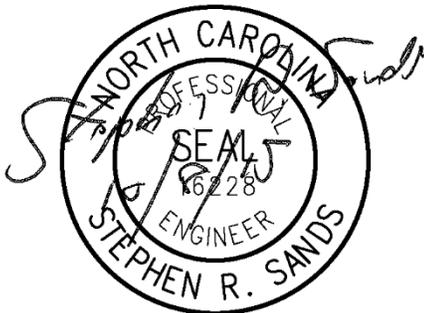




**BID DOCUMENTS  
FOR  
TREASURE DRIVE STORMWATER  
IMPROVEMENTS**

**PROJECT NO. 32180-002**



**SET #** \_\_\_\_\_



PREPARED FOR:  
ENGINEERING DEPARTMENT  
850 WARREN C. COLEMAN BLVD, POST OFFICE BOX 308  
CONCORD, NORTH CAROLINA 28026-0308

PREPARED BY:

**Hazen**

4944 PARKWAY PLAZA BOULEVARD, SUITE 375  
CHARLOTTE, NORTH CAROLINA 28217  
704 357-3150

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## **SECTION I – BIDS, AGREEMENTS, AND NOTICES**



## **ADVERTISEMENT/INVITATION TO BID**

Project Title: **Treasure Drive Stormwater Improvements**

H&S Project Number: **32180-002**

Project Description: The **Treasure Drive Stormwater Improvements** project involves the replacement of a 48" RCP culvert with a 20'x5' Precast Concrete Bottomless Arch Culvert. The project is located along Treasure Drive between Glenwood Drive and Woodlawn Avenue near Central Cabarrus High School. Other items necessary for the culvert replacement includes but not limited to grading, asphalt paving, minor storm drainage, concrete, sanitary sewer relocation, water line relocation, erosion control, and traffic control.

Sealed Bids will be received by the City of Concord (Owner) at the address below. Please submit notarized bids in a sealed envelope by the bid opening time and date. All Bids must be in accordance with the Bidding Documents on file with the City of Concord Engineering Department. Bidders must be licensed contractors in the State of North Carolina. Bids will be received on a unit price basis. A Bid Bond must accompany each bid. The Successful Bidder will be required to furnish a Construction Performance Bond and a Construction Payment Bond as security for the faithful performance and the payment of all bills and obligations arising from the performance of the Contract. Contractor and all Subcontractors will be required to conform to the labor standards set forth in the Contract Documents. Owner reserves the right to reject any or all Bids, including without limitation the rights to reject any or all nonconforming, nonresponsive, unbalanced, or conditional Bids, and will award to lowest responsible Bidder taking into consideration quality, performance, and time specified in Bid Form for performance of Work.

W. Brian Hiatt  
City Manager

Engineer: Stephen R. Sands, PE, CFM  
Hazen and Sawyer  
4944 Parkway Plaza Boulevard, Suite 375  
Charlotte, North Carolina 28217

Bidders shall pay a non-refundable \$100.00 fee associated with the procurement of plans, specifications, and other contract/bid documents. Bid Plans and Specification can be obtained from:

Hazen and Sawyer  
4944 Parkway Plaza Boulevard, Suite 375  
Charlotte, North Carolina 28217  
Phone: 704-357-3150  
Email: [lthomas@hazenandsawyer.com](mailto:lthomas@hazenandsawyer.com)

Plans, specifications, and other contract documents will be open to public inspection at the Engineer's office, AGC of the Carolinas, and ISqFt.com.

**Technical questions:** Stephen R. Sands, PE, CFM 704-357-3150 or [ssands@hazenandsawyer.com](mailto:ssands@hazenandsawyer.com)

**Bid Due Date:** **October 29, 2015 @ 2:00 PM**  
**Location:** City of Concord, Alfred M. Brown Operations Center  
850 Warren C. Coleman Blvd. (Hwy 601 S.)  
Conference Room C, Concord, NC 28026

## **INSTRUCTIONS TO BIDDERS**

1. **DEFINED TERMS.** Terms used in these Instructions to Bidders are meanings assigned to them in the General Conditions and the Supplementary Conditions. An additional term is defined as follows:

Successful Bidder - The lowest, qualified, responsible, and responsive Bidder to whom Owner (based on the Owner's evaluation as herein provided) makes an award.

2. **COPIES OF BID DOCUMENTS.** Bid Documents, which include all front-end documents, may be obtained from:

Hazen and Sawyer  
4944 Parkway Plaza Boulevard, Suite 375  
Charlotte, North Carolina 28217  
Phone: 704-357-3150  
Email: [lthomas@hazenandsawyer.com](mailto:lthomas@hazenandsawyer.com)

Partial sets of Bid Documents will not be issued in response to requests by subject matter.

Complete sets of Bid Documents must be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misrepresentations resulting from the use of incomplete sets of Bid Documents.

Owner and Engineer, in making copies of Bid Documents available on the above terms, do so only for obtaining Bids for the Work and do not confer a license or grant for any other use.

3. **QUALIFICATIONS OF BIDDERS.** To demonstrate qualifications to perform the Work, Bidder may be required to submit written evidence on financial data; previous experience, present commitments, and other such data as may be requested by Owner or Engineer. Each Bid must contain evidence of Bidder's qualification to do business in the state where the Project is located, or Bidder must agree to obtain such qualification prior to award of the Contract.
4. **EXAMINATION OF CONTRACT DOCUMENTS AND SITE.** It is the responsibility of each Bidder, before submitting a Bid, to (a) thoroughly examine the Contract Documents, (b) visit the site to become familiar with local conditions that may affect cost, progress, performance, or furnishing of the Work, (c) consider federal, state, and local laws and regulations that may affect cost, progress, performance, or furnishing of the Work, (d) study and carefully correlate Bidder's observations with the Contract Documents, and (e) notify Engineer of all conflicts, errors, or discrepancies discovered by Bidder in the Contract Documents.
  - 4.1. **Underground Facilities.** Information and data reflected in the Contract Documents with respect to underground facilities at or contiguous to the site are based upon information and data furnished to Owner and Engineer by owners of such underground facilities or others, and Owner and Engineer disclaim responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary Conditions.
  - 4.2. **Additional Information.** Before submitting a Bid, each Bidder will, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests, and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface, and underground facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance, or furnishing of the Work and which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price, and other terms and conditions of the Contract Documents.

On request 24 hours in advance, Owner will provide each Bidder access to the site to conduct such explorations and tests as each Bidder deems necessary for submission of a Bid. Bidder shall fill all holes, clean up, and restore the site to its former condition upon completion of such explorations.

Arrangements for site visits shall be made by calling the office of the Director of Engineering for the City of Concord at 704.920.5425.

- 4.3. Easements. The lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by Contractor. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by Owner unless otherwise specified in the Contract Documents.
- 4.4. Unit Price Contracts. Bidders must satisfy themselves of the accuracy of the estimated quantities in the Bid schedule by examination of the site and a review of the drawings and the specifications, including the addenda. After Bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities of work or the nature of the work to be done.
- 4.5. Bidder's Representation. The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement concerning examination of the Contract Documents and the site, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
5. INTERPRETATIONS AND ADDENDA. All questions about the meaning or intent of the Quoting Documents and the Contract Documents shall be submitted in writing to: City of Concord Stormwater Services, P.O. Box 308, Concord, NC 28026 or Tom Bach at [bacht@concordnc.gov](mailto:bacht@concordnc.gov). Interpretations or clarifications considered necessary by Owner in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Quoting Documents. Questions received less than **7 days** prior to the date for opening of Bids may not be answered. Only answers issued by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
6. BID SECURITY. **Each Proposal must be accompanied by a deposit equal to 5% of the bid.** The Engineer's Opinion of Probable cost for this project is **\$328,000.00**. This deposit may consist of cash, or a Cashier's Check issued by, or a Certified Check drawn on a Bank or Trust Company authorized to do business in North Carolina, on a Bank insured by the Federal Deposit Insurance Corporation, a U.S. Money Order payable to the City of Concord, or 5% Bid Bond in the form required by G.S. 143-129 as amended, issued by an Insurance Company authorized to do business in North Carolina. Said deposit to be retained in the event of failure of the successful bidder to execute a formal contract within ten (10) days after award or to give satisfactory surety required.  
  
The Bid security of the Successful Bidder (if so required) will be retained until such Bidder has executed the Agreement, furnished the required contract security (if so required), and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Agreement and furnish the required contract security within the number of days set forth in the Bid Form, Owner may annul the Notice of Award and the Bid security of that Bidder will be forfeited. The Bid security (if so required) of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of 7 days after the Effective Date of the Agreement or the day after the last day the Bid remain subject to acceptance as set forth in the Bid Form, whereupon Bid security furnished by such Bidders will be returned. Bid security accompanying Bids which are deemed by Owner to be noncompetitive will be returned within 7 days after the designated Bid opening.
7. CONTRACT TIMES. The numbers of calendar days within which, or the dates by which, the Work is to be substantially completed and completed and ready for final payment (the Contract Times) are set forth in the Bid Form.
8. LIQUIDATED DAMAGES. Provisions for liquidated damages, if any, are set forth in the Agreement.

9. SUBSTITUTES OR "OR-EQUAL ITEMS. Bidder's attention is directed to Article 6.5 of the General Conditions concerning substitutes and "or-equal" items. Where an item or material is specified by a proprietary name, it is done for the purpose of establishing a basis of quality and not for the purpose of limiting competition. The Engineer's intent is to consider alternative products which have the desired essential characteristics. The Engineer will consider any such products offered. Requests for acceptance of alternative products shall be made through Bidders quoting as prime Contractors. Acceptances for substitutions will not be granted directly to suppliers, distributors, or subcontractors. Pursuant to Section 133-3, General Statutes of North Carolina, the following procedures shall be used:

Bidders desiring to submit alternative product proposals for prior acceptance of the Engineers shall submit, in writing, such proposals from October 19, 2015, until October 23, 2015. Applications received after this time will not be reviewed. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute, including drawings, cuts, performance and test data, and other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment, or other work that incorporation of the substitute would require shall be included. The Engineer shall consider and either accept or reject all alternative product proposals submitted.

If, by the close of the fifth day prior to the deadline for receiving the Bid, the Engineer has accepted any alternative product proposals, the Quoting Documents shall be modified to include the alternative products. The Engineer shall publish the modification in an Addendum at least 5 days prior to the deadline for receiving Bids. The Engineer's decision of acceptance or rejection of a proposed substitute shall be final.

10. SUBCONTRACTORS, SUPPLIERS, AND OTHERS. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, and other persons and organizations (including those who are to furnish the principal items of material and equipment) to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within 3 days after the opening submit to Owner the List of Subcontractors completed with all such Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work for which such identification is required. The list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, person, or organization, if requested by Owner. If Owner or Engineer after due investigation has reasonable objection to any proposed Subcontractor, Supplier, or other person or organization, Owner may, before the Notice of Award is given, request the apparent Successful Bidder to submit an acceptable substitute without an increase in the Bid.
11. BID FORM. The Bid Form is bound in the Bid Documents and shall not be removed therefrom. Bid Forms must be completed in ink.

Bids by corporations must be executed in the corporate name by the president or vice-president (or other corporate officer accompanied by evidence of authority to sign for the corporation). Bids by partnerships must be executed in the partnership name and signed by a partner. Bids by joint ventures shall be signed by each participant in the joint venture or by a representative of the joint venture accompanied by evidence of authority to sign for the joint venture.

The names of all persons signing shall be legibly printed below the signature. A Bid by a person who affixes to his signature the word "president", "secretary", "agent", or other designation without disclosing his principal may be held to be the Bid of the individual signing. When requested by Owner, evidence of the authority of the person signing shall be furnished.

All blanks in the Bid Form shall be filled. A Bid price shall be indicated for each unit price item listed therein, or the words "No Bid", "No Charge", "No Change", or other appropriate phrase shall be entered.

The Bid shall contain an acknowledgment of receipt of all Addenda; the numbers and dates of which shall be filled in on the Bid Form.

No alterations in Bids, or in the printed forms therefore, by erasures, interpolations, or otherwise will be acceptable unless each such alteration is signed or initialed by the Bidder; if initialed, Owner may require the Bidder to identify any alteration so initialed.

- 11.1. Bid Pricing. The Bidder shall complete the schedule of unit prices included in the Bid Form and shall accept all fixed unit prices listed therein.

The total Bid will be determined as the sum of the products of the estimated quantity of each item and the unit price Bid. The final Contract Price will be subject to adjustment according to final measured, used, or delivered quantities as provided in Article 9.7 of the General Conditions, and the unit prices in the Bid will apply to such final quantities except that unit prices will be subject to change by Change Order as stipulated in the Supplementary Conditions.

- 11.2. Contingency. The Contingency is to be added to the Bid price and is to be used for minor change order items. If the Contingency is to be used, a scope of work and price would be negotiated. The Contingency is for the sole use of Owner. A change order will be issued to delete any unauthorized portion of the Contingency.

12. SUBMISSION OF BIDS. Bids shall be submitted at the time and place indicated in the Invitation to Bid, or the modified time and place indicated by Addendum. Bids shall be enclosed in a sealed envelope or wrapping, addressed to:

City of Concord  
Stormwater Services  
P.O. Box 308  
850 Warren C. Coleman Blvd.  
Concord, North Carolina 28026-0308

Bids shall be marked with the name, license number, and address of the Bidder and shall be accompanied by the Bid security (if required) and other required documents. If the Bid is sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it.

Each Bid envelope shall be identified on the outside with the words:

Project Title: **Treasure Drive Stormwater Improvements** Project Number: **32180-002**

Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.

**One copy of all pages of the BID FORM must be submitted with the Bid, as well as a Bid Bond and Debarred Firms Certification Form.**

Oral, telephone, facsimile, or telegraph Bids are invalid and will not receive consideration.

No Bidder may submit more than one Bid. Multiple Bids under different names will not be accepted from one firm or association.

A conditional or qualified Bid will not be accepted.

13. MODIFICATION AND WITHDRAWAL OF BIDS. Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

If, within 24 hours after Bids are opened, any Bidder files a duly signed, written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the Bid security (if

any) will be returned. Thereafter, that Bidder will be disqualified from further quoting on the Work to be provided under the Contract Documents.

14. OPENING OF BIDS. Bids will be opened and publicly read aloud at the time and place specified in the Invitation to Bid. Bidders, their authorized agents, and other interested parties are invited to be present
15. BIDS TO REMAIN SUBJECT TO ACCEPTANCE. All Bids will remain subject to acceptance for the number of days set forth in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the security (if any) prior to that date.
16. AWARD OF CONTRACT. Owner reserves the right to reject any or all Bids, including without limitation the rights to reject any or all nonconforming, nonresponsive, unbalanced, or conditional Bids, and will award to lowest responsible Bidder taking into consideration quality, performance, and time specified in Bid Form for performance of Work. Owner also reserves the right to waive informalities.

In evaluating Bids, Owner will consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and such alternatives, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

Owner may consider the qualifications and experience of Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the Supplementary Conditions. Owner also may consider the operating costs, maintenance requirements, performance data, and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Award.

Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.

If the Contract is to be awarded, it will be awarded to the lowest Bidder whose evaluation by Owner indicates to Owner that the award will be in the best interests of Owner. If the Contract is to be awarded, Owner will give the Successful Bidder a Notice of Award within the number of days set forth in the Bid Form. The evaluation of Suppliers' or manufacturers' data submitted with the Bid, or submitted upon request prior to the Notice of Award, will include consideration of the following:

- Owner-required inventory of spare parts.
- Building design changes which would be required to accommodate the proposed materials and equipment.
- Installation requirements and related engineering, training, and operating costs.
- Experience and performance record of the Supplier or the manufacturer.
- Maintenance and frequency of inspections required to assure reliable performance of the equipment.
- Suppliers' or manufacturers' service facilities and availability of qualified field service personnel.
- Efficiency and related operating expense during the anticipated useful life of the equipment.

17. CONTRACT SECURITY. The General Conditions set forth Owner's requirements as to Performance and Payment Bonds (required). These Bonds shall be delivered to Owner with the executed Agreement.
18. SIGNING OF AGREEMENT. When Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by two unsigned counterparts of the Agreement with all other written Contract Documents attached. Within the number of days set forth in the Bid Form, the Successful Bidder shall sign, leaving the dates blank, and deliver the required number of counterparts of the Agreement and attached documents to Owner with the required Bonds and power of attorney. Within 30 days thereafter, Owner shall execute all copies of the Agreement and other Contract Documents submitted by Contractor

(Successful Bidder); shall insert the date of contract on the Agreement, Bonds, and power of attorney; and shall distribute signed copies as stipulated in the Agreement.

Should the Owner not execute the Contract within the period specified, the Successful Bidder may, by written notice, withdraw his signed Contract. Such notice or withdrawal shall be effective upon receipt of the notice by the Owner.

19. SALES AND USE TAXES. Provisions for sales and use taxes, if any, are set forth in the Supplementary Conditions.
20. RETAINAGE. Provisions concerning retainage are set forth in the Agreement.
21. LAWS AND REGULATIONS. Modifications, if any, to the General Conditions concerning Laws and Regulations are set forth in the Supplementary Conditions. Additional provisions, if any, concerning Laws and Regulations are set forth in the Agreement.
  - 21.1. Collusive Bidding. In accordance with Section 112(c) of Title 23 USC, and G.S. 75-5(b)(7) of the State of North Carolina, the Contractor (Bidder), by submission and execution of this bid or Bid, certifies that he has not entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding or quoting in connection with his Bid on this project.

End of Section

**DEBARRED FIRMS CERTIFICATION FORM**

PROJECT TITLE: **TREASURE DRIVE STORMWATER IMPROVEMENTS**

PROJECT NO.: **32180-002**

The undersigned hereby certifies that the firm of \_\_\_\_\_ has not been suspended by the State of North Carolina or any agency or department thereof for conviction or indictment or any of the offenses enumerated in G.S. 133-27 nor will award subcontracts of any tier to firms that have been suspended for conviction or indictment of any of the offenses enumerated in G.S. 133-27.

\_\_\_\_\_  
Name of Firm

ATTEST \_\_\_\_\_

(SEAL)

\_\_\_\_\_  
Signature of Authorized Official

\_\_\_\_\_  
Title

Sworn and subscribed before me this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

**BID FORM**

PROJECT IDENTIFICATION:

PROJECT TITLE: **TREASURE DRIVE STORMWATER IMPROVEMENTS**

PROJECT NO.: **32180-002**

THIS BID IS SUBMITTED TO:

City of Concord – Stormwater Services  
850 Warren C. Coleman Blvd., P.O. Box 308  
Concord, North Carolina 28026-0308

- 1) The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with Owner in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents within the specified time and for the amount indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.
- 2) Bidder accepts all of the terms and conditions of the Invitation to Bid and the Instructions to Bid, including without limitation those dealing with the disposition of the Bid security (if security is required by the City Manager). This Bid will remain subject to acceptance for 60 days after the day designated for reception of Bids. Bidder will sign and submit the Agreement with the Bonds and other documents required by the Quoting Documents within 10 days after the date of Owner's Notice of Award.
- 3) In submitting this Bid, Bidder represents that:

- a) Bidder has examined copies of all the Quoting Documents and of the following Addenda (receipt of all which is hereby acknowledged):

No. _____	Dated _____

- b) Bidder has visited the site, become familiar with, and satisfied itself as to the general, local, and site conditions that may affect cost, progress, performance, and furnishing of the Work.
- c) Bidder is familiar with and has satisfied itself as to all Federal, State, and Local Laws and Regulations that may affect cost, progress, performance, and furnishing of Work.
- d) Bidder has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except underground facilities) which have provided by the owner and under the conditions normally used and identified in the Supplementary Conditions and Special Conditions as provided in Paragraph 4.2.1 of the General Conditions. Bidder accepts the determination set forth in the Supplementary Conditions and Special Conditions of the extent of the "technical data" contained in such reports and drawings upon which Bidder is entitled to rely as provided in Paragraph 4.2 of the General Conditions. Bidder acknowledges that such reports and drawings are not Contract Documents and may not be complete for Bidder's purposes. Bidder acknowledges that Owner and Engineer do not assume responsibility for the accuracy or completeness of information and data shown, indicated in the Quoting Documents with respect to underground facilities at, or contiguous to the site. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all such additional or supplementary examinations, investigations, explorations, tests,

studies, and data concerning conditions (surface, subsurface, and underground facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance, or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder and safety precautions and programs incident thereto. Bidder does not consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance and furnishing of the Work in accordance with the time, price, and other terms and conditions of the Contract Documents.

- e) Bidder is aware of the general nature of Work to be performed by Owner and others at the site that relates to Work for which this Bid is submitted as indicated in the Contract Documents.
  - f) Bidder has correlated the information known to Bidder, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
  - g) Bidder has given Engineer written and verbal notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Contract Documents and the written resolution thereof by Engineer is acceptable to Bidder, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
  - h) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid Bidder has not solicited or induced any person, firm, or corporation to refrain from quoting; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.
- 4) Bidder will complete the Work for the following unit prices. Quantities indicated are estimated and not guaranteed; they are solely for comparing Bids and establishing the initial Contract Price. Final payment will be based on actual quantities.

**EXHIBIT A – BID FORM**

<i>Item</i>	<i>NCDOT Section</i>	<i>Item Description</i>	<i>Quantity</i>	<i>Units</i>	<i>Unit Price Bid</i>	<i>Amount Bid</i>
		<b>ROADWAY ITEMS</b>				
1	800	Mobilization	1	LS		
2	801	Construction Staking	1	LS		
3	310	18" R.C. Pipe Culverts, Class III	60	LF		
4	607	Asphalt Milling (1.5-inch Depth)	9	SY		
5	610	Asphalt Concrete Surface Course, Type S, 9.5B	28	TN		
6	610	Asphalt Concrete Intermediate Course, Type I, 19.0B	27	TN		
7	610	Asphalt Concrete Base Course, Type B, 25.0B	49	TN		
8	610	Asphalt Binder for Plant Mix	5	TN		
9	520	Aggregate Base Course for Driveway	11	TN		
10	SP-5	Reinforced Concrete – Endwalls and Footings	59	CY		
11	840	Masonry Drainage Structures, DI (NCDOT Std. 840.35)	3	EA		
12	840	Frame with Grate, Std. NCDOT 840.16	3	EA		
13	SP-10	Class II Rip Rap	145	TN		
14	876	Geotextile For Drainage	125	SY		
15	1631	Seeding and Mulching	1200	SY		
16	SP-01	Comprehensive Grading	1	LS		
17	SP-04	Traffic Control	1	LS		
18	SP-06	Precast Reinforced Concrete Arch Culvert	40	LF		
19	SP-07	Stream Pump Around Operation	1	LS		
20	SP-11	Rock Toe Protection	1	LS		
		<b>UTILITY ITEMS</b>				
21	1510	6" PC350 DI Water Main, Restrained Joint	110	LF		
22	1515	6" Water Gate Valve	2	EA		
23	1515	Deadman Thrust Restraint	2	EA		
24	1520	8" PC350 DI Gravity Sanitary Sewer	356	LF		
25	1525	4' Dia. Sanitary Sewer Manhole	4	EA		
26	1525	6' Dia. Sanitary Sewer Manhole	1	EA		
27	1540	12.75" Steel Encasement Pipe with spiders	50	LF		

<i>Item</i>	<i>NCDOT Section</i>	<i>Item Description</i>	<i>Quantity</i>	<i>Units</i>	<i>Unit Price Bid</i>	<i>Amount Bid</i>
28	SP-09	Sewer Flow Control	1	LS		
29	SP-12	Water Service Reconnection	2	EA		
30	SP-13	Sewer Service Reconnection	2	EA		

**ESTIMATED BASE COST**  
**10% CONTINGENCY**  
**TOTAL ESTIMATED COST**

\$ \_\_\_\_\_  
 \$ \_\_\_\_\_  
 \$ \_\_\_\_\_

5) Bidder agrees that all work will be completed and ready for final payment within **150** calendar days from the date of notice to proceed.

SIGNATURE OF BIDDER: \_\_\_\_\_

Contractor's License Number \_\_\_\_\_ License Expiration Date \_\_\_\_\_

If an Individual

By \_\_\_\_\_  
 (signature of individual)

doing business as \_\_\_\_\_

Business address \_\_\_\_\_

Phone No. \_\_\_\_\_

Date \_\_\_\_\_, 20\_\_\_\_

ATTEST \_\_\_\_\_ TITLE \_\_\_\_\_

If a Partnership

By \_\_\_\_\_  
 (firm name)

\_\_\_\_\_  
 (signature of general partner)

Business address \_\_\_\_\_

Phone No. \_\_\_\_\_

Date \_\_\_\_\_, 20\_\_\_\_

ATTEST \_\_\_\_\_ TITLE \_\_\_\_\_

If a Corporation

By \_\_\_\_\_  
(corporation name)

By \_\_\_\_\_ Title \_\_\_\_\_  
(signature of authorized person)

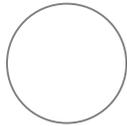
Business address \_\_\_\_\_

Phone No. \_\_\_\_\_

Date \_\_\_\_\_, 20\_\_\_\_\_

ATTEST \_\_\_\_\_ TITLE \_\_\_\_\_

(Seal)



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

By (name) \_\_\_\_\_

Contractor's License Number \_\_\_\_\_ License Expiration Date \_\_\_\_\_

If an Individual

By \_\_\_\_\_  
(signature of individual)

doing business as \_\_\_\_\_

Business address \_\_\_\_\_

Phone No. \_\_\_\_\_

Date \_\_\_\_\_, 20\_\_\_\_\_

ATTEST \_\_\_\_\_ TITLE \_\_\_\_\_

If a Partnership

By \_\_\_\_\_  
(firm name)

\_\_\_\_\_  
(signature of general partner)

Business address \_\_\_\_\_

Phone No. \_\_\_\_\_

Date \_\_\_\_\_, 20\_\_\_\_\_

ATTEST \_\_\_\_\_ TITLE \_\_\_\_\_

If a Corporation

By \_\_\_\_\_  
(corporation name)

By \_\_\_\_\_ Title \_\_\_\_\_  
(signature of authorized person)

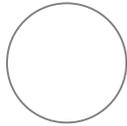
Business address \_\_\_\_\_

Phone No. \_\_\_\_\_

Date \_\_\_\_\_, 20\_\_\_\_\_

ATTEST \_\_\_\_\_ TITLE \_\_\_\_\_

(Seal)



**PERFORMANCE BOND**

Date of Execution of this Bond \_\_\_\_\_

Name and Address of Principal (Contractor) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name and Address of Surety \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name and Address of Contracting Body \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Amount of Bond \_\_\_\_\_  
\_\_\_\_\_

Contract                   That certain contract by and between the Principal and the Contracting Body above named  
dated \_\_\_\_\_  
for \_\_\_\_\_  
\_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS, that we, the PRINCIPAL and SURETY above named, are held and firmly bound unto the above-named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered into a certain contract with the Contracting Body, identified as shown above and hereto attached;

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of the contract that may hereafter be made, notice of which modifications to the Surety being hereby waived, then, this obligation to be void; otherwise, to remain in full force and virtue.

**PERFORMANCE BOND: (Continued)**

THIS PERFORMANCE BOND is made and given pursuant to the requirements and provisions of Section 129 of Chapter 143 of the General Statutes of North Carolina and pursuant to Article 3 of Chapter 44-A of the General Statutes of North Carolina, and each and every provision set forth and contained in Section 129 of Chapter 143 and in Article 3 of Chapter 44-A of the General Statutes of North Carolina is incorporated herein, made a part hereof, and deemed to be conclusively written into this Bond.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals as of the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned and representative, pursuant to authority of its governing body.

WITNESS:

\_\_\_\_\_  
(Proprietorship or Partnership)  
Printed Name \_\_\_\_\_

\_\_\_\_\_  
Principal (Name of individual and trade name,  
partnership, corporation, or joint venture)

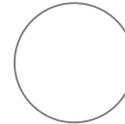
BY \_\_\_\_\_ (SEAL)  
Printed Name \_\_\_\_\_

TITLE \_\_\_\_\_  
(Owner, Partner, Office held in  
corporation, joint venture)

ATTEST: (Corporation)

**(Corporate Seal of Principal)**

BY \_\_\_\_\_  
Printed Name \_\_\_\_\_



TITLE \_\_\_\_\_  
(Corporation Secretary or  
Assistant Secretary Only)

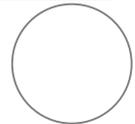
WITNESS:

\_\_\_\_\_  
Surety (Name of Surety Company)

BY \_\_\_\_\_  
Printed Name \_\_\_\_\_

TITLE \_\_\_\_\_ Attorney in Fact

**(Corporate Seal of Surety)**



COUNTERSIGNED:

\_\_\_\_\_  
(Address of Attorney in Fact)

\_\_\_\_\_  
N.C. Licensed Resident Agent

## PROJECT SPECIAL PROVISIONS

### Section 1.0 General Requirements

- 1.1. Contractor shall utilize the latest edition of NCDOT Standard Specifications & Standard Drawings for Roads and Structures, the City of Concord technical standards, and Water & Sewer Authority of Cabarrus County Technical Standard specifications, the most restrictive requirement shall apply unless otherwise noted. Section numbers in the bid forms and special provisions reference to the NCDOT Standard Specifications for Roadways and Structures.

Whenever the following terms are used in the NCDOT Standard Specifications, in any of the Contract Documents, or in the plans, the intended meaning of such terms shall be as follows:

- 1.1.1. **“Administrator”**, **“Chief Engineer”**, or **“State Highway Administrator”** shall mean the “City Engineer”
  - 1.1.2. **“Alternate”** or **“Alternate Bid”** shall mean the amount stated in the Bid which may be added to or subtracted from the Base Bid amount if such Alternate(s) are accepted by the City.
  - 1.1.3. **“Total Amount Bid”** or **“Total Base Bid”** shall mean the correct sum total obtained by adding together the amounts bid for every item in the proposal including contingencies or allowances, but excluding Alternates.
  - 1.1.4. **“Board of Transportation”** shall mean “City Council”
  - 1.1.5. **“City”** shall mean the “City of Concord, North Carolina”; the City is the Project Owner
  - 1.1.6. **“Construction Manager”**, **“Engineer”**, or **“Resident Engineer”** shall mean the City’s duly authorized Construction Manager to oversee the construction of the project
  - 1.1.7. **“Contract”** shall mean the reciprocal undertakings, obligations, and rights of the City and the Contractor evidenced by the executed agreement and other Contract Documents between the City and the Contractor, covering the performance of and compensation of the Work.
  - 1.1.8. **“Contract Amount”**, **“Total Contract Amount”** or **“Contract Sum”** shall mean the Total Base Bid plus Alternates accepted by the City.
  - 1.1.9. **“Contract Documents”** shall consist of the Project Manual, the Contractor’s executed bid and forms, Acceptance by the City, and any change orders issued after execution of the contract.
  - 1.1.10. **“Date of Availability”** shall mean “Notice to Proceed Date”
  - 1.1.11. **“Department”**, **“Department of Transportation”**, **“Division of Highways”**, and **“Raleigh Central Office”** shall all mean “City of Concord Water Resources - Stormwater Services”
  - 1.1.12. **“Project Manual”** shall mean the complete set of bidding documents issued by the City of Concord or its authorized representatives, to include the Invitation to Bid, Instructions to Bidders, Bid Forms, sample project forms, conditions and special provisions of the contract, addenda issued prior to the execution of the contract, and drawings.
  - 1.1.13. **“State”** shall mean “City of Concord”
  - 1.1.14. **“Supplemental Agreements”** shall mean “Change Orders”
- 1.2. The Contractor shall adhere to the provisions of the 1985 Underground Damage Prevention Act, North Carolina General Statutes 887, Chapter 785, Senate Bill 168, Article 3. To assist the Contractor and utility owners in meeting the requirements of this law, there is a service provider called “NC811.” Most major utilities with underground facilities in the State subscribe to this service.

From within North Carolina, dial 811. For calls originating outside (or inside) of North Carolina, the toll free number (800) 632-4949 may be used. NC811 can also be accessed via the Internet at <http://nc811.org/homepage.htm>.

The Contractor shall include the cost of any coordination and cooperation of utilities in his bid.

No additional compensation shall be allowed for delays or inconvenience sustained by the Contractor due to utility relocation or adjustments. No additional payment will be made for re-mobilization required by the utility's failure to relocate a utility at the request of the Contractor.

Where changes to utility facilities are to be made solely for the convenience of the Contractor, it shall be the Contractor's responsibility to arrange for such changes, and the Contractor shall bear all costs of such changes.

- 1.3. All concrete used on City projects will be required to meet the NCDOT Standard Specifications for Roadways and Structures.

- 1.4. Maintenance of the Project shall be in accordance with Section 104-10 of the NCDOT Standard Specifications.

The Contractor shall furnish and erect, at no additional cost to the City, whatever sidewalks, bridges, culverts, or other works as may be necessary for the protection of the public, including, but not limited to, barricades, fences, etc. and for the safe and proper execution of other public utility lines so as not to interfere therewith or damage or cause damage thereto. The Contractor shall be responsible for all damages to persons or property that occur as a result of his fault, omission, or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all work performed hereunder until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the City.

- 1.5. The Contractor shall be responsible for locating and providing storage areas for construction materials and equipment. The material and equipment storage shall comply with all local and state ordinances throughout the construction period. The Contractor shall restore the storage area to its original condition upon completion of the Project or upon such time as directed by the Engineer. Such restoration shall be at no additional cost to the City.

The Contractor shall be responsible for the safeguarding of materials and equipment against fire, theft and vandalism and shall not hold the City responsible in any way for the occurrences of same. The Contractor shall furnish and erect, at no additional cost, whatever works may be necessary for the protection of the public, including but not limited to barricades, fences, etc. Prior to final payment being made, the Contractor shall obtain a release from the property owner of the storage area utilized for the Project.

- 1.6. All quantity tickets for items not measurable in place shall be submitted in duplicate to the Project Inspector within seventy-two (72) hours after receipt of the material on the job. Each ticket shall indicate the date, contractor, job location and name, type of material, quantity of material, truck number and signature of the Contractor or his authorized representative.

No tickets will be accepted after seventy-two (72) hours have elapsed between the time of delivery and the submittal of tickets to the Engineer.

- 1.7. Any Allowance included as a line item on the Itemized Proposal, including but not limited to Contingency Allowances, may only be used by the Contractor upon written instructions from the Engineer. Any portion of any Allowance remaining at the end of the Contract shall revert to the City. The City reserves the right to change any Allowance amount prior to award of the Contract.

- 1.8. The Contractor shall guarantee all materials and workmanship for a period of one (1) year from the date of acceptance by the City and shall replace any portions that fail because of faulty materials or workmanship at no additional cost to the City. A six (6) month and eleven (11) month inspection will be held during the warranty period. The Contractor shall immediately repair all defective items upon notification. Items repaired under the provisions shall have an extended warranty period of twelve (12) months from the date of repair of the item.

- 1.9. The Contract Time will begin upon the issuance of the Notice to Proceed and will extend **150** calendar days thereafter.
- 1.10. Liquidated Damages will be assessed at the rate of **\$500.00** per calendar day for failure to complete the Project within the Contract Period.
- 1.11. No work shall be performed on the Project, which is subject to measurement or payment when City offices are closed for observed City holidays. This restriction does not relieve the Contractor from the responsibility of ensuring the safety and well-being of pedestrian and vehicular traffic, and for the protection of public and private property.

In emergencies and certain other conditions deemed necessary by the Engineer, the Contractor may be directed to work on weekends or holidays. There will be no separate measurement or payment for work done under these directives other than those established in the Contract.

- 1.12. The Engineer will determine acceptability of materials and construction in accordance with the applicable sections of these specifications.
- 1.13. Following the application of the appropriate acceptance plan, the decision of the Engineer shall be final as to the acceptance, rejection, or acceptance at an adjusted payment of defective materials.

Nonconforming materials, projects, items of construction, or complete construction that are not adaptable to correction by reworking shall be removed and replaced, accepted without payment, or accepted at an adjusted payment as stated in these specifications, or if not stated, as directed by the Engineer.

It is the intent of these specifications to provide an equitable means of accepting materials and work that may vary slightly from the specification range stated in the Standard Specifications in lieu of total rejection, removal, repair or nonpayment.

When materials or construction are not within specifications limits, an adjusted payment maybe allowed as delineated in these specifications, except where the level and variability of test results indicate a degree of nonconformance with requirements so great as to make the material or construction unacceptable. Unacceptable material and construction shall be either reworked or replaced at no cost to the City. The Engineer reserves the right to reject questionable material at any time in lieu of making reduced payment.

## Section 2.0 Special Provisions

### **SP-01, Comprehensive Grading**

#### 1. Description

This item shall include all elements of work covered by the referenced NCDOT Specifications and the Additional Specifications provided herein.

#### **NCDOT Specifications**

- 200, "Clearing and Grubbing"
- 225, "Roadway Excavation"
- 230, "Borrow Excavation"
- 235, "Embankments"
- 240, "Ditch Excavation"
- 250, "Removal of Existing Pavement"
- 260, "Proof Rolling"
- 340, "Pipe Removal"
- 402, "Removal of Existing Structures"

500, "Fine Grading, Sub-grade, Shoulders and Ditches"  
545, "Incidental Stone Base"  
560, "Shoulder Construction"  
802, "Disposal of Waste and Debris"  
1530, "Abandon or Remove Utilities"  
Division 16, "Erosion Control and Roadside Development"

### **Additional Specifications**

- a. Earthwork, Excavation, Unsuitable Materials, and Backfill Materials: the Contractor shall be responsible for all excavation, removal and disposal of unsuitable materials, providing borrow excavation, and backfill necessary for the construction of the project. All excavation, removal and disposal of unsuitable materials, borrow excavation and backfill shall be paid for within the Comprehensive Grading pay item with the exception of the Select Material/Controlled Backfill associated with the Pre-cast Arch Culvert installation and described in *SP-03*.
- b. Channel and Ditch Excavation and Grading: the Contractor shall be responsible for all channel excavation, ditch excavation, channel grading, ditch grading, riprap removal, and incidentals necessary for completing the work as shown on the plans or as directed by the Engineer. Bypass pumping for removal of the existing culvert shall be paid for separately under *SP-07, Pump Around Operation*.
- c. Clearing and Grubbing: Clearing on this Project shall be performed to the slope stake line or the right-of-way or easement lines unless directed otherwise. The Contractor shall obtain permission from the Engineer prior to removing any trees in the easement areas.
- d. Erosion Control: includes but is not limited to furnishing, installing, and maintaining, silt fence, diversion ditches, rock inlet sediment traps, rock pipe sediment trap, silt sacks, all stone for erosion control, rock check dams, block and gravel and inlet protection, catch basin inlet protection, temporary rock construction entrances, silt basins, haul/access roads, temporary stream crossings, and all other erosion control measures required by the plans, current ordinances, project permitting, and the Contractor's means and methods. Temporary erosion control matting will be paid for separately.
- e. Fence Removal and Disposal and or Fence Relocation: as shown on the plans and any additional removal, relocation, or reset identified by the Contractor's means and methods shall be included in this item. Engineer shall identify any fence to be reused prior to removal and disposal by the Contractor.
- f. Hedgerow and or Planting bed Removal and Disposal: as shown on the plans and any additional hedgerow or planting bed removal identified by the Contractor's means and methods shall be included in this item. Hedgerows to be removed shall be approved by the Engineer prior to removal.
- g. Irrigation System Maintenance: the Contractor shall be responsible for removing, temporary capping, and replacing any irrigation system components disturbed within the work area. The Contractor may elect to re-use components on any individual property if such components remain operational when reinstalled. Should the Contractor damage any component such that they cannot be re-used, replacement parts shall be of the same type and quality. If such items exist in the road right of way, the Contractor is to replace them outside the right of way.
- h. Mail Boxes and Site Amenities: remove, protect, and reset mailboxes and site amenities. Mailboxes shall remain in service at all times.
- i. Minor Drainage: The Contractor shall be responsible for locating and maintaining/restoring the function of the outfall of any French drains, roof drains, basement drains, or foundation drains in the work area. The Contractor shall be aware that there may be such items not identified in

the construction documents. As directed by the City's inspector, the Contractor shall tie all such items into the nearest structure to which gravity flow may be established using materials conforming to Section 1044-6 of the NCDOT Standard Specifications.

- j. Private Electrical Accessories: the Contractor shall be responsible for verifying the location of, removing and reinstalling any underground electrical accessories, including but not limited to wiring for decorative lighting, invisible pet fencing, and television cable. If such items exist in the road right of way, the Contractor is to replace them outside the right of way.
- k. Private Utility Accessories: the Contractor shall be responsible for verifying the location of, removing and reinstalling (or protecting) any underground utility accessories within the limits of construction, including but not limited to gas service for grills, lighting, etc.
- l. Removal and Disposal of Existing Infrastructure: concrete curb, sidewalk, miscellaneous concrete, asphalt, driveways, pads, slabs, walls, structures, catch basins, manholes, endwalls, wingwalls, etc. within the construction limits as shown on the plans and any additional infrastructure removal identified by the Contractor's means and methods shall be included in this item.
- m. Shoring: the Contractor shall be responsible for all shoring to include means, methods, materials and engineering needed to construct the project.
- n. Saw Cutting: all saw cutting required to build the Project. Where asphalt or concrete (curb, sidewalk, roadway, driveways, parking lots, etc.) is to be removed, the Contractor shall provide a neat edge along the pavement being retained by sawing the pavement a minimum of 2" deep and 1' wide before breaking and removing adjacent pavement. The cost of sawing asphalt or concrete shall be included in this item.
- o. Tree Protection: The Contractor shall provide tree protection as shown on the plans, including any pruning, which shall be performed by a certified arborist in accordance with proper arboricultural standards, and any additional Tree Protection identified by the Contractor's means and methods shall be included in this item.
- p. Tree and/or Stump Removal and Disposal: as shown on the plans and any additional tree and/or stump removal identified by the Contractor's means and methods shall be included in this item. Trees to be removed shall be approved by the Engineer prior to removal.
- q. Utility Pipe/Conduit Removal and Disposal: existing public or private utility pipe / conduit, drain pipe removal and disposal as shown on the plans and any additional utility pipe / conduit removal identified by the Contractor's means and methods shall be included in this item.
- r. Property Access: all labor and materials required to maintain access to properties during construction as directed by the Engineer.

## 2. Measurement

There will be no separate measurement made for Comprehensive Grading.

## 3. Payment

For the above-referenced NCDOT sections and numbered Additional City Specifications, there will be no direct measurement, payment or compensation, all cost incurred to complete the work as specified shall be included in the Lump Sum price bid for "Comprehensive Grading".

There will be **no separate measurement or payment** for the items listed or referenced in this specification.

Payment will be made under:

**COMPREHENSIVE GRADING ..... LS**

**SP-02, EARTHWORK, EXCAVATION, UNSUITABLE MATERIALS, AND BACKFILL MATERIALS**

1. Description

Earthwork shall be performed to the lines and grades indicated on the plans. The work shall include excavation, furnishing, placement, compaction, and satisfactory disposal of all materials encountered within the limits of the Work necessary for the construction of the Project.

All excavated materials that are not required for the Project or are unsuitable for fills shall be considered as waste and shall be hauled off the site at the Contractor's expense.

2. Materials

Provide bedding material in accordance with Article 1016-3 for Class II, Type 1 or Class III, Type 1 or Type 2 select material.

Provide foundation conditioning material in accordance with Article 1000-6 for Flowable Fill.

Provide foundation conditioning geotextile in accordance with Article 1056-2 for Type 2 geotextile.

Provide borrow material in accordance with Article 1018.

**(A) Unsuitable Material and Rock**

Unsuitable material shall be defined as any and all unsuitable materials regardless of its nature. Unsuitable Material not incorporated into the Project shall be removed, hauled, and disposed by the Contractor only as authorized by the Engineer. Stockpiled Unsuitable Material shall be disposed of no less than once per week.

Rock shall be defined as any subsurface material (except foundations and pavements) which cannot be excavated by a backhoe, or trackhoe, which is capable of producing 31,000 pounds of curling force.

Unsuitable material and/or rock shall be removed, hauled, disposed of at no additional cost to the City.

When unsuitable material or rock is encountered, the Engineer shall be notified to:

- verify that the material cannot be removed as defined above or incorporated into the project feature
- determine the measurement limits

Rock removal methods include, but are not limited to, drilling, pneumatic hammering, blasting, etc. or as directed by the Engineer. Blasting shall be performed as specified in Article 220-3 of the Standard Specifications.

Disposal shall be in accordance with Section 802 in the Standard Specifications.

The removal limits of the unsuitable material or rock shall comply with the following paragraphs.

Storm Drainage

- Pipe

- Horizontally – as illustrated in NCDOT 300.01;
- Lower Limit – as illustrated in NCDOT 300.01
- Box Culverts/Bends/Bottomless Culverts
  - Horizontally – outer width of culvert or footer plus six (6) feet (3 feet each side);
  - Lower Limit – one (1) foot below the bottom of the barrel or footing;

#### Channels

- Two (2) feet below the finished grade or;
- Stream/channel structures – as directed by the Engineer.

#### Structures

*(Includes but not limited to: headwalls, drainage structures (catch basins, drop inlets, risers, etc.), rip rap aprons, flared end sections, retaining walls, etc.)*

- To the subgrade elevation as shown on the plans or details;
- Horizontally – two (2) feet from each exterior surface (outer wall of the structure or footer; boulder or rip rap extents, as approved for stream structures and rip rap aprons)

### **(B) Bedding and Backfill**

- Pipe (including round, elliptical, etc.)
  - There will be no separate measurement or payment for select bedding and select backfill material required in the installation of pipe as illustrated in NCDOT 300.01. All bedding and select backfill material will be included in cost of the installed pipe.
- Culvert (Box Culverts/Bends/Bottomless Culverts)
  - There will be no separate measurement or payment for bedding required in the installation of culverts as illustrated in Figure 2.1 of the *Precast Reinforced Concrete Culvert* Special Provision or as shown on the plans. All bedding material will be included in cost of the installed pipe or culvert.
  - Material needed for buried culvert inverts and channel inverts inside three-sided bridge/culverts shall be incidental to the cost of the culvert unless otherwise directed by the Engineer.

When local material meeting the requirements for the select bedding and backfill is approved for use by the Engineer, no deductions in the cost of pipe culvert will be made. Local material is defined as material generated on the project site or within the project limits.

#### Within the Existing or Proposed Roadway

- Pipe (including round, elliptical, etc.)
  - For pipe located within the existing or proposed roadway, including beneath the proposed curb and gutter or between road ditch lines, the Contractor shall use suitable material from the elevation of the select backfill material included in the cost of the installed pipe to the subgrade.
- Culvert (Box Culverts/Bends/Bottomless Culverts)
  - For culverts located within the existing or proposed roadway, including beneath the proposed curb and gutter or between road ditch lines, the Contractor shall use suitable material from the elevation of the bedding included in the cost of the installed culvert to the subgrade.

When local material meeting the requirements for suitable material is approved for use by the Engineer, there will be no separate measurement or payment for the material incorporated into the completed and accepted Project.

Suitable material shall be defined as material meeting both:

- Unified Soil Classification System (USCS) designation of GW, GP, GM, GC, SW, SP, SM, or SC and
- American Association State Highway Transportation Official (AASHTO) Soil Classification System designation of A-1, A-3, A-2-4, or A-2-5.

When local suitable material is not available to complete the backfill of the trench, the Contractor shall use select material in accordance with SP-03 *Select Material*.

Do not use *Select Material* until all local suitable material has been incorporated into the Project. There shall be no measurement or payment made for *Select Material* brought to the site at the Contractor's convenience.

#### Outside of the Proposed or Existing Roadway

- Pipe (including round, elliptical, etc.)
  - For pipe located outside the existing or proposed roadway, including beneath the proposed curb and gutter or between road ditch lines, the Contractor shall use local suitable material from the elevation of the select backfill material included in the cost of the installed pipe to the finished grade or subgrade.
- Culvert (Box Culverts/Bends/Bottomless Culverts)
  - For culverts located outside the existing or proposed roadway, including beneath the proposed curb and gutter or between road ditch lines, the Contractor shall use local suitable material from the elevation of the bedding included in the cost of the installed culvert to the finished grade or subgrade.

When local suitable material is not available to complete the backfill of the trench, the Contractor shall use borrow material in accordance with NCDOT 230.

Do not use *Borrow Excavation* material until all local suitable material has been incorporated into the Project. There shall be no measurement or payment made for borrow excavation material brought to the site at the Contractor's convenience.

### 3. Measurement and Payment

There will be no direct payment for earthwork, excavation, unsuitable materials, rock removal, and backfill materials described in this special provision. All other earthwork shall be considered incidental to the Project and paid for in *SP-01 - Comprehensive Grading SP-05, Reinforced Concrete – Endwalls or SP-06, Precast Reinforced Concrete Culvert*, unless noted elsewhere in the Contract Documents.

## **SP-03, SELECT MATERIAL/CONTROLLED BACKFILL**

### 1. Description

Work covered in this special provision consists of furnishing, placing, and compacting select material/controlled backfill as shown on the plans or as directed.

Select material/controlled backfill shall be placed in pipe culvert excavations within the existing or proposed roadway, including beneath the proposed curb and gutter, or as directed. The Engineer will determine the amount and location of select material/controlled backfill to be used on the project. The Contractor shall not remove material from the project without approval from the Engineer.

## 2. Materials

Select material/controlled backfill shall meet the requirements of AASHTO Group A1, A2, A3, or 4, as recommended by the reinforced precast concrete arch culvert manufacturer, or other approved classes or materials as directed.

With written approval and without additional compensation, a higher class of material may be substituted than stated in the Contract Documents.

## 3. Measurement and Payment

There will be no separate measurement or payment for select bedding and select backfill/controlled backfill material required in the installation of pipe as illustrated in NCDOT 300.01. All bedding and select backfill/controlled backfill material required in the installation of the pipe as illustrated in NCDOT 300.01 will be included in cost of the installed pipe.

## **SP-04, TRAFFIC CONTROL**

### 1. Description

Beginning Work and Street Closings: The Contractor is responsible for notifying the City of Concord Transportation Department (Joe Wilson III, PE: 704-920-5362) of any work where the number of travel lanes is reduced from normal conditions.

The Contractor shall install advance warning signs for the Project. These signs shall be in place for one week before construction activity begins. The Contractor shall begin construction activity on a street on the scheduled date for the closing of the travel lane.

During daily construction work hours, the Contractor will maintain at least one lane of traffic. During periods of construction inactivity, all lanes of traffic will be open unless otherwise shown on the plans or noted in the specifications.

Traffic Control Plan: Traffic control will be performed by the Contractor based upon the Traffic Control Special Provisions. The Traffic Control Special Provisions may refer to plan sheets for major work items, details in the NCDOT Roadway Standard Drawings, or the NCDOT Maintenance/Utility Traffic Control Guidelines.

All traffic control devices and procedures shall conform to the requirements of the current edition of the Federal Highway Administration (FHWA) *Manual on Uniform Traffic Control Devices* (MUTCD), the current edition of the North Carolina Department of Transportation (NCDOT) Supplement to the *Manual on Uniform Traffic Control Devices for Streets and Highways*, the NCDOT Roadway Standard Drawings, the current edition of the NCDOT Standard Specifications for Roads and Structures, and NCDOT Work Zone Traffic Control guidelines.

The Contractor shall maintain the traffic control as described herein unless the Contractor submits an alternate traffic control plan to the Engineer and it is approved by the Engineer. The Engineer may direct the Contractor to modify the traffic control if, in the Engineer's opinion, traffic is not moving safely or efficiently.

Traffic Control Phasing for this project shall be in accordance with the Traffic Control Plans, NCDOT Maintenance/Utility Traffic Control Guidelines, NCDOT Standard Drawings. The contractor shall adhere rigidly to these plans and details. If these details are not typical for field conditions, the details may be combined or altered upon approval of the Engineer. The standards and details are the minimum required. Additional signs, cones, drums, barricades and warning devices may be used, but at no time will less than what is specified on the plans, in the standards, and on diagrams be acceptable.

Maintenance of Traffic: The Contractor shall maintain all travel lanes in accordance with the Traffic Control Plan sheets.

The Contractor shall use flagger control in accordance with NCDOT Maintenance/Utility Traffic Control Guidelines.

In areas of drop-offs and low shoulders, the Contractor shall backfill up to the edge and elevation of the existing pavement in accordance with Section 3.3 of the NCDOT Maintenance/Utility Traffic Control Guidelines.

Reasonable ingress and egress shall be maintained to all businesses and dwellings affected by the work activity. Access to driveways shall not be blocked unless reasonable alternative access is available or unless permission to block the driveway is granted by the affected property owner and/or tenant. Special attention shall be paid to maintaining easy access to fire hydrants.

The Contractor shall not work on both sides of the road simultaneously within the same area.

The Contractor shall provide adequate drainage under driveways and within the Project area for the duration of the Project.

The Contractor shall mark all hazards within the Project limits with well-maintained signs, barricades, warning and/or channelizing devices.

Traffic Control Devices: The Contractor shall furnish, install, operate, relocate, maintain and remove all temporary traffic control devices necessary for controlling traffic. The Contractor shall notify City of Concord Transportation Department regarding conflicting permanent signs. Only City of Concord Transportation Department forces shall install, remove or relocate any permanent signs within the right-of-way. All construction signs and barricades shall remain in place until the appropriate permanent signs and pavement markings are installed.

Pedestrian Considerations: The Contractor shall accommodate the needs of all pedestrians in accordance with Chapter 5 of the NCDOT Maintenance/Utility Traffic Control Guidelines.

Equipment and Material Storage: During periods of construction inactivity, all construction equipment and materials may be stored in the right-of-way or temporary project easement, but must be placed safely fifteen (15) or more feet away from any open travel lane. It is recommended that all construction equipment and materials be stored on private property, which is posted against trespassing. It is the responsibility of the Contractor performing the work to obtain the permission to use a property for this purpose.

Excavation and Trenches: Trenches or excavations, which cannot be properly backfilled and patched prior to the end of the workday may be bridged to permit an unobstructed flow of traffic. Trench walls and adjacent soils shall be sufficiently stabilized prior to the use of steel plates for bridging.

- Bridging must be secured against displacement by using adjustable cleats, angles, bolts, or other devices to prevent movement by traffic.
- The trench must be adequately shored to support the bridging and traffic.

- Steel plates used for bridging must extend 1 foot beyond the edges of the trench. Temporary paving materials (premix) should be used to feather the edges of the plate to minimize wheel impact.

All excavation in the public rights-of-way shall be in compliance with all current Occupational Safety and Health Act (OSHA) requirements. Any persons in an excavation not in compliance with OSHA regulations will be ordered out of the excavation until it is brought into compliance. OSHA-N.C. inspectors may be notified of any excavation not brought into compliance when ordered or if a contractor or utility company repeatedly violates OSHA regulations.

All agencies working within the public right-of-way shall comply with all of the provisions of the Underground Damage Prevention Act (Section 1, Chapter 87, Article 3 of the North Carolina General Statutes). The North Carolina 811 (NC811) is available to assist you with meeting the provisions of this act. Contacting NC811 (811) is sufficient notification to most utilities; however, the Contractor is also responsible for contacting those utilities in the area, which are not members of the NC811. Except in cases of emergency, requests for underground utility locates must be made at least 48 hours, but no more than 2 weeks, before an excavation is begun. NC811 requires that the Contractor mark the proposed excavation area limits with soluble white paint. The Contractor is responsible for any damage, which may result, from the failure to have all underground utilities properly located or for not following proper procedures in the vicinity of properly marked underground utilities.

Crane Work: All crane activity within the public rights-of-way shall comply with all current OSHA requirements. No crane operator shall swing or lift a load over an open travel lane, open sidewalk, or any other part of the public right-of-way open for use by the public.

The crane operator should avoid swinging a load over the public rights-of-way. If the operator must swing/lift a load over or near an open right-of-way, the responsible party shall follow all relevant lane closure details. The crane operator shall not swing or lift a load in a manner that endangers the public.

2. Measurement

There will be no separate measurement made for Traffic Control.

3. Payment

Traffic Control will be paid at the lump sum price for "Traffic Control". This payment will be full compensation for all elements of work required to complete the Project as specified.

Partial payments will be made as follows:

- 25% of the lump sum price on the first partial payment estimate made after any work has been performed on the item of "Traffic Control".
- 25% of the lump sum price on the first partial payment after work is 25% complete.
- 25% of the lump sum price on the first partial payment after work is 50% complete.
- 25% of the lump sum price on the first partial payment after work is 100% complete.

Payment will be made under:

**TRAFFIC CONTROL ..... LS**

**SP-05, REINFORCED CONCRETE – ENDWALLS AND FOOTINGS**

1. Description

Work covered in this special provision include but not limited to excavation, hauling, disposal of materials, furnishing and placing backfill materials, subsurface drainage, concrete, brick masonry, mortar, grout, and furnishing and placing reinforcing steel to construct the endwalls and footings in accordance with the contract.

2. Materials and Construction Methods

Installation of the reinforced concrete shall conform to Section 838 of the NCDOT Standard Specifications as well as any requirements of this provision. Backfill shall be as specified in the *Earthwork, Excavation, Unsuitable Materials, and Backfill Materials* Special Provision.

Payment for Reinforced Concrete shall be full compensation to complete the items as specified in Section 838 – *Endwalls* and Section 1070 – *Reinforcing Steel* of the NCDOT Standard Specifications for Roads and Structures, the Plans, and this Specification.

3. Measurement

The quantity of reinforced concrete to be paid for will be the actual number of cubic yards of concrete, which has been installed and accepted.

4. Payment

Payment for all work covered by this special provision will be made at the contract unit price per cubic yards for “Reinforced Concrete”. Such payment will be full compensation for all work covered by this special provision including, but not limited to, furnishing all labor, materials, filter fabric, equipment, excavating, bedding, fill material, fill, constructing joints and connections, furnishing

**REINFORCED CONCRETE - ENDWALLS AND FOOTINGS.....CY**

**SP-06, PRECAST REINFORCED CONCRETE ARCH CULVERT**

1. Description

Work covered by this special provision consists of installation of a precast reinforced concrete arch culvert (culvert), in accordance with the plans and specifications at locations shown on the plans. The work shall also include the construction of such joints and connections to other culverts, pipes, drainage structures, and steps as may be necessary to complete the work shown on the plans.

2. Materials and Construction Methods

Installation of the culvert shall conform to Section 414 of the NCDOT Standard Specifications as well as any requirements of this provision. Backfill shall be as specified in the *Earthwork, Excavation, Unsuitable Materials, and Backfill Materials* Special Provision.

Design and Manufacture

Culvert sections shall conform to ASTM C-1577 or the latest edition of the AASHTO LRFD Bridge Design Specifications. Provide a precast culvert that meets the requirements of Section 1077 and any other applicable parts of the Standard Specifications.

The concrete mixture shall meet the requirements for Single Cell Box Sections shown in Table 1077-1 in Section 1077 of the NCDOT Standard Specifications. Movement of the precast sections should be minimized during the initial curing period. Any damage caused by moving or handling during the initial curing phase will be grounds for rejection of that precast section. Air entrain the concrete in accordance with Section 1077 - 5(A) of the NCDOT Standard Specifications. For dry cast manufacturing, air entrainment is not required.

Handling devices or holes are permitted in each culvert section for the purpose of handling and laying. Submit details of handling devices or holes for approval and do not cast any concrete until approval is granted. Remove all handling devices flush with concrete surfaces as directed. Fill holes in a neat and workmanlike manner with an approved non-metallic non-shrink grout, concrete, or hole plug.

Each culvert section shall be checked at the plant for fitment and numbered which shall correspond to the laying schedule.

All openings shown on the plans in the culvert shall be formed during the manufacturing process.

Culvert minimum waterway area shown on the plans shall be verified with the manufacturer for the culvert sizes due to manufacturing differences.

#### Joints

Produce the precast reinforced concrete culvert section with tongue and groove ends. Design and form these ends of the culvert section so, when the sections are laid together, they make a continuous line of culvert sections with a smooth interior free of appreciable irregularities in the flowline. The internal joint formed at the tongue and groove ends of the precast units shall be sealed with either bitumen/butyl sealant or closed-cell neoprene material conforming to ASTM C990 or C1677. The internal joint material shall be installed in accordance with the manufacturer's recommendations. The material shall be shown on the shop drawings when they are submitted for review.

Seal the external joint with an outside sealer wrap conforming to ASTM C877 that is at least 12 inches wide and covers the joint on both the sides and the top of the box section. Use ConWrap CS-212 from Concrete Sealants, Inc., EZ-Wrap from Press-Seal Gasket Corporation, Seal Wrap from Mar-Mac Manufacturing Co., Inc., Cadilloc External Pipe Joint from Cadilloc, or an approved equal for the outside sealer wrap. If the outside sealer wrap is not applied in a continuous strip along the entire joint, a 12 inch minimum lap of the outside sealer wrap is permitted. Before placing the outside sealer wrap, clean and prime the area receiving the outside sealer wrap in accordance with the sealer wrap manufacturer recommendations. The joint wrap manufacturer installation recommendations shall be included with shop drawings submitted for review.

Cover the external joint sealer with a 3 foot strip of filter fabric conforming to Type 4 requirements in Section 1056 of the Standard Specifications.

#### Installation

Ensure that equipment of the correct lifting capacity is available to install precast concrete units. Site conditions must be checked well in advance of shipping to ensure proper equipment location and to avoid any lifting restrictions. The lift anchors or holes provided in each section are only means to lift the elements unless otherwise approved by manufacturer.

In no case shall equipment operating in excess of the design load be permitted over the culvert units unless otherwise approved by manufacturer.

No construction equipment shall cross the bare precast concrete unit. The contractor shall refer to the Manufacturers specifications for additional restrictions.

No backfill shall be placed against any structural elements until they have been approved by the Engineer. Complete backfill in accordance with Sections 410-8 and 414-7 of the NCDOT Standard Specifications, Manufacturer's Specifications, and as specified in the *Earthwork, Excavation, Unsuitable Materials, and Backfill Materials* Special Provision. Sections 410-10 and 414-9 of the NCDOT Standard Specifications do not apply.

Bedding for precast culvert shall meet the requirements of Section 410 and 414 of the NCDOT Standard Specifications. Excavate 12 inches below the bottom of barrel and footings and backfill with

Class VI select material in accordance with Section 1016 of the NCDOT Standard Specifications or as shown on the plans. Bedding shall extend 12 inches outside of the culvert or footings. In addition, bedding material shall be placed on filter fabric conforming to Type 4 requirements in Section 1056 of the NCDOT Standard Specifications. The filter fabric shall be placed perpendicular to the culvert barrel and extend 1 foot vertically onto the culvert wall/footing. Perpendicular sections of fabric shall be continuous. A minimum lap of 2 feet shall be provided between sections of fabric.

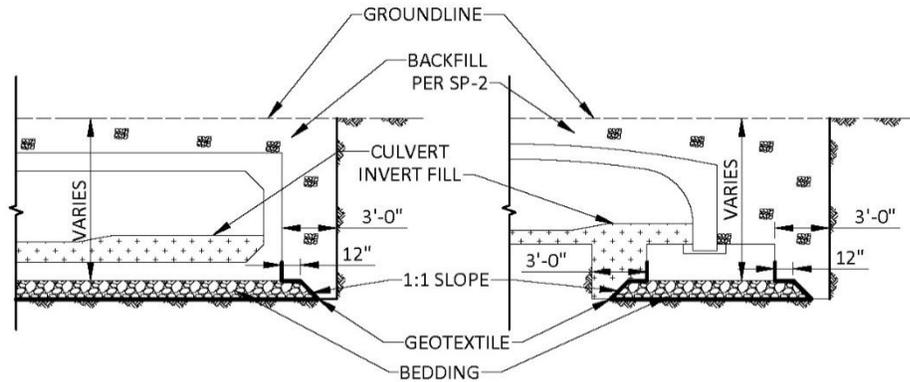
Culvert sections shall be placed at the beginning of the outlet end of the culvert with the groove end being laid upgrade. Tongue sections shall be laid into the groove sections. Positive means shall be provided to pull each section firmly into the previously placed section so that the joints are tightly homed. Use a "come-along", box pullers or other approved methods to create a positive means of joining box sections. Construction equipment shall not have direct contact with the culvert section. The load of the culvert sections shall be suspended by a lifting device during joining procedure.

Place multiple, parallel lines of a culvert such that the separation between the lines of culvert has a minimum width of 3 inches. Fill the separation between multiple lines of culvert with non-excavatable flowable fill. Use flowable fill that meets the requirements listed in Section 1000 of the NCDOT Standard Specifications except that Field Compressive Strength Specimens are not required.

Invert Fill Material (as needed)

The culvert shall be filled with native soil as shown on the plans and details. Native material consists of material that is excavated from the streambed or floodplain at the project site during culvert construction. Only material that is excavated from the streambed may be used to line the low flow channel or culvert barrel. Rip rap may be used to supplement the native material. If riprap is used, native material shall be placed on top to fill voids and provide a flat surface for animal passage. Native material is subject to approval by the Engineer and may be subject to permit conditions. If native material is not available, the Engineer shall approve an alternate source of material.

The material shall be compacted as little as possible but firm enough to walk on without leaving footprints.



UNDERCUT EXCAVATION SHALL BE PAID FOR SEPARATELY.

Figure 2.1 – Precast Reinforced Concrete Culvert Typical Section

3. Submittals

The designs of the precast culverts are the responsibility of the Contractor and are subject to review, comments, and approval. Submit two sets of detailed plans for review. Include all details in the plans, including the size and spacing of the required reinforcement necessary to build the precast culverts and the laying schedule. A North Carolina Registered Professional Engineer shall seal the plans and design calculations. The shop drawings must show the proposed openings (top and sides) and reinforcing for pipe connections, structure openings, and precast holes for steps.

The Contractor shall submit the manufacturer's certification for the culvert sections and those products to be used in the installation.

All submittals shall be made a minimum of two weeks prior to construction or placing an order for materials for review by the Engineer.

4. Measurement

The quantity of precast reinforced concrete culvert to be paid for will be the actual number of linear feet of culvert, which has been installed and accepted. Measurement will be made horizontally along the centerline of the installed culvert. Measurement will not be made across precast bends or other drainage structures.

5. Payment

Payment for all work covered by this special provision will be made at the contract unit price per linear foot for "Precast Reinforced Concrete Culvert". Such payment will be full compensation for all work covered by this special provision including, but not limited to, furnishing all labor, materials, filter fabric, equipment, excavating, bedding, invert fill material, flowable fill, installing culvert, constructing joints and connections, furnishing project submittals and other incidentals necessary to complete this work. There shall be no separate payment for Culvert Excavation, filter fabric, bedding, or any other items required by Section 410 (Articles 1-6 and 9) or 414 (Articles 1-5 and 8) of the NCDOT Standard Specifications. Backfill shall be as specified in the Earthwork, Excavation, Unsuitable Materials, and Backfill Materials special provision. Sections 410-10 and 414-9 of the NCDOT Standard Specifications do not apply.

Payment will be made under:

**20' x 5' PRECAST REINFORCED CONCRETE ARCH CULVERT ..... LF**

**SP-07, STREAM PUMP AROUND OPERATION**

1. Description

Work under this section consists of furnishing all labor, materials, equipment, supplies, supervision, tools, and performing all work necessary for the installation and maintenance of pumping stream base and storm event flow around project work areas for sediment and erosion control purposes as may be necessary or directed by the Engineer and to conform to the plans, specifications, details, permits, local laws, state laws and federal laws, where applicable.

2. Methods and Materials

The measures and works shall include, but are not limited to, the following:

Pump Around Operation – A pump shall be used to convey the stream base flow and storm event flow around the work area during channel excavation, installation of structures, and stabilization. Impervious dikes shall be installed at the upstream and downstream locations of the stream pump around operations. The size of pumps used shall be determined by the onsite contractor with approval from the project engineer. The pump includes temporary flexible hose in sufficient length to pump the water from the upstream side of the active working area to the downstream end. Pumps shall be silent or quiet rated (70 decibels at 25').

Sediment Filter Bag Systems – A sediment control bag/silt bag/dewatering bag/special stilling basin shall be used to filter pumped water during construction. The quantity of sediment filter bag systems may be increased, decreased, or eliminated entirely at the direction of the Engineer.

The Contractor shall stabilize all construction areas and elements prior to a storm event to prevent on-site and off-site damage due to erosion and sedimentation. Construction areas and elements to be stabilized include the cofferdam, baseflow pump system, and construction area pump system, channel, flood bench, vegetation, etc.

3. Measurement

Measurement will be made as described below:

The Stream Pump Around Operation specified under this Section shall be measured at the contract lump sum price. No separate measurement of materials will be made under this item.

Impervious dikes, sediment filter bag system, pump system, hose, and stabilization during storm events shall be considered incidental to the project. No separate measurement of materials will be made under this item.

4. Payment

The Stream Pump Around Operation specified under this Section shall be paid for at the contract lump sum price. No separate payment of materials will be made under this item.

Impervious dikes, sediment filter bag system, pump system, hose, and stabilization during storm events shall be considered incidental to the project. No separate payment of materials to construct these elements will be made under this item.

Payment will be made under:

**STREAM PUMP AROUND OPERATION ..... LS**

**SP-08, DUCTILE IRON PIPE AND FITTINGS**

1. Description

Work under this section consists of furnishing all labor, materials, equipment, supplies, supervision, tools, and performing all work necessary for the installation of the PC350 DI gravity sanitary sewer as necessary or directed by the Engineer and to conform to the plans, specifications, details, permits, local laws, state laws and federal laws, where applicable.

2. Requirements

Interior Linings

1. Force mains and fittings shall be cement mortar lined except where ceramic epoxy lining is required as shown on the drawings. Cement mortar lining shall conform to American Standard Specifications for Cement Mortar Lining for Cast Iron Pipe and Ductile Iron Pipe and Fittings, ANSI A21.4 (AWWA C104) and shall be standard thickness. The mortar lining shall be protected with the bituminous seal coat. Prior to installation, no pipe shall have cracks in cement mortar lining exceeding 0.016 inches.
2. All gravity sewer pipe and fittings shall be ceramic epoxy lined. The Standard of Quality is Protecto 401 Ceramic Epoxy. The material shall be an amine cured novalac epoxy containing at least 20% by volume of ceramic quartz pigment.

The lining shall be applied by a certified firm with a successful history of applying linings to the interior of ductile iron pipe and fittings. The ceramic epoxy lining shall cover the inner surface of the pipe as follows:

- a. Coating of bell sockets and spigot ends require the gasket area and spigot ends up to 6 inches back from the end of the spigot end must be coated with 6 mils nominal, 10 mils maximum using Protecto Joint Compound.
- b. The Joint Compound shall be applied by brush to ensure coverage. Care should be taken that the Joint Compound is smooth without excess buildup in the gasket seat or on the spigot ends.
- c. Coating of the gasket seat and spigot ends shall be done after the application of the lining. The lining shall extend from the spigot end through the socket to the edge of the gasket sealing area.
- d. The lining in fittings shall cover the interior surfaces including the socket areas as defined above.
- e. The lining in pipe and fittings shall be 40 mils nominal thickness.
- f. Repair procedures for damaged ceramic epoxy lining shall be made with Protecto Joint Compound in strict accordance with the manufacturer's recommendations.
- g. Any request for substitution must be accompanied by a successful history of lining pipe and fittings for sewer service, a test report verifying the following properties, and a certification of the test results.
  - i. A permeability rating of 0.00 when tested according to Method A of ASTM E-96-66, Procedure A with a test duration of 30 days.
  - ii. The following test must be run on coupons from factory lined ductile iron pipe:
    - o ASTM B-117 Salt Spray (scribed panel) – Results to equal 0.00 undercutting after two years.
    - o ASTM G-95 Cathodic Disbondment 1.5 volts @ 77°F. Results to equal no more than 0.5 mm undercutting after 30 days.
    - o Immersion Testing rated using ASTM D-714.87.
      - 20% Sulfuric Acid – No effect after two years.
      - 140°F 25% Sodium Hydroxide – No effect after two years.
      - 160°F Distilled Water – No effect after two years.
      - 120°F Tap Water (scribed panel)
      - 0.0 undercutting after two years with no effect.
    - o An abrasion resistance of no more than 3 mils (.075mm) loss after one million cycles using European Standard EN 598: 1994 Section 7.8 Abrasion Resistance.

#### Exterior Coatings

1. All pipe and fittings shall have a bituminous coating on the exterior surface in accordance with ANSI A21.15 (AWWA C151).
2. Where shown on the drawings pipe and fittings shall be wrapped with a polyethylene encasement (Polywrap). Polyethylene encasement shall conform to ANSI/AWWA C105/A21.5. Polyethylene encasement shall be provided in tube rolls, accordion bundles or sheets, and shall be manufactured of virgin polyethylene material conforming to ANSI/ASTM D1248. The specified nominal thickness for low-density polyethylene film is 0.008 in. (8 mils). The specified nominal thickness for high-density cross-laminated polyethylene film is 0.004 in. (4 mils). The minus thickness tolerance shall not exceed 10% of the nominal thickness on both material types. Joints in the polyethylene encasement shall be taped. Installation of

polyethylene encasement shall conform to ANSI/AWWA C105/A21.5 and DIPRA's "Polyethylene Encasement" brochure.

Pipe and fittings shall be the class that equals or exceeds the pipe class as specified on the Drawings. Requirements for various types of joints are described in the following paragraphs. UNLESS OTHERWISE NOTED HEREIN OR ON THE DRAWINGS, ALL EXPOSED DUCTILE IRON PIPING SHALL HAVE FLANGED JOINTS.

Push-On Joint – Push-on joint includes a single rubber gasket which fits into the bell end of the pipe. The gasket shall be wiped clean, flexed, and then placed in the socket. Any bulges in the gasket which might interfere with the entry of the plain end of the pipe shall be removed. A thin film of lubricant shall be applied to the gasket surface which will come into contact with the spigot end of the pipe. The lubricant shall be furnished by the pipe manufacturer.

The plain end of the pipe, which is tapered for ease of assembly, shall be wiped clean and a thick film of lubricant applied to the outside. The pipe shall be aligned and carefully entered into the socket until it just makes contact with the gasket. The joint assembly shall be completed by entering the pipe past the gasket until it makes contact with the bottom of the socket. The pipe shall be pulled "home" with an approved jack assembly as recommended by the pipe manufacturer. If assembly is not accomplished by reasonable force, the plain end shall be removed and the condition corrected.

All joints and joint accessories shall conform to the requirements of ANSI A21.11 (AWWA C111).

Gaskets shall be the "Ring Gasket" type, 1/8-inch minimum thickness, cloth inserted rubber, red rubber or neoprene and shall be suitable for the service intended. Gaskets for glass lined pipe shall be TORUSEAL flange gasket, or equal. Bolts shall be of the size and length called for and in accordance with the "American Standard" and comply with the requirements of the ANSI/AWWA and ASME Standards. The bolts for flanged joints shall be a minimum ASTM A307; Grade B carbon steel and be in accordance with ANSI A21.10, (AWWA C110). The bolts shall have hexagonal heads and nuts, no washers shall be used.

Bell and spigot pipe shall be provided with push on, O-ring rubber gasket, compression type joints and shall conform to the requirements of ANSI A21.11 (AWWA C111). Fittings and specials shall be supplied with mechanical joints as specified for mechanical joint pipe. If required by installation conditions, pipe shall have cast-on lugs for adequately tying it together.

Mechanical joints and fittings shall conform to the requirements of ANSI A21.11, (AWWA C111). Joints shall be made employing a tapered rubber gasket forced into a tapered groove with a ductile iron follower ring. If required by installation conditions, pipe and fittings shall have cast-on lugs for adequately tying the pipe and fittings together. These shall be in conformance with standard practice and as outlined under the appropriate AWWA Specifications.

Threaded restraining rods and bolts, and clamping bolts and nuts shall be fluorocarbon coated or type 304 stainless steel. All stainless steel connectors shall be coated with an approved anti-galling material such as "Never Seez".

Provide green detector tape, Lineguard III, or equal, labeled "SEWER" over entire length of installed buried pipelines.

Restrained joint pipe and fittings shall consist of bolted retainer rings, ductile iron locking segments held in place by rubber retainers, or ductile iron retaining rings that lock over the bell of the joint and are secured to prevent rotation, and factory welded retainer beads or rings on the spigot of the pipe. All components of the bolted or snap ring assemblies shall be constructed of corrosion-resistant, high strength, low-alloy steel. Restrained pipe and fittings shall be Flex-Ring or Lok-Ring type joints as manufactured by American Cast Iron Pipe Company, TR Flex or HP-LOK as manufactured by US Pipe, or equal. Fittings 12" and smaller may be mechanical joint with EBAA Mega-Lug or equal. No field fabrication of push-on or other type pipe joints to furnish restrained joints shall be allowed unless

specifically approved by the Engineer. Special gripping gaskets in lieu of welded ring-type restrained joints shall not be permitted on this project.

**FLANGED JOINTS AND FITTINGS:** Flanged joints and fittings shall have a minimum pressure rating of 250 psi with 125 lb. Standard flanges. All flanges and fittings shall conform to the requirements of ANSI B16.1. Flanges shall be ductile iron and shall be of the threaded or screw on type. The face of the flanges shall be machined after installation of the flange to the pipe. No raised surface shall be allowed on flanges. Flanged pipe shall conform to the requirements of ANSI Specification A21.15, (AWWA C115). Plain end and flange shall be faced to insure that the flange is perpendicular to the pipe axis and the pipe/flange interface is flush. Pipe barrels and flanges shall have a taper pipe thread (NPT) in accordance with ANSI B1.20.1 with thread diameters adapted to Ductile Iron pipe standard outside diameters. Flanges shall be free to pits, gouges, rust, debris, oil and grease. Surface finish shall be no greater than 250 RMS. Refinish flange faces if corrective measures do not meet the foregoing. Check flange and bolt hole spot facings for burrs, etc. and clear from facings. Pipe lengths shall be fabricated to meet the requirements of the Drawings. All flanged pipe shall be minimum Class 53. Align flanges so they are concentric and parallel and install gasket carefully. Use no lubricant, grease or adhesives on either the gasket or flange faces. Connect flanges per the Pipeline Seal and Insulator Inc. guidelines.

#### SOURCE QUALITY CONTROL

Factory Test:

1. Subject pipe to factory hydrostatic test of not less than 500 psi for minimum 10 seconds.

#### INSTALLATION

Joining Method – Push-On Mechanical (Gland-Type) Joints:

1. Install in accordance with AWWA C111.
2. Assemble mechanical joints carefully according to manufacturer's recommendations.
3. If effective sealing is not obtained, disassemble, thoroughly clean, and reassemble the joint.
4. Do not overstress bolts.
5. Where piping utilizes mechanical joints with tie rods, align joint holes to permit installation of harness bolts.

Joining Method – Push-On Joints:

1. Install in accordance with AWWA C115.
2. Assemble push-on joints in accordance with manufacturer's directions.
3. Bevel and lubricate spigot end of pipe to facilitate assembly without damage to gasket. Use lubricant that is non-toxic, does not support the growth of bacteria, has no deteriorating effects on the gasket material, and imparts no taste or odor to water in pipe.
4. Assure the gasket groove is thoroughly clean.
5. For cold weather installation, warm gasket prior to placement in bell.
6. Taper of bevel shall be approximately 30 degrees with centerline of pipe and approximately 1/4 IN back.

Cutting:

1. Do not damage interior lining material during cutting.
2. Use abrasive wheel cutters or saws.
3. Make square cuts.
4. Bevel and free cut ends of sharp edges after cutting.

Support exposed pipe in accordance with Section 15000.

Install buried piping in accordance with Section 15000.

Install restrained joint systems where specified.

#### FIELD QUALITY CONTROL

Test piping systems in accordance with Section 15000.

#### 3. Measurement

Measurement for the Ductile Iron Pipe and Fittings shall be measured at the per linear foot basis price. No separate measurement of materials will be made under this item.

#### 4. Payment

The Ductile Iron Pipe and Fittings specified under this Section shall be paid for at the linear foot basis. No separate payment of materials will be made under this item.

Payment will be made under:

**DUCTILE IRON PIPE AND FITTINGS ..... LF**

#### **SP-09, SEWER FLOW CONTROL**

#### 1. Description

Furnish all materials, labor, equipment, power, maintenance, etc. required to implement bypass flow control for sanitary sewer lines for the purpose of diverting the existing flow around the work area as necessary to facilitate proper sanitary sewer replacement. The design, installation, and operation of the temporary bypass pumping system shall be the Contractor's responsibility. Bypass pumping shall be required to adequately control the flow.

#### 3. Submittals

Submit a Bypass Sewage Pumping Plan that includes:

- a. Staging areas for pumps
- b. Sewer plugging method and types of plugs
- c. Number, size, material, location, and method of installation of suction piping
- d. Number, size, material, location, and method of installation of discharge piping
- e. Bypass pump sizes, capacity, number of each size to be onsite, and power requirements. Pump sizing shall clearly indicate compliance with requirements of this Specification Section.
- f. Calculations of static lift, friction losses, and flow velocity. Pump curves showing pump operating range shall be submitted.
- g. Standby power generator size and location
- h. Downstream discharge plan
- i. Method of protecting discharge manholes or structures from erosion and damage
- j. Thrust and restraint block sizes and locations
- k. Sections showing suction and discharge pipe depth, embedment, select fill, and special backfill
- l. Method of noise control for each pump and/or generator
- m. Any temporary pipe supports and anchoring required
- n. Design plans and computation for access to bypass pumping locations indicated on the Drawings
- o. Calculations for selection of bypass pumping pipe size
- p. Schedule for installation of and maintenance of bypass pumping lines
- q. Plan indicating selected location of bypass pumping lines

#### 4. Equipment

All equipment utilized for bypass pumping shall be specifically designed for the intended purpose. All piping, pumps, etc. in contact with sanitary sewage shall be manufactured with materials designed for use in a sewage environment.

#### 5. Requirements

- a. Provide bypass sewage pumping, as required, around the section in which work is to be performed. Bypass pumping shall be the full responsibility of the Contractor. The bypass pumping system shall be of sufficient capacity to handle all flows without causing overflows or basement backups.
- b. Prior to starting bypass pumping, the Contractor shall submit a detailed description of the method proposed for bypass pumping to the Owner and Engineer for review and approval. The description shall include all materials, equipment (including spares), and personnel to be used and a sketch showing a typical pump-around Bypass pumping equipment shall include pumps, conduits, engines, and related equipment necessary to divert the flow of sewage around the section in which work is to be performed. In addition, the Contractor shall maintain, at the same location and in operable condition, duplicate equipment to be used in case the primary equipment fails. In this event, the Contractor shall promptly repair or replace the failed equipment to the satisfaction of the Owner.
- c. Piping: The longitudinal flow piping may be flexible up to 6 inches in diameter. Fused high density polyethylene (HDPE) piping shall be used for 8-inch piping and larger. The bypass piping shall be inspected and approved prior to beginning any PACP CCTV inspection of the sewer section which is being bypassed. No leaks will be accepted during the bypass operations.
- d. Suction and discharge points shall be located at manholes only.
- e. Discharge of sewage to the ground, creeks, and/or storm sewers shall be prohibited. Any violation shall be immediately corrected by the Contractor. If the Owner is required to alleviate any prohibited discharges, the Contractor shall be charged the Owner's cost times two. All costs shall be deducted from the Contract Amount.
- f. When Bypass Pumping Sound Attenuation is specifically listed as a separate Bid Item on the Bid Proposal Form, all pumps shall be equipped with sound attenuation measures which reduce noise levels to a maximum of **75** decibels at a distance of 50 feet from the equipment during all periods of operation. If equipment is operated between the hours of **8:00 P.M. and 6:00 A.M.**, this equipment shall also be provided with a sound attenuation enclosure consisting of a three-sided enclosure with a roof constructed of a 2-inch x 4- inch lumber frame with 1/2-inch plywood sheathing and 2-inch styrofoam panels attached to the inside of the entire enclosure. The enclosure shall be portable to allow the enclosure to be moved when bypass pumping equipment is moved.
- g. If, at any time, the Contractor is unable to properly bypass pump the sewage, construction will be stopped until the Contractor is able to continue work in an acceptable manner. The Contractor will not receive additional Contract Time for delays caused by improper equipment, labor, or breakdowns.
- h. Service shall be maintained at all times. Surcharges due to plugging the sewer line for bypass pumping shall be maintained to prevent backups in services and overflows at any point in the system.
- i. The Contractor shall be capable of pumping all the sewage in the existing line under all weather and seasonal conditions. All pumping equipment to be used shall be submitted to the Owner for review and approval.
- j. All suction and discharge hose shall be free of leaks and shall be designed to carry the required pumped sewage. Any leaks shall be repaired immediately. All couplings shall be quick-connect with gaskets. If the hose used is inadequate in size, length, or condition, the Contractor shall be required to replace the hose as directed by the Owner or Engineer. The hose to be used shall be submitted to the Owner and Engineer for review and approval.

#### 4. Measurement and Payment

The Sewer Flow Control specified under this Section shall be paid for at the contract lump sum price. No separate payment of materials will be made under this item.

Payment will be made under:

**SEWER FLOW CONTROL..... LS**

**SP-10, RIP RAP**

1. Description

The work covered by this section consists of furnishing, stockpiling, placing and maintaining approved stone and filter fabric to be utilized to construct the rip rap for the channel bench and culvert channel protection, as specified in the Contract Document or as directed by the Engineer.

2. Materials

Riprap shall be Class II and meet the requirements of NCDOT Section 1042.

Filter fabric for sealing structures shall meet the material requirements of NCDOT Section 1056 Geosynthetics.

3. Methods

Riprap shall be thoroughly mixed with machinery prior to placement. Riprap shall be carefully placed on filter material. Placement shall not damage the underlying filter blanket or geosynthetic fabric. If the Engineer determines that the placement of stone has damaged or displaced the filter material to the extent that it cannot function as intended, the Contractor, at his expense, shall remove the placed riprap stone and properly correct the damage to, and/or the displacement of, the filter material. Such correction may include the removal of the filter material, re-grading the affected area, and subsequent replacement of the filter material and riprap stone as required by the Engineer.

Riprap shall be placed in a manner, which will produce a dense, reasonably well graded mass without segregation and with a minimum amount of voids. The larger stone shall be evenly distributed through the riprap mass. The individual placement of larger riprap stones may be required to obtain a uniform distribution of stone size. The riprap placement shall be supplemented by such hand methods as are required to obtain a uniform finished surface. Special care shall be exercised in placing riprap within 3 feet of structures to avoid damage to such structures.

Establish elevations of the proposed structure. The Contractor may install additional survey control, as needed, to complete the work in accordance with the Contract Documents.

- a. Install filter fabric per the Contract Documents. Fabric reaching the excavated streambed / toe of bank soil face may be folded and/or trimmed, in accordance with the Contract Documents. The fabric installation shall be reviewed by the Engineer prior to proceeding with the work.
- b. Place riprap on top of the filter fabric and between the back of the footer boulders and the excavated streambed soil face. Riprap shall be level with the top surface of the footer boulders. The riprap shall be reviewed by the Engineer prior to proceeding with the work.
- c. Finish grade the adjacent streambed and channel banks to provide a smooth even grade transition between project structure components (arms, sills, inverts, floodplain sills, etc.) and the existing and/or proposed ground surface.

In locations where exposed bedrock and/or other existing feature extends to and/or within the limits of the proposed work, the rip rap installation shall be field adjusted to incorporate the bedrock/existing

feature, into the finished work. The Engineer shall be contacted as soon as the presence of bedrock and/or other existing feature is field identified, to determine the appropriate method of incorporation. Site conditions may require slight deviation from the plan and shall be approved by the Engineer.

4. Measurement

The quantity of rip rap to be paid for shall be measured per ton completed and accepted into the final work.

No separate measurement of materials shall be made under this item for fabric, and/or other incidental items.

5. Payment

The work covered by this section shall be paid for at the contract per each price for "Rip Rap". Payment will be full compensation for all work covered in this special provision, including, but not limited to grading, installation, adjusting, excavating, placing backfill, maintaining the feature through acceptance, and for furnishing all materials, filter fabric, riprap, equipment, tools and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by the Engineer. No separate payment shall be made for subsidiary items.

Payment will be made under:

**RIP RAP..... TN**

**SP-11, ROCK TOE**

1. Description

This work consists of collecting, storage, preparation, and installation of all materials required for installation of Rock Toe protection.

2. Materials

Boulders shall consist of flat-sided, durable field or quarry stone that is sound, hard, dense, angular, resistant to the action of air and water, and free of seams, cracks, or other structural defects. The Contractor shall use boulders three by two by one and a half feet, and shall conform to the specifications as shown on the plans. The Contractor cannot use limestone or concrete waste for stone. Boulders shall be approved by the Engineer.

Riprap used to backfill behind the boulders shall be Class A and B and meet the requirements of NCDOT Section 1042.

No. 57 course aggregate (stone) shall meet the requirements of NCDOT Section 1005.

Filter fabric for sealing structures shall meet the material requirements of NCDOT Section 1056 Geosynthetics.

Soil backfill used as fill to meet final grade shall be relatively clean soil free of debris.

3. Construction Methods

Rock toe will be constructed according to the rock toe detail shown on the plans or as directed by the Engineer.

Riprap used to construct the rock toe shall be an equal mix (50%/50%) of Class A riprap and Class B riprap. Riprap shall be thoroughly mixed with machinery prior to placement. Riprap shall be carefully placed on filter material. Placement shall not damage the underlying filter blanket or geosynthetic fabric. If the Engineer determines that the placement of stone has damaged or displaced the filter material to the extent that it cannot function as intended, the Contractor, at his expense, shall remove the placed riprap stone and properly correct the damage to, and/or the displacement of, the filter material. Such correction may include the removal of the filter material, re-grading the affected area, and subsequent replacement of the filter material and riprap stone as required by the Engineer.

Riprap shall be placed in a manner, which will produce a dense, reasonably well graded mass without segregation and with a minimum amount of voids. The larger stone shall be evenly distributed through the riprap mass. The individual placement of larger riprap stones may be required to obtain a uniform distribution of stone size. The riprap placement shall be supplemented by such hand methods as are required to obtain a uniform finished surface. Special care shall be exercised in placing riprap within 3 feet of structures to avoid damage to such structures.

Establish elevations of the proposed structure. The Contractor may install additional survey control, as needed, to complete the work in accordance with the Contract Documents.

Soil backfill shall be compacted in horizontal lifts not exceeding 12" in thickness at a moisture content within approximately 5 percent of optimum. No specific soil compaction is required for backfill, but the finished grade shall be firm and not subject to excessive deflection or settlement under heavy equipment load.

4. Measurement and Payment

Rock toe protection shall specified under this Section shall be paid for at the contract lump sum price.

Such payment shall be considered full compensation for the items of work, including the cost for furnishing all stone material, filter fabric, erosion control matting, backfill, labor, equipment, tools, and incidentals required to construct the rock toe protection.

Payment will be made under:

**ROCKTOE ..... LS**

**SP-12, WATER SERVICE RECONNECTION**

1. Description

This work consists of locating, disconnection, re-connection, and all supporting permits associated with the water services encountered during the project.

2. Materials

Materials including pipe, fittings, pressure release valves, meters, etc. shall comply with the Water and Sewer Authority of Cabarrus County standard specifications.

3. Measurement and Payment

Water service reconnection shall be measured and paid per each.

Such payment shall be considered full compensation for the items of work, including the cost for furnishing all pipe, fittings, valves, meters, permitting, and incidentals required to reconnect water services.

Payment will be made under:

**WATER SERVICE RECONNECTION.....EA**

**SP-13, SEWER SERVICE RECONNECTION**

1. Description

This work consists of locating, disconnection, re-connection, and all supporting permits associated with the sewer services encountered during the project.

2. Materials

Materials including pipe, fittings, clean-outs, etc. shall comply with the Water and Sewer Authority of Cabarrus County standard specifications.

3. Measurement and Payment

Sewer service reconnection shall be measured and paid per each.

Such payment shall be considered full compensation for the items of work, including the cost for furnishing all pipe, fittings, clean-outs, permitting, and incidentals required to reconnect sewer services.

Payment will be made under:

**SEWER SERVICE RECONNECTION.....EA**

**NOTICE OF AWARD**

TO:

FROM: City of Concord City Council (OWNER)  
P.O. Box 308  
26 Union Street, South  
Concord, North Carolina 28026-0308

PROJECT TITLE: **TREASURE DRIVE STORMWATER IMPROVEMENTS** PROJECT NO: **32180-002**

You are hereby notified that the bid submitted by you for the above named project in response to the City of Concord's Invitation to Bid dated October 9, 2015 in the amount of

\_\_\_\_\_ and \_\_\_\_\_/100 DOLLARS

(\$\_\_\_\_\_) has been accepted.

You are hereby required to execute the formal AGREEMENT with the City of Concord City Council and to furnish any and all Contractor's Bond(s), Certificate of Insurance and Power of Attorney(s) along with other documents pertaining to the work as designated by the City of Concord.

If you fail to execute said AGREEMENT and to furnish this and any other required documents pertaining to the work within ten (10) days from the date of delivery of this NOTICE OF AWARD, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your bid as abandoned and to award the work covered by your proposal to another, or to re-bid the work or otherwise dispose thereof as the Owner may see fit.

**Dated this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_**

**City of Concord, North Carolina**  
**By:** \_\_\_\_\_  
**Title: City Manager**

**CONTRACTOR**  
**By:** \_\_\_\_\_  
**Title:** \_\_\_\_\_

*ACCEPTANCE OF NOTICE OF AWARD*

Receipt of the above NOTICE OF AWARD is hereby acknowledged this the \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**NOTICE TO PROCEED**

TO:

FROM: City of Concord City Council (OWNER)  
P.O. Box 308  
26 Union Street, South  
Concord, North Carolina 28026-0308

PROJECT TITLE: **TREASURE DRIVE STORMWATER IMPROVEMENTS** PROJECT NO: **32180-002**

Contract Amount: \_\_\_\_\_ and \_\_\_/100 DOLLARS  
(\$\_\_\_\_\_).

You are hereby notified to commence work on or before the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, pending acceptance of your Certificate of Insurance and any other required documents, and are to fully complete the work by the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Your project final completion date is therefore the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, and as set forth in the above named project's schedule unless an extension is granted by the City of Concord Director of Engineering in writing.

City of Concord, North Carolina

By: \_\_\_\_\_  
Title: City Manager

# STANDARD FORM CONSTRUCTION CONTRACT

This contract (together with all exhibits and valid amendments, the "Agreement" or the "Contract") is made and entered into as of the \_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by the City of CONCORD ("City") and \_\_\_\_\_ ("Contractor"), ( ) a corporation, ( ) a professional corporation, ( ) a professional association, ( ) a limited partnership, ( ) a sole proprietorship, or ( ) a general partnership; organized and existing under the laws of the State of \_\_\_\_\_.

## **Sec. 1. Background and Purpose.**

Project Description: The **Treasure Drive Stormwater Improvements** project involves the replacement of a 48" RCP culvert with a 20'x5' Precast Concrete Bottomless Arch Culvert. The project is located along Treasure Drive between Glenwood Drive and Woodlawn Avenue near Central Cabarrus High School. Other items necessary for the culvert replacement includes grading, asphalt paving, minor storm drainage, concrete, sanitary sewer relocation, erosion control, and traffic control.

**Sec. 2. Services and Scope to be Performed.** The Contractor shall provide the services at the charges set forth either in this paragraph and illustrated on the Exhibit "E" – Construction Plans. Additional exhibits may be used to further define this Agreement when the Contractor and City so agree. Any additional exhibits shall be designated as exhibits to the Agreement with capitalized, sequential letters of the alphabet, shall be attached hereto and incorporated herein by reference as if the same were fully recited, and shall become terms of this Agreement upon execution by both parties.

In this Contract, "services" means the services that the Contractor is required to perform pursuant to this Contract and all of the Contractor's duties to the City that arise out of this Contract. Any amendments, corrections, or change orders by either party must be made in writing signed in the same manner as the original. (This form may be used for amendments and change orders.) The City reserves the right to refuse payment for any work outside that authorized herein or pursuant to a duly approved amendment or change order.

**Sec. 3. Complete Work without Extra Cost.** Unless otherwise provided, the Contractor shall obtain and provide, without additional cost to the City, all labor, materials, equipment, transportation, facilities, services, permits, and licenses necessary to perform the Work.

**Sec. 4. Compensation.** The City shall pay the Contractor for the Work as described in this paragraph below OR as described in Exhibit "A" attached. In the event of a conflict, the provisions of this paragraph shall control. Any additional expenses or charges shall only be paid after both the City and the Contractor agree to and execute a written change order. The City shall not be obligated to pay the Contractor any fees, payments, expenses or compensation other than those authorized in this Contract or in a duly-approved change order. All payments shall be deemed inclusive of tax and other obligations.

**Sec. 4a. Retainage.** The City shall withhold no retainage on Contracts having a "total project cost" of less than \$100,000.00. The City may withhold retainage on contracts having a total project cost between \$100,000 and \$200,000. The City shall withhold retainage on contracts whose total project cost exceeds \$300,000. When withheld, retainage shall equal no more than five percent of each progress payment. When the project is fifty per cent complete, the City shall not retain anything from future project payments provided that (i) the surety concurs in writing, (ii) the Contractor continues to perform satisfactorily, (iii) any non-conforming work identified in writing by the architect, engineer(s) or City has been corrected by the Contractor and accepted by the architect, engineer(s) or City. However, if the City determines that the Contractor's performance is unsatisfactory, the City may withhold up to five percent retainage from each project payment. The City may withhold additional amounts above five percent for unsatisfactory job progress, defective construction not remedied, disputed work, third party claims filed against the owner or reasonable evidence that a third-party claim will be filed.

Definitions:

"Total Project Cost": Total value of the Contract and any approved change orders or amendments.

"Project is Fifty Percent Complete": When the Contractor's validly-issued gross project invoices (excluding the value of the materials stored off-site) equal or exceed fifty percent of the value of the Contract, except that the value of materials stored on-site shall not exceed twenty percent of the Contractor's gross project invoices for the purpose of determining whether the project is fifty percent complete.

**Sec. 5. Term.** The Contractor shall commence work within thirty (30) days of the date of its receipt of written Notice to Proceed from the City. The date that is thirty (30) days from the date of the Contractor's receipt of the Notice to Proceed shall be the "Commencement Date." All work as set forth in the Construction Plans in Exhibit "E" shall be completed within one hundred fifty (150) calendar days of the Commencement Date. The date that is one hundred fifty (150) calendar days from the Commencement Date shall be the "Completion Date." Time is of the essence with regard to this Project. If Contractor's obligations are not completed by the Completion Date, the City reserves the right to nullify this Agreement, order the Contractor to immediately cease all work under this Agreement and vacate the premises, and to seek professional services equivalent to those outlined in this Contract. The Contractor shall be held accountable for all damages incurred by the City as a consequence of the missed Completion Date. The exercise of any of these rights by the City shall not be interpreted to prejudice any other rights the City may have under this Agreement or in law or equity. This Contract shall not be automatically extended unless agreed to in writing by the City.

**Sec. 6. Contractor's Billings to City.** Payments will be made in accordance with the schedule found in this section below OR attached at Exhibit "A". Contractor shall submit an original pay request (invoice) to the City Purchasing Agent by the first of each month in order to expedite payment. Upon receipt of the request the City Purchasing Agent shall verify the amounts and if correct forward the request to the Accounts Receivable Division of the Finance Dept. Final payment on the Contract shall be made in 45 days, except in the case of retainage. Within 60 days after the submission of the final pay request, the City (with the written consent of the surety) shall release to the Contractor all retainage payments IF the City receives a certificate of substantial completion from the architect, engineer or designer-in-charge of the project OR the City receives beneficial occupancy and use of the project. In either case, the City may retain up to 2.5 times the estimated value of the work to be completed or corrected.

**Sec. 7. Insurance.** Contractor shall maintain and cause all sub-contractors to maintain insurance policies at all times with minimum limits as follows:

<u>Coverage</u>	<u>Minimum Limits</u>
Workers' Compensation	\$100,000 each accident, \$100,000 bodily injury by disease each employee, \$500,000 bodily injury by disease policy limit
General Liability	\$1,000,000 per occurrence regardless of the contract size
Automobile Liability	\$1,000,000 per occurrence regardless of the contract size
Umbrella	<input type="checkbox"/> \$1,000,000 per occurrence if contract does not exceed 180 days and does not exceed \$500,000; otherwise, <input type="checkbox"/> \$2,000,000 per occurrence

Contractor shall provide a Certificate of Insurance to the City listing the City as an additional insured. Such Certificate shall be in a form acceptable to the City.

**Sec. 8. Documentation Requirements:**

A. Contractor shall provide the City with a **Certificate of Insurance** for review prior to the issuance of any contract or Purchase Order. All Certificates of Insurance will require written notice by the insurer or Contractor's agent in the event of cancellation, reduction or other modifications of coverage by the insurer. Such notice shall be not less than 30 days for nonrenewal by the insurer, not less than 10 days for cancellation due to nonpayment of the premium and as soon as possible for all other types of modifications. In addition to the notice requirement above, Contractor shall provide the City with written notice of cancellation, reduction, or other modification of coverage of insurance whether instigated by the insurer or by the Contractor immediately upon Contractor's receipt of knowledge of such modifications. Upon failure of the Contractor to provide such notice, Contractor assumes sole responsibility for all loses incurred by the City for which insurance would have provided coverage. The insurance certificate shall be for the insured period in which the initial contract period begins and shall be renewed by the Contractor for each subsequent renewal period of the insurance for so long as the contract remains in effect.

The City shall be named as an **additional insured** on all policies except Workers' Compensation and it is required that coverage be placed with "A" rated insurance companies acceptable to the City. Statement should read, "City of Concord is added as an additional insured as evidenced by an endorsement attached to this certificate." Failure to maintain the required insurance in force may be cause for termination of this Agreement. In the event that the Contractor fails to maintain and keep in force the insurance herein required, the City has the right to cancel and terminate the Agreement without notice.

B. Contractor shall provide a completed W-9 form to the City prior to execution by the City of this Agreement.

**Sec. 9. Performance of Work by Contractor.**

(a) The Contractor warrants that all work performed under this Contract conforms to the Contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier. This warranty shall continue for a period of 1 year from the date of issuance by the City of written final completion of the work.

(b) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to City - owned or controlled real or personal property, when that damage is the result of--

(1) The Contractor's failure to conform to contract requirements; or

(2) Any defect of equipment, material, workmanship, or design furnished.

(c) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

(d) The City shall notify the Contractor, in writing, within a reasonable time, not to exceed 30 days, after the discovery of any failure, defect, or damage.

(e) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time, not to exceed 30 days unless otherwise agreed in writing and signed by the City Manager or his designee, after receipt of notice, the City shall have the right to replace repair, or otherwise remedy the failure, defect, or damage at the Contractor s expense.

(f) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this Contract, the Contractor shall--

(1) Obtain all warranties that would be given in normal commercial practice,

(2) Require all warranties to be executed, in writing, for the benefit of the City, if directed to do so by the City; and

(3) Enforce all warranties for the benefit of the City, if directed to do so by the City

(g) In the event the Contractor's warranty has expired, the City may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.

(h) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the City nor for the repair of any damage that results from any defect in City-furnished material or design.

**Sec. 10. Performance of Work by City.** If the Contractor fails to perform the Work in accordance with the schedule referred to in the Contract, the City may, in its discretion, perform or cause to be performed some or all of the Work, and doing so shall not waive any of the City's rights and remedies. Before doing so, the City shall give the Contractor reasonable notice of its intention. The Contractor shall reimburse the City for all costs incurred by the City in exercising its right to perform or cause to be performed some or all of the Work pursuant to this section.

**Sec. 11. Attachments.** Additional exhibits may be used to further define this Agreement when the Contractor and City so agree. Any additional exhibits shall be designated as exhibits to the Agreement with capitalized, sequential letters of the alphabet, shall be attached hereto and incorporated herein by reference as if the same were fully recited, and shall become terms of this Agreement upon execution by both parties.

*The following attachments* are made a part of this Contract and incorporated herein by reference:

- (a) Exhibit "A" – Bid Form
- (b) Exhibit "B" - Contractor must execute the Affidavit attached as Exhibit "A", attesting to compliance with state and federal laws related to E-Verify. **\*This requirement only applies to contracts that fall within the formal bidding range.**
- (c) Exhibit "C" – Tax Form(s).
- (d) Exhibit "D" - Certificate of Insurance.
- (e) Exhibit "E" – Construction plans

In case of conflict between an attachment and the text of this contract excluding the attachment, the text of this contract shall control. Any attachment that materially alters the standard terms contained herein must be reviewed by the City Attorney and approved by the City in writing.

**Sec. 12. Notice.** (a) All notices and other communications required or permitted by this Contract shall be in writing and shall be given either by personal delivery, fax, or certified United States mail, return receipt requested, addressed as follows:

To the City:

Sue Hyde, Director of Engineering  
City of Concord  
P.O. Box 308  
Concord, NC 28026  
Fax Number: (704) 786-4521

To the Contractor:

VaLerie Kolczynski, Esq.  
City Attorney  
PO Box 308  
Concord, NC 28026  
Fax Number: (704) 784-1791

(b) **Change of Address, Date Notice Deemed Given:** A change of address, fax number, or person to receive notice may be made by either party by notice given to the other party. Any notice or other communication under this Contract shall be deemed given at the time of actual delivery, if it is personally delivered or sent by fax. If the notice or other communication is sent by US Mail, it shall be deemed given upon the third calendar day following the day on which such notice or other communication is deposited with the US Postal Service or upon actual delivery, whichever first occurs.

**Sec. 13. Indemnification.** To the maximum extent allowed by law, the Contractor shall defend, indemnify, and save harmless the City of Concord, its agents, officers, and employees, from and against all charges that arise in any manner from, in connection with, or out of this Contract as a result of the acts or omissions of the Contractor or subcontractors or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable except for damage or injury caused solely by the negligence of the City its agents, officers, or employees. In performing its duties under this section, the Contractor shall at its sole expense defend the City of Concord, its agents, officers, and employees with legal counsel reasonably acceptable to City. As used in this subsection – “Charges” means claims, judgments, costs, damages, losses, demands, liabilities, duties, obligations, fines, penalties, royalties, settlements, expenses, interest, reasonable attorney’s fees, and amounts for alleged violations of sedimentation pollution, erosion control, pollution, or other environmental laws, regulations, ordinances, rules, or orders. Nothing in this section shall affect any warranties in favor of the City that are otherwise provided in or arise out of this Contract. This section is in addition to and shall be construed separately from any other indemnification provisions that may be in this Contract. This section shall remain in force despite termination of this Contract (whether by expiration of the term or otherwise) and termination of the services of the Contractor under this Contract.

**Sec. 14. Corporate Status.** If the Contractor is dissolved or suspended and the Contractor does not notify the City of such dissolution within three (3) business days from date of dissolution or suspension, and/or the corporate status is not reinstated within thirty (30) days, this Contract, at the sole option of the City and without prejudice to City’s other remedies, shall be declared null and void or the Contractor shall execute a new contract showing the Contractor’s correct legal entity.

**Sec. 15. Miscellaneous.**

(a) Choice of Law and Forum. This Contract shall be deemed made in Cabarrus County, North Carolina. This Contract shall be governed by and construed in accordance with the laws of North Carolina. The exclusive forum and venue for all actions arising out of this Contract shall be the appropriate division of the North Carolina General Court of Justice, in Cabarrus County. Such actions shall neither be commenced in nor removed to federal court. This section shall not apply to subsequent actions to enforce a judgment entered in actions heard pursuant to this section.

(b) Waiver. No action or failure to act by the City shall constitute a waiver of any of its rights or remedies that arise out this Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

(c) Performance of Government Functions. Nothing contained in this Contract shall be deemed or construed so as to in any way estop, limit, or impair the City from exercising or performing any regulatory, policing, legislative, governmental, or other powers or functions.

(d) Severability. If any provision of this Contract shall be unenforceable, the remainder of this Contract shall be enforceable to the extent permitted by law.

(e) Assignment, Successors and Assigns. Without the City’s written consent, the Contractor shall not assign (which includes to delegate) any of its rights (including the right to payment) or duties that arise out this Contract. Unless the City otherwise agrees in writing, the Contractor and all assigns shall be subject to all of the City’s defenses and shall be liable for all of the Contractor’s duties that arise out of this Contract and all of the City’s claims that arise out of this Contract. Without granting the Contractor the right to assign, it is agreed that the duties of the Contractor that arise out of this Contract shall be binding upon it and its heirs, personal representatives, successors, and assigns.

(f) Compliance with Law. In performing all of the Work, the Contractor shall comply with all applicable law.

(g) City Policy. THE CITY OPPOSES DISCRIMINATION ON THE BASIS OF RACE AND SEX AND URGES ALL OF ITS CONTRACTORS TO PROVIDE A FAIR OPPORTUNITY FOR MINORITIES AND WOMEN TO PARTICIPATE IN THEIR WORK FORCE AND AS SUBCONTRACTORS AND VENDORS UNDER CITY CONTRACTS.

(h) EEO Provisions. During the performance of this Contract the Contractor agrees as follows:  
(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, political affiliation or belief, age, or handicap. The Contractor shall take affirmative action to insure that applicants are employed and that employees are treated equally during employment, without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or handicap. The Contractor shall post in conspicuous places available to employees and applicants for employment, notices setting forth these EEO provisions. (2) The Contractor in all solicitations or

advertisements for employees placed by or on behalf of the Contractor, state all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, political affiliation or belief, age, or handicap.

(i) No Third Party Right Created. This Contract is intended for the benefit of the City and the Contractor and not any other person.

(j) Principles of Interpretation. In this Contract, unless the context requires otherwise the singular includes the plural and the plural the singular. The pronouns "it" and "its" include the masculine and feminine. Reference to statutes or regulations include all statutory or regulatory provisions consolidating, amending, or replacing the statute or regulation. References to contracts and agreements shall be deemed to include all amendments to them. The word "person" includes natural persons, firms, companies associations, partnerships, trusts, corporations, governmental agencies and units, and any other legal entities.

(k) Modifications, Entire Agreement. A modification of this Contract is not valid unless signed by both parties and otherwise in accordance with requirements of law. Further, a modification is not enforceable against the City unless the City Manager or other duly authorized official signs it for the City. This Contract contains the entire agreement between the parties pertaining to the subject matter of this Contract. With respect to that subject matter, there are no promises, agreements, conditions, inducements, warranties, or understandings, written or oral, expressed or implied, between the parties, other than as set forth or referenced in this Contract.

(l) Corporate Seal. If a corporate seal is included by any party to this Contract, it is only for authentication purposes. This Contract is not signed under seal.

(m) No Employment Relationship. For all matters relating to this Agreement, Contractor shall be deemed an Independent Contractor. Nothing in this Agreement shall be construed in such a manner as to create an employee-employer relationship between City and Contractor.

**(The following section applies to construction contracts only if amount is over \$50,000)**

**Sec. 16. Bonding.** Both performance and payment bonds for the full amount of this Contract are required to be attached. Instead of bonds, you may submit a deposit of money, certified check or government securities for the full amount of the Contract. The performance bond shall have a value equal to 100% of this Contract. This bond shall be conditioned upon faithful performance of the Contract in accordance with the plans, specifications and conditions of the Contract. The performance bond shall be solely for the protection of the City. The payment bond shall be in an amount equal to 100% of the Contract, and conditioned upon the prompt payment for all labor or materials for which a contractor or subcontractor is liable. The payment bond shall be solely for the protection of the persons furnishing materials or performance labor for which a contractor or subcontractor is liable.

**Sec. 17. Dispute Resolution.** It is understood and agreed that NCGS 143-128(f1-g) requires that disputes arising under an agreement for the erection, construction, alteration or repair of a building be subject to a dispute resolution process specified by the City. The amount in controversy shall be at least \$15,000.00 before this dispute resolution procedure may be used. In compliance with this statutory provision, the City specifies this Section as the dispute resolution process to be used on this Project. It is further understood and agreed that this dispute resolution process is based on non-binding mediation and will only be effective to the extent that the Parties to any mediated dispute participate in the mediation in good faith. It is also understood and agreed that the City is under no obligation under any circumstance to secure or enforce the participation of any other Party in the mediation of any dispute subject to this Section and NCGS 143-128(f1-g).

**This Section 17 does not apply to:**

- (a) The purchase and erection of prefabricated or relocatable buildings or portions of such buildings, except that portion of the work that must be performed at the construction site; or**
- (b) The erection, construction alteration or repair of a building when the cost of such building is \$300,000 or less.**

17.1 Any dispute arising between or among the Parties listed in Section 17.3 that arises from an agreement to construct the Project, including without limitation a breach of such agreement, shall be

subject to non-binding mediation administered by the American Arbitration Association under its Construction Industry Mediation Rules ("Rules"), except as otherwise expressly set forth in this Section. To the extent any provision of the Rules is inconsistent with the provisions of this Section, the provisions of this Section shall control. The mediation provided in this Section shall be used pursuant to this Agreement and NCGS 143-128(f1-g) and is in lieu of any dispute resolution process adopted by the North Carolina State Building Commission, which process shall not apply to this Project.

17.2 For purposes of this Section the following definitions shall apply:

- a. *Agreement to construct the Project* means an agreement to construct the Project that is subject to the requirements of NCGS 143-128 and does not include any agreement related to the Project that is not subject to said statute.
- b. *Construct or construction* refers to and includes the erection, construction, alteration or repair of the Project.
- c. *Party or Parties* refers to the parties listed in Section 16.4.
- d. *Project* means the building to be erected, constructed, altered or repaired pursuant to this Agreement.

17.3 The City and any Party contracting with the City or with any first-tier or lower-tier subcontractor for the construction of the Project agree to participate in good faith in any mediation of a dispute subject to this Section and NCGS 143-128(f1-g), including without limitation the following Parties (if any): architect(s), engineer(s), surveyor(s), construction manager, construction manager at risk, prime contractor(s), surety(ies), subcontractor(s), and supplier(s).

17.4 In order to facilitate compliance with NCGS 143-128(f1-g), the Contractor and all other Parties shall include this Section 17 in every agreement to which it (any of them) is a Party for the construction of the Project without variation or exception. Failure to do so will constitute a breach of this Agreement, and the Contractor or other Party failing to include this Section in any agreement required by this Section shall indemnify and hold harmless the remaining Parties from and against any and all claims, including without limitation reasonable attorney fees and other costs of litigation, arising in any manner from such breach. Notwithstanding the foregoing provisions of this Section, it is expressly understood and agreed that the Parties are intended to be and shall be third-party beneficiaries of the provisions of this Section and can enforce the provisions hereof.

17.5 The following disputes are not subject to mediation: (i) a dispute seeking a non-monetary recovery; and (ii) a dispute seeking a monetary recovery of \$15,000 or less.

17.6 A dispute seeking the extension of any time limit set forth in an agreement to construct the Project shall be subject to mediation pursuant to this Section and NCGS 143-128(f1-g), but only if the damages which would be suffered by the Party seeking the extension would exceed \$15,000 if the disputed extension is denied. To the extent that liquidated damages are set forth in such agreement as the measurement of damages for failure by such Party to meet such time limit, such liquidated damages shall be the exclusive standard for determining the amount of damages associated with such dispute.

17.7 For purposes of this Section, a dispute is limited to the recovery of monetary damages from the same transaction or occurrence against a single Party or two or more Parties alleged to be liable jointly, severally or in the alternative. Two or more disputes may not be consolidated or otherwise combined without the consent of all Parties to such disputes.

17.8 In addition to such matters as are required by the Rules, a request for mediation shall include the amount of the monetary relief requested.

17.9 Prior to requesting mediation, a Party must form a good faith belief that it is entitled under applicable law to recover the monetary amount to be included in the request from one or more of the remaining Parties. Such belief must be based on a reasonable and prudent investigation into the dispute that is the subject of the request. The request for mediation must be based on such investigation and may not include any amount or the name of any remaining Party, unless supported by such investigation and good faith belief by the Party requesting the mediation.

17.10 If a Party breaches any provision of Section 17.9, it shall indemnify and hold harmless all other Parties from any costs, including reasonable attorney fees and other costs of litigation, and damages incurred by such other Parties that arise from such breach.

17.11 All expenses incurred by a Party to a dispute in preparing and presenting any claim or defense at the mediation shall be paid by the Party. Such expenses include without limitation preparation and production of witnesses and exhibits and attorney fees. All other expenses of the mediation, including filing fees and required traveling and other expenses of the mediator, shall be borne as follows: one half by the Party requesting the mediation, with the remaining parties paying equal shares of the remaining expenses and costs; provided that, if the City is named as a party to the mediation, the City shall pay at least one-third of the mediation expenses and costs divided among the Parties. If more than one Party to a dispute requests a mediation, the mediation expenses and costs to be divided among the Parties shall be borne equally by the Parties to the dispute; provided that, if the City is named as a Party to the mediation, the City shall pay at least one-third of the mediation expenses and costs divided among the Parties.

17.12 The mediation shall be held at a location agreeable to the mediator and all of the Parties; provided that, if no agreement can be reached, the mediation will be held at such location in Cabarrus County as the mediator shall determine.

17.13 The provisions of this Section are subject to any other provision of this Agreement concerning the submission, documentation and/or proof of any claim or dispute. Such other provisions shall apply in full force and shall be satisfied as a condition precedent to mediation pursuant to this Section.

17.14 The Parties understand and agree that mediation in accordance with this Section shall be a condition precedent to institution of any legal or equitable proceeding seeking monetary recovery based on any dispute that is subject to mediation pursuant to this Section.

**Sec. 18. Breach.** In the event of a violation of any material term of this Agreement, the non-violating party may terminate the Agreement upon written notice. Such notice shall state the violation with specificity and shall give ten (10) days to cure the violation. The cure period shall be measured as ten (10) days from the date of receipt of notice by the violating party, or, if the date is not known, then thirteen (13) days from the date the notice is placed in the United States Post. If the violation remains uncorrected at the end of the cure period, the Agreement shall be terminated without any further action by the non-violating party. Any remaining disputes shall be subject to the dispute resolution procedure set forth above, if applicable.

[Signature Page to Follow]

IN WITNESS WHEREOF, the City of Concord and the Contractor have caused this Contract to be executed by their respective duly authorized agents or officers.

CITY OF CONCORD:

(Typed or Printed Legal Name of Contractor)

By: \_\_\_\_\_  
City Manager

By: \_\_\_\_\_  
Signature of President/Vice President/Manager/Partner

Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

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

ATTEST BY:

Date: \_\_\_\_\_

\_\_\_\_\_  
City Clerk

ATTEST:

BY: \_\_\_\_\_  
Signature of Vice President, Secretary, or other officer

APPROVED AS TO FORM:

Printed Name: \_\_\_\_\_

\_\_\_\_\_  
Attorney for the City of Concord

Title \_\_\_\_\_

SEAL

**APPROVAL BY CITY FINANCE OFFICER**

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

\_\_\_\_\_

Signature

EXHIBIT "B"

STATE OF NORTH CAROLINA

AFFIDAVIT

COUNTY OF CABARRUS

\*\*\*\*\*

I, \_\_\_\_\_ (the individual signing below), being duly authorized by and on behalf of \_\_\_\_\_ (the legal name of the entity entering the contract, "Employer") after first being duly sworn hereby swears or affirms as follows:

- 1. Employer understands that E-Verify is the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law in accordance with NCGS §64-25(5).
2. Employer understands that Employers Must Use E-Verify. Each employer, after hiring an employee to work in the United States, shall verify the work authorization of the employee through E-Verify in accordance with NCGS§64-26(a). Employer attests that Employer is in compliance with the requirements of the federal and state laws relevant to E-verify.
3. Employer is a person, business entity, or other organization that transacts business in the State of North Carolina. Employer employs 25 or more employees in this State. (mark Yes or No)
a. YES \_\_\_\_\_, or b. NO \_\_\_\_\_.
4. Employer attests that all subcontractors employed by it as part of this contract comply with the requirements of E-Verify, and Employer will ensure compliance with E-Verify by any subcontractors subsequently hired by Employer as part of any contract with the City of Concord.
5. Employer shall have a continuing duty to inform the City of Concord of any changes to this sworn information.

This \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Signature of Affiant
Print or Type Name: \_\_\_\_\_

State of North Carolina County of Cabarrus
Signed and sworn to (or affirmed) before me, this the \_\_\_\_
day of \_\_\_\_\_, 20\_\_.

My Commission Expires:

\_\_\_\_\_  
Notary Public

(Affix Official/Notarial Seal)

EXHIBIT "C"

TAX FORM(S)

EXHIBIT "D"

CERTIFICATE OF INSURANCE

PAY REQUEST FORM

City of Concord  
Post Office Box 308  
Concord, North Carolina 28026-0308

For Office Use Only:  
Charge to P.O. # \_\_\_\_\_  
Due \_\_\_\_\_

**PROJECT: #** \_\_\_\_\_ **DESCRIPTION:** \_\_\_\_\_  
Date Notice to Proceed: \_\_\_\_\_  
Completion Date: \_\_\_\_\_  
Days Remaining in Contract: \_\_\_\_\_  
Percent Work Complete: \_\_\_\_\_  
Percent Time Complete: \_\_\_\_\_  
Percent Payment Complete: \_\_\_\_\_

**APPLICATION FOR PAYMENT NO. \_\_\_\_\_ SHEET NO. \_\_\_\_\_ OF**  
**PERIOD FROM: \_\_\_\_\_ TO: \_\_\_\_\_**

CERTIFICATE OF THE CONTRACTOR

To the best of my knowledge and belief, I certify that this periodical estimate is correct and all work has been performed and materials supplied in full accordance with the terms and conditions of the contract documents between the undersigned contractor and the City of Concord.

**GROSS AMOUNT OF PARTIAL PAYMENT ----- \$ \_\_\_\_\_**

**LESS: RETAINAGE AT \_\_\_\_\_ PERCENT ---- \$ \_\_\_\_\_**

**PREVIOUS PAYMENT ----- \$ \_\_\_\_\_**

**LIQUIDATION DAMAGES**

**\_\_\_\_\_ DAYS @ \$ \_\_\_\_\_ ----- \$ \_\_\_\_\_**

**OTHER DEDUCTIONS:**

\_\_\_\_\_ ----- \$ \_\_\_\_\_

\_\_\_\_\_ ----- \$ \_\_\_\_\_

**TOTAL DEDUCTIONS ----- \$ \_\_\_\_\_**

**NET AMOUNT DUE THIS ESTIMATE ----- \$ \_\_\_\_\_**

Name of Contractor: \_\_\_\_\_ Address: \_\_\_\_\_

Signed: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

CERTIFICATE OF CONSTRUCTION ADMINISTRATOR/ENGINEER

I certify that I have verified this periodical estimate and that to the best of my knowledge and belief, it is a true and correct statement of work performed and materials supplied under the contract.

Consultant Engineer: \_\_\_\_\_ Date: \_\_\_\_\_

Construction Administrator: \_\_\_\_\_ Date: \_\_\_\_\_

APPROVED AND PAYMENT RECOMMENDED:

CITY OF CONCORD

Signed: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

**ENGINEERING'S APPLICATION FOR PAYMENT FORM**

Project Title: **Treasure Drive Stormwater Improvements** Project #: **32180-002**

ITEM	DESCRIPTION	QUANTITY	UNIT	TOTAL PRICE	QUANT. THIS EST.	TOTAL THIS EST.	QUANT. PREV. EST.	TOTAL PREVIOUS	QUANT. TO DATE	TOTAL TO DATE
1	Mobilization	1	LS							
2	Construction Staking	1	LS							
3	18" R.C. Pipe Culverts, Class III	60	LF							
4	Asphalt Milling (1.5-inch Depth)	9	SY							
5	Asphalt Concrete Surface Course, Type S, 9.5B	28	TN							
6	Asphalt Concrete Intermediate Course, Type I, 19.0B	27	TN							
7	Asphalt Concrete Base Course, Type B, 25.0B	49	TN							
8	Asphalt Binder for Plant Mix	5	TN							
9	Aggregate Base Course for Driveway	11	TN							
10	Reinforced Concrete – Endwalls and Footings	59	CY							
11	Masonry Drainage Structures, DI (NCDOT Std. 840.35)	3	EA							
12	Frame with Grate, Std. NCDOT 840.16	3	EA							
13	Class II Rip Rap	145	TN							
14	Geotextile For Drainage	125	SY							
15	Seeding and Mulching	1200	SY							
16	Comprehensive Grading	1	LS							
17	Traffic Control	1	LS							
18	Precast Reinforced Concrete Arch Culvert	40	LF							
19	Stream Pump Around Operation	1	LS							
20	Rock Toe Protection	1	EA							
	<b>UTILITY ITEMS</b>									
21	6" PC350 DI Water Main, Restrained Joint	110	LF							

**ENGINEERING'S APPLICATION FOR PAYMENT FORM**

Project Title: **Treasure Drive Stormwater Improvements**      Project #: **32180-002**

ITEM	DESCRIPTION	QUANTITY		UNIT	TOTAL	QUANT.	TOTAL	QUANT.	TOTAL	QUANT.	TOTAL
				PRICE	PRICE	THIS EST.	THIS EST.	PREV. EST.	PREVIOUS	TO DATE	TO DATE
22	6" Water Gate Valve	2	EA								
23	Deadman Thrust Restraint	2	EA								
24	8" PC350 DI Gravity Sanitary Sewer	356	LF								
25	4' Dia. Sanitary Sewer Manhole	4	EA								
26	6' Dia. Sanitary Sewer Manhole	1	EA								
27	12.75" Steel Encasement Pipe with spiders	50	LF								
28	Sewer Flow Control	1	LS								
29	Water Service Reconnection	2	EA								
30	Sewer Service Reconnection	2	EA								

**CITY OF CONCORD  
CONCORD, NORTH CAROLINA**

Date: \_\_\_\_\_

**Project Title:      Treasure Drive Stormwater Improvements      Project #: 32180-002**

---

**Owner:      City of Concord      Change Order No.**

**To:**  
**(CONTRACTOR)**

**Account No.**  
**Purchase Order No.**

You are hereby requested to make the following changes in this Contract to comply with the provisions of the attached and/or the original Contract Documents.

Item No.	Description of Changes	Additions	Deductions
		\$0.00	\$0.00
<b>Original Contract Amount</b>			
<b>Net Changes by Previous Change Orders</b>			
<b>Net Changes this Change Order</b>			
			\$0.00
<b>New Contract Amount</b>			
			\$0.00

The Contract Time will be \_\_\_\_\_ by \_\_\_\_\_ calendar days.

The Completion Date as of this Change Order is:

**Accepted:    (Contractor)**

**By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Accepted:    CITY OF CONCORD**

**By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

This instrument has been pre-audited in the manner required by Local Government Budget and Fiscal Control Act.

**By:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Finance Director**

**CONTRACT CHANGE ORDER**

**CERTIFICATE OF INFRASTRUCTURE COMPLETION**

<b>Project Title: Treasure Drive Stormwater Improvements    Project #: 32180-002</b>	
<b>CONTRACTOR NAME &amp; ADDRESS:</b>	<b>OWNER NAME &amp; ADDRESS:</b>
<b>MISCELLANEOUS INFORMATION:</b>	
<b>INSPECTOR:</b>	

The following items have been inspected, reviewed and found to be complete in substantial accordance with the approved plans and specifications. The dates of completion are those agreed upon by the City of Concord when all construction work and testing was completed. These dates DO NOT initiate the start of any warranty periods of said items(s). Warranty periods shall begin as specified on the CERTIFICATE OF FINAL COMPLETION.

Stormwater System	Approved: _____ Date: _____
Curb & Gutters	Approved: _____ Date: _____
Sanitary Sewer	Approved: _____ Date: _____
Potable Water	Approved: _____ Date: _____
Street Paving	Approved: _____ Date: _____
Sidewalks	Approved: _____ Date: _____
Other	Approved: _____ Date: _____

**FIELD ORDER**

**CITY OF CONCORD  
ENGINEERING DEPARTMENT**

Post Office Box 308  
Concord, North Carolina 28026-0308

PROJECT TITLE: **TREASURE DRIVE STORMWATER IMPROVEMENTS**  
PROJECT NUMBER: 32180-002

**FIELD ORDER NO** \_\_\_\_\_ **CONTRACT** \_\_\_\_\_ **DATE** \_\_\_\_\_

**PROJECT** \_\_\_\_\_

**LOCATION** \_\_\_\_\_

**TO:** \_\_\_\_\_

---

---

THIS ORDER AUTHORIZES YOU TO PROCEED WITH THE ALTERATIONS AND/OR ADDITIONS TO THE WORK AS DESCRIBED HEREIN, IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF OUR STANDARD FORM OF CONTRACT.

**DESCRIPTION OF WORK:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- QUOTATION RECEIVED AND APPROVED BY THE CITY OF CONCORD.
- QUOTATION NOT RECEIVED. PLEASE FURNISH QUOTATION IMMEDIATELY TO THE CITY OF CONCORD FOR CHECK AND APPROVAL.
- TIME AND MATERIAL BASIS. FURNISH TIME AND MATERIAL REPORTS DAILY TO THE CITY OF CONCORD FOR VERIFICATION AND SIGNATURE.
- OTHER

\_\_\_\_\_

AUTHORIZED BY: \_\_\_\_\_

**NORTH CAROLINA SALES TAX REPORT**

OWNER: \_\_\_\_\_  
 Project Title: **Treasure Drive Stormwater Improvements**  
 Project #: **32180-002**

CONTRACTOR: \_\_\_\_\_

PURCHASE ORDER: \_\_\_\_\_

DATE	VENDOR NAME	INVOICE NO.	NET INVOICE AMOUNT	STATE TAX AMOUNT	COUNTY TAX AMOUNT	SPECIAL COUNTY TAX	COUNTY PAID
TOTAL							

I certify that the above listed vendors were paid sales tax upon purchases of materials during the period covered by the Construction Estimate, and the property upon which such taxes were paid with or will be used in the performance of this contract. No tax on purchases or rentals of tools and/or equipment is included in the above list. All of the materials above became a part of or is annexed to the building or structure being erected, altered or repaired.

\_\_\_\_\_  
 Contractor or Subcontractor Name  
 (PRINT)  
  
 Signature: \_\_\_\_\_  
 Name (print): \_\_\_\_\_  
 Title: \_\_\_\_\_

SWORN AND SUBSCRIBED BEFORE  
 ME THIS \_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_.  
  
 \_\_\_\_\_  
 NOTARY PUBLIC  
  
 MY COMMISSON EXPIRES ON: \_\_\_\_\_

## **NORTH CAROLINA ONE CALL**

North Carolina One Call Center, Inc., a non-profit organization funded by participating utility companies and municipalities in the interest of community and job safety and improved service through damage reduction to the utilities.

**A ONE CALL TOLL FREE TELEPHONE NUMBER, 811 or 1-800-632-4949, PROVIDES AN AVENUE TO ALL OF THE PARTICIPATING MEMBERS FROM ANY POINT WITHIN THE STATE OF NORTH CAROLINA.**

Anyone proposing to excavate, dig, bore, tunnel, blast or disturb the earth in any manner in which buried utilities may be damaged is requested to call the toll-free number between the hours of 6:00 a.m. and 10:00 p.m., Monday through Friday, forty-eight hours before starting the proposed work.

Within minutes of your telephone call, the participating members will be made aware of your plans and will be given pertinent information that has been provided by you about your planned work. You will be told the names of the participating members from whom you can expect a response - if there are buried facilities in the path of your activity, the route of the utilities will be staked and/or marked at no expense to you. If there are no facilities in the area of the planned work, you will be called or notified by a representative of a participating company accordingly.

Should a non-participating utility operator be serving your area, we recommend that you call them on an individual basis. All utility operators, whether company or municipality, will be provided an opportunity to become a member of North Carolina One Call Center, Inc.

Naturally, knowing the route of utilities, the excavator is expected to exercise caution and to avoid damage as the project progresses.

Damage prevention does not just happen – it is a planned and orderly process through which each of us can participate - **YES, WE CAN AND WE WILL DRAMATICALLY REDUCE DAMAGES TO THE UTILITIES IN THE STATE OF NORTH CAROLINA!! THANKS FOR YOUR HELP.**

### **BEFORE YOU DIG**

IN THE INTEREST OF COMMUNITY AND JOB SAFETY AND IMPROVED SERVICE

**CALL NORTH CAROLINA ONE CALL CENTER, INC.  
811 or 1-800-632-4949**

**North Carolina One Call Center, Inc  
2300 West Meadowview Rd., Suite 227  
Greensboro, NC 27407  
[www.nc811.org](http://www.nc811.org)**

## **SECTION II – GENERAL CONDITIONS**

## ARTICLE 1.0 – DEFINITIONS

### 1. Definitions

1.1. Defined Terms: Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

- 1.1.1. **Acceptance** - By the OWNER of the Work as being fully complete in accordance with the Contract Documents subject to waiver of claims.
- 1.1.2. **Addenda** - Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the Contract Documents.
- 1.1.3. **Agreement** - The written instrument which is evidence of the agreement between OWNER and CONTRACTOR covering the work.
- 1.1.4. **Application for Payment** - The form acceptable to ENGINEER which is to be used by CONTRACTOR during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- 1.1.5. **Asbestos** - Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
- 1.1.6. **Bid** - The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 1.1.7. **Bidder** – The one who submits a Bid directly to Owner, as distinct from a sub-bidder who submits a bid directly to a Bidder.
- 1.1.8. **Bidding Documents** - The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).
- 1.1.9. **Bidding Requirements** - The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security form, if any, and the Bid form with any supplements
- 1.1.10. **Bonds** - Performance and payment bonds and other instruments of security.
- 1.1.11. **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.
- 1.1.12. **Claim** - A demand or assertion by OWNER or CONTRACTOR seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
- 1.1.13. **Contract** – Executed agreement between the OWNER and the successful bidder, covering the performance of the WORK and the compensation therefore. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
- 1.1.14. **Contract Documents** – The definition of the Contract Documents shall be as set forth in the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.
- 1.1.15. **Contract Price** - The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.3 in the case of Unit Price Work).
- 1.1.16. **Contract Times** - The number of days or the dates stated in the Agreement to complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.
- 1.1.17. **CONTRACTOR** - The individual or entity with whom OWNER has entered into the Agreement.
- 1.1.18. **Cost of the Work** - See paragraph 11.1.1 for definition.
- 1.1.19. **Drawings** - That part of the Contract Documents prepared approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by CONTRACTOR. Shop Drawings and other CONTRACTOR submittals are not Drawings as so defined.

- 1.1.20. **Effective Date of the Agreement** - The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 1.1.21. **ENGINEER** – Director of Engineering, City of Concord.
- 1.1.22. **ENGINEER's Consultant** – An individual or entity having a contract with ENGINEER to furnish services as ENGINEER, independent professional associate or consultant with respect to the Project.
- 1.1.23. **Field Order** - A written order issued by ENGINEER which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
- 1.1.24. **General Requirements** - Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.
- 1.1.25. **Hazardous Environmental Condition** - The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
- 1.1.26. **Hazardous Waste** - The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 1.1.27. **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.
- 1.1.28. **Liens** - Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 1.1.29. **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.
- 1.1.30. **Notice of Award**- The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.
- 1.1.31. **Notice to Proceed** - A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform the Work under the Contract Documents.
- 1.1.32. **OWNER** – City of Concord, North Carolina.
- 1.1.33. **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.
- 1.1.34. **PCB's** – Polychlorinated biphenyls
- 1.1.35. **Petroleum** - Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
- 1.1.36. **Project** - The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.
- 1.1.37. **Project Manual** - The bound documentary information prepared for bidding and construction 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.
- 1.1.38. **Radioactive Material** - Source, special nuclear, or byproduct material as defined by the atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 1.1.39. **Resident Project Representative** - The authorized representative of ENGINEER who may be assigned to the Site or any part thereof.
- 1.1.40. **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.
- 1.1.41. **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.

- 1.1.42. **Site** - Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, including right-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR. .
- 1.1.43. **Specifications** - That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
- 1.1.44. **Subcontractor** - An individual or entity having a direct contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the Site.
- 1.1.45. **Substantial Completion** - The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 1.1.46. **Supplementary Condition** - That part of the Contract Documents which amends or supplements these General Conditions.
- 1.1.47. **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.
- 1.1.48. **Underground Facilities** - All underground pipeline, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic of other control systems.
- 1.1.49. **Unit Price Work** - Work to be paid for on the basis of unit prices.
- 1.1.50. **Work** - The entire completed construction OR the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 1.1.51. **Work Change Directive** - A written statement to CONTRACTOR issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.
- 1.1.52. **Written Amendment** - A written statement modifying the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the non-engineering or non-technical rather than strictly construction-related aspects of the Contract Documents.
- 1.1.53. **Resident Observer** - Shall have the same definition as "Resident Project Representative" when referred to in these documents or during the duration of the Project.
- 1.1.54. **Written Notice** - The "Notice" as used herein shall mean and include all written notices, demands, instruction, claims, approvals, and disapprovals required to obtain compliance with Contract requirements. Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or to an authorized representative of such individual, firm or corporation, or if delivered at or sent by registered mail to the last business address known to him who gives the notice. Unless otherwise stated in writing, any notice to or demand upon the OWNER under this Contract shall be delivered to the OWNER through the ENGINEER.

## 1.2. Terminology

### 1.2.1. Intent of Certain Terms or Adjectives

- 1.2.1.1. Whenever in the Contract Documents the terms "as allowed", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper", "satisfactory", or adjectives of like effect or import are used to describe an action or determination of ENGINEER as to the Work, it is intended that such action or determination will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of section 9.9 or any other provision of the Contract Documents.

### 1.2.2. Day

- 1.2.2.1. The work "day" shall constitute a calendar day or 24 hours measured from midnight to the next midnight.

### 1.2.3. Defective

- 1.2.3.1. The word "defective", when modifying the work "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 has been damaged prior to ENGINEER's recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.4 or 14.5).

### 1.2.4. Furnish, Install, Perform, Provide

- 1.2.4.1. The word "furnish", when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
  - 1.2.4.2. The word "install", when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
  - 1.2.4.3. The words "perform" or "provide", when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
  - 1.2.4.4. When "furnish", "install", "perform", or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of CONTRACTOR, "provide" is implied.
- 1.2.5. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

## ARTICLE 2.0 – PRELIMINARY MATTERS

### 2. Preliminary Matters

#### 2.1. Delivery of Bonds

2.1.1. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.

#### 2.2. Copies of Documents

2.2.1. The CONTRACTOR will be furnished without charge up to **five** sets of specifications and full size drawings. Additional sets of drawings and specifications requested by the CONTRACTOR will be furnished at the cost of reproduction, plus handling.

#### 2.3. Commencement of Contract Times: Notice to Proceed

2.3.1. The Contract Time will commence to run on the day indicated in the Notice to Proceed.

#### 2.4. Starting the Work

2.4.1. CONTRACTOR shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

#### 2.5. Before Starting Construction

2.5.1. CONTRACTOR's Review of Contract Documents: Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error, ambiguity, or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless CONTRACTOR knew or reasonably should have known thereof.

2.5.2. Preliminary Schedules: Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for its timely review:

2.5.2.1. A preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2.5.2.2. A preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and

2.5.2.3. A preliminary schedule of values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.5.3. Evidence of Insurance: The CONTACTOR shall submit three copies of his insurance certificate with submittal of his executed Contract Documents. The CONTRACTOR may use the "Accord Form" for the Certificate of Insurance, but the form shall be modified to state that the described insurance policies shall not be canceled without 30 days prior written notice to the OWNER and the ENGINEER by registered mail. CONTRACTOR shall review "Accord Form" before forwarding to the ENGINEER.

## 2.6. Pre-Construction Conference

2.6.1. Before any Work at the Site is started, a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in paragraph 2.5.2, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

## 2.7. Initial Acceptance of Schedules

2.7.1. Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to review for acceptability to ENGINEER as provided below the schedules submitted in accordance with paragraph 2.5.2. CONTRACTOR shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to CONTRACTOR until acceptable schedules are submitted to ENGINEER.

2.7.1.1. The progress schedule will be acceptable to ENGINEER if it provides an orderly progression of the Work to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on ENGINEER responsibility for the progress schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefore.

2.7.1.2. CONTRACTOR's schedule of Shop Drawing and Sample submittals will be acceptable to ENGINEER if it provides a workable arrangement for reviewing and processing the required submittals.

2.7.1.3. CONTRACTOR's schedule of values will be acceptable to ENGINEER as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

## 2.8. Award

2.8.1. The award of the Contract, if it is awarded, will be to the lowest responsive, responsible Bidder whose qualifications indicate the award will be in the best interest of the OWNER and whose Bid complies with all the prescribed requirements. Notice of Award will not be given until the OWNER has concluded such investigations as he deems necessary to establish the responsibility, qualifications, and financial ability of the Bidders to do the Work in accordance with the Contract Documents to the satisfaction of the OWNER within the time prescribed. The OWNER reserves the right to reject the Bid of any Bidder who does not pass such investigation to the OWNER'S satisfaction. In analyzing Bids, the OWNER may take into consideration alternates and unit prices, if requested by the Bid forms. If the Contract is awarded, the OWNER will give the successful Bidder a Notice of Award within 90 days after the opening of Bids.

## **ARTICLE 3.0 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE**

### 3. Contract Documents: Intent, Amending, Reuse

#### 3.1. Intent

- 3.1.1. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
- 3.1.2. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to OWNER.
- 3.1.3. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in Article 9.0.

#### 3.2. Reference Standards

##### 3.2.1. Standards, Specifications, and Codes.

- 3.2.1.1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, whether such reference be specific or by implication, shall mean the standard, specification, manual, or code in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
- 3.2.1.2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall any such provision or instruction be effective to assign to OWNER, ENGINEER, or any of ENGINEER's Consultants, agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

#### 3.3. Reporting and Resolving Discrepancies

##### 3.3.1. Reporting Discrepancies

- 3.3.1.1. If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, CONTRACTOR shall report it to ENGINEER in writing at once. CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.1) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.4; provided, however, that CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any such conflict, error, ambiguity, or discrepancy unless CONTRACTOR knew or reasonably should have known thereof.

### 3.3.2. Resolving Discrepancies

3.3.2.1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

3.3.2.1.1. The provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents)

### 3.4. Amending and Supplementing Contract Documents

3.4.1. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways: (i) a Written Amendment; (ii) a Change Order; or (iii) a Work Change Directive.

3.4.2. The requirements of the Contract Documents may be supplemented and minor variations and deviations in the Work may be authorized, by one or more of the following ways: (i) a Field Order; (ii) ENGINEER's approval of a Shop Drawing or Sample; or (iii) ENGINEER's written interpretation or clarification.

### 3.5. Reuse of Documents

3.5.1. CONTRACTOR and any Subcontractor or supplier or other individual or entity performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not have or acquire any title in or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER or ENGINEER's Consultant, including electronic media editions; and (ii) shall not reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adoption by ENGINEER. This prohibition will survive final payment, completion, and acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

## **ARTICLE 4.0 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS**

### 4. Availability of Lands; Subsurface and Physical Conditions; Reference Points

#### 4.1. Availability of Lands

4.1.1. OWNER shall furnish the Site. OWNER shall notify CONTRACTOR of any encumbrances or restrictions not of general application but specifically related to use of the Site with which CONTRACTOR must comply in performing the Work. OWNER will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If CONTRACTOR and OWNER are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in OWNER's furnishing the Site, CONTRACTOR may make a Claim therefore as provided in paragraph 10.5.

4.1.2. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

#### 4.2. Subsurface and Physical Conditions

4.2.1. Any testing, reports or drawings which are available or have been relied upon for this project are identified or included in the Special Provisions.

4.2.2. Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the technical data. Except for such reliance on such technical data, CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER's Consultants with respect to:

4.2.2.1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, and safety precautions and programs incident thereto; or

4.2.2.2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or

4.2.2.3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinion, or information.

#### 4.3. Differing Subsurface or Physical Conditions

4.3.1. Notice: If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

4.3.1.1. is of such a nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely as provided in paragraph 4.2 is materially inaccurate; or

4.3.1.2. is of such a nature as to require a change in the Contract Documents; or

4.3.1.3. differs materially from that shown or indicated in the Contract Documents; or

4.3.1.4. is of an unusual nature, and differs materially from condition ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents:

4.3.1.4.1. Then CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.1), notify OWNER and ENGINEER in writing about such condition. CONTRACTOR shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

4.3.2. ENGINEER's Review: After receipt of written notice as required by paragraph 4.3.1, ENGINEER will promptly review the pertinent condition, determine the necessity of OWNER's obtaining additional exploration or tests with respect thereto, and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

#### 4.3.3. Possible Price and Times Adjustments

4.3.3.1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in CONTRACTOR's cost of, or time required for, performance of the Work; subject, however, to the following:

4.3.3.1.1. such condition must meet anyone or more of the categories described in paragraph 4.3.1; and

- 4.3.3.1.2. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of paragraphs 9.8 and 11.3.
- 4.3.3.2. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Times if:
  - 4.3.3.2.1. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
  - 4.3.3.2.2. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or
  - 4.3.3.2.3. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.3.1.
- 4.3.3.3. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefore as provided in paragraph 10.5. However, OWNER, ENGINEER, and ENGINEER's consultants shall not be liable to CONTRACTOR for any claims, costs, losses, or damages (including but not limited to all fees and charges of ENGINEERS, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by CONTRACTOR on or in connection with any other project or anticipated project.

#### 4.4. Underground Facilities

- 4.4.1. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to OWNER or ENGINEER by the OWNERS of such Underground Facilities, including OWNER, or by others.
  - 4.4.1.1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and
  - 4.4.1.2. the cost of all of the following will be included in the Contract Price, and CONTRACTOR shall have full responsibility for:
    - 4.4.1.2.1. reviewing and checking all such information and data.
    - 4.4.1.2.2. locating all Underground Facilities shown or indicated in the Contract Documents.
    - 4.4.1.2.3. coordination of the Work with the OWNERS of such Underground Facilities, including OWNER, during construction and
    - 4.4.1.2.4. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.
- 4.4.2. Not Shown or Indicated
  - 4.4.2.1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated reasonable accuracy in the" Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by paragraph 6.16.1), identify the OWNER of such Underground Facility and give written notice to that OWNER and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract

Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility.

- 4.4.2.2. If ENGINEER concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, OWNER or CONTRACTOR may make a Claim therefore as provided in paragraph 10.5.

#### 4.5. Reference Points

- 4.5.1. OWNER shall provide engineering surveys to establish reference points for construction which in ENGINEER's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

#### 4.6. Hazardous Environmental Condition at Site

- 4.6.1. Reports and Drawings: Reference is made to these General Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the site, if any, that have been utilized by the ENGINEER in the preparation of the Contract Documents.
- 4.6.2. Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the technical data contained in such reports and drawings, but such reports and drawings are not Contract Documents. Except for such reliance on such "technical data", CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER or any of ENGINEER's Consultants with respect to:
  - 4.6.2.1. the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto; or
  - 4.6.2.2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
  - 4.6.2.3. any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.
- 4.6.3. CONTRACTOR shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. CONTRACTOR shall be responsible for a Hazardous Environmental Condition

created with any materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.

- 4.6.4. If CONTRACTOR encounters a Hazardous Environmental Condition or if CONTRACTOR or anyone for whom CONTRACTOR is responsible creates a Hazardous Environmental Condition, CONTRACTOR shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by paragraph 6.16); and (iii) notify OWNER and ENGINEER (and promptly thereafter confirm such notice in writing). OWNER shall promptly consult with ENGINEER concerning the necessity for OWNER to retain a qualified expert to evaluate such condition or take corrective action, if any.
- 4.6.5. CONTRACTOR shall not be required to resume Work in connection with such condition or in any affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by CONTRACTOR, either party may make a Claim therefore as provided in paragraph 10.5.
- 4.6.6. If after receipt of such written notice CONTRACTOR does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then OWNER may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefore as provided in paragraph 10.5. OWNER may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.0.
- 4.6.7. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, Engineer's Consultants, and the officers, directors, partners, employees, agents, other consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court of arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.6.6 shall obligate CONTRACTOR to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- 4.6.7.1. The provisions of paragraphs 4.2, 4.3, and 4.4 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

## **ARTICLE 5.0 – BONDS AND INSURANCE**

### 5. Bonds and Insurance

#### 5.1. Performance and Payment Bonds

- 5.1.1. Concurrent with execution of the Agreement and within ten days of the Notice of Award, the successful CONTRACTOR shall procure, execute, and deliver to the OWNER and maintain, at his own cost and expense, the following bonds, in the forms attached, of a surety company approved by the state in which the Work is being performed as a Surety:
  - 5.1.1.1. Performance Bond - in an amount not less than 100% of the total amount payable to the CONTRACTOR by the terms of the Contract as security for the faithful performance of the Work. Bond must be valid until one year after the date of issuance of the Certificate of Substantial Completion.
  - 5.1.1.2. Payment Bond - in an amount not less than 100% of the total amount payable to the CONTRACTOR by the terms of the Contract as security for the payment of all persons performing labor and furnishing material in connection with the Work. Bond must be valid until one year after the date of issuance of the Certificate of Substantial Completion.
- 5.1.2. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act. Bonds shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff, Bureau of Government Financial Operations, U.S. Treasury Department.
- 5.1.3. If the Surety on any Bond furnished by the CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business in the state in which the Work is being performed is revoked, the CONTRACTOR shall, within ten days thereafter, substitute another Bond or Surety, both of which shall be acceptable to the OWNER.

## 5.2. Insurance Requirements

- 5.2.1. Wherever in this Article the terms "The Insured" and "OWNER" occur with respect to coverage in a policy, it shall mean the OWNER and its agent and agencies, all municipalities where Work is being performed under the Contract, the ENGINEER, and any other parties specifically designated herein, who shall be named as insured in each policy issued. The insurance policies required herein shall not contain any Third Party Beneficiary Exclusion.
- 5.2.2. The CONTRACTOR shall not commence Work under the Contract until he has obtained all insurance required under this Article and such insurance has been approved by the OWNER, nor shall the CONTRACTOR allow any Subcontractor to commence Work on his subcontract until all similar insurance required of the Subcontractor has been so obtained and approved.
- 5.2.3. Provision of some types of insurance by a Subcontractor may be waived, at the option of the OWNER, where it is deemed that adequate coverage is provided by the CONTRACTOR's insurance. Subcontractors must, in all cases, provide Workmen's Compensation and Employer's Liability Insurance and Motor Vehicle Liability Insurance.
- 5.2.4. One copy of each such insurance policy and certificates indicating each type of coverage mentioned, and the correlation between the insurance furnished and that required, shall be filed with each of The Insured.
- 5.2.5. All policies relating to this Contract shall be so written that each of The Insured shall be notified by the carrier of cancellation or change at least 30 days prior to the effective date of such cancellation or change. Renewal certificates covering the

renewal of all policies expiring during the life of the Contract shall be filed with each of The Insured not less than 30 days before the expiration of such policies.

5.2.6. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and furnished. The insurance shall provide protection from claims set forth herein which may arise out of or result from Contractor's performance and furnishing of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed or furnished by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform or furnish any of the Work, or by anyone for whose acts any of them may be liable:

- 5.2.6.1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
- 5.2.6.2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
- 5.2.6.3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
- 5.2.6.4. claims for damages insured by personal injury liability coverage which are sustained: (1) by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or (2) by any other person for any other reason;
- 5.2.6.5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting there from; and
- 5.2.6.6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle.

### 5.3. General Insurance Requirements

5.3.1. The insurance required to be purchased and maintained by Contractor shall:

- 5.3.1.1. include at least the specific coverages and be written for not less than the limits of liability specified herein or required by Laws or Regulations, whichever is greater;
- 5.3.1.2. include completed operations insurance;
- 5.3.1.3. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.12, 6.16, and 6.31 through 6.33 of the General Conditions;
- 5.3.1.4. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 30 days' prior written notice has been given to Owner and Engineer;
- 5.3.1.5. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work;
- 5.3.1.6. with respect to completed operations insurance, and any other insurance coverage written on a claims-made basis, remain in effect for at least 2 years after final payment (and Contractor shall furnish Owner and Engineer evidence satisfactory to Owner of continuation of such insurance at final payment and one year thereafter);
- 5.3.1.7. contain a cross liability or severability of interest clause or endorsement. Insurance covering the specified additional insured shall be primary insurance, and all other insurance carried by the additional insured shall be excess insurance; and
- 5.3.1.8. with respect to workers' compensation and employers' liability, comprehensive automobile liability, commercial general liability, and umbrella liability insurance, Contractor shall require its insurance carriers to waive all rights of subrogation against Owner, Engineer, and their respective officers, directors, partners, employees, and agents.

5.3.2. Workers' Compensation and Employers' Liability Insurance. This insurance shall protect Contractor against all claims under applicable state workers' compensation laws. Contractor shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a workers' compensation law. This policy shall include an "all states" or "other states" endorsement. The liability limits shall be not less than:

Workers' compensation	Statutory
Employers' liability	\$1,000,000 each occurrence

5.3.3. Comprehensive Automobile Liability Insurance. This insurance shall be occurrence type written in comprehensive form and shall protect Contractor, and Owner, and Engineer as additional insured, against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles, either on or off the project site whether they are owned, non-owned, or hired. The liability limits shall be not less than:

Bodily injury and property damage	\$1,000,000 combined single limit for each occurrence
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5.3.4. Commercial General Liability Insurance. This insurance shall be occurrence type written in comprehensive form and shall protect Contractor, and Owner, and Engineer as additional insured, against claims arising from injuries, sickness, disease, or death of any person or damage to property arising out of performance of the Work. The policy shall also include personal injury liability coverage, contractual liability coverage, completed operations and products liability coverage, and coverage for blasting, explosion, collapse of buildings, and damage to underground property. The liability limits shall be not less than:

Bodily injury and property damage	\$1,000,000 combined single limit for each occurrence \$1,000,000 general aggregate
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5.3.5. Umbrella Liability Insurance. This insurance shall protect Contractor, and Owner, and Engineer as additional insured, against claims in excess of the limits provided under workers' compensation and employers' liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall be not less than:

Bodily injury and property damage	\$4,000,000 combined single limit for each occurrence \$4,000,000 general aggregate
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5.3.6. Owner's Protective Liability Insurance. This insurance shall be issued in the name of Owner and shall protect and defend Owner against claims arising as a result of the operations of Contractor or Contractor's Subcontractors. The liability limits shall be not less than:

Bodily injury and property damage	\$1,000,000 combined single limit for each occurrence \$1,000,000 general aggregate
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- 5.3.7. Property Insurance. Contractor shall purchase and maintain property insurance coverage for the Work at the site in the amount of the full replacement cost thereof. This insurance shall:
- 5.3.7.1. include the interests of Owner, Contractor, Subcontractors, Engineer, and Engineer's Consultants, each of whom is deemed to have an insurable interest and shall be listed as a named insured;
  - 5.3.7.2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false-work, Work in transit including ocean transit, and Work in storage at the project site or at another location acceptable to Owner, and shall insure against at least the following perils: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and damage caused by frost and freezing;
  - 5.3.7.3. cover, in an amount not less than \$100,000, the Owner-furnished equipment and materials to be erected or installed by Contractor;
  - 5.3.7.4. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects); and
  - 5.3.7.5. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer, with 30 days' written notice to each other insured.
  - 5.3.7.6. If Owner requests in writing that other special insurance be included in the property insurance provided by Contractor, Contractor shall, if possible, include such insurance, and the cost thereof will be charged to Owner by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the site, Contractor shall in writing advise Owner whether or not such other special insurance has been procured by Contractor.

#### 5.4. Other Insurance Requirements

- 5.4.1. If any of the property and casualty insurance requirements are not complied with at their renewal dates, payments to the CONTRACTOR will be withheld until these requirements have been met, or at the option of the OWNER, the OWNER may pay the renewal premiums and withhold such payments from any monies due to the CONTRACTOR.
- 5.4.2. In the event that claims in excess of the insured amounts provided herein are filed by reason of any operations under the Contract, the amount of excess of such claims, or any portion thereof, may be withheld from payment due or to become due the CONTRACTOR until such time as the CONTRACTOR shall furnish such additional security covering such claims as may be determined by the OWNER.
- 5.4.3. All policies and certificates of insurance of the CONTRACTOR shall contain the following clauses:
  - 5.4.3.1. insurers shall have no right of recovery or subrogation against the OWNER and its agents and agencies and the ENGINEER, it being the intention of the parties that the insurance policies so effected shall protect both parties and be primary coverage for any and all losses covered by the above-described insurance.
  - 5.4.3.2. the clause "other insurance provisions" in a policy in which the OWNER and its agents and agencies and the ENGINEER is named as an insured, shall not apply to these parties.
  - 5.4.3.3. the insurance companies issuing the policy or policies shall have no recourse against the OWNER and its agents and agencies and the ENGINEER, for the payment of any premiums or for assessments under any form of policy.

- 5.4.3.4. any and all deductibles in the above-described insurance policies shall be assumed by and be for the amount of, and at the sole risk of the CONTRACTOR.

## **ARTICLE 6.0 - CONTRACTOR'S RESPONSIBILITIES**

### 6. Contractor's Responsibilities

#### 6.1. Supervision and Superintendence

6.1.1. CONTRACTOR shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of OWNER or ENGINEER in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. CONTRACTOR shall be responsible to see that the complete Work complies accurately with the Contract Documents.

6.1.2. At all times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

#### 6.2. Labor; Working Hours

6.2.1. CONTRACTOR shall provide competent, suitably qualified personnel to survey, layout, and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site.

6.2.2. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to ENGINEER.

#### 6.3. Services, Materials, and Equipment

6.3.1. Unless otherwise specified in the General Requirements, CONTRACTOR shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing start-up, and completion of the Work.

6.3.2. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of OWNER. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. All materials and

equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

#### 6.4. Progress Schedule

6.4.1. CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.7 as it may be adjusted from time to time as provided below.

6.4.1.1. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.7) proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

6.4.1.2 Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12.0. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.0.

#### 6.5. Substitutes and "Or-Equals"

6.5.1. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item equipment or material or equipment of other Suppliers may be submitted to ENGINEER for review under the circumstances described below.

6.5.1.1. "Or-Equal" Items: If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by ENGINEER as an "or-equal" item, in which case review and approval of the proposed item may, in ENGINEER's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this paragraph 6.5.1.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

6.5.1.1.1. in the exercise of reasonable judgment ENGINEER determines that: (i) it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and;

6.5.1.1.2. CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER; and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

#### 6.5.1.2. Substitute Items

6.5.1.2.1. If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal" item under paragraph 6.5.1.1, it will be considered a proposed substitute item.

6.5.1.2.2. CONTRACTOR shall submit sufficient information as provided below to allow ENGINEER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute. Such information on items of material or equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR.

- 6.5.1.2.3. The procedure for review by ENGINEER will be as set forth in paragraph 6.5.1.2.4, as supplemented in the General Requirements and as ENGINEER may decide is appropriate under the circumstances.
- 6.5.1.2.4. CONTRACTOR shall first make written application to ENGINEER for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application shall certify that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not use of a proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available engineering, sales, maintenance, repair, and replacement services will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other CONTRACTORS affected by any resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute item. ENGINEER may require CONTRACTOR to furnish additional data about the proposed substitute item.

6.5.2. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by ENGINEER. CONTRACTOR shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in subparagraph 6.5.1.2.

6.5.3. ENGINEER's Evaluation: ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.5.1 and 6.5.2. ENGINEER will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal". ENGINEER will advise CONTRACTOR in writing of any negative determination.

6.5.4. Special Guarantee: OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.

6.5.5. CONTRACTOR's Expense: CONTRACTOR shall provide all data in support of any proposed substitute for "or-equal" at CONTRACTOR's expense.

## 6.6. Concerning Subcontractors, Suppliers, and Others

6.6.1. CONTRACTOR shall not employ any Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, against whom OWNER may have reasonable objection. CONTRACTOR shall not be required to employ any

Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

- 6.6.2. Within ten days after Notice of Award has been issued, the CONTRACTOR shall furnish to the ENGINEER a list of subcontractors, suppliers, or other persons or organizations who will participate in the Work or furnish principal items of materials and equipment to be utilized in the Work. The list shall include the subcontractors, suppliers, or other persons or organizations indicated on the Bid Form. Within ten days after receipt of the list but prior to the Effective Date of the Agreement, the ENGINEER shall notify the CONTRACTOR in writing if the ENGINEER (or OWNER) has reasonable objection to any subcontractor, suppliers, or other person or organization on the list. Failure by the ENGINEER to object to anyone on the list within the specified time shall constitute acceptance of the subcontractor, supplier, or other person or organization. Acceptance of a subcontractor, supplier, other person or organization named shall not constitute a waiver of the requirements of the contract specifications or the right of the OWNER or ENGINEER to reject defective work. If the ENGINEER (or OWNER) has a reasonable objection as described above, the CONTRACTOR may either (1) submit an acceptable substitute without an increase in his Bid price, or (2) withdraw his Bid without forfeiting his Bid security.
- 6.6.3. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations. OWNER or ENGINEER may furnish to any such Subcontractor, Supplier, or other individual or entity to the extent practicable, information about amounts paid to CONTRACTOR on account of Work performed for CONTRACTOR by a particular Subcontractor, Supplier, or other individual or entity.
- 6.6.4. CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR.
- 6.6.5. CONTRACTOR shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with ENGINEER through CONTRACTOR.
- 6.6.6. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- 6.6.7. All Work performed for CONTRACTOR by a Subcontractor shall be pursuant to an appropriate agreement between the CONTRACTOR and Subcontractor. The Subcontractor shall not commence Work until the CONTRACTOR has obtained all insurance as required by Article 5.0, inclusive.
- 6.6.8. The CONTRACTOR shall not subcontract more than 50 percent of the Contract price without prior written approval of the OWNER.

## 6.7. Patent Fees and Royalties

6.7.1. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER or ENGINEER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees or agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of ENGINEERS, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

## 6.8. Permits

6.8.1. CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility OWNERS for connection to the Work.

## 6.9. Laws and Regulations

6.9.1. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

6.9.2. If CONTRACTOR observes that the Specifications or Drawings are at variance with any Laws or Regulations, he shall give ENGINEER prompt written notice thereof. If CONTRACTOR performs any Work knowing it to be contrary to such Laws or Regulations, and without such notice to ENGINEER, he shall bear all costs arising there from. The CONTRACTOR shall, at all times, observe and comply with and shall cause all his agents and employees and all his Subcontractors to observe and comply with all such existing Laws or Regulations, and shall protect and indemnify the OWNER and the ENGINEER and the municipalities in which Work is being performed, and their officers and agents against any claim or liability arising from or based on the violation of any such Law or Regulation, whether by himself or his employees or any of his Subcontractors.

6.9.3. Changes in Laws or Regulations not adopted or in effect at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Times. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefore as provided in paragraph 10.5.

## 6.10. Taxes

6.10.1. CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work. A listing of sales tax paid for the period shall be submitted with each Progress Payment

## 6.11. Use of Site and Other Areas

### 6.11.1. Limitation on Use of Site and Other Areas

6.11.1.1. CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

6.11.1.2. Should any claim be made by any such owner or occupant because of the performance of the work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

6.11.1.3. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant, and the officers, directors, partners, employees, agents, and other consultants of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of ENGINEER's, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such OWNER or occupant against OWNER, ENGINEER, or any other party indemnified hereunder to the extent caused by or based upon CONTRACTOR's performance of the Work.

6.11.2. Removal of Debris During Performance of the Work: During the progress of the Work CONTRACTOR shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris, Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

6.11.3. Cleaning: Prior to Substantial Completion of the Work CONTRACTOR shall clean the Site and make it ready for utilization by OWNER. At the completion of the Work CONTRACTOR shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus material and shall restore to original condition all property not designated for alteration by the Contract Documents.

6.11.4. Loading Structures: CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

## 6.12. Record Documents

6.12.1. CONTRACTOR shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record

documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to ENGINEER for OWNER. CONTRACTOR is advised that failure to furnish the ENGINEER with accurate and detailed record drawings shall be reason for withholding final payment.

#### 6.13. Safety and Protection

6.13.1. CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- 6.13.1.1. all persons on the Site or who may be affected by the Work;
- 6.13.1.2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
- 6.13.1.3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

6.13.2. CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property referred to in paragraph 6.13.1.2 or 6.13.1.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or ENGINEER's Consultant, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them). CONTRACTOR's duties and responsibilities for safety and for protection of the work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.7.2 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

#### 6.14. Safety Representative

6.14.1. CONTRACTOR shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

#### 6.15. Hazard Communication Programs

6.15.1. CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made

available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

#### 6.16. Emergencies

6.16.1. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, CONTRACTOR is obligated to act to prevent threatened damage, injury, or loss. CONTRACTOR shall give ENGINEER prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change Directive or Change Order will be issued.

#### 6.17. Shop Drawings and Samples

6.17.1. CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. CONTRACTOR shall submit four copies of all shop drawings plus the number required for use by the ENGINEER. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show ENGINEER the services, materials, and equipment CONTRACTOR proposes to provide and to enable ENGINEER to review the information for the limited purposes required by paragraph 6.17.5.

6.17.2. CONTRACTOR shall also submit Samples to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal for the limited purposes required by paragraph 6.17.5. CONTRACTOR shall submit three samples plus the number required to be returned to the CONTRACTOR for each sample required.

6.17.3. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER as required by paragraph 2.7, any related Work performed prior to ENGINEER's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR

#### 6.17.4. Submittal Procedures

6.17.4.1. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:

6.17.4.1.1. all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

6.17.4.1.2. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

6.17.4.1.3. all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and

- 6.17.4.1.4. CONTRACTOR shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
- 6.17.4.1.5. each Shop Drawing submitted to the ENGINEER must be accompanied by a transmittal which references the applicable section(s) of the specifications. In addition, each Shop Drawing shall be numbered in the order of submittal sequence. All submittals called for in the specifications shall be submitted in the number of copies as indicated in the Contract Documents.
- 6.17.4.2. Each submittal shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.
- 6.17.4.3. At the time of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to ENGINEER for review and approval of each such variation.

#### 6.17.5. ENGINEER's Review

- 6.17.5.1. ENGINEER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER. ENGINEER's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 6.17.5.2. ENGINEER's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 6.17.5.3. ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of each submittal as required by paragraph 6.17.4.3 and ENGINEER, has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.4.1.

#### 6.17.6. Resubmittal Procedures

- 6.17.6.1. CONTRACTOR shall make corrections required by ENGINEER and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall direct specific attention in writing to revision other than the corrections called for by ENGINEER on previous submittals.

#### 6.18. Continuing the Work

6.18.1. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.4 or as OWNER and CONTRACTOR may otherwise agree in writing.

#### 6.19. CONTRACTOR's General Warranty and Guarantee

6.19.1. CONTRACTOR warrants and guarantees to OWNER, ENGINEER, and ENGINEER's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:

6.19.1.1. abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, Suppliers, or any other individual or entity for whom CONTRACTOR is responsible; or

6.19.1.2. normal wear and tear under normal usage.

6.19.2. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents:

6.19.2.1. observations by ENGINEER;

6.19.2.2. recommendation by ENGINEER or payment by OWNER of any progress or final payment;

6.19.2.3. the issuance of a certificate of Substantial Completion by ENGINEER or any payment related thereto by OWNER;

6.19.2.4. use or occupancy of the Work or any part thereof by OWNER;

6.19.2.5. any acceptance by OWNER or any failure to do so;

6.19.2.6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER;

6.19.2.7. any inspection, test, or approval by others; or

6.19.2.8. any correction of defective Work by OWNER.

#### 6.20. Indemnification

6.20.1. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of ENGINEER's, architects, attorneys, and other professionals and all court of arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage:

6.20.1.1. is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting there from; and

6.20.1.2. is caused in whole or in part by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified

party by Laws and Regulations regardless of the negligence of any such individual or entity.

6.20.2. In any and all claims against OWNER or ENGINEER or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.20.1 shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for CONTRACTOR or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

6.20.3. Nothing in the Contract Documents shall create or give to third parties any claim or right of action against the CONTRACTOR, the OWNER or the ENGINEER beyond such as may legally exist irrespective of the Contract.

#### 6.21. Operation and Maintenance Manuals

6.21.1. CONTRACTOR shall submit two copies of Operation and Maintenance Manuals for all equipment for review. Upon receipt of approval, six complete sets must be provided. No equipment may be placed into service until the approved manuals are received by the ENGINEER. Instruction manuals shall list all of the equipment specified in this and other sections of the Specifications and shall include equipment serial numbers, design data, operating instructions, maintenance instructions, lubrication instructions, piping, wiring and control diagrams, assembly drawings showing location of parts, part numbers and spare parts list.

### **ARTICLE 7.0 - OTHER WORK**

#### 7. Other Work

##### 7.1. Related Work at Site

7.1.1. OWNER may perform other work related to the Project at the Site by OWNER's employees, or let other direct contracts therefore, or have other work performance by utility owner. If such other work is not noted in the Contract Documents, then:

7.1.1.1. written notice thereof will be given to CONTRACTOR prior to starting any such other work; and

7.1.1.2. if OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefore as provided in paragraph 10.5.

7.1.2. CONTRACTOR shall afford each other CONTRACTOR who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the other work with OWNER's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their

work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibility of CONTRACTOR under this paragraph are for the benefit of such utility owners and other CONTRACTORS to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other CONTRACTORS.

- 7.1.3. If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7.0, CONTRACTOR shall inspect such other work and promptly report to ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure to so report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Work except for latent defects and deficiencies in such other work.

## 7.2. Coordination

- 7.2.1. If OWNER intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth:
  - 7.2.1.1. the individual or entity who will have authority and responsibility for coordination of the activities between the various CONTRACTORS will be identified;
  - 7.2.1.2. the specific matters to be covered by such authority and responsibility will be itemized; and
  - 7.2.1.3. the extent of such authority and responsibilities will be provided.
- 7.2.2. OWNER shall have sole authority and responsibility for such coordination.

## **ARTICLE 8.0 - OWNER'S RESPONSIBILITIES**

### 8. Owner's Responsibilities

#### 8.1. Communications to CONTRACTOR

- 8.1.1. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through ENGINEER. .

#### 8.2. Replacement of ENGINEER

- 8.2.1. In case of termination of the employment of ENGINEER, OWNER shall appoint an ENGINEER to whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER.

#### 8.3. Furnish Data

- 8.3.1. OWNER shall promptly furnish the data required of OWNER under the Contract Documents.

#### 8.4. Pay Promptly When Due

- 8.4.1. OWNER shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.2.3. and 14.7.3.

#### 8.5. Lands and Easements; Reports and Tests

8.5.1. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.5. Paragraph 4.2 refers to OWNER identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by ENGINEER in preparing the Contract Documents.

8.6. Insurance

8.6.1. OWNER's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.0.

8.7. Change Orders

8.7.1. OWNER is obligated to execute Change Orders as indicated in paragraph 10.3.

8.8. Inspections, Tests, and Approvals

8.8.1. OWNER's responsibility in respect to certain inspections, tests, and approvals is set forth in paragraph 13.3.2.

8.9. Limitations on OWNER's Responsibilities

8.9.1. The OWNER shall not supervise, direct, or have control or authority over, nor be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the work. OWNER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

8.10. Undisclosed Hazardous Environmental Condition

8.10.1. OWNER's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in paragraph 4.6.

8.11. Evidence of Financial Arrangements

8.11.1. If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy OWNER's obligations under the contract Documents, OWNER's responsibility in respect thereof will be as set forth in these General Conditions.

**ARTICLE 9.0 - ENGINEER'S STATUS DURING CONSTRUCTION**

9. Engineer's Status During Construction

9.1. OWNER's Representative

9.1.1. ENGINEER will be OWNER's representative during the construction period and his instructions shall be carried into effect promptly and efficiently.

9.2. Project Representative

9.2.1. ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more extensive observation of the Work. The responsibilities and authority

and limitations thereon of any such Resident Project Representative and assistants will be as provided in section 9.9.

### 9.3. Clarifications and Interpretations

- 9.3.1. The ENGINEER will furnish a Resident Project Representative (and assistants) to assist the ENGINEER in observing the performance of the Work. The Resident Project Representative will serve as the ENGINEER's liaison with the CONTRACTOR, working principally through the CONTRACTOR's superintendent to assist him in understanding the intent of the Contract Documents.
- 9.3.2. The Resident Project Representative shall conduct on-site observations of the Work in progress to confirm that the Work is proceeding in accordance with the Contract Documents. He will verify that tests, equipment and systems start-ups and operating and maintenance instructions are conducted as required by the Contract Documents. He will have the authority to disapprove or reject defective Work in accordance with Article 13.0.
- 9.3.3. Except upon written instruction of the ENGINEER, the Resident Project Representative:
  - 9.3.3.1. Shall not authorize any deviation from the Contract Documents or approve any substitute materials or equipment.
  - 9.3.3.2. Shall not exceed limitation of ENGINEER's authority as set forth in the Contract Documents.
  - 9.3.3.3. Shall not undertake any of the responsibilities of CONTRACTOR, Subcontractors, or CONTRACTOR's superintendent, or expedite the Work.
  - 9.3.3.4. Shall not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Contract.
  - 9.3.3.5. shall not advise on or issue directions as to safety precautions and programs in connection with the Work.

### 9.4. Authorized Variations in Work

- 9.4.1. ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER and also on CONTRACTOR, who shall perform the Work involved promptly. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of a Field Order, a Claim may be made therefore as provided in paragraph 10.5.

### 9.5. Rejecting Defective Work

- 9.5.1. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, or that ENGINEER believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. ENGINEER will also have authority to require special inspection or testing of the Works provided in paragraph 13.4, whether or not the Work is fabricated, installed, or completed.

### 9.6. Shop Drawings, Change Orders and Payments

- 9.6.1. In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraph 6.17.
- 9.6.2. In connection with ENGINEER's authority as to Change Orders, see Articles 10.0, 11.0, and 12.0.
- 9.6.3. In connection with ENGINEER's authorities to Applications for Payment, see Article 14.0.

9.7. Determinations for Unit Price Work

- 9.7.1. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR the ENGINEER's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). ENGINEER's written decision thereon will be final and binding (except as modified by ENGINEER to reflect changed factual conditions or more accurate data) upon OWNER and CONTRACTOR, subject to the provisions of paragraph 10.5.

9.8. Decisions on Requirements of Contract Documents and Acceptability of Work

- 9.8.1. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work there under. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and Claims seeking changes in the Contract Price or Contract Times will be referred to ENGINEER in writing, in accordance with the provisions of paragraph 10.5, with a request for a formal decision.
- 9.8.2. The rendering of a decision by ENGINEER pursuant to this paragraph 9.8 with respect to any such Claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.7) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such Claim, dispute, or other matter.

9.9. Limitations on ENGINEER's Authority and Responsibilities

- 9.9.1. Neither ENGINEER's authority or responsibility under this Article 9.0 or under any other provision of the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by ENGINEER shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- 9.9.2. ENGINEER will not supervise, direct, contract, or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the performance of the Work. ENGINEER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

- 9.9.3. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- 9.9.4. ENGINEER's review of the final Application for Payment and accompanying documentation and all maintenance and operating instruction, schedules, guarantees, Bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by paragraph 14.7.1 will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents
- 9.9.5. The limitations upon authority and responsibility set forth in this section 9.9 shall also apply to ENGINEER's Consultants, Resident Project Representative, and assistants.

## **ARTICLE 10.0 – CHANGES IN THE WORK; CLAIMS**

### 10. Changes in the Work; Claims

#### 10.1. Authorized Changes in the Work

- 10.1.1. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
- 10.1.2. If OWNER and CONTRACTOR are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefore as provided in paragraph 10.5.

#### 10.2. Unauthorized Change in the Work

- 10.2.1. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in paragraph 3.4, except in the case of an emergency as provided in paragraph 6.16 or in the case of uncovering Work as provided in paragraph 13.4.2.

#### 10.3. Execution of Change Orders

- 10.3.1. OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by ENGINEER (or Written Amendments) covering:
  - 10.3.1.1. changes in the Work which are: (i) ordered by OWNER pursuant to paragraph 10.1.1, (ii) required because of acceptance of defective Work under paragraph 13.8.1 or OWNER's correction of defective Work under paragraph 13.9, or (iii) agreed to by the parties;
  - 10.3.1.2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
  - 10.3.1.3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 10.5;

provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.18.1.

#### 10.4. Notification to Surety

10.4.1. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility. The amount of each applicable Bond will be adjusted to reflect the effect of any such change.

#### 10.5. Claims and Disputes

10.5.1. Notice: Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to ENGINEER promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent of the Claim, dispute, or other matter with supporting data shall be delivered to the ENGINEER within 60 days after the start of such event (unless ENGINEER allows additional time for claimant to submit additional or more accurate data in support of such Claim, dispute, or other matter). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.1.2. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.2.2. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to ENGINEER and the claimant within 30 days after receipt of the claimant's last submittal (unless ENGINEER allows additional time).

10.5.2. ENGINEER's Decision: ENGINEER will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. ENGINEER's written decision on such Claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless:

10.5.2.1. an appeal from ENGINEER's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16.0; or

10.5.2.2. if no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to appeal from ENGINEER's written decision is delivered by OWNER or CONTRACTOR to the other and to ENGINEER within 30 days after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction within 60 days after the date of such decision or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.

10.5.3. ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.5.2, a decision denying the claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any.

10.5.4. No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.5.

## **ARTICLE 11.0 - COST OF THE WORK; UNIT PRICE WORK**

### 11. Cost of the Work; Unit Price

#### 11.1. Cost of the Work

11.1.1. Costs Included: The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to CONTRACTOR will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in the amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.1.2.

- 11.1.1.1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Such employees shall include without limitation superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, worker' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by OWNER.
- 11.1.1.2. cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.
- 11.1.1.3. Payments made by CONTRACTOR to Subcontractors for Work performed by Subcontractors and all subcontracts shall be subject to the provisions of the Contract Documents.
- 11.1.1.4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
- 11.1.1.5. Supplemental costs including the following:
  - 11.1.1.5.1. the proportion of necessary transportation, travel, and subsistence expenses of CONTRACTORS's employees incurred in discharge of duties connected with the Work.
  - 11.1.1.5.2. cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the OWNER, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of the CONTRACTOR.

- 11.1.1.5.3. rentals of all construction equipment and machinery, whether rented from CONTRACTOR or others, shall be negotiated between the ENGINEER and the CONTRACTOR. These rates shall include all fuel, lubricants, insurance, etc. Equipment rental charges shall not exceed the prorated monthly rental rates listed in the current edition of the "Compilation of Rental Rates for Construction Equipment," as published by the Associated Equipment Distributors. Charges per hour shall be determined by dividing the monthly rates by 176. The rental of any such equipment and machinery shall close when the use thereof is no longer necessary for the Work.
- 11.1.1.5.4. sales, consumer, use, and other similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.
- 11.1.1.5.5. deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- 11.1.1.5.6. losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the performance of the Work (except losses and damages with the deductible amounts of property insurance established in accordance with paragraph 5.6.4), provided such losses and damages have resulted from causes other than the negligence of CONTRACTOR, and Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's fee.
- 11.1.1.5.7. the cost of utilities, fuel, and sanitary facilities at the Site.
- 11.1.1.5.8. minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressage, and similar petty cash items in connection with the Work.
- 11.1.1.5.9. when the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.
- 11.1.1.5.10. when all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.

11.2. Costs Excluded: The term Cost of the Work shall not include any of the following items:

11.2.1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorney, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed CONTRACTOR, whether at the Site or in CONTRACTOR's principal or branch office for general administration of the work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.1.1.1 or specifically covered by paragraph 11.1.1.4, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.

11.2.2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site.

- 11.2.3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.
- 11.2.4. Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 11.2.5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.1.1 and 11.1.2.
- 11.2.6. CONTRACTOR's Fee: When all the Work is performed on the basis of cost-plus, CONTRACTOR's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, CONTRACTOR's fee shall be determined as set forth in paragraph 12.1.3.
- 11.2.7. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to paragraphs 11.1.1 and 11.1.2, CONTRACTOR will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

### 11.3. Unit Price Work

- 11.3.1. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER subject to the provisions of paragraph 9.8.
- 11.3.2. Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.
- 11.3.3. OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.5 if:
  - 11.3.3.1. the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
  - 11.3.3.2. there is no corresponding adjustment with respect any other item of Work; and
  - 11.3.3.3. if CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense or OWNER believes that OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

## **ARTICLE 12.0 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES**

### 12. Change of Contract Price; Change of Contract Times

## 12.1. Change of Contract Price

- 12.1.1. The Contract Price may only be changed by a Changed Order or by a Written Amendment. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the ENGINEER and the other party to the Contract in accordance with provisions of paragraph 10.5.
- 12.1.2. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
- 12.1.2.1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit price to the quantities of the items involved (subject to the provisions of paragraph 11.2); or
  - 12.1.2.2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 12.1.3.2); or
  - 12.1.2.3. where the Work involved is not covered by unit price contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 12.1.2.2, on the basis of the Cost of the Work (determined as provided in paragraph 11.1) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 12.1.3).
- 12.1.3. CONTRACTOR's Fee; The CONTRACTOR's fee for overhead and profit shall be determined as follows:
- 12.1.3.1. a mutually acceptable fixed fee; or
  - 12.1.3.2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
    - 12.1.3.2.1. for costs incurred under paragraphs 11.1.1.1 and 11.1.1.2, the CONTRACTOR's fee shall be 15 percent;
    - 12.1.3.2.2. for costs incurred under paragraph 11.1.1.3, the CONTRACTOR's fee Shall be five percent;
    - 12.1.3.2.3. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of paragraph 12.1.3.2. is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under paragraphs 11.1.1.1 and a11.1.1.2 and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
    - 12.1.3.2.4. no fee shall be payable on the basis of costs itemized under paragraphs 11.1.1.4, 11.1.1.5, and 11.1.2;
    - 12.1.3.2.5. the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to five percent of such net decrease; and
    - 12.1.3.2.6. when both additions and credit are involved in any one change; the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 12.1.3.2.1 through 12.1.3.2.5, inclusive.

## 12.2. Change of Contract Times

- 12.2.1. The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) shall be based on written notice submitted by the party making the claim

to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.5.

12.2.2. Any adjustment of the Contract Times (or Milestones) covered by a Change Order or of any Claim for an adjustment in the Contract Times (or Milestones) will be determined in accordance with the provisions of this Article 12.0.

### 12.3. Delays Beyond CONTRACTOR's Control

12.3.1. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefore as provided in paragraph 12.2.1. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other CONTRACTOR's performing work as contemplated by Article 7.0, fires, floods, epidemics, abnormal weather conditions, or acts of God.

### 12.4. Delays Within CONTRACTOR's Control

12.4.1. The Contract Times (or Milestones) will not be extended due to delays within the control of CONTRACTOR. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

### 12.5. Delays Beyond OWNER's and CONTRACTORS's Control

12.5.1. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

### 12.6. Delay Damages

12.6.1. In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from:

12.6.1.1. delays caused by or within the control of CONTRACTOR; or

12.6.1.2. delays beyond the control of both OWNER and CONTRACTOR including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility OWNER's or other CONTRACTOR's performing other work as contemplated by Article 7.0.

12.6.2. Nothing in this paragraph 12.6 bars a change in Contract Price pursuant to this Article 12.0 to compensate CONTRACTOR due to delay, interference, or disruption directly attributable to actions or in actions of OWNER or anyone for whom OWNER is responsible.

### 12.7. Abnormal Weather Conditions

12.7.1. Abnormal Weather Conditions for rain shall be derived from the most recent 20-year (minimum) average for the nearest NOAA weather reporting station. The mean number of days of precipitation per month of 0.10 inch or more shall establish the mean number of weather days for the period.

## 12.8. Liquidated Damages

12.8.1. The required completion time for the Project is as set forth in the Agreement. The CONTRACTOR is advised that the Contract times stated in the Bid Form are of the essence of the Contract. For each and every day in excess of each Contract time stated in the Bid Form that the CONTRACTOR fails to complete the Work indicated, the CONTRACTOR shall pay to the OWNER the sum stated in the Bid Form as liquidated damages. The said amounts are fixed and agreed upon by and between the CONTRACTOR and the OWNER as an estimate of the actual damages which would be incurred by the OWNER.

## **ARTICLE 13.0 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK**

### 13. Tests and Inspections; Correction, Removal, or Acceptance of Defective Work

#### 13.1. Notice of Defects

13.1.1. Prompt notice of all defective Work of which OWNER or ENGINEER has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.0.

#### 13.2. Access to Work

13.2.1. OWNER, ENGINEER, ENGINEER's Consultants, other representative and personnel of OWNER, independent testing laboratories, and governmental agencies with jurisdictional interest will have access to the Site and the Work at reasonable times for their observation inspecting, and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

#### 13.3. Tests and Inspections

13.3.1. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

13.3.2. OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

- 13.3.2.1. for inspections, tests, or approvals covered by paragraphs 13.3.3 and 13.3.4 below;
- 13.3.2.2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.4.2 shall be paid as provided in said paragraph 13.4.2; and
- 13.3.2.3. as otherwise specifically provided in the Contract Documents.

13.3.3. If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to be specifically inspected, tested, or approved by some public body, CONTRACTOR shall assume full responsibility therefore, pay all costs in connection therewith and furnish ENGINEER the required certificates of inspection, testing or approval.

13.3.4. The OWNER reserves the right to independently perform at its own expense, laboratory tests on random samples of material or performance tests on equipment delivered to the site. These tests, if made, will be conducted in accordance with the appropriate referenced standards or specification requirements. The entire shipment

represented by a given sample, samples or price of equipment may be rejected on the basis of the failure of samples or pieces of equipment to meet specified test requirements. All rejected materials or equipment shall be removed from the site, whether stored or installed in the Work, and the required replacement shall be made, all at no additional cost to the OWNER.

- 13.3.5. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by CONTRACTOR without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation.
- 13.3.6. Uncovering Work as provided in paragraph 13.3.5 shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

#### 13.4. Uncovering Work

- 13.4.1. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.
- 13.4.2. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by other, CONTRACTOR, at ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment. If it is found that such work is defective, CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefore as provided in paragraph 10.5. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, CONTRACTOR may make a Claim therefore as provided in paragraph 10.05.

#### 13.5. OWNER May Stop the Work

- 13.5.1. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workmen or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, or if the Work interferes with the operation of the existing facility, the OWNER may order CONTRACTOR to stop, by a written order any Work, or any portion thereof, until the cause for such order has been eliminated.

#### 13.6. Correction or Removal of Defective Work

- 13.6.1. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by ENGINEER, remove it from the Project and replace it with Work that is not defective. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges

of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

### 13.7. Correction Period

13.7.1. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.1 is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instruction: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting there from. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or repaired or may have the rejected Work removed and replaced, and all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

13.7.2. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

13.7.3. Where defective Work (and damage to other Work resulting there from) has been corrected or removed and replaced under this paragraph 13.7, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed

13.7.4. CONTRACTOR's obligations under this paragraph 13.7 are in addition to any other obligation or warranty. The provisions of this paragraph 13.7 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

### 13.8. Acceptance of Defective Work

13.8.1. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER's recommendation of final payment, ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall pay all Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to OWNER's evaluation of and determination to accept such defective Work (such costs to be approved by ENGINEER as to reasonableness) and the diminished value of the Work to the extent not otherwise

paid by CONTRACTOR pursuant to this sentence. If any such acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefore as provided in paragraph 10.5. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

#### 13.9. OWNER May Correct Defective Work

- 13.9.1. If CONTRACTOR fails within a reasonable time after written notice from ENGINEER to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.6.1, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days written notice to CONTRACTOR, correct and remedy any such deficiency.
- 13.9.2. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. In connection with such corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the Site, take possession of all or part of the Work and suspend CONTRACTOR's services related thereto, incorporate in the Work all materials and equipment stored at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees, OWNER's other CONTRACTOR's, and ENGINEER and ENGINEER's Consultants access to the Site to enable OWNER to exercise the rights and remedies under this paragraph.
- 13.9.3. All Claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by OWNER in exercising the rights and remedies under this paragraph 13.9 will be charged against CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, OWNER may make a Claim therefore as provided in paragraph 10.5. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of CONTRACTOR's defective Work.
- 13.9.4. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies under this paragraph 13.9.

### **ARTICLE 14.0 - PAYMENTS TO CONTRACTOR AND COMPLETION**

#### 14. Payments to Contractor and Completion

##### 14.1. Schedule of Values

- 14.1.1. The schedule of values established as provided in paragraph 2.5.2 will serve as the basis for progress payments and will be incorporated into a form of Application for

Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.1.2. With the above submittal, the CONTRACTOR shall submit for the ENGINEER's approval, a complete breakdown of all lump sum items in the Proposal. This breakdown, modified where directed by the ENGINEER, will be used as a basis for preparing partial estimates and establishing progress payments.

14.1.3. A lump sum payment equal to three percent of the total bid price (to include all bonds, insurance, move-on expenses, etc.) will be allowed for 'mobilization' as a progress payment line item. Up to half of the cost for mobilization will be considered in the initial payment request provided that cost documentation suitable to the ENGINEER is furnished by the CONTRACTOR. Any outstanding balance of mobilization line item will be payable when the Project Work is ten percent complete as indicated by the approved progress payments.

## 14.2. Progress Payments

### 14.2.1. Applications for Payments

14.2.1.1. The effective ending date of all applications for Progress Payments shall be the 25<sup>th</sup> day of each month unless mutually agreed upon otherwise. All applications for Progress Payments will be computer-generated based on the Schedule of Values as provided in paragraph 14.1, and submitted in triplicate. The application will be generated each period by the CONTRACTOR.

14.2.1.2. Prior to final preparation of each Progress Payment, the CONTRACTOR and Resident Project Representative shall mutually measure and agree upon the quality of Work completed each period.

14.2.1.3. Partial payment for materials or equipment properly stored on-site will be made on the basis of the invoice cost of the materials or equipment provided a detailed list of the materials for which partial payment is requested and supporting copies of the invoices is attached to each Application for Progress Payment. As the work progresses, the value of materials not entered into construction will be reduced as materials or equipment are installed. At the completion of the Work, the value of stored materials not entered into construction must be zero.

14.2.1.4. The following paragraphs (i & ii) are for construction projects in North Carolina only:

14.2.1.4.1. Sales and Use Tax: With each application for Progress Payment, CONTRACTOR must furnish a certified and notarized statement setting forth the cost of the property purchased from each vendor and the amount of sales and/or use tax paid thereon. The statement shall show both the N.C. Sales Tax and the County Tax paid and shall list any payments made directly to the North Carolina Department of Revenue. Tax statements and certification shall be submitted on the forms provided in the Contract Documents. In the event the CONTRACTOR makes several purchases from the same vendor, such certified statement must indicate the invoice numbers, the inclusive dates of the invoices, the total amount of the invoices, and the sales and use taxes paid thereon. Such statement must include the cost of any tangible personal property withdrawn from the CONTRACTOR's warehouse stock and the amount of sales or use tax paid thereon by the CONTRACTOR.

Similar certified statements by his subcontractors must be obtained by the prime CONTRACTOR and furnished with the Application for Progress Payment. If no tax has been paid during the pay request period, "NONE" shall be entered on the tax form.

14.2.1.4.2. Use tax may be due on construction equipment brought into North Carolina for use in the performance of contracts (NCGS §105-164.4 and 105-164.6). CONTRACTORS are also liable for payment of applicable privilege licenses (NCGS §105-54) and for payment of applicable franchise, corporate income and withholding taxes (NCGS §105-122, 105-123, 105-134, and 105163.2).

14.2.1.5. Retainage: Retainage shall be as set forth in the Standard Contract Form or otherwise in the Contract Documents and shall be in compliance with the requirements of Laws and Regulations.

14.2.2. Review of Applications:

14.2.2.1. ENGINEER will, within 10 days after receipt of each Application for Payment, either indicate in writing his approval of payment or return the Application to CONTRACTOR indicating in writing his reasons for refusing to approve payment. In the latter case, CONTRACTOR may make the necessary correction and resubmit the Application. Within 30 days of receiving the submittal of an approvable Application for Payment, the OWNER will make partial payment to the CONTRACTOR on the basis of a duly certified approved estimate of the Work performed during the preceding period by the CONTRACTOR.

14.2.2.2. ENGINEER's recommendation of any payment requested in an Application for Payment will be based on ENGINEER's observations on the Site of the executed Work and on ENGINEER's review of the Application for Payment and the accompanying data and schedules, that to the best of ENGINEER's knowledge, information and belief:

14.2.2.2.1. the Work has progressed to the point indicated;

14.2.2.2.2. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.8, and to any other qualifications stated in the recommendation); and

14.2.2.2.3. the conditions precedent to CONTRACTOR's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe the Work. By recommending any such payment ENGINEER will not thereby be deemed to have represented that: (i) inspections made to check the quality or the quantity of the Work as it have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents; or (ii) that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR;

14.2.2.2.4. neither ENGINEER's review of CONTRACTOR's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment, including final payment, will impose responsibility on ENGINEER to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the

safety precautions and programs incident thereto, or for CONTRACTOR's failure to comply with Laws and Regulations applicable to CONTRACTOR's performance of the Work;

14.2.2.2.5. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make the representations referred to in paragraph 14.2.2.2. ENGINEER may also refuse to recommend any such payment because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

14.2.2.2.5.1. the Work is defective, or completed Work has been damaged, requiring correction or replacement;

14.2.2.2.5.2. the Contract Price has been reduced by Written Amendment or Change Orders;

14.2.2.2.5.3. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.9; or

14.2.2.2.5.4. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.2.1.

#### 14.2.3. Payment Becomes Due

14.2.3.1. Thirty days after presentation of the Application for Payment to OWNER with ENGINEER's recommendation, the amount recommended will (subject to the provisions of paragraph 14.2.4) become due, and when due will be paid by OWNER to CONTRACTOR.

#### 14.2.4. Reduction in Payment

14.2.4.1. OWNER may refuse to make payment of the full amount recommended by ENGINEER because:

14.2.4.1.1. claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work;

14.2.4.1.2. Liens have been filed in connection with the Work, except where CONTRACTOR has delivered a specific Bond satisfactory to OWNER to secure the satisfaction and discharge of such Liens;

14.2.4.1.3. There are other items entitling OWNER to a set-off against the amount recommended; or

14.2.4.1.4. OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.2.2.5.1 through 14.2.2.5.3 or paragraph 15.2.1.

14.2.4.2. If OWNER refuses to make payment of the full amount recommended by ENGINEER, OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action and promptly pay CONTRACTOR any amount remaining after deduction of the amount so withheld. OWNER shall promptly pay CONTRACTOR the amount so withheld, or any adjustment thereto agreed to by OWNER and CONTRACTOR, when CONTRACTOR corrects to OWNER's satisfaction the reasons for such action.

14.2.4.3. If it is subsequently determined that OWNER's refusal of payment was not justified; the amount wrongfully withheld shall be treated as an amount due as determined by paragraph 14.2.3.1.

#### 14.3. CONTRACTOR's Warranty of Title

14.3.1. CONTRACTOR warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporation in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

#### 14.4. Substantial Completion:

14.4.1. CONTRACTOR may, in writing to OWNER and ENGINEER, certify that the entire Project is substantially complete and request that ENGINEER issue a certificate of Substantial Completion. Within a reasonable time thereafter, OWNER, CONTRACTOR and ENGINEER shall make an inspection of the Project to determine the status of completion. If ENGINEER and OWNER do not consider the Project substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion and the responsibilities between OWNER and CONTRACTOR for maintenance, heat and utilities. There shall be attached to the certificate a tentative list of items to be completed or corrected before Substantial Completion, and the certificate shall fix the time within which such items shall be completed or corrected, said time to be within Contract Time.

14.4.2. OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

#### 14.5. Partial Utilization:

14.5.1. Prior to Substantial Completion of the Project, OWNER may request CONTRACTOR in writing to permit him to use a specified part of the Project which he believes he may use without significant interference with construction of the other parts of the Project. If CONTRACTOR agrees, he will certify to OWNER and ENGINEER that said part of the Project is substantially complete and request the ENGINEER to issue a certificate of Substantial completion for that part of the Project. Within a reasonable time thereafter, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of that part of the Project to determine its status of completion. If ENGINEER and OWNER do not consider that it is substantially complete, ENGINEER will notify CONTRACTOR in writing giving his reasons therefore. If ENGINEER and OWNER consider that part of the Project to be substantially complete, ENGINEER will execute and deliver to OWNER and CONTRACTOR a certificate to that effect, fixing the date of Substantial Completion as to that part of the Project, attaching thereto a tentative list of items to be completed or corrected before Substantial Completion of the entire Project and fixing the responsibility between OWNER and CONTRACTOR for maintenance, heat, and utilities as to that part of the Project. OWNER shall have the right to exclude CONTRACTOR from any part of the Project which ENGINEER has so certified to be substantially complete, but OWNER shall allow CONTRACTOR reasonable access to complete items on the tentative list.

14.5.2. The CONTRACTOR is specifically advised that payment in full for sections so completed and used by the OWNER will NOT be made until the entire Project has been completed. Partial payments for Work completed and the retainage will be handled on the basis of the ENTIRE Contract Amount as here specified. The CONTRACTOR shall account for this in his Bid and under no circumstances will occupancy and use of completed sections of the Work by the OWNER be considered as grounds for reducing the retainage withheld from the CONTRACTOR's partial payments, or for an increase in the Contract Price.

#### 14.6. Final Inspection

14.6.1. Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will promptly make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measure as are necessary to complete such Work or remedy such deficiencies.

#### 14.7. Final Payment

##### 14.7.1. Application for Payment

14.7.1.1. After CONTRACTOR has, in the opinion of ENGINEER, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in paragraph 6.12), and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments.

14.7.1.2. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Lien rights arising out of or Liens filed in connection with the Work.

14.7.1.3. In lieu of the releases or waivers of Liens specified in paragraph 14.7.1.2 and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible have been paid or otherwise satisfied.

##### 14.7.2. Review of Application and Acceptance

14.7.2.1. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application for Payment to OWNER for payment. At the same time ENGINEER will also give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.9. Otherwise, ENGINEER will return the Application for Payment to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application for Payment.

##### 14.7.3. Payment Becomes Due

14.7.3.1. Thirty days after the presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.

#### 14.8. Final Completion Delayed

14.8.1. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in paragraph 5.1, the written consent of the surety to the payment of the balance due for that portion of the Work fully complete and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

### **ARTICLE 15.0 - SUSPENSION OF WORK AND TERMINATION**

#### 15. Suspension of Work and Termination

##### 15.1. OWNER May Suspend Work

15.1.1. At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes a Claim therefore as provided in paragraph 10.5.

##### 15.2. OWNER May Terminate for Cause

15.2.1. The occurrence of any one or more of the following events will justify termination for cause:

15.2.1.1. CONTRACTOR's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.7 as adjusted from time to time pursuant to paragraph 6.4);

15.2.1.2. CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;

15.2.1.3. CONTRACTOR's disregard of the authority of ENGINEER; or

15.2.1.4. CONTRACTOR's violation in any substantial way of any provisions of the Contract Documents.

15.2.2. If one or more of the events identified in paragraph 15.2.1 occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Site, and take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is

finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by OWNER arising out of or relating to completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses, and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such claims, costs, losses, and damages incurred by OWNER will be reviewed by ENGINEER as to their reasonableness and, when so approved by ENGINEER, incorporated in a Change Order. When exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

### 15.3. OWNER May Terminate For Convenience

15.3.1. Upon seven days written notice to CONTRACTOR, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Contract. In such case, CONTRACTOR shall be paid (without duplication of any items):

15.3.1.1. for completed and acceptable Work executed in accordance with the contract Documents prior to the effective date of termination.

15.3.2. CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

### 15.4. CONTRACTOR May Stop Work or Terminate

15.4.1. If, through no act or fault of CONTRACTOR, the Work is suspended for more than 90 consecutive days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within 30 days after it is submitted, or OWNER fails for 30 days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days written notice to OWNER and ENGINEER, and provided OWNER or ENGINEER do not remedy such suspension or failure within that time, terminate the Contract and recover from OWNER payment on the same terms as provided in paragraph 15.3. In lieu of terminating the Contract and without prejudice to any other right remedy, if ENGINEER has failed to act on an Application for Payment within 30 days after it is submitted, or OWNER has failed for 30 days after it is submitted, or OWNER has failed for 30 days to pay CONTRACTOR any sum finally determined to be due, CONTRACTOR may, seven days after written notice to OWNER and ENGINEER, stop the Work until payment is made of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.4 are not intended to preclude CONTRACTOR from making a Claim under paragraph 10.5 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping the Work as permitted by this paragraph.

### 15.5. Assignment of Contract

15.5.1. CONTRACTOR shall not assign, transfer, convey, or otherwise dispose of the Contract, or of his legal right, title, or interest in or to the same or to any part thereof, without the prior written consent of the OWNER. CONTRACTOR shall not assign by power of attorney or otherwise any monies due him and payable under this Contract without the prior written consent of the OWNER. Such consent, if given, will in no way relieve the CONTRACTOR from any of the obligations of this Contract. OWNER shall not be bound to abide by or observe the requirements of any such assignment.

## **ARTICLE 16.0 - DISPUTE RESOLUTION**

### 16. Dispute Resolution

#### 16.1. Methods and Procedures

16.1.1. Dispute resolution methods and procedures, if any, shall be as set forth in these General Conditions, in the Standard Form Contract, or otherwise in the Contract Documents. If no method and procedure has been set forth, and subject to the provisions of paragraph 9.9 and 10.5, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.