to be done is shown on the set of Contract Drawings entitled "Baxter Convenience Center Driveway Improvements" sealed November 2024.

# C. <u>General Arrangement</u>

1. The Contract Drawings indicate the extent and general arrangement of the work. If any departures from the Contract Drawings are deemed necessary by the Contractor to accommodate the materials and equipment they propose to furnish, details of such departures and reasons therefore shall be submitted as soon as practicable to the Engineer for approval. No such departures shall be made without the prior written approval of the Engineer. Approved changes shall be made without additional cost to the Owner for this work.

- 2. The specific equipment proposed for use by the Contractor on the Project may require changes in other work to provide a complete satisfactory operating installation. The Contractor shall submit to the Engineer, for approval, all necessary drawings and details showing such changes to verify conformance with the overall Project requirements and overall Project operating performance. The Bid Price shall include all costs in connection with the preparation of new drawings and details and all changes to construction work to accommodate the proposed materials and equipment.
- 3. The following materials will be supplied by the Owner:
  - a. None

### D. <u>Construction Permits, Easements, and Encroachments</u>

- 1. The Owner shall obtain or cause to be obtained all permanent and temporary construction easements as shown on the Contract Drawings. The Contractor shall verify that these agreements have been obtained and shall comply with the conditions set forth in each agreement.
- 2. The Contractor shall obtain, keep current, and pay all fees for any necessary construction permits from those authorities, agencies, or municipalities having jurisdiction over land areas, utilities, or structures which are located within the Contract limits and which will be occupied, encountered, used, or temporarily interrupted by the Contractor's operations unless otherwise stated. Record copies of all permits shall be furnished to the Engineer.
- 3. When construction permits are accompanied by regulations or requirements issued by a particular authority, agency, or municipality, it shall be the Contractor's responsibility to familiarize himself and comply with such regulations or requirements as they apply to their operations on this Project.
- 4. The Contractor is responsible for all transportation permits required for performance of this Contract.

### E. <u>Time of Work</u>

1. The normal time of work for this Contract shall generally be unrestricted. No lane closures will be allowed from 7 a.m to 6 p.m Monday through Friday. All lane closures will need to be at night or on weekends. Additionally, no work shall be performed on the following legal holidays should they occur during the Contract Time:

1. New Year's Day	5. Independence Day
2. Martin Luther King, Jr. Day	6. Labor Day
3. Good Friday	7. Thanksgiving (2 Days)
4. Memorial Day	8. Christmas (2 Days)

When a holiday falls on a Sunday, the holiday shall be observed on the following Monday.

Note that during periods of short daylight, the Contractor is required to provide ample temporary lighting as described in the following paragraph.

- 2. If it shall become imperative to perform work at night, the Owner and Engineer shall be informed a reasonable time in advance of the beginning of such work. Temporary lighting and all other necessary facilities for performing and inspecting the work shall be provided, maintained, and paid for by the Contractor at no additional cost to the Owner. The Contractor shall take all necessary steps and precautions to ensure a safe workplace for night work including compliance with all applicable statutes, ordinances, rules, and regulations.
- 3. Unless otherwise specifically permitted, all work that would be subject to damage shall be stopped during inclement, stormy, or freezing weather. Only such work as will not suffer injury to workmanship or materials will be permitted. The Contractor shall carefully protect their work against damage or injury from the weather, and when work is permitted during freezing weather, they shall provide and maintain approved facilities for heating the materials and for protecting the partially completed and finished work.

# F. <u>Surveys and Layout</u>

- 1. All work under this Contract shall be constructed in accordance with the lines and grades shown on the Contract Drawings or as directed by the Engineer. Elevations of existing ground and appurtenances shown on the Contract Drawings are believed to be reasonably correct but are not guaranteed to be absolute and therefore are presented only as an approximation. Any error or apparent discrepancy in the data shown or omissions of data required for accurately accomplishing the stake out survey shall be referred immediately to the Engineer for interpretation or correction.
- 2. All survey work for construction control purposes shall be made by the Contractor at their expense. The Contractor shall provide a competently qualified survey party under the supervision of a Registered Land Surveyor, all necessary instruments, stakes, and other material to perform the work. Benchmarks in relatively close proximity to the work will be provided by the Owner for horizontal/vertical control.
- 3. The Contractor shall establish all baselines for the location of the principal component parts of the work together with a suitable number of bench marks and batter boards adjacent to the work. Based upon the information provided by the Contract Drawings, the Contractor shall develop and make all detail surveys necessary for construction, including slope stakes, batter boards, stakes for all working points, lines, and elevations.
- 4. The Contractor shall have the responsibility to carefully preserve the bench marks, reference points, and stakes, and in the case of destruction thereof by the Contractor or resulting from their negligence, the Contractor shall be charged with the expense and damage resulting therefrom and shall be responsible for any mistakes that may be caused by the unnecessary loss or disturbance of such bench marks, reference points, and stakes.

- 5. Existing or new control points, property markers, and monuments that will be or are destroyed during the normal causes of construction shall be reestablished by the Contractor at no cost to the Owner and all reference ties recorded therefore shall be furnished to the Engineer. All computations necessary to establish the exact position of the work shall be made and preserved by the Contractor.
- 6. The Engineer may check all or any portion of the work and the Contractor shall afford all necessary assistance and adequate time to the Engineer in carrying out such checks. Any necessary corrections to the work shall be immediately made by the Contractor. Such checking by the Engineer shall not relieve the Contractor of any responsibilities for the accuracy or completeness of their work.

### 7. <u>GPS-Based Grading Systems:</u>

If any global positioning system (GPS) based computer equipment is to be used in the grading of the site, the Contractor shall submit the digital data, GPS build file, or model surface in an AutoCAD compatible format to the Engineer for approval prior to construction.

### 8. <u>Record (As-Built) Drawings:</u>

For this project, the Contractor shall prepare and furnish one (1) reproducible and one (1) digital sets of the following Record (As-Built) Drawings prepared by a SC Licensed Land Surveyor to the Engineer:

- a. Limits of all pavement and aggregate surfacing and fencing; and
- b. Finish grades for all work within the Contract Limits.

The Record Drawings shall indicate all critical locations/elevations of structures, earthwork, piping, roads, utilities, existing benchmarks, etc. Refer to the individual sections of these Specifications (where applicable) for additional requirements of each drawing.

The scale, level of detail, and format of the Record Drawings must be to the satisfaction of and approval by the Engineer. The digital drawings shall be readable by AutoCAD Version 2010 or later in the \*.DWG or \*.DXF format. Topographical maps shall be drawn at full scale in 3-dimensional polylines with X, Y, and Z labeled accurately for each. The layering system shall have descriptive names easily discernible as to the content of the drawing or a layer code sheet shall be provided explaining the layering system. The drawings shall be produced in a fashion that conforms with industry computer aided drafting standards.

### 10. <u>Tolerances:</u>

For this project, the maximum allowable deviation from the lines and grades, as shown on the Contract Drawings, are shown in the following table.

Survey Item	Tolerance
Horizontal Location:	<u>+</u> 1.0 Feet
Elevation:	<u>+</u> 0.15 Feet
Slopes (vertical/horizontal x 100):	<u>+</u> 0.50 %

## G. <u>Coordination</u>

- 1. The Contractor shall allow the Owner or their agents, and other Project Contractors or their agents, to enter upon the work for the purpose of constructing, operating, maintaining, removing, repairing, altering, or replacing such pipes, sewers, conduits, manholes, wires, poles, or other structures and appliances which may be required to be installed at or in the work. The Contractor shall cooperate with all aforesaid parties and shall allow reasonable provisions for the prosecution of any other work by the Owner, or others, to be done in connection with their work, or in connection with normal use of the facilities.
- 2. Each Contractor shall cooperate fully with the Owner, the Engineer, and all other Contractors employed on the work, to effect proper coordination and progress to complete the Project on schedule and in proper sequence. Insofar as possible, decisions of all kinds required from the Engineer shall be anticipated by the Contractor to provide ample time for inspection, or the preparation of instructions.
- 3. Each Contractor shall assume full responsibility for the coordination of all parts of their work with that of other Contractors. Each Contractor's Superintendent shall coordinate all work with other Contractors in the laying out of work. Each Contractor shall lay out their own work in accordance with the Contract Drawings, Specifications, and instructions of latest issue and with due regard to the work of other Contractors.
- 4. Periodic coordinating meetings shall be held per Section 01200, Project Meetings, of these Specifications

# H. <u>Additional Engineering Services</u>

1. In the event that the Engineer is required to provide additional engineering services as a result of substitution of materials or equipment which are not "or equal" by the Contractor, or changes by the Contractor in dimension, weight, etc., of the equipment and accessories furnished, or if the Engineer is required to examine and evaluate any changes proposed by the Contractor for the convenience of the Contractor, then the Engineer's charges in connection with such additional services shall be charged to the Contractor by the Owner.

2. In the event that the Engineer is required to provide additional engineering services as a result of Contractor's errors, omissions, or failure to conform to the requirements of the Contract Documents, or if the Engineer is required to examine and evaluate any changes proposed by the Contractor solely for the convenience of the Contractor, then the Engineer's charges in connection with such additional services shall be charged to the Contractor by the Owner.

# I. Additional Owner's Expenses

- 1. In the event the work of this Contract is not completed within the time set forth in the Contract or within the time to which such completion may have been extended in accordance with the Contract Documents, the additional engineering or inspection charges incurred by the Owner may be charged to the Contractor and deducted from the monies due them. Extra work or supplemental Contract work added to the original Contract, as well as extenuating circumstances beyond the control of the Contractor, will be given due consideration by the Owner before assessing engineering and inspection charges against the Contractor.
- 2. Charges assessed to the Contractor for additional engineering and inspection costs will be determined based on actual hours charged to the job by the Engineer. Daily rates will depend on the number and classifications of employees involved, but in no case shall such charges exceed \$500 per day for engineering personnel, travel time and expenses, and any other direct reimbursable items, based on an eight hour workday.
- 3. Charges for additional Owner's expenses shall be in addition to any liquidated damages assessed in accordance with the Contract.

### J. <u>Subsurface Data (Where Applicable)</u>

- 1. Subsurface data are offered in good faith solely for placing the Bidder in receipt of all information available to the Owner and Engineer and in no event is to be considered as part of the Contract Documents.
- 2. The Bidder must interpret such subsurface data according to their own judgment and acknowledge that they are not relying upon the same as accurately describing the subsurface conditions, which may be found to exist.

The test boring logs present factual information of the subsurface conditions at the specific test boring location only. The Bidder should not consider, or conclude, that the subsurface conditions will be consistent between test boring locations.

2. The Bidder further acknowledges that they assume all risks contingent upon the nature of the subsurface conditions to be actually encountered by them in performing the work covered by the Contract, even though such actual conditions may result in the Bidder performing more or less work than they originally anticipated.

# K. <u>Protection of Property</u>

- 1. The Contractor shall be responsible for the preservation and protection of property adjacent to and within the work site against damage or injury as a result of their operations under this Contract. Any damage or injury occurring on account of any act, omission, or neglect on the part of the Contractor shall be restored in a proper and satisfactory manner or replaced by and at the sole expense of the Contractor to an equal or superior condition than previously existed.
- 2. The Contractor shall comply promptly with such safety regulations as may be prescribed by the Owner or the local authorities having jurisdiction and shall, when so directed, properly correct any unsafe conditions created by, or unsafe practices on the part of, their employees. In the event of the Contractor's failure to comply, the Owner may take the necessary measures to correct the conditions or practices complained of, and all costs thereof will be deducted from any monies due the Contractor. Failure of the Engineer to direct the correction of unsafe conditions or practices shall not relieve the Contractor of their responsibility hereunder.
- 3. In the event of any claims for damage or alleged damage to property as a result of work under this Contract, the Contractor shall be responsible for all costs in connection with the settlement of or defense against such claims. Prior to commencement of work in the vicinity of property adjacent to the work site, the Contractor, at their own expense, shall take such surveys as may be necessary to establish the existing condition of the property. Before final payment can be made, the Contractor shall furnish satisfactory evidence that all claims for damage have been legally settled or sufficient funds to cover such claims have been placed in escrow, or that an adequate bond to cover such claims has been obtained.

# L. <u>Fire Protection</u>

- 1. The Contractor shall take all necessary precautions to prevent fires at or adjacent to the work, buildings, etc., and shall provide adequate facilities for extinguishing fires which do occur.
- 2. When fire or explosion hazards are created in the vicinity of the work as a result of the locations of fuel tanks, or similar hazardous utilities or devices, the Contractor shall immediately alert the local Fire Marshal, the Engineer, and the Owner of such tank or device. The Contractor shall exercise all safety precautions and shall comply with all instructions issued by the Fire Marshal and shall cooperate with the Owner of the tank or device to prevent the occurrence of fire or explosion.

# M. <u>Chemicals</u>

All chemicals used during Project construction or furnished for Project operation, whether herbicide, pesticide, disinfectant, polymer, or reactant of other classification, must show approval of either the EPA or USDA. Use of all such chemicals and disposal of residues shall be in strict conformance with all applicable Federal, State, and/or local rules and regulations. Material safety data sheets (MSDS) shall be submitted as requested by the Owner.

# N. Existing Utilities and Structures

- 1. The term existing utilities shall be deemed to refer to both publicly and privately-owned utilities such as electric power and lighting, telephone, water, gas, storm drains, process lines, sanitary sewers, leachate piping, landfill gas (LFG) piping and wells, and all appurtenant structures.
- 2. Where existing utilities and structures are indicated on the Contract Drawings, it shall be understood that all of the existing utilities and structures affecting the work may not be shown and that the locations of those shown are approximate only. It shall be the responsibility of the Contractor to ascertain the actual extent and exact location of existing utilities and structures. In every instance, the Contractor shall notify the proper authority having jurisdiction and obtain all necessary directions and approvals before performing any work within the Contract limits.
- 3. Prior to beginning any excavation work, the Contractor shall, through field investigations, determine any conflicts or interferences between existing utilities and new utilities to be constructed under this Project. This determination shall be based on the actual locations, elevations, slopes, etc. of existing utilities as determined in the field investigations, and locations, elevation, slope, etc. of new utilities as shown on the Contract Drawings. If an interference exists, shown or not shown in the Contract Drawings, the Contractor shall immediately cease work in the area of the interference and shall report to the Engineer for further direction.
- 4. If the Engineer agrees that an interference exists, they shall modify the design as required. Additional costs to the Contractor for this change shall be processed through a Change Order as detailed elsewhere in these Contract Documents. In the event the Contractor fails to bring a potential conflict or interference to the attention of the Engineer prior to beginning excavation work, any actual conflict or interference which does arise during the Project shall be corrected by the Contractor, as directed by the Engineer, at no additional expense to the Owner.
- 5. The work shall be carried out in a manner to prevent disruption of existing services and to avoid damage to the existing utilities. Temporary connections shall be provided, as required, to insure no interruption of existing services. Any damage resulting from the work of this Contract shall be promptly repaired by the Contractor at their own expense in a manner approved by the Engineer and further subject to the requirements of any authority having jurisdiction. Where it is required by the authority having jurisdiction that they perform their own repairs or have them done by others, the Contractor shall be responsible for all costs thereof.
- 6. Where excavations by the Contractor require any utility lines or appurtenant structures to be temporarily supported and otherwise protected during the construction work, such support and protection shall be provided by the Contractor. All such work shall be performed in a manner satisfactory to the Engineer and the respective authority having jurisdiction over such work. In the event the Contractor fails to provide proper support or protection to any existing utility, the Engineer may, at their discretion, have the respective

authority to provide such support or protection as may be necessary to insure the safety of such utility, and the costs of such measures shall be paid by the Contractor.

### 0. Applicable Standards and Codes

- 1. Wherever reference is made to any published standards, codes, or standard specifications, it shall mean the latest standard code, specification or tentative specification of the technical society, organization or body referred to, which is in effect at the date of invitation for Bids.
- 2. All materials, products, and procedures used or incorporated in the work shall be in strict conformance with applicable codes, regulations, specifications, and standards.
- 3. A partial listing of codes includes the following:
  - a. National Fire Codes.
  - b. Underwriters Laboratories, Inc.
  - c. National Electrical Manufacturer's Association
  - d. American National Standards Association
  - e. Regulations and Standards of the Occupational Safety and Health Act (OSHA)
  - f. Uniform Building Code (UBC)
  - g. American Society for Testing and Materials (ASTM).
  - h. SCDOT Standard Specifications for Highway Construction.

The following is a partial list of typical abbreviations which may be used in the Specifications, and the organizations to which they refer:

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AGA	American Gas Association
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
API	American Petroleum Institute
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWS	American Welding Society
AWWA	American Water Works Association
DIPRA	Ductile Iron Pipe Research Association
COE	U.S. Army Corps of Engineers
CRSI	Concrete Reinforcing Steel Institute
Fed Spec	Federal Specifications
GRI	Geosynthetic Research Institute
IEEE	Institute of Electrical and Electronic Engineers
IPCEA	Insulated Power Cable Engineers Association
ISO	Insurance Services Offices

- 4. The Contractor shall, when required, furnish evidence satisfactory to the Engineer that materials and methods are in accordance with such standards where so specified.
- 5. In the event any questions arise as to the application of these standards or codes, copies shall be supplied on-site by the Contractor.

# P. <u>Limits of Work Area</u>

- 1. The Contractor shall confine their construction operations within the Contract limits shown on the Contract Drawings and/or property lines and/or fence lines. Storage of equipment and materials, or erection and use of sheds outside of the Contract limits, if such areas are the property of the Owner, shall be used only with the Owner's approval. Such storage or temporary structures, even within the Contract's limits, shall be confined to the Owner's property and shall not be placed on properties designated as easements or rights-of-way unless specifically permitted elsewhere in the Contract Documents.
- 2. Damage or impact by the Contractor to areas within or outside the Contract limits shall be the sole responsibility of the Contractor to remedy (including fines) the impact/damage to at least prior condition/function. This shall include sensitive areas including, but not limited to, wetlands and archeological sites.

# Q. <u>Weather Conditions</u>

The Contractor shall take necessary precautions (in the event of impending storms) to protect all work, materials, or equipment from damage or deterioration due to, but not limited to, floods, driving rain, wind, and snow/ice storms. The Owner reserves the right, through the opinion of the Engineer, to order that additional protection measures over and beyond those proposed by the Contractor, be taken to safeguard all components of the Project. The Contractor shall not claim any compensation for such precautionary measures so ordered, nor claim any compensation for such precautionary measures so ordered.

# R. <u>Periodic Cleanup: Basic Site Restoration</u>

1. During construction, the Contractor shall regularly remove from the site of the work all accumulated debris and surplus materials of any kind which result from their operations. Unused equipment and tools shall be stored at the Contractor's yard or base of operations for the Project.

- 2. When the work involves installation of sewers, drains, water mains, manholes, underground structures, or other disturbance of existing features in or across streets, rights-of-way, easements, or private property, the Contractor shall (as the work progresses) promptly backfill, compact, grade, and otherwise restore the disturbed area to the basic condition which will permit resumption of pedestrian or vehicular traffic and any other critical activity or functions consistent with the original use of the land. Unsightly mounds of earth, large stones, boulders and debris shall be removed so that the site presents a neat appearance.
- 3. The Contractor shall perform the cleanup work on a regular basis and as frequently as ordered by the Engineer. Basic site restoration in a particular area shall be accomplished immediately following the installation or completion of the required facilities in that area. Furthermore, such work shall also be accomplished, when ordered by the Engineer, if partially completed facilities must remain incomplete for some time period due to unforeseen circumstances.
- 4. Upon failure of the Contractor to perform periodic cleanup and basic restoration of the site to the Engineer's satisfaction, the Owner may, upon five (5) days prior written notice to the Contractor, without prejudice to any other rights or remedies of the Owner, cause such work for which the Contractor is responsible to be accomplished to the extent deemed necessary by the Engineer, and all costs resulting therefrom shall be charged to the Contractor and deducted from the amounts of money that may be due them.

# S. <u>Use of Facilities Before Completion</u>

- 1. The Owner reserves the right to enter and use any portion of the constructed facilities before final completion of the whole work to be done under this Contract. However, only those portions of the facilities which have been completed to the Engineer's satisfaction, as evidenced by their issuing a Certificate of Substantial Completion covering that part of the work, shall be placed in service.
- 2. It shall be the Owner's responsibility to prevent premature connections to or use of any portion of the installed facilities by private or public parties, persons or groups of persons, before the Engineer issues their Certificate of Substantial Completion covering that portion of the work to be placed in service.
- 3. Consistent with the approved progress schedule, the Contractor shall cooperate with the Owner, their agents, and the Engineer to accelerate completion of those facilities, or portions thereof, which have been designated for early use by the Owner.

### END OF SECTION

# SECTION 01025

# **MEASUREMENT AND PAYMENT**

### A. <u>General</u>

This section includes the units and methods of measurement and the basis of payment for work done under this Contract. The work required for each item shall be as required and/or reasonably implied by the Contract Documents to complete the work. Note that all measurement work shall be subject to verification (surveyed or otherwise) by the Owner.

### B. Measurement and Payment

1. <u>Section 02110: Site Preparation:</u>

All work required for <u>Site Preparation</u> shall be included for payment in the Contractor's Lump Sum Price for this work, wherein no measurement will be made, except for the following item:

- a. <u>Clearing and Grubbing</u>, which includes related earthwork and materials (including griding of wood debris), shall be included for payment in the Contractor's Unit Price Bid for this work, per acre in-place. Measurement of clearing limits shall be made by the Contractor's surveyor based on the horizontal projected length. No adjustments will be made in the length for slopes, uneven contours, overlaps, seams, repairs, or wasted material
- 2. <u>Section 02820: Chain Link Fencing and Gates:</u>

All work required for <u>Chain Link Fencing and Gates</u>, which is not otherwise covered under related sections of these Specifications, shall be included for payment in the Contractor's Lump Sum and Unit Price Bid for the following items:

- a. <u>30' Clear Span Sliding Gate</u>, which includes related opener, hardware, gate posts gates and wiring and labor shall be paid on the basis of the Unit Price Bid for this work.
- b. <u>Chain Link Fence</u>, which includes related material and labor shall be paid on the basis of the Unit Price Bid per linear foot measured by the contractors surveyor for this work.
- 3. <u>Section 02930: Revegetation:</u>

All work required for <u>Revegetation</u> shall be included for payment in the Contractor's Unit Price Bid for this work, per acre in-place. Measurement of this area shall be made by the Contractor's surveyor based on the horizontal projected area. No adjustments will be made in the area for slopes, uneven contours, repairs, or wasted material

4. <u>Surveying:</u>

This work shall consist of all surveying and control work required by the Contract Documents. This includes baseline surveys, location of utilities, stakeout of elevation and positional information required to complete the construction and obtaining all survey information required to compile Record (As-Built) Drawings as required by the Contract Documents. All work required for <u>Surveying</u> shall be included for payment in the Contractor's Lump Sum Price for this work, wherein no measurement will be made.

5. <u>Bonds, Mobilization, and Insurance:</u>

This work shall consist of securing the appropriate bonds and insurance policies for the project, performance of preparatory construction operations, and performance of project closeout activities including the movement of personnel and equipment to and from the project site, safety equipment, and other facilities to begin work on a substantial phase of the Contract. All work required for <u>Bonds, Mobilization, and Insurance</u> shall be included for payment in the Contractor's Lump Sum Price for this work, wherein no measurement will be made. The amount of this item shall be limited to a maximum of four percent of the total Bid price. <u>At least twenty (20) percent of this item must be allocated for demobilization at the end of the project.</u>

## C. <u>Submittals</u>

Before completion of the first pay application, the Contractor shall prepare and submit copies of their proposed pay application to the Engineer for review.

END OF SECTION

# SECTION 01200

# **PROJECT MEETINGS**

# A. <u>Pre-Bid Meeting</u>

- 1. A Pre-Bid Meeting will be held at the time and place to be designated in the Advertisement for Bids.
- 2. The Engineer will be available to discuss the Project and answer pertinent questions. No oral interpretation will be made as to the meaning of the Contract Documents. Interpretation, if deemed necessary by the Engineer, will be in the form of an Addendum to the Contract Documents following the meeting.

# B. <u>Preconstruction Meeting</u>

- 1. A preconstruction meeting will be held after Award of Contract, but prior to the start of work at the site.
- 2. <u>Attendance:</u>
  - a. Owner
  - b. Engineer
  - c. Contractor
  - d. Representatives of Governmental or other Regulatory Agencies (As Appropriate).

### 3. <u>Tentative Agenda:</u>

- a. Tentative construction schedule/milestones
- b. Work sequencing
- c. Designation of responsible personnel
- d. Processing of Field Decisions and Change Orders
- e. Adequacy of distribution of Contract Documents
- f. Submittal of Shop Drawings and samples
- g. Procedures for maintaining record documents
- h. Use of site and Owner's requirements
- i. Major equipment deliveries and priorities
- j. Safety and first aid procedures
- k. Security procedures
- l. Housekeeping procedures
- m. Processing of Partial Payment Requests
- n. General regard for community relations.

# C. <u>Progress Meetings</u>

- 1. Progress meetings will be held monthly (or as otherwise directed by the Owner) at the County Public Works Department Offices during the performance of the work of this Contract. Additional meetings may be called as progress of work dictates.
- 2. The Engineer or their representative will preside at meetings and record minutes of proceedings and decisions. The Engineer will subsequently distribute copies of minutes to participants.
- 3. <u>Attendance:</u>
  - a. Owner;
  - b. Engineer;
  - c. Contractor; and
  - d. Subcontractors as pertinent to the agenda.
- 4. <u>Tentative Agenda:</u>
  - a. Review and approve minutes of previous meetings.
  - b. Review progress of work since last meeting.
  - c. Review proposed 30-60 day construction schedule.
  - d. Note and identify problems which impede planned progress.
  - e. Develop corrective measures and procedures to regain planned schedule.
  - f. Revise construction schedule as indicated and plan progress during next work period.
  - g. Maintaining of quality and work standards.
  - h. Complete other current business.
  - i. Report on community and governmental relations.
  - j. Schedule next progress meeting.

### END OF SECTION

# SECTION 01300

# SUBMITTALS

# A. <u>General</u>

This section describes the submittal process and the various submittal items which are required for this work. Submittal items include:

- 1. Progress Schedule;
- 2. Proposed Products List;
- 3. Product Data;
- 4. Samples;
- 5. Working Drawings;
- 6. Operation and Maintenance Manuals; and
- 7. Other Submittals.

A summary list of required submittals for this project is shown on Table 1 of this section. Note that this summary list does not relieve the Contractor of providing additional submittal information, not listed in Table 1, which may be required by the Contract Documents.

# B. <u>Procedure for Submittal and Contractor Responsibilities</u>

- 1. Submittals shall be transmitted in sufficient time to allow the Engineer at least ten (10) working days (or greater if specified elsewhere) for review and processing.
- 2. Unless otherwise stated or agreed to, the Contractor <u>shall transmit an electronic copy of all submittals to the Engineer in a format acceptable to the Engineer and Owner</u>. If hard copies of submittals are necessary (or required by the Contract Documents), the Contractor shall transmit five (5) copies of all hard copy submittals to the Engineer. Transportation charges on all submittals shall be the Contractor's responsibility.
- 3. All submittals from subcontractors, manufacturers, or suppliers shall be sent directly to the Contractor for checking. The Contractor shall thoroughly check all submittals for accuracy and conformance to the intent of the Contract Documents before submitting them to the Engineer. ALL SUBMITTALS SHALL BEAR THE CONTRACTOR'S STAMP OF APPROVAL CERTIFYING THAT THEY HAVE BEEN SO CHECKED. SUBMITTALS WITHOUT THE CONTRACTOR'S STAMP OF APPROVAL WILL NOT BE REVIEWED BY THE ENGINEER AND WILL BE RETURNED TO THE CONTRACTOR.
- 4. All submittals shall be bound, dated, properly labeled, and consecutively numbered. Information on the label shall indicate submittal number (corresponding to Table 1 of this section), specification section, Contract Drawing number, subcontractors, manufacturer's or supplier's name, and the name or type of item the submittal covers. Each part of a submittal shall be marked and tabulated. Submittals shall be accompanied by a letter of transmittal, containing date, Project title, Contractor's name, number and titles of submittals, and any other pertinent data to facilitate review.

5. If the submittals contain any departures from the Contract Documents, specific mention thereof shall be made in the Contractor's letter of transmittal. Otherwise, the review of such submittals shall not constitute approval of the departure.

## C. <u>Procedure for Review</u>

1. Submittals will be reviewed and annotated by the Engineer in one of the following ways:

"Furnish as Submitted" - no exceptions are taken.

"Furnish as Noted" - minor corrections are noted and shall be made.

"Revise and Resubmit" - major corrections are noted and a resubmittal is required.

"Rejected" - Based on the information submitted, the submission is not in conformance with the Contract Documents. The deviations from the Contract Documents are too numerous to list and a completely revised submission of the proposed equipment or a submission of other equipment is required.

- 2. If a submittal is satisfactory to the Engineer, the Engineer will annotate the submittal "Furnish as Submitted" or "Furnish as Noted" and transmit electronically to the Contractor. For hard copy submittals, the Engineer will transmit two (2) copies to the Contractor.
- 3. If a resubmittal is required, the Engineer will annotate the submittal "Revise and Resubmit" or "Rejected" and transmit electronically to the Contractor for appropriate action. For hard copy submittals, the Engineer will transmit four (4) copies to the Contractor for appropriate action.
- 4. The Contractor shall revise and resubmit submittals as required by the Engineer until submittals are acceptable to the Engineer.
- 5. No materials or equipment shall be ordered, fabricated, shipped, or any work performed until the Engineer returns to the Contractor the submittals, herein required, annotated either "Furnish as Submitted" or "Furnish as Noted".
- 6. The Engineer's review of the Contractor's submittals shall in no way relieve the Contractor of any of their responsibilities under the Contract. An acceptance of a submittal shall be interpreted to mean that the Engineer has no specific objections to the submitted material, subject to conformance with the Contract Drawings and Specifications.
- 7. The Engineer's review will be confined to general arrangement and compliance with the Contract Drawings and Specifications only, and will not be for the purpose of checking dimensions, weights, clearances, fittings, tolerances, interferences, coordination of trades, etc.

- 8. Acceptance of a Working Drawing by the Engineer will constitute acceptance of the subject matter for which the Drawing was submitted and not for any other structure, material, equipment, or appurtenances indicated or shown.
- 9. Where errors, deviations, and/or omissions are discovered at a later date in any of the submittals, the Engineer's prior review of the submittals does not relieve the Contractor of the responsibility for correcting all errors, deviations, and/or omissions.
- 10. <u>Additional Engineering Services:</u>
  - a. It is understood by the Contractor that the Owner may charge the Contractor the Engineer's charges for review in the event a submittal is not approved (either "Furnish as Submitted" or "Furnish as Noted") by the third submittal. These charges shall be for all costs associated with engineering review, meetings with the Contractor or manufacturer, etc. commencing with the fourth submittal.
  - b. In the event that the Engineer is required to provide additional engineering services as a result of a substitution of materials or equipment by the Contractor, the additional services will be provided in accordance with Section 01010, Summary of Work, of these Specifications, and will be covered in supplementary or revised information which will be issued to the Contractor.

## D. <u>Progress Schedule</u>

- 1. <u>General:</u>
  - a. Within ten (10) days after the start date defined in the Notice to Proceed, the Contractor shall prepare and submit copies of their proposed progress schedule to the Engineer for review.
  - b. If so required, the schedule shall be revised until it is acceptable to the Owner. Acceptance by the Owner does not constitute confirmation that the schedule is accurate and complete only that it appears to meet minimum job requirements; and, thus, shall not relieve the Contractor of any Contract dates, milestones, or deadlines.
  - c. The schedule shall be updated monthly, depicting progress to the last day of the month and copies submitted to the Engineer not later than the fifth day of the month. PROGRESS PAYMENTS MAY NOT BE PROCESSED WITHOUT A CURRENT PROGRESS SCHEDULE.
- 2. Form of Schedule:
  - a. The schedule shall be prepared in the form of a horizontal bar chart showing in detail the proposed sequence of the work and identifying construction activities for each structure and for each portion of work including the critical path, predecessor relationships, milestones, etc.

b. The schedule shall be time scaled, identifying the first day of each week, with the estimated date starting and completion of each stage of the work in order to complete the Project within the Contract time.

## E. <u>Proposed Products List</u>

- 1. Within fifteen (15) days after the start date defined in the Notice to Proceed, the Contractor shall prepare and submit copies of their tabulation of principal items of equipment and materials to be purchased to the Engineer for review.
- 2. The list shall include the manufacturer name, trade name, and model number for each product.

### F. <u>Product Data</u>

- 1. The Contractor shall furnish for review information on proposed products as required by the Contract Documents or requested by the Engineer.
- 2. Product data shall indicate, at a minimum, the material properties specified in the Contract Documents.

### G. <u>Samples</u>

- 1. The Contractor shall furnish for review all samples as required by the Contract Documents or requested by the Engineer.
- 2. Samples shall be of sufficient size or quantity to clearly illustrate the quality, type, range of color, finish, or texture and shall be properly labeled to show the nature of the material, trade name of manufacturer, and location of the work where the material represented by the sample will be used.

### H. <u>Working Drawings</u>

### 1. <u>General:</u>

- a. Working Drawings include, but are not limited to, layout drawings in plan and elevation, etc. The Contractor shall be responsible for securing all of the information, details, dimensions, Drawings, etc., necessary to prepare the Working Drawings required and necessary under this Contract and to fulfill all other requirements of their Contract. The Contractor shall secure such information, details, Drawings, etc. from all possible sources including the Contract Drawings, Working Drawings prepared by subcontractors, Engineers, suppliers, etc.
- b. Working Drawings shall accurately and clearly present the following:
  - (1) All working and installation dimensions.
  - (2) Arrangement and sectional views.

- (3) Units of equipment in the proposed positions for installation, details of required attachments and connections, and dimensioned locations between units and in relation to the structures.
- (4) Necessary details and information for making connections between the various trades including, but not limited to, accessories, appurtenances, etc.
- c. Working Drawings specifically prepared for this Project shall be on Mylar or other approved reproducible material sheets of the same size as the Contract Drawings. Drawings shall conform to recognized drafting standards and be neat, legible, and drawn to a large enough scale to show in detail the required information.
- d. Contract Drawings are used for engineering and general arrangement purposes only and are not to be used for Working Drawings.
- 2. <u>Working Drawing Requirements:</u>
  - a. <u>Shop Drawings:</u>
    - (1) The Contractor shall submit for review by the Engineer Shop Drawings for all fabricated work and for all manufactured items required to be furnished by the Contract Documents.
    - (2) Structural and all other layout Drawings prepared specifically for the Project shall have a plan scale of not less than 1 inch = 4 feet.
    - (3) Where manufacturer's publications in the form of catalogs, brochures, illustrations, or other data sheets are submitted in lieu of prepared Shop Drawings, such submittals shall specifically indicate the item for which approval is requested. Identification of items shall be made in ink, and submittals showing only general information are not acceptable.
  - b. <u>Layout and Installation Drawings:</u>
    - (1) The Contractor shall prepare and submit for review by the Engineer layout and installation Drawings for all pipes, etc. under this Contract. The final dimensions, elevation, location, etc., of pipe, etc., may depend upon the dimensions of equipment and valves to be furnished by the Contractor.

### 3. <u>Record Working Drawings:</u>

- a. Prior to final payment, the Contractor shall furnish the Engineer one complete set of all accepted Working Drawings, including Shop Drawings, etc.
- b. Manufacturer's publications, submitted in lieu of prepared Shop Drawings, will not be required in reproducible form. However, five (5) sets of such material shall be furnished by the Contractor to the Engineer.

- c. Working Drawings furnished shall be corrected to include any departures from previously accepted Drawings.
- d. Refer to Section 01010 Paragraph F.9 (Summary of Work Record (As-Built) Drawings) for additional information regarding required record drawings.

## I. Operation and Maintenance Manuals

- 1. Copies of Operation and Maintenance Manuals, prepared specifically for this Project, shall be furnished for each item of equipment furnished under this Contract at the time it is installed.
- 2. Manuals shall contain complete information in connection with assembly, operation, lubrication, adjustment, maintenance, and repair, including detailed parts lists with drawings or photographs identifying the parts.
- 3. All copies of the manuals furnished shall be assembled and bound in separate volumes, by major equipment items or trades, and properly indexed to facilitate locating any required information.
- 4. The Engineer and the Owner shall be the sole judge of the acceptability and completeness of the manuals and may reject any submittal for insufficient information included, incorrect references, and/or the manner in which the material is assembled.
- 5. The approved sets of operation and maintenance manuals shall be furnished prior to final acceptance.

### J. <u>Other Submittals</u>

Other required submittals include, but are not limited to: proposed handling/installation procedures, information on proposed construction equipment, borrow area information, material certifications, qualifications for manufacturers and installers, manufacturer instructions/recommendations, test reports, and design data.

# QUALITY CONTROL AND QUALITY ASSURANCE

## A. <u>General</u>

### 1. <u>Definitions:</u>

### a. <u>Construction Quality Control (CQC)</u>

Construction Quality Control refers to actions taken by manufacturers, fabricators, installers, and/or the Contractor to ensure that the materials and the workmanship meet the requirements of the Contract Documents. CQC is provided by the **Contractor at no additional cost to the Owner**. The Contractor shall follow CQC procedures as required by the Contract Documents, the Project CQA Manua and SCDOT Standard Specifications.

### b. <u>Construction Quality Assurance (CQA)</u>

Construction Quality Assurance is defined as a planned and systematic program employed by the Owner to assure conformity of the construction with the Contract Documents. CQA is provided by the CQA Engineer as a representative of the Owner and is independent from the Contractor and all manufacturers. The CQA program is designed to provide adequate confidence that items or services meet contractual and regulatory requirements and will perform satisfactorily in service.

- 2. On this Project, the Contractor is to provide for the services of a CQA Engineer on-site to selectively test materials and monitor compliance with the requirements of the Contract Documents and the SCDOT Standards for Highway Construction. This will be in addition to Construction Quality Control (CQC) provided and paid for by the Contractor. The Contractor will afford these representatives access to the job site for the performance of their duties as described in the Contract Documents.
- 3. CQA test methods and frequency of testing are defined in the SCDOT Standards for Highway Construction. The Contractor shall participate in and conform with all terms and requirements of this document.

## B. <u>Testing Laboratory Services</u>

- 1. <u>General:</u>
  - a. Laboratory testing and checking required by the Specifications, including the cost of transporting all samples and test specimens, shall be provided and paid for by the responsible party unless otherwise indicated in the Specifications.

- b. Materials to be tested include, but are not necessarily limited to the following: soils.
- c. Tests required by the Owner shall not relieve the Contractor from the responsibility of supplying certificates from manufacturers or suppliers to demonstrate conformance with the Specifications.

### 2. <u>Procedure:</u>

- a. The Contractor shall plan and conduct their operations to permit taking of field samples and test specimens, as required, and to allow adequate time for laboratory tests.
- b. The collection, field preparation, and storage of field samples and test specimens shall be as directed by the Engineer with the cooperation of the Contractor.

### 3. <u>Significance of Tests:</u>

Test results shall be binding on both the Contractor and the Owner, and shall be considered irrefutable evidence of compliance or noncompliance with the Specification requirements, unless:

- a. Supplementary testing shall prove, to the satisfaction of the Owner, that the initial samples were not representative of actual conditions or
- b. Observation(s) of the test sampling or procedures as made by the CQA Engineer render the results invalid.
- 4. <u>Supplementary and Other Testing:</u>

Nothing shall restrict the Contractor from conducting tests they may require. Should the Contractor at any time request the Owner to consider such test results, the test reports shall be certified by an independent testing laboratory acceptable to the Owner. Testing of this nature shall be conducted at the Contractor's expense.

## C. Imperfect Work, Equipment, or Materials

- 1. Any work, equipment, or materials furnished by the Contractor not in conformance with the Contract Documents which is discovered before the final acceptance of the work, as established by the date of Final Payment, or during the Contractor's guarantee period, shall be removed, replaced, and/or corrected to conform to the Contract Documents immediately even though it may have been overlooked by the Engineer and estimated for payment.
- 2. Any equipment or materials condemned or rejected by the Engineer shall be tagged as such and shall be immediately removed from the site. Satisfactory work or materials shall be substituted for that rejected.

3. The Engineer may order tests of work, equipment, or materials which appear to be in non-conformance with the Contract Documents to determine the required functional capability for possible acceptance, if there is no other reason for rejection. The cost of such tests shall be borne by the Contractor; and the nature, tester, extent, and supervision of the tests will be as determined by the Engineer. If the results of the tests indicate that the required functional capability of the work, equipment, or material was not impaired, consistent with the final general appearance of same, the work, equipment, or materials may be deemed acceptable. If the results of such tests reveal that the required functional capability of the questionable work, equipment, or materials has been impaired, then such work, equipment, or materials shall be deemed imperfect and shall be replaced. The Contractor may elect to replace the imperfect work, equipment, or material in lieu of performing the tests.

## D. <u>Inspection and Tests</u>

- 1. The Contractor shall allow the Engineer ample time and opportunity for testing materials and equipment to be used in the work. The Contractor shall at all times furnish the Engineer and their representatives, facilities including labor, and allow proper time for inspecting and testing materials, equipment, and workmanship.
- 2. The Contractor must anticipate possible delays that may be caused in the execution of their work due to the necessity of materials and equipment being inspected and accepted for use.
- 3. The Contractor shall furnish, at their own expense, all samples of materials required by the Engineer for testing, and shall make their own arrangements for providing water, electric power, or fuel for the various inspections and tests of structures and equipment.
- 4. Where other tests or analyses are specifically required in other sections of these Specifications, the cost thereof shall be borne by the party so designated in such sections.
- 5. The Owner will bear the cost of all tests, inspections, or investigations undertaken by the order of the Engineer for the purpose of determining conformance with the Contract Documents if such tests, inspections, or investigations are not specifically required by the Contract Documents, and if conformance is ascertained thereby. Whenever nonconformance is determined by the Engineer as a result of such tests, inspections, or investigations, the Contractor shall bear the full cost thereof or shall reimburse the Owner for said cost. In this connection, the cost of any additional tests and investigations, which are ordered by the Engineer to ascertain subsequent conformance with the Contract Documents, shall be borne by the Contractor.

# **TEMPORARY FACILITIES AND CONTROLS**

## A. <u>Temporary Utilities</u>

### 1. <u>General:</u>

- a. The Contractor shall provide temporary sanitary service, light and power, and water service for their operations at the site unless otherwise provided as agreed to by the Owner. The temporary services shall be provided for use throughout the construction period.
- b. The Contractor shall coordinate and install all temporary services in accordance with the requirements of the utility companies having jurisdiction and as required by applicable codes and regulations.
- c. At the completion of the work, or when the temporary services are no longer required, the temporary facilities shall be restored to their original conditions.
- d. All costs in connection with the temporary services including, but not limited to, installation, utility company service charges, maintenance, relocation, and removal shall be borne by the Contractor at no additional cost to the Owner.
- e. Some temporary facilities that may be required may be indicated on the Contract Drawings; however, the Contract Drawings do not necessarily show any or all of the temporary facilities that the Contractor ultimately uses to complete the work.

### 2. <u>Temporary Sanitary Service:</u>

Sanitary conveniences, in sufficient numbers, for the use of all persons employed on the work and properly screened from public observation, shall be provided and maintained at suitable locations by the Contractor, all as prescribed by State and local requirements. The contents of same shall be removed and disposed of in a manner consistent with State and local requirements, as the occasion requires. Each Contractor shall rigorously prohibit the committing of nuisances within, on, or about the work. Sanitary facilities shall be removed from the site when no longer required.

### 3. <u>Temporary Light and Power:</u>

- a. The Contractor shall provide at their sole expense such temporary light and power as required for their operations.
  - c. Upon completion of the work, but prior to acceptance by the Owner, the Contractor shall remove all temporary services, security lighting systems, temporary general lighting systems, and all temporary electrical work from the premises.

### 4. <u>Temporary Water:</u>

- a. The Contractor shall provide temporary water service for construction purposes and for cleaning. The Contractor shall pay all charges associated with the connection and all charges for potable water used under this Contract.
- b. Each Contractor shall supply potable water for their employees either by portable containers or drinking fountains.
- c. An adequate number of hose bibs, hoses, and watertight barrels shall be provided for the distribution of water.

## B. <u>First Aid Facilities and Accidents</u>

1. <u>First Aid Facilities:</u>

The Contractor shall provide at the site such equipment and facilities as are necessary to supply first aid to any of their personnel who may be injured in connection with the work.

- 2. <u>Accidents:</u>
  - a. The Contractor shall report immediately by telephone or messenger to both the Owner and the Engineer all accidents whatsoever out of, or in connection with, the performance of the work, whether on or adjacent to the site, which cause death, personal injury, or property damage. The Contractor shall further issue a written report to the Engineer within 24 hours which describes these accidents giving full details and statements of witnesses.
  - b. If any claim is made by anyone against the Contractor or a Subcontractor on account of any accidents, the Contractor shall report within 2 business days the facts, in writing, to the Engineer, giving full details of the claim.

## C. <u>Protection of Work and Material</u>

- 1. During the progress of the work and up to the date of final payment, the Contractor shall be solely responsible for the care and protection of all work and materials covered by the Contract as well as other areas of the site that may be impacted by the Contractor or Subcontractors.
- 2. All work and materials shall be protected against damage, injury, or loss from any cause whatsoever, and the Contractor shall make good any such damage or loss at their own expense. Protection measures shall be subject to the approval of the Engineer.

## D. <u>Barricades, Warning Signs, and Lights</u>

- 1. The Contractor shall provide, erect, and maintain as necessary, strong and suitable barricades, danger signs, and warning lights along all roads accessible to the public, as required by the authority having jurisdiction, to insure safety to the public. All barricades and obstructions along public roads shall be illuminated at night and all lights for this purpose shall be kept burning from sunset to sunrise.
- 2. Each Contractor shall provide and maintain such other warning signs and barricades in areas of and around their respective work as may be required for the safety of all those employed in the work, the Owner's operating personnel, or those visiting the site.

## E. <u>Access Roads and Parking Areas</u>

- 1. <u>Access Roads:</u>
  - a. The Contractor shall construct and maintain such temporary access roads as required to perform the work of this Contract.
  - b. The Contractor shall access the site through the existing site entrance shown on the Contract Drawings or as otherwise designated by the Owner. The Contractor shall not disturb areas outside the clearing limits shown on the Contract Drawings unless approved by the Owner.
  - c. Access roads shall be located within the property lines of the Owner unless the Contractor independently secures easements for their use and convenience. Contractor shall submit written documentation (consent form, etc.) to the Engineer for any Contractor secured easements across privately held property. The easement agreement shall specify terms and conditions of use and provisions for site restoration. A written release from the property owner certifying that all terms of the easement agreement have been complied with by the Contractor shall be furnished to the Engineer prior to final payment.
  - d. The Contractor shall obtain all necessary permits and pay all costs associated with any bonds required by the State transportation department for the use of State maintained roads or similar requirements for local roads and private drives.

### 2. <u>Parking Areas:</u>

The Contractor shall use existing parking areas and/or construct and maintain suitable parking areas for their construction personnel on the Project site within the clearing limits shown on the Contract Drawings where approved by the Engineer and the Owner.

3. <u>Restoration:</u>

At the completion of the work, the surfaces of land disturbed by the Contractor's activities, whether in the Contract Limits or not, shall be restored by the Contractor. At a minimum, such restoration shall include establishment of a permanent ground cover

(Revegetation or other means acceptable to the Owner) adequate to restrain erosion for all disturbed areas. Revegetation shall be in accordance with Section 02930, Revegetation, of these Specifications. The cost of all restoration work shall be at the Contractor's sole expense.

## F. <u>Dust and Mud Control</u>

- 1. The Contractor shall take all necessary measures to control dust and mud from their operations, and to prevent spillage of excavated materials on public or site roads.
- 2. The Contractor shall remove all spillage of excavated materials, debris, dust, or mud from public roads by methods approved by the Engineer.
- 2. The Contractor shall apply water at locations and in such quantities and at such frequencies as may be required by the Owner or Engineer to control dust and mud and prevent either from becoming a nuisance to the surrounding area. Other measures (dust suppressants, etc.) may be required, as determined by the Owner or Engineer.
- 3. Dust and mud control and cleaning measures shall be provided at no additional cost to the Owner.

## G. <u>Traffic Regulations</u>

The Contractor shall obey all traffic laws and comply with all the requirements, rules, and regulations of the State Department of Transportation and other local authorities having jurisdiction to maintain adequate warning signs, lights, barriers, etc. for the protection of traffic on public roadways.

# **MATERIALS AND EQUIPMENT**

## A. <u>General</u>

- 1. All equipment, materials, instruments, or devices incorporated in this Project shall be new and unused, unless indicated otherwise in the Contract Documents. Equipment and materials to be incorporated into the work shall be delivered sufficiently in advance of their installation and use to prevent delay in the execution of the work, and they shall be delivered as nearly as feasible in the order required for executing the work.
- 2. The Contractor shall protect all equipment and materials from deterioration and damage.. Storage of equipment and materials shall be in locations completely protected from flooding, standing water, excessive dust, falling rock, brush fire, etc. Storage areas shall be located sufficiently distant from all construction activities and the movement of construction vehicles to minimize the potential for accidental damage. Any equipment or materials of whatever kind which may have become damaged or deteriorated from any cause shall be removed and replaced by good and satisfactory items at the Contractor's expense for both labor and materials.
- 3. Equipment and materials shall be installed in accordance with the requirements of the General Conditions and the respective Specification Sections.

### B. <u>Storage of Materials and Equipment</u>

- 1. The Contractor shall store their materials and equipment at the job site in accordance with the requirements of the General Conditions and as hereinafter specified. All equipment and materials shall be stored in accordance with manufacturer's recommendations and as directed by the Owner or Engineer, and in conformity to applicable statutes, ordinances, regulations, and rulings of the public authority having jurisdiction.
- 2. The Contractor shall enforce the instructions of the Owner and Engineer regarding the posting of regulatory signs for loadings on structures, fire safety, and smoking areas.
- 3. The Contractor shall not store materials or encroach upon private property without the written consent of the owners of such private property.
- 4. The Contractor shall not store materials in such a manner that they are exposed to weather which, in the Engineer opinion can alter the material properties.
- 5. The Contractor shall not store unnecessary materials or equipment on the job site, and shall take care to prevent any structure from being loaded with a weight which will endanger its security or the safety of persons.
- 6. Materials shall not be placed within ten (10) feet of fire hydrants. Gutters, drainage channels, and inlets shall be kept unobstructed at all times.

## C. Connections to Equipment

1. Connections to equipment shall follow manufacturer's recommendations as to size and arrangement of connections and/or as shown in detail on the Contract Drawings or approved Shop Drawings. Piping connections shall be made to permit ready disconnection of equipment with minimum disturbance of adjoining piping and equipment.

## D. <u>Substitutions</u>

- 1. Requests for substitutions of equipment or materials shall conform to the requirements of the General Conditions and as hereinafter specified.
  - a. The Contractor shall submit for each proposed substitution sufficient details, complete descriptive literature, and performance data together with samples of the materials, where feasible, to enable the Owner and Engineer to determine if the proposed substitution is equal.
  - b. The Contractor shall submit certified tests, where applicable, by an independent laboratory attesting that the proposed substitution is equal.
  - c. A list of installations where the proposed substitution is equal.
- 2. Where the approval of a substitution requires revision or redesign of any part of the work, including that of other Contracts, all such revision and redesign, and all new drawings and details therefore, shall be provided by the Contractor at their own cost and expense, and shall be subject to the approval of the Owner and Engineer.
- 3. In the event that the Engineer is required to provide additional engineering services, then the Engineer's charges for such additional services shall be charged to the Contractor by the Owner in accordance with the requirements of the General Conditions.
- 4. In all cases the Owner and Engineer shall be the judge as to whether a proposed substitution is to be approved. The Contractor shall abide by their decision when proposed substitute items are judged to be unacceptable and shall in such instances furnish the item specified or indicated. No substitute items shall be used in the work without written approval of the Owner and Engineer.
- 5. The Contractor shall have and make no claim for an extension of time or for damages by reason of the time taken by the Engineer in considering a substitution proposed by the Contractor or by reason of the failure of the Engineer to approve a substitution proposed by the Contractor.
- 6. Acceptance of any proposed substitution shall in no way release the Contractor from any of the provisions of the Contract Documents.

# **PROJECT CLOSEOUT**

## A. <u>Final Cleaning</u>

- 1. At the completion of the work, the Contractor shall remove all rubbish from and about the site of the work, and all temporary structures, construction signs, tools, scaffolding, materials, supplies, and equipment which he or any of their Subcontractors may have used in the performance of the work.
- 2. The Contractor shall thoroughly clean all materials, equipment, and structures so as to leave work in a clean and new appearing condition.
- 3. The Contractor shall maintain cleaning until the Project, or portion thereof, is occupied by the Owner.

## B. <u>Equipment Start-Up Services (Where Applicable)</u>

- 1. Equipment start-up period, for the training of facility personnel, shall begin after satisfactory completion and acceptance of the field tests and coincidentally with the certified date of substantial completion for the part of the work for which the equipment is included. If the equipment is not covered by a certificate of substantial completion for a part of the work, the period shall begin upon substantial completion of the Project.
- 2. During the equipment start-up period the Contractor shall furnish, at no additional cost to the Owner the services of factory trained representatives of the equipment manufacturers for the equipment designated in the Specifications to:
  - a. Assist in the start-up and operations of the equipment.
  - b. Assist in the training of facility personnel, designated by the Owner, in the proper operation and maintenance of the equipment.
- 3. <u>The Owner shall:</u>
  - a. Provide the necessary facility personnel to be instructed in the operation and maintenance of the equipment. The Owner's personnel shall operate all equipment.
  - b. Pay for all fuel, power, and chemicals consumed beyond quantities specified in the Contract Documents. The Contractor shall pay for fuel, power, and chemicals consumed up to the date of "certified substantial completion" except as otherwise specified herein.
- 4. The Contractor shall be available to promptly repair all work during the start-up period so as to cause minimum disruption to the total facility operation.

- 5. Upon completion of a minimum of ten (10) consecutive and continuous days of satisfactory operation, or the number of days called for in the Specifications, the Owner will assume operation and operating cost of the equipment. If the equipment malfunctions during this start-up period, the start-up period will be repeated until satisfactory operation is achieved.
- 6. In the event a system, equipment, or component proves defective or is unable to meet specified performance criteria, the Contractor shall replace the defective item and the minimum one (1) year guarantee period, or the guarantee period called for in the Specifications for the item shall start after satisfactory replacement and testing of the item.

## C. <u>Final Cleanup: Site Rehabilitation</u>

- 1. Before finally leaving the site, the Contractor shall wash and clean all exposed surfaces which have become soiled or marked, and shall remove from the site of work all accumulated debris and surplus materials of any kind which result from their operation, including construction equipment, tools, sheds, sanitary enclosures, etc. The Contractor shall leave all equipment, fixtures, and work, which they have installed, in a clean condition. The completed Project shall be turned over to the Owner in a neat and orderly condition.
- 2. The site of the work shall be rehabilitated or developed in accordance with other sections of the Specifications and the Drawings. In the absence of any portion of these requirements, the Contractor shall completely rehabilitate the site to a condition and appearance equal or superior to that which existed just prior to construction, except for those items whose permanent removal or relocation was required in the Contract Documents or ordered by the Owner.

## D. <u>Final Inspection</u>

- 1. Final cleaning and repairing shall be so arranged as to be finished upon completion of the construction work. The Contractor will make their final cleaning and repairing, and any portion of the work finally inspected and accepted by the Engineer shall be kept clean by the Contractor, until the final acceptance of the entire work.
- 2. When the Contractor has finally cleaned and repaired the whole or any portion of the work, they shall notify the Engineer that they are ready for final inspection of the whole or a portion of the work, and the Engineer will thereupon inspect the work. If the work is not found satisfactory, the Engineer will order further cleaning, repairs, or replacement.
- 3. When such further cleaning or repairing is completed, the Engineer, upon further notice, will again inspect the work. The "Final Payment" will not be processed until the Contractor has complied with the requirements set forth, and the Engineer has made their final inspection of the entire work and is satisfied that the entire work is properly and satisfactorily constructed in accordance with the requirements of the Contract Documents.

## E. <u>Project Closeout</u>

- 1. As construction of the Project enters the final stages of completion, the Contractor shall, in concert with accomplishing the requirements set forth in the Contract Documents, attend to or have already completed the following items as they apply to their contract:
  - a. Scheduling equipment manufacturers visits to site.
  - b. Required testing of Project components.
  - c. Scheduling start-up and initial operation.
  - d. Scheduling and furnishing skilled personnel during initial operation.
  - e. Correcting or replacing defective work, including completion of items previously overlooked or work which remains incomplete, all as evidenced by the Engineer's "Punch" Lists.
  - f. Attend to any other items listed herein or brought to the Contractor's attention by the Engineer.
- 2. In addition, and before the Certificate of Substantial Completion is issued, the Contractor shall submit to the Engineer (or to the Owner if indicated) certain records, certifications, etc. which are specified elsewhere in the Contract Documents. A partial list of such items appears below, but it shall be the Contractor's responsibility to submit any other items which are required in the Contract Documents:
  - a. Test results of Project components.
  - b. Performance Affidavits for equipment.
  - c. Certification of equipment or materials in compliance with Contract Documents.
  - d. Operation and maintenance instructions or manuals for equipment.
  - e. One set record drawings showing as-built changes and additions to the work under their Contract.
  - f. Any special guarantees or bonds (Submit to Owner).

The Contractor's attention is directed to the fact that required certifications and information under some items above must actually be submitted earlier in accordance with other sections of the Specifications.

## SITE PREPARATION

<u>Site Preparation</u>: Site Preparation includes clearing, grubbing, and/or stripping operations.

### A. <u>Description</u>

- 1. <u>General:</u>
  - a. The Contractor shall furnish all labor, material, and equipment to complete Site Preparation in accordance with the Contract Drawings and these Specifications.
  - b. Principal items of work include:
    - 1. Notifying all authorities owning utility lines running to or on the property. Protect and maintain all utility lines to remain and cap those that are not required in accordance with instructions of the Utility Companies, and all other authorities having jurisdiction.
    - 2. Clearing the site within the clearing limits, including removal of grass, brush, shrubs, trees, loose debris, and other encumbrances except for trees to remain.
    - 3. Boxing and protecting all areas to be preserved.
    - 4. Disposing from the site all debris resulting from work under this Section.
    - 5. Contractor is to remove underbrush and small caliper trees (3" and smaller) within the area shown on the contract documents. Trees to remain within this area are to be limbed up to a height of 12' above the ground. This entire area is to be covered with 4" of mulch over a fabric weed barrier.

#### 2. <u>Related Work:</u>

Related Contract Work is described in the following sections of the Specifications:

<u>Work</u>	<u>Section</u>
Erosion and Sedimentation Control	02270

### B. <u>Submittals</u>

The Contractor shall submit the following to the Engineer prior to performance of the work:

1. Location for disposal of clearing debris and waste.

2. Permit(s) or approval(s) for burning of clearing debris.

## C. <u>Construction</u>

- 1. <u>Clearing of the Site:</u>
  - a. Clearing limits and underbrush removal limits, as shown on the Contract Drawings, shall be established by the Contractor's Surveyor. Once established, the clearing limits shall be inspected and approved by the **Engineer and Owner** prior to clearing the affected areas.
  - b. Install tree protection fencing (where applicable) and required erosion and sedimentation control measures prior to performing clearing and grubbing activities.
  - c. Before the start of excavation and grading operations, the areas within the clearing limits shown on the Contract Drawings shall be cleared and grubbed.
  - Clearing shall consist of cutting, removal, and satisfactory disposal of all trees, fallen timber, brush, bushes, rubbish, fencing, and other perishable and objectionable material.

Should it become necessary to remove a tree, bush, brush, or other plants outside the clearing limits, the Contractor shall do so only after permission has been granted by the Engineer.

- e. Where necessary, excavation resulting from the removal of trees, roots, and the like shall be filled with suitable material, as approved by the Engineer, and thoroughly compacted per the requirements contained in Section 02223, Embankment, of these Specifications.
- e. In temporary construction easement locations, only those trees and shrubs shall be removed which are in actual interference with excavation or grading work under this Contract, and removal shall be subject to approval by the Engineer. However, the Engineer reserves the right to order additional trees and shrubs removed at no additional cost to the Owner, if such, in their opinion, they are too close to the work to be maintained or have become damaged due to the Contractor's operations.
- f. Unless otherwise shown or specified, the Contractor shall clear and grub a strip at least 15 feet wide along all permanent fence lines installed under this Contract.
- 3. <u>Grubbing:</u>
  - a. Grubbing shall consist of the removal and disposal of all stumps, roots, logs, sticks, and other perishable materials to a depth of at least 6 inches below ground surfaces.

- b. Large stumps located in areas to be excavated may be removed during grading operations, subject to the approval of the Engineer.
- 4. <u>Disposal of Cleared and Grubbed Material:</u>

No open burning of clearing debris will be allowed on this project. All trees, stumps, roots, bushes, etc. shall be removed from the site and disposed of by the Contractor.

Alternatively, the Contractor may grind woody materials into wood mulch and either remove from the site or stockpile on-site in the location(s) approved by the Owner.

### 5. <u>Existing Concrete, Brick, Asphalt, Waste, and Non-Vegetative Debris:</u>

Unless otherwise directed by the Owner, the Contractor is to remove and dispose of all concrete, brick, asphalt, waste and non-vegetative debris off site.

# CHAIN LINK FENCE AND GATES

<u>Chain Link Fence and Gates</u>: Chain Link Fence and Gates are installed around various portions of the site which require restricted access.

## A. <u>Description</u>

1. <u>General:</u>

The Contractor shall furnish all labor, material, and equipment to complete installation of Chain Link Fence and Gates in accordance with the Contract Drawings and these Specifications.

### 2. <u>Reference Standards:</u>

The latest revision of the following standards of the American Society of Testing and Materials (ASTM) and Underwriters Laboratories (UL) are hereby made a part of these specifications.

ASTM F 688-1	7 Standard Specification for Polyvinyl Chloride (PVC) Polyolefin and Other Polymer-Coated Steel Chain Link Fence Fabric
ASTM F 626	Standard Specification for Fence Fittings.
ASTM F 1043	Standard Specification for Strength and Protective Coatings on Steel Industrial Chain Link Fence Framework.
ASTM F 1083	Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures.
ASTM F 1184	Standard Specification for Industrial and Commercial Horizontal Slide Gates.
ASTM F 2200	Standard Specification for Automated Vehicular Gate Construction <mark>.</mark>
UL 325	Door, Drapery, Gate, Louver, and Window Operators.

## B. <u>Materials</u>

### 1. <u>Fabric:</u>

The fencing fabric shall be 9 gauge, 2-inch mesh class 2b black polymer coated steel chain link fabric per ASTM F688. Fabric shall have a minimum coating of 2.0 oz/ft<sup>2</sup> (Class 2). Top and bottom selvages of fabric shall be twisted and barbed.

- 2. <u>Framework:</u>
  - a. <u>Round Steel Pipe and Rail:</u>

Posts and rails shall be ASTM F 1043 Group IA Table 3 Heavy Industrial Fence Framework, schedule 40 hot-dip galvanized steel pipe per ASTM F1083. Exterior and interior zinc coatings shall be Type A. Pipe shall be regular grade with a minimum steel yield strength of 30,000 psi and shall have the following minimum diameters:

Line Posts:	1.900 inch 0.D.
End, Corner, Pull Posts:	2.375 inch 0.D.
Top, Bottom, Intermediate, and Brace Rails:	1.660 inch 0.D.

- b. All posts not otherwise covered, shall be provided with weather-tight end caps.
- c. Rail couplings shall be of the outside type and shall be so constructed as to prevent creeping. They shall be manufactured from galvanized steel and shall be suitable for coupling the rails. Couplings shall be a minimum of 6 inches long and self-centering.

Rail ends and brace ends for receiving top, bottom, and brace rails shall be galvanized steel.

#### 3. <u>Barbed Wire:</u>

Barbed wire shall be black polymer coated double-strand twisted wire with 12 1/2 gauge 4 point barbs spaced on approximately 5 inch centers.

#### 4. <u>Extension Arms:</u>

For barbed wire, line, end, and corner posts shall be fitted with extension arms of galvanized steel. Each arm shall carry three barbed wires securely fastened. The topmost barbed wire shall be 12 inches above the fabric of the fence and 12 inches out from the fence line.

5. <u>Fittings and Accessories:</u>

Unless otherwise specified, all miscellaneous fencing fittings and accessories shall be of galvanized steel. Wire ties, hog rings, brace and tension (stretcher) bars and bands, truss rod assembly, barbed wire supporting arms, etc. shall be in accordance with ASTM F 626.

Truss bands and turnbuckles for rods shall be provided. Stretcher, truss rod, and brace bands shall be fastened by means of carriage bolts and nuts, which shall not be removable form the outside of the fence. Hog rings shall be provided to attach the bottom tension wire to the bottom of the fabric.

- 6. <u>Cantilever Slide Gates:</u>
  - a. Cantilever gates shall be an external roller design fabricated in accordance with ASTM F 1184 (Type II Class 1) and shall be single or double leaf as shown or indicated on the Contract Drawings. Gate frames shall be non-sag, welded galvanized steel construction utilizing a minimum 2.375 inch 0.D. pipe (exterior members)/1.900-inch 0.D. pipe (internal members) (maximum 8.0-foot horizontal or vertical spacing for framing) and fitted with fencing fabric to match the fence. Frame members shall be ASTM F 1043 Group IA Table 3 Heavy Industrial Fence Framework, schedule 40 hot-dip galvanized steel pipe per ASTM F1083. One or two adjustable diagonal trusses shall be installed in each gate panel. The vertical members of the gate frame shall be extended one foot above the top horizontal member to which 3 strands of barbed wire, uniformly spaced at the same height as the fence barbed wire, shall be attached.
  - b. The overall gate structure shall be a minimum of 40% larger than the gate opening to support the cantilevered portion of the gate in the closed position with minimum deflection per ASTM F 1184.
  - c. Gate posts shall be of the same type and grade as used for framework and shall be a minimum of 4.0 inches in diameter.
  - d. Provide safety protective guards for the top and bottom external rollers.
  - e. Electrically operated gates and accessories shall be manufactured to comply with ASTM F 2200 and UL 325. Gate operators shall be All-O-Matic SL-150DC PRO 1HP 4,000LB openers or approved equivalent with Keypad, Exit Loop, Safety Loop, Monitor Photo Eye Twin Beam, and Exterior Mounted key switch.
- 8. <u>Privacy Slats:</u>

Privacy slats shall be bottom lock 2" HDPE Privacy slats SlatSource brand or equal. The Owner shall select from available colors.

## C. <u>Submittals</u>

The Contractor shall submit the following to the Engineer:

- 1. The Contractor shall submit shop drawings for the Chain Link Fence and Gates for approval at least 2 weeks prior to construction.
- 2. The Contractor shall furnish copies of the delivery tickets or other approved receipts to the Engineer as evidence for materials received that will be incorporated into construction.

## D. <u>Construction</u>

### 1. <u>Site Conditions:</u>

Prior to installation of Chain Link Fence and Gates, the Contractor shall verify that the work of other trades is completed to the point where this installation may properly commence. The areas to receive fences shall be smoothly graded and free of rocks, debris, obstructions, mounds, and depressions.

### 2. <u>Fabric:</u>

Fence fabric shall be installed two inches above finished grade level and shall be securely fastened to posts, gate frames, top, bottom, and brace rails, and elsewhere, as specified hereinbefore. The fabric shall be tightened to provide a smooth, uniform appearance. Where rolls of fabric are joined, they shall be properly tensioned, ends of fabric matched and mounted by a spiral connecting link.

### 3. <u>Top Rails:</u>

All top rails shall pass through loops of cap posts and shall form a continuous brace from end to end of each stretch of fence. Top rail lengths shall be joined with couplings. Top rails shall be securely fastened to terminal posts by means of rail ends and brace bands.

### 4. <u>Bottom Rails:</u>

Bottom rails shall be provided between all posts, except at gate openings. Bottom rails shall be securely fastened to end, corner, pull, and gate posts by means of rail ends and brace bands, and to line posts by means of rail ends and post connectors.

#### 5. <u>Brace Rails:</u>

Horizontal brace rails shall be provided at all terminal posts midway between top rails and the ground, and shall extend from the terminal post to the first adjacent line post. Braces shall be securely fastened to line posts by brace ends and brace bands, and to terminal posts by rail ends and brace bands.

#### 6. <u>Truss Rods:</u>

Diagonal truss rods shall be trussed from the brace and on the line post back to the terminal post and fastened to it by a brace band.

7. <u>Posts:</u>

Line posts shall be spaced equidistant in the fence line at no more than 10 feet on centers. Posts shall be plumb and tops of posts properly aligned. Line, terminal, and gate post holes shall be 36 inches deep and have a diameter of 4 times greater than the outside dimension of the post. Posts shall be set 30 inches in the hole, which shall be filled with 3,000 psi concrete. The top exposed surface of the footing shall be sloped to

shed water and shall be smoothly finished to present a neat appearance. Extension arms and end caps shall be firmly seated on the top of posts.

8. <u>Gates:</u>

Gates shall be erected plumb and true with all required hardware properly installed. The top rail of the gate shall be the same height as the top rail of the fence. Gates shall be fitted with vertical galvanized steel arms and shall carry three strands of barbed wire. The top strand of the barbed wire shall be at the same height as the barbed wire on the line fence.

### 9. <u>Damaged and Un-Coated Areas:</u>

All damaged and un-coated areas shall be repaired in accordance with the manufacturer's instructions.

10. <u>Privacy Slats:</u>

Privacy slats shall be installed where shown on the Contract Drawings. Installation procedures shall be in accordance with the manufacturer's recommendations.

# REVEGETATION

<u>Revegetation</u>: Revegetation includes permanent Revegetation of all site areas disturbed by the Contractor whether inside the Contract Limits or not.

### A. <u>Description</u>

1. <u>General:</u>

The Contractor shall furnish all labor, material, and equipment to complete Revegetation in accordance with the Contract Drawings and these Specifications.

2. <u>Related Work:</u>

Related Contract Work is described in the following sections of the Specifications:

<u>Work</u>	<u>Section</u>
Site Preparation	02110

3. <u>Correction Period:</u>

The Contractor shall be responsible for the satisfactory establishment and growth of a permanent stand of vegetation as judged by the Engineer during the correction period of one year. During this period, the Contractor shall be responsible for the maintenance items described in Paragraph D.4 (Maintenance) of this Specification.

## B. <u>Materials</u>

- 1. <u>Limestone</u>: Unless otherwise defined by specific soil tests, supply agricultural grade ground limestone conforming to the current "Rules, Regulations, and Standards of the Fertilizer Board of Control."
- <u>Fertilizer:</u> Unless otherwise defined by specific soil tests, supply commercial fertilizer meeting applicable requirements of State and Federal law. Do not use cyanamic compounds of hydrated lime. Deliver fertilizer in original containers labeled with content analysis.
- 3. <u>Grass Seed:</u> Supply fresh, clean, new-crop seed. Do not use seed which is wet, moldy, or otherwise damaged. Deliver seed in standard sealed containers labeled with producer's name and seed analysis, and in accord with US Department of Agriculture Rules and Regulations under Federal Seed Act.
- 4. <u>Mulch:</u> Supply clean, seed-free, threshed straw of oats, wheat, barley, rye, beans, or other locally available mulch material.

- a. Do not use mulch containing a quantity of matured, noxious weed seeds or other species that will be detrimental to seeding, or provide a menace to surrounding land.
- b. Do not use mulch material which is fresh or excessively brittle, or which is decomposed and will smother or retard growth of grass.
- 5. <u>Binder:</u> Supply emulsified asphalt or synthetic binder.
- 6. <u>Water:</u> Supply potable, free of substances harmful to growth.
- 7. Application rates, seed types, and other requirements shall be in accordance with Seeding Schedule of this section.

## C. <u>Submittals</u>

The Contractor shall submit the following to the Engineer:

- 1. Results of soil tests performed and proposed modifications, if any, to the specified requirements.
- Certificates for each grass seed mixture, stating botanical and common name, percentage by weight, and percentages of purity, germination, and weed seed. Certify that each container of seed delivered is fully labeled in accordance with Federal Seed Act and equals or exceeds specification requirements.
- 3. Copies of invoices for fertilizer, showing grade furnished and total quantity applied.

## D. <u>Construction</u>

1. The Contractor shall establish a smooth, healthy, uniform, close stand of grass from the specified seed. Prior to Revegetation, the Contractor shall adequately test the soils to be revegetated to ensure the adequacy of the specified requirements. Any modifications to these requirements deemed necessary after the review of soil test results, shall be at the Contractor's sole expense. The Engineer will perform the observations to determine when successful Revegetation is achieved.

### 2. <u>Soil Preparation:</u>

- a. Limit preparation to areas which will be planted soon after preparation.
- b. Loosen surface to minimum depth of four (4) inches.
- c. Remove stones, sticks, roots, rubbish and other extraneous matter over three (3) inches in any dimension.
- d. Spread lime uniformly over designated areas at the rate specified in Seeding Schedule of this section.

- e. After application of lime, prior to applying fertilizer, loosen areas to be seeded with double disc or other suitable device if soil has become hard or compacted. Correct any surface irregularities in order to prevent pocket or low areas which will allow water to stand.
- f. Distribute fertilizer uniformly over areas to be seeded at the rate specified in the Seeding Schedule of this section.
  - (1) Use suitable distributor.
  - (2) Incorporate fertilizer into soil to depth of at least two (2) inches.
  - (3) Remove stones or other substances which will interfere with turf development or subsequent mowing.
- g. Grade seeded areas to smooth, even surface with loose, uniformly fine texture.
  - (1) Roll and rake, remove ridges and fill depressions, as required to meet finish grades.
  - (2) Fine grade just prior to planting.

### 3. <u>Seeding:</u>

- a. Use approved mechanical power driven drills or seeders, mechanical hand seeders, or other approved equipment.
- b. Distribute seed evenly over entire area at the rate specified in Seeding Schedule of this section.
- c. Stop work when work extends beyond most favorable planting season for species designated, or when satisfactory results cannot be obtained because of drought, high winds, excessive moisture, or other factors.
- d. Resume work only when favorable condition develops, or as directed by the Engineer.
- e. Lightly rake seed into soil followed by light rolling or cultipacking.
- f. Immediately protect seeded areas against erosion by mulching or placing Rolled Erosion Control Products in accordance with Section 02275 of these Specifications, where applicable.
  - (1) Spread mulch in a continuous blanket at the rate specified in Seeding Schedule of this section.
  - (2) Immediately following spreading mulch, secure with evenly distributed binder at the rate specified in Seeding Schedule of this section.

(3) For slopes not steeper than 3H:1V and as an option to using binder to secure mulch, use a mulch anchoring tool operated along the contour of the slope.

### 4. <u>Maintenance:</u>

The Contractor shall be responsible for maintaining all seeded areas through the end of their warranty period. The Contractor shall provide, at their expense, protection of all seeded areas against damage at all times until acceptance of the work. Maintenance shall include, but not be limited to, the following items:

- a. Regrade and revegetate all eroded areas until adequately stabilized by grass.
- b. Remulch with new mulch in areas where mulch has been disturbed by wind or maintenance operations sufficiently to nullify its purpose. Anchor as required to prevent displacement.
- c. Replant bare areas using same materials specified.

### Seeding Schedule – See Section 810 Seeding – SCDOT Standard Specifications for Highway Construction