

PROJECT CONTRACT MANUAL

TOWN OF MELBOURNE BEACH - BASIN 1 IMPROVEMENTS

B.S.E. CONSULTANTS, INC.

Civil, Agricultural, and Environmental
Engineers and Land Surveyors



***312 South Harbor City Boulevard, Suite #4
Melbourne, FL 32901
(321) 725-3674***

February 2025
B.S.E. File # 11440.25

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PROPOSAL SECTION

INVITATION TO BID
TOWN OF MELBOURNE BEACH - BREVARD COUNTY FLORIDA
BASIN 1 IMPROVEMENTS

NOTICE IS HEREBY GIVEN that sealed bids will be accepted by the Owner, Town of Melbourne Beach for the furnishing of all labor and materials for the completion of Basin 1 Improvements. Complete bid packages will be available at 9:00 am, local time, on **Wednesday, August 20, 2025**, by emailing request “**Basin 1 Improvements Bid Package**” to:

Town of Melbourne Beach
Town Manager
507 Ocean Avenue
Melbourne Beach, FL 32951
321-724-5860 Telephone
Email: townmanager@melbournebeachfl.org

Sealed bids will be received by the Town of Melbourne Beach until **3:30 p.m. on Wednesday, September 10, 2025**. One (1) bound ORIGINAL hard copy, one (1) bound copy, one (1) electronic copy on thumb drive all in sealed envelope with project name “Town of Melbourne Beach – Basin 1 Improvements” along with name and email address of bidder. Please refer to “Instructions to Bidders” for more details. *No faxed bids will be accepted.* Bids will be opened and publicly read aloud at **4:00 p.m., Wednesday, September 10, 2025**. All bids received after **3:30 p.m. on Wednesday, September 10, 2025**, will be returned unopened.

Scope of work shall include all labor and materials required to complete the project in accordance with the project plans and specifications.

Bid security in the amount of five percent (5%) of the Total Bid must accompany the Bid in accordance with the Instructions to Bidders.

The successful bidder may be required to furnish a performance and payment bond in an amount at least equal to the contract price as security for the faithful performance of the agreement, and for the payment of all persons performing labor and/or furnishing material in connection with the agreement and for the payment of all persons performing labor and/or furnishing material in connection with the agreement. **The Town reserves the right to delete this agreement.**

The successful bidder will be required to fully complete all work within the stipulated time frame from and including the date to start work established in a written Notice to Proceed from the Owner.

The Town reserves the right to reject all Proposals or any Proposal, and to waive technical errors and informalities.

Earliest publish date _____

Bill to: Town of Melbourne Beach
507 Ocean Avenue
Melbourne Beach, FL 32951

NOTICE TO BIDDERS

TOWN OF MELBOURNE - BEACH BASIN 1 IMPROVEMENTS

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The Owner reserves the right to reject all Proposals or any Proposal, and to waive technical errors and informalities.

INSTRUCTIONS TO BIDDERS

1. EXAMINATION OF SITE

Each Bidder by making his bid represents that he has visited the site and familiarized himself with all the conditions under which the Work is to be performed. It shall be the Bidder's obligation to verify for himself all information concerning site and subsurface conditions, locations of buried utilities, and any other conditions affecting the Work. The Owner will make available to the Bidder at the office of the Engineer information that he may have concerning site and subsurface conditions. However, any investigations of subsurface conditions were made solely for design purposes, and neither the Owner nor Engineer assumes any responsibility as to the sufficiency or accuracy of the investigation. Should the Bidder be awarded the Contract, he agrees that no claim will be made against the Owner or Engineer if actual conditions do not conform to those indicated. The prices for the bid shall include all costs of doing the work.

2. EXAMINATION OF CONTRACT DOCUMENTS

Each Bidder by making his bid represents that he has read and understands the Contract Documents. The Bidder shall include in his bid prices any and all costs that may be necessary to complete the work in accordance with the requirements of the Contract Documents.

3. INTERPRETATION OF CONTRACT DOCUMENTS

Questions regarding documents, discrepancies, omissions, or intent of the Specifications or Drawings shall be submitted in writing to the Owner through the Engineer at least seven days prior to opening of bids to provide time for issuing an Addendum. Any interpretation of the Contract Documents will be made only by Addenda in the space provided in the Proposal Form. The Owner will not be responsible for any oral explanations or interpretations of the Contract Documents.

4. PROJECT

It is the intent of the Owner that a Notice to Proceed for construction will be issued as all required regulatory approval is received.

5. APPROXIMATE QUANTITIES

Approximate Quantities are shown on the Bid Form only to assist prospective bidders and to establish unit prices for all individual items. Payment for all work shall be made based upon the contractor's lump sum price.

6. PREPARATION OF PROPOSAL

Only bids which are made out on the Proposal Form included in this document will be considered. A bid will be rejected if it does not contain a price for **each** item named in the Proposal. Bidders are warned against making any erasures or alterations of any kind, and bids which contain omissions, erasures, conditions, alterations, or additions not called for may be rejected.

7. SIGNING OF PROPOSAL

If the Bidder is a corporation, the legal name of the corporation shall be set forth together with the signature of the president who is authorized to sign contracts on behalf of the corporation. If Bidder is a co-partnership, the true name of the firm shall be set forth together with the signatures of all partners. If Bidder is an individual, his signature shall be inscribed. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a notarized power of attorney must be on file with the Owner prior to opening of bids or submitted with the bid.

8. DESIGNATION OF SUBCONTRACTORS AND SUPPLIERS

Each bidder shall list on the form included in these Documents the names and addresses of all subcontractors and suppliers who will perform work, render service, or provide material to the bidder on or about the construction site in an amount in excess of five percent of the Bidder's total base bid. Each Bidder shall show on the form the portion of the Work to be done by each subcontractor.

9. SUBMISSION OF PROPOSAL

Each Proposal, properly signed, shall be enclosed in a sealed envelope addressed and entitled as specified in the Notice to Bidders and delivered to the office designated in the Notice to Bidders. All Addenda issued shall be included with the Documents at the time of bid submittal.

10. WITHDRAWAL OR REVISION OF PROPOSAL

Any Proposal may be withdrawn at any time prior to the hour fixed in the Invitation to Bid for the opening of bids, provided that a request in writing, executed by the Bidder, or his duly authorized representative, for the withdrawal of such bid is filed with the Owner prior to that time. The withdrawal of a bid will not prejudice the right of a Bidder to file a new bid. No Proposal may be withdrawn, modified, or corrected after the time set for opening such Proposals.

11. QUALIFICATION OF BIDDERS

It is the intention of the Owner to award the Contract only to a Bidder who has furnished satisfactory evidence that he has the requisite experience and ability and that he has sufficient capital, facilities, and plant to prosecute the Work successfully and promptly, and to complete the Work within the time specified in the Contract Documents.

12. DISQUALIFICATION OF BIDDER

Only one Proposal for the Work described in this Document from an individual, firm or partnership, a corporation or an association under the same or different names, will be considered. Reasonable grounds for believing that any Bidder is interested in more than one bid for the work contemplated will cause the rejection of all bids in which such Bidder is interested. If there are reasonable grounds for believing that collusion exists among the Bidders, the bids of the participants in such collusion will not be considered.

13. PENALTY FOR COLLUSION

If at any time it shall be found that the person, firm, or corporation to whom the Contract has been awarded has, in presenting any bid or bids, colluded with any other party or parties, then the Contract so awarded shall be null and void, and the Contractor and his sureties shall be liable to the Owner for all loss or damage which the Owner may suffer thereby, and the Owner may advertise for new bids for said work.

14. LICENSE

Each Bidder shall possess state and local licenses as are required by law and shall furnish satisfactory proof to the Owner upon request that the licenses are in effect during the entire period of the Contract. Bidder must also have an active underground Utility Contractor's License and provide verification with bid submittal package. A state of Florida's General Contractor's license will also be accepted.

15. CONSIDERATION OF BIDS

After the Proposals are opened and read, the Contract bid prices will be compared. The award will be made by the Owner on the basis of the Proposal from the lowest responsive*, responsible** qualified Bidder. Until the final award of the Contract, the Owner reserves the right to reject any and all Proposals and to waive all technicalities.

16. EFFECTIVE DATE OF AWARD

If a Contract is awarded by the Owner, such award shall be effective when formal notice of such award, signed by the authorized representative of the Owner, has been delivered to the intended awardee, or mailed him at the main business address shown on his bid, by some officer or agent of the Owner duly authorized to give such notice.

17. EXECUTION OF AGREEMENT

Copies of the Agreement in the number stated in the Agreement, shall be executed by the successful Bidder, and returned together with the required bonds and insurance, within 15 calendar days from the date of the award of the Contract. Effective date of bonds shall be from the date of the agreement through the final completion date plus 30 days to allow for construction, material or weather delay.

18. FAILURE TO EXECUTE AGREEMENT AND FILE BONDS AND INSURANCE

Failure of a successful Bidder to execute the Agreement and the required certificate(s) of insurance and the required bonds within the required time shall be just cause for the annulment of the award. On failure of a successful Bidder to execute the Agreement and file the required insurance and bonds within the required time, he shall forfeit his bid security as liquidated damages. Upon annulment of an award, the Owner may then award a contract to the next lowest responsive, responsible bidder.

19. PAYMENT FOR EXCESS COSTS

The successful Contractor will be required to pay for the excess cost of field engineering, inspection, and liquidated damages as defined in the Supplemental Conditions.

20. COMMENCEMENT AND COMPLETION OF WORK

The successful bidder shall commence work within 14 calendar days after the issuance by the Owner of a written Notice to Proceed and shall substantially complete all work within **90** calendar days and fully complete all work within **120** calendar days from the date of the Notice to Proceed in accordance with the terms and conditions of the Contract Documents.

21. OWNER'S RIGHTS

Owner reserves the right to reject any and all Bids, to waive any and all formalities and to negotiate contract terms with the non-responsive or conditional Bids; and/or to accept the Bid that, in his judgment, will be in the best interest of the Owner. The Owner reserves the right to add or delete from the quantities listed in the Bid Form without in any way invalidating any of the unit or lump sum prices bid.

***RESPONSIVE BIDDER:** Any person, firm or corporation submitting a bid for the work contemplated whose Bid Form is complete and regular, free of excisions or special conditions and has no alternative bids for any item unless requested in the technical specifications.

****RESPONSIBLE BIDDER:** Any person, firm or corporation submitting a bid for the work contemplated who maintains a permanent place of business, has adequate plant equipment to do the work properly and within the time limit that is established, and has adequate financial status to meet his obligations contingent to the work.

AGREEMENT FOR PROFESSIONAL SERVICES

**TOWN OF MELBOURNE BEACH – BASIN 1 IMPROVEMENTS
(BSE #11440.25)**

Pursuant to Section 287.135 (3) (b), Florida Statutes, this contract allows for the termination at the option of the Town of Melbourne Beach, if _____ is found to have been placed on the Scrutinized Companies List that Boycott Israel or is engaged in a boycott of Israel.

_____ complies with the provisions of Section 287.135, and certifies that it is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List and it does not have business operations in Cuba or Syria.

Dated on: _____

Certified By:

Name: _____

Title: _____

Company: _____

On this _____ day of _____, 20____, I attest that the preceding document is a true, exact, complete, and unaltered photocopy made by me of the AGREEMENT FOR PROFESSIONAL SERVICES presented to me by the document's custodian, and, to the best of my knowledge, that the photocopied document is neither a public record nor a publicly recordable document, certified copies of which are not available from an official source other than a notary public.

NOTARY PUBLIC AT LARGE

Seal/Stamp/Commission #

CONTRACTOR'S QUALIFICATION STATEMENT

The undersigned certified under oath that the information provided herein is true and sufficiently complete so as not to be misleading:

Submitted to: _____

Address: _____

Submitted by: _____

Name: _____

Address: _____

Principal office: _____

Check one: ☐ Corporation ☐ Partnership ☐ Individual ☐ Joint Venture ☐ Other

Name of Project (if applicable): _____

Type of Work (file separate form for each Classification of Work):

_____ General Construction

_____ Plumbing

_____ Electrical

_____ Other _____

1. ORGANIZATION

1.1 How many years has your organization been in business as a Contractor? _____

1.2 How many years has your organization been in business under its present business name? _____

1.2.1 Under what other or former names has your organization operated?

1.3 If your organization is a corporation, answer the following:

1.3.1 Date of incorporation _____

1.3.2 State of incorporation _____

1.3.3 President's name _____

1.3.4 Vice President's name _____

1.3.5 Secretary's name _____

1.3.6 Treasurer's name _____

1.4 If your organization is a partnership, answer the following:

1.4.1 Date of organization _____

1.4.2 Type of partnership (if applicable) _____

1.4.3 Name(s) of general partner(s) _____

1.5 If your organization is individually owned, answer the following:

1.5.1 Date of organization _____

1.5.2 Name of owner _____

- 1.6 If the form of your organization is other than those listed above, describe it and name the principals.

2. LICENSING

- 2.1 List jurisdictions and trade categories in which your organization is legally qualified to do business, and indicate registration or license numbers, if applicable.

- 2.2 List jurisdiction in which your organization's partnership or trade name is filed.

3. EXPERIENCE

- 3.1 List the categories of work that your organization normally performs with its own forces.

- 3.2 Claims and Suits – If the answer to any of the questions below is yes, please attach details.

- 3.2.1 Has your organization ever failed to complete any work awarded to it?

3.2.2 Are there any judgments, claims, arbitration proceedings or suits pending or outstanding against your organization or its officers?

3.2.3 Has your organization filed any law suits or requested arbitration with regard to construction contracts within the last five years?

3.3 Within the last five years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract? (If the answer is yes, please attach details.)

3.4 List major construction projects your organization has in progress, giving the name of project, owner, architect, contract amount, percent complete and scheduled completion date. (No more than 5.)

3.4.1 State total worth or work in progress and under contract.

3.5 On a separate sheet, list the major projects your organization has completed in the past five years, giving the name of project, owner, architect, contract amount, date of completion and percentage of the cost of the work performed with your own forces.

3.5.1 State average annual amount of construction work performed during the past five (5) years:

- 3.6 List the construction experience and present commitments of the key individuals of your organization.

4. REFERENCES

4.1 Trade References

4.2 Bank References

4.3 Surety

4.3.1 Name of bonding company _____

4.3.2 Name and address of agent _____

5. FINANCING

5.1 Financial Statement

- 5.1.1 Attach a financial statement, preferably audited, including your organization's latest balance sheet and income statement showing the following items:

Current assets (e.g., cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials inventory and prepaid expenses).

Net Fixed Assets;

Other Assets;

Current Liabilities (e.g., accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries and accrued payroll taxes);

Other liabilities (e.g., capital, capital stock, authorized and outstanding shares, par values, earned surplus and retained earnings)

5.1.2 Name and address of firm prepared attached financial statement, and date thereof _____

5.1.3 Is the attached financial statement for the identical organization named on page one? _____

5.1.4 If not, explain the relationship and financial responsibility of the organization whose financial statement is provided (e.g., parent-subsidiary). _____

5.2 Will the organization whose financial statement is attached act as guarantor of the contract for construction? _____

6. SIGNATURE

6.1 Dated _____ this ____ day of _____, 20____.

Name of Organization: _____

By: _____

Title: _____

6.2 _____ being
Printed Name

duly sworn deposes and says that the information herein in true and sufficiently complete so as not to be misleading.

Subscribed and sworn before me this _____ day of _____ 20____.

Notary Public: _____

My Commission Expires: _____

PROPOSAL

TOWN OF MELBOURNE BEACH - BASIN 1 IMPROVEMENTS

Full Name of Bidder: _____

Main Business Address: _____

Place of Business: _____

State Contractor's License: _____

TO: **Town of Melbourne Beach** (hereinafter called the **Owner**)

The undersigned, as Bidder, declares that the only person or parties interested in this Proposal as principals are those named herein, that this Proposal is made without collusion with any other person, firm or corporation; that he has carefully examined the location of the proposed work, the proposed forms of Agreement and Bonds, and the Contract Drawings and Specifications, including Addenda issued thereto and acknowledges receipt below:

Addendum Number	Date Issued	Contractor's Initials
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

He proposes, and agrees if this Proposal is accepted, that he will contract with the Town of Melbourne Beach in the form of the copy of the Agreement included in these Contract Documents, to provide all necessary machinery, tools, apparatus and other means of construction, including utility and transportation services necessary to do all the Work, and furnish all the materials and equipment specified or referred to in the Contract Documents in the manner and time herein prescribed, and according to the requirements of the Owner as therein set forth, furnish the Contractor's Bonds and Insurance specified in the General Conditions of the Contract, and to do all other things required of the Contractor by the Contract Documents, and that he will take full payment the sums set forth in the following bid schedule.

Upon receipt or written notice of the conditional acceptance of this bid, bidder will execute the formal Contract attached and deliver the insurance within 15 days as required by the Contract Documents.

If awarded a contract under this Proposal, the Undersigned proposes to start work at the site within 14 calendar days after the receipt from the Owner of a written Notice to Proceed. The Undersigned further agrees to fully complete all work covered per the following schedule. All dates shown represent consecutive calendar days from and including the date of receipt from the Owner of a written Notice to Proceed.

Contract Time Substantial Completion

90 days

Final Completion

120 days

Bid Security

Accompanying this Bid is a Certified or a Cashier's Check or a Bid Bond in the amount of \$_____, made payable to the Owner which may be forfeited as liquidated damages if, in the event this proposal is accepted, the undersigned fails to execute the Agreement, provide insurance certificate(s) and furnish and pay for the required performance and payment bonds for the Owner within fifteen (15) days after acceptance of the Bid; otherwise said Certified or Cashier's Check or Bid Bond will be returned to the undersigned.

Award of Bid

Bidder acknowledges that Owner may not award the Contract immediately. Bidder acknowledges that all prices quoted within the proposal are valid for a period of ninety (90) days after bid opening. If the Contract is not awarded within ninety (90) days, Bidder may adjust the unit prices proposed; however, Owner retains the right to reject all bids and rebid the project.

Respectfully Submitted:

State of Florida

County of _____

_____, being first duly sworn on oath deposes and says that the Bidder on the above Proposal is organized as indicated below and that all statements herein made are made on behalf of such Bidder and that this deponent is authorized to make them.

_____, also deposes and says that he has examined and carefully prepared his Bid Proposal from the Contract Drawings and Specifications and has checked the same in detail before submitting this Bid; that the statements contained herein are true and correct.

(a) Corporation

The bidder is a corporation organized and existing under the laws of the State of _____, which operates under the legal name of _____, and the full names of its officers are as follows:

President	_____
Secretary	_____
Treasurer	_____
Manager	_____

and it (does) or (does not) have a corporate seal. The _____ is authorized to sign construction proposals and contracts for the company by action of its Board of Directors taken _____, a certified copy of which is hereto attached (Strike out this last sentence if not applicable).

(b) Co-Partnership

The Bidder is a co-partnership consisting of individual partners whose full names are as follows:

_____	_____
_____	_____
_____	_____
_____	_____

The co-partnership does business under the legal name of: _____.

(c) Individual

The bidder is an individual whose full name is, _____, and if operating under a trade name, said trade name is _____.

Dated _____, 20__.

Legal Entity

(Seal - If Corporation)
(Sign Here)

By: _____

Telephone No. _____

Subscribed and sworn to before me this _____ day of _____,
20__.

Notary Public

My Commission Expires:

TRENCH SAFETY AFFIDAVIT - UNIT PRICE

BASIN 1 IMPROVEMENTS

Trench excavations on this Project are expected to be in excess of 5 feet deep. The Occupational Safety and Health Administration excavation safety standards, 29 CFR 1926.650 Subpart P trench safety standards will be in effect during the period of construction of the project.

Bidder acknowledges that included in the various items of the Bid and in the Total Bid Price are costs for complying with the Florida Trench Safety Act (90-96, Laws of FL) effective October 1, 1990, and hereby gives assurance that, if awarded the Contract, the Contractor or Subcontractor performing trench excavation work on the Project will comply with the applicable trench safety standards. The Bidder further identifies the costs as follows:

Trench Safety Item (Description)	Unit Quantity	Units of Measure (LF, SY)	Unit Cost	Extended Cost
BASED BID ITEMS				
A.				
B.				
C.				
D.				
E.				
F.				
TOTAL				

FAILURE TO COMPLETE THE ABOVE SHALL RESULT IN THE BID BEING DECLARED NON-RESPONSIVE.

Company Name

Date

Signature

LIST OF SUBCONTRACTORS/SUPPLIERS

TOWN OF MELBOURNE BEACH – BASIN 1 IMPROVEMENTS

The Undersigned states that the following is a full and complete list of the proposed subcontractors and suppliers on this Project and the class of work to be performed by each, and that such list will not be added to nor altered without written consent of the Owner through the Engineer.

Subcontractor and Address

Class of Work to be performed or Type of Material to be Supplied

(1) _____

(2) _____

(3) _____

(4) _____

(5) _____

(6) _____

*Attach additional sheets as necessary.

DATE

BIDDER

SIGNATURE

BID FORM

PROJECT IDENTIFICATION: Town of Melbourne Beach – Basin 1 Improvements

CONTRACT IDENTIFICATION AND NUMBER: B.S.E. #11440.25

THIS BID IS SUBMITTED TO:

Town Manager
Town of Melbourne Beach
507 Ocean Avenue
Melbourne Beach, FL 32951
(321) 724-5860 Telephone
Email: townmanager@melbournebeachfl.org

1. The undersigned **BIDDER** proposes and agrees, if the **BID** is accepted, to enter into an Agreement with **OWNER** in the form included in the Contract Documents to complete all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the Contract Documents.
2. **BIDDER** accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. This Bid will remain open for ninety (90) calendar days after the day of Bid opening. **BIDDER** will sign the Agreement and submit the Contract Security and other documents required by the Contract Documents within fifteen calendar days after the date of **OWNER**'s Notice of Award.
3. In submitting this Bid, **BIDDER** represents, as more fully set forth in the Agreement, that:
 - (a) **BIDDER** has examined copies of all the Contract Documents and of the following addenda:

<u>Date</u>	<u>Number</u>
_____	_____
_____	_____
_____	_____

(receipt of all of which is hereby acknowledged) and also copies of the Invitation to Bid and the Instruction to Bidders;

- (b) **BIDDER** has examined the site and locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules and regulations), including disposal of cleared material and the conditions affecting cost, progress or performance for the Work and has made such independent investigations as **BIDDER** deems necessary;
- (c) 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 sought by collusion to obtain for himself any advantage over any other Bidder or over **OWNER**; and

4. **BIDDER** will complete the Work for the following Lump Sum price(s):

CONTRACT PRICE: _____ **DOLLARS,**
(\$ _____). (Inclusive of a performance and payment
bond which may be subsequently waived by the Town.

The cost of the Contract is based on the estimated quantities shown on the Bid Schedule which is \$ _____.

- 5. **BIDDER** acknowledges that a separate Notice to Proceed will be issued and the possible impacts of such have been considered within the Bid.
- 6. **BIDDER** agrees that the individual stages of the Work will be substantially completed per the following schedule, such days reflecting the time after the date when the Contract Time commences to run.

Substantial Completion
90 Days

Full Completion
120 Days

BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.

7. The following document is attached to and made a condition of this Bid:

- (a) A tabulation of Subcontractors and other persons and organizations required to be identified in this Bid.
- (b) Exhibit A — Estimated Quantity Forms

8. The attached estimated quantities are included only for the assistance of the Bidder and for establishing unit prices for individual items.

9. Communications concerning this Bid shall be addressed to:

Mr. Scott M. Glaubitz, P.E., P.L.S.
B.S.E. Consultants, Inc.
312 South Harbor City Blvd., Suite 4
Melbourne, FL 32901
(321) 725-3674 Telephone
Email: BSE-Info@lja.com

10. The terms used in this Bid which are defined in the General Conditions of the Construction Contract included as a part of the Contract Documents have the meanings assigned to them in the General Conditions.

SUBMITTED ON _____.

Name of Firm: _____

Signature: _____ Title: _____

(Seal)

Attest: _____

Business Address: _____

Phone No.: _____

IMPORTANT:

Note: If the Contractor is a corporation, the legal name of the corporation shall be set forth above together with a signature of the officer or officers authorized to sign Contracts on behalf of the Corporation; if Contractor is a co-partnership, the true name of the firm shall be set forth above together with the signatures of all the partners; and if Contractor is an individual, his signature shall be placed above. If signature is by an agent other than an officer of a corporation or a member of a partnership, a power-of-attorney must be attached hereto. Signature of Contractor shall also be acknowledged before a Notary Public or other person authorized by law to execute such acknowledgment.

**TOWN OF MELBOURNE BEACH
BASIN 1 IMPROVEMENTS
BSE #11440.25
BID FORM**

Note: Bids shall include sales tax and other applicable taxes and fees

ITEM	UNIT	ENGINEER'S QUANTITIES	CONTRACTOR'S QUANTITIES	UNIT PRICE	TOTAL PRICE
PHASE 1					
PART 1 - EARTHWORK, PAVING AND DRAINAGE					
MOBILIZATION	LS	1			\$ -
MAINTENANCE OF TRAFFIC (MOT)	LS	1			\$ -
TV CAMERA INSPECTION 36" drainage pipe between existing structure DS-104 and DS-144 and 24" drainage pipe along South Palm	LS	1			\$ -
EXISTING PIPE REMOVE and DISPOSE - 8" POLYETHYLENE	LF	220			\$ -
EXISTING PIPE REMOVE and DISPOSE - 12" POLYETHYLENE	LF	10			\$ -
EXISTING PIPE REMOVE and DISPOSE - 15" POLYETHYLENE	LF	10			\$ -
EXISTING PIPE REMOVE and DISPOSE - 18" POLYETHYLENE	LF	353			\$ -
EXISTING PIPE REMOVE and DISPOSE - 8" CMP	LF	840			\$ -
EXISTING PIPE REMOVE and DISPOSE - 12" CMP	LF	720			\$ -
EXISTING PIPE REMOVE and DISPOSE - 24" PVC	LF	600			\$ -
EXISTING PIPE REMOVE and DISPOSE - 12" RCP	LF	60			\$ -
EXISTING DRAINAGE STRUCTURE REMOVE and DISPOSE	EA	22			\$ -
PLUG (and ABANDON) 8" CMP (SHANNON AVE)	EA	1			\$ -
12" RCP	LF	64			\$ -
15" RCP	LF	255			\$ -
18" RCP	LF	2,466			\$ -
24" RCP	LF	475			\$ -
TYPE D INLET	EA	22			\$ -
CONNECT TO EXISTING DRAINAGE STRUCTURE	EA	7			\$ -
FILL EXISTING SWALE (HARLAND AVE)	CY	46			\$ -
CONCRETE FLUME (SOUTH PALM AVE AND MAGNOLIA AVE)	EA	1			\$ -
MILL AND OVERLAY PAVEMENT	SY	920			\$ -
DRIVEWAY RECONSTRUCTION - ASPHALT	EA	1			\$ -
DRIVEWAY RECONSTRUCTION - CONCRETE	EA	24			\$ -
DRIVEWAY RECONSTRUCTION - PAVER	EA	4			\$ -

**TOWN OF MELBOURNE BEACH
BASIN 1 IMPROVEMENTS
BSE #11440.25
BID FORM**

Note: Bids shall include sales tax and other applicable taxes and fees

ITEM	UNIT	ENGINEER'S QUANTITIES	CONTRACTOR'S QUANTITIES	UNIT PRICE	TOTAL PRICE
IRRIGATION SYSTEM RESTORATION	LS	1			\$ -
MAIL BOX RESTORATION	LS	1			\$ -
STORM WATER POLLUTION PREVENTION PLAN (SWPPP)	LS	1			\$ -
SILT FENCE (if needed)	LS	1			\$ -
UTILITY ADJUSTMENT - WATER SERVICES	LS	1			\$ -
					\$ -
					\$ -
SUBTOTAL PHASE 1 PART 1					\$ -
PART 2 - MISCELLANEOUS					
PERFORMANCE BOND & PAYMENT	LS	1			\$ -
PHASE 1 - TOTAL PART 1 + PART 2 WITHOUT ALTERNATIVES					\$ -
PART 3 - ALTERNATIVES					
Alternate #1 - FULL 36" RCP PIPE REPLACEMENT from EX DS-104 to EX DS-144	LF	340			\$ -
Alternate #2 - 36" RCP PIPE REPLACEMENT ACROSS RIVERSIDE DRIVE (OPEN CUT, MILL & REPAVE 50 FT EITHER SIDE of CUT)	LF	44			\$ -
Alternate #3 - 36" RCP PIPE REPLACEMENT in GREEN SPACE	LF	36			\$ -
Alternate #4 - SLEEVE 36" RCP PIPE from EX DS-104 to EX DS-144	LF	340			\$ -
PHASE 1 TOTAL with ALTERNATIVE #1					\$ -
PHASE 1 TOTAL with ALTERNATIVE #2					\$ -
PHASE 1 TOTAL with ALTERNATIVE #3					\$ -
PHASE 1 TOTAL with ALTERNATIVE #4					\$ -

**TOWN OF MELBOURNE BEACH
BASIN 1 IMPROVEMENTS
BSE #11440.25
BID FORM**

Note: Bids shall include sales tax and other applicable taxes and fees

ITEM	UNIT	ENGINEER'S QUANTITIES	CONTRACTOR'S QUANTITIES	UNIT PRICE	TOTAL PRICE
PHASE 2					
PART 1 - EARTHWORK, PAVING AND DRAINAGE					
MOBILIZATION	LS	1			\$ -
MAINTENANCE OF TRAFFIC (MOT)	LS	1			\$ -
CONSTRUCT "S1" 8 FT WIDE SWALE	LF	14,500			\$ -
CONSTRUCT "S2" 4 FT WIDE SWALE	LF	550			\$ -
CONSTRUCT "S3" 1.5 FT WIDE SWALE	LF	850			\$ -
IRRIGATION SYSTEM RESTORATION	LS	1			\$ -
MAIL BOX RESTORATION	LS	1			\$ -
STORM WATER POLLUTION PREVENTION PLAN (SWPPP)	LS	1			\$ -
SILT FENCE (if needed)	LS	1			\$ -
UTILITY ADJUSTMENT - WATER SERVICES	LS	1			\$ -
					\$ -
					\$ -
SUBTOTAL PHASE 2 PART 1					\$ -
PART 2 - MISCELLANEOUS					
PERFORMANCE BOND & PAYMENT	LS	1			\$ -
PHASE 2 TOTAL PART 1 + PART 2					
					\$ -

NOTES:

1. Bids shall include sales tax and other applicable taxes and fees.
2. The Engineer's Estimated Quantities are provided for your convenience. Contractor should bid their own quantities. If there is a large discrepancy, please contact Engineer.
3. The award timeframe for Phase 2 related work is unknown at this time.



CONTRACT FORMS

AGREEMENT

This agreement is dated as of the ____ day of _____ in the year of ____ by and between **The Town of Melbourne Beach** (hereinafter called **OWNER**) and _____ (hereinafter called **CONTRACTOR**, **OWNER** and **CONTRACTOR**, in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article 1. **WORK**

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

- Scope of work consists of installing grass swales of variable width, limited milling of asphalt, limited laying new asphalt to direct surface water flow, utility adjustments, maintenance of traffic, excavation, grading sodding/seeding and associated work. In order to protect the street asphalt, no metal track machines will be allowed - rubber tired or rubber track machines only. Existing-Landscape Vegetation (not grass or sod) is not to be removed from swale construction. The only vegetation allowed to be removed is associated with storm sewer construction. Care must be taken to minimize vegetation damage. Asphalt milling and resurfacing is limited to those areas shown in the plans. This work is to direct surface flow to existing inlets. The contractor is to coordinate all work with Town personnel and provide a minimum of 1 week notice to all residents in the work area.

Article 2. **ENGINEER**

The Project has been designed by **B.S.E. Consultants, Inc. 312 S. Harbor City Blvd., Suite 4, Melbourne, Florida 32901**, who is hereinafter called **ENGINEER** and who will assume all duties and responsibilities and will have the rights and authority assigned to **ENGINEER** in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

Article 3. **CONTRACT TIME**

- 3.1 The Work for each stage will be substantially completed within the number of calendar days listed in Table 3.1 for that stage from the date when the Contract Time commences as provided in paragraph 2.3 of the General Conditions. All work shall be and completed and ready for final payment in accordance with paragraph 14.13 of the General Conditions within the number of calendar days listed in Table 3.1.

**Table 3.1 - Contract Time
(Calendar Days)**

Substantial Completion	Final Completion
90	120

- 3.2 Liquidated Damages. **OWNER** and **CONTRACTOR** recognize that time is of the essence of the Agreement and that **OWNER** will suffer financial loss if the Work is not substantially complete within the time specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize that it is difficult, if not impossible, to ascertain precisely the actual loss suffered by **OWNER** if the Work is not substantially complete on time. Accordingly, instead of requiring any such proof, **OWNER** and **CONTRACTOR** agree that as liquidated damages for delay (but not as a penalty) **CONTRACTOR** shall pay **OWNER** One Hundred Fifty dollars (\$150.00) for each calendar day that expires after the time specified in paragraph 3.1 for substantial completion until the Engineer finds the Work is substantially completed, in accordance with General Condition 14.8.

Article 4. **CONTRACT PRICE**

The **OWNER** shall pay the **CONTRACTOR** for performance of the Work in accordance with the Contract Documents in current funds as follows: For all items listed on the Bid Schedule, installed and measured in accordance with the Contract Documents, payment for each item shall be the unit price or lump sum bid for each item multiplied by the measured quantity. The cost of the Contract is based on the estimated quantities shown on the Bid Schedule which is
\$ _____.

Article 5. **PAYMENT PROCEDURES**

Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by **ENGINEER** as provided in the General Conditions. The provided Applications for Payment and Change Order Form **MUST BE UTILIZED.**

5.1 Progress Payments. **OWNER** shall make progress payments on account of the Contract Price on the basis of **CONTRACTOR**'s Applications for Payment as recommended by **ENGINEER**. All progress payments will be on the basis of the progress of the Work measured by the schedule of values provided for in paragraph 14.1 of the General Conditions.

5.1.1 Prior to Substantial Completion progress payments will be in an amount equal to ninety percent (90%) of the Work completed and less in each case the aggregate of payments previously made.

5.1.2 Upon Substantial Completion, **OWNER** shall pay an amount sufficient to increase total payments to **CONTRACTOR** to ninety-five percent (95%) of the Contract Price, less such amounts as **ENGINEER** shall determine in accordance with paragraph 14.7 of the General Conditions.

5.2 Final Payment. Upon final completion and acceptance of the Work in accordance with paragraph 14.13 of the General Conditions, **OWNER** shall pay the remainder of the Contract Price as recommended by **ENGINEER** as provided in said paragraph 14.13.

Article 6. **INTEREST**

All payment shall be made in accordance with the Local Government Prompt Payment Act, Florida Statute 218.70.

Article 7. **CONTRACTOR'S REPRESENTATIONS**

In order to induce **OWNER** to enter into this Agreement **CONTRACTOR** makes the following representations:

7.1 **CONTRACTOR** has familiarized himself with the nature and extent of the Contract Documents, Work, locality, and with all local conditions and federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.

- 7.2 **CONTRACTOR** has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Work which were relied upon by **ENGINEER** in the preparation of the Drawings and Specifications and which have been identified in the Supplementary Conditions.
- 7.3 **CONTRACTOR** has made or caused to be examinations, investigations and tests and studies of such reports and related data in addition to those referred to in paragraph 7.2 as he deems necessary for the performance of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, tests, reports or similar data are or will be required by **CONTRACTOR** for such purposes.
- 7.4 **CONTRACTOR** has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.
- 7.5 **CONTRACTOR** has given **ENGINEER** written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by **ENGINEER** is acceptable to **CONTRACTOR**.

Article 8. **CONTRACT DOCUMENTS**

The Contract Documents which comprise the entire agreement between **OWNER** and **CONTRACTOR** are attached to this Agreement, made a part hereof and consists of the following:

- 8.1 This Agreement (pages A-1 to A-6, inclusive), and Exhibits attached thereto,
- 8.2 **CONTRACTOR'S** Bid Form (page BF1 – B5, inclusive),
- 8.3 Performance and Payment Bond,
- 8.4 Addenda Numbers 1 to _____, inclusive,
- 8.5 Notice of Award,
- 8.6 Documentation submitted by **CONTRACTOR** prior to Notice of Award
- 8.7 General Conditions (pages GC-1 to GC-50, inclusive),

- 8.8 Supplementary Conditions (pages SC-1 to SC- 8, inclusive),
- 8.9 Specifications consisting of Divisions as listed in the Table of Contents thereof.
- 8.10 Drawings prepared by B.S.E. Consultants, Inc. reduced for inclusion within this document **Town of Melbourne Beach Basin 1 Drainage Improvements** BSE #11440.25 Sheets 1-9.
- 8.11 The contract price includes all material and labor.
- 8.12 Materials are to conform to stated specifications or as approved by the Engineer

There are no Contract Documents other than those listed above in this Article 8. The Contract Documents may only be altered, amended or repealed by a Modification (as defined in Section 1 of the General Conditions).

Article 9. **MISCELLANEOUS**

- 9.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions shall have the meanings indicated in the General Conditions.
- 9.2 No assignment by a part hereto of any rights under or interest in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 9.3 **OWNER** and **CONTRACTOR** each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.
- 9.4 If the Owner finds it necessary to employ an attorney at law to enforce this agreement, the Owner shall be entitled to reasonable attorney's fees and costs.

IN WITNESS WHEREOF, the parties hereto have signed this Agreement in triplicate. One counterpart each has been delivered to **OWNER, CONTRACTOR** and **ENGINEER**. All portions of the Contract Documents have been signed or identified by **OWNER** and **CONTRACTOR** or by **ENGINEER** on their behalf.

This agreement will be effective on_____.

BY_____
[CORPORATE SEAL]
Contractor

BY_____
[CORPORATE SEAL]
Elizabeth Mascaro
Town Manager

Attest_____

Attest_____

Address for giving notices:

Address for giving notices:

Town of Melbourne Beach

507 Ocean Avenue

Melbourne Beach, FL 32951

CORPORATE OFFICERS CERTIFICATION

“I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.”

NAME: Elizabeth Mascaro

TITLE: Town Manager

COMPANY NAME: Town of Melbourne Beach

COMPANY ADDRESS: 507 Ocean Avenue, Melbourne Beach, FL 32951

COMPANY PHONE #: (321) 724-5860

➤ **PROJECT SITE DESCRIPTION:**

Scope of work consists of installing grass swales of variable width, limited milling of asphalt, limited laying new asphalt to direct surface water flow, utility adjustments, maintenance of traffic, excavation, grading sodding/seeding and associated work. In order to protect the street asphalt, no metal track machines will be allowed - rubber tired or rubber track machines only. Existing-Landscape Vegetation (not grass or sod) is not to be removed from swale construction. The only vegetation allowed to be removed is associated with storm sewer construction. Care must be taken to minimize vegetation damage. Asphalt milling and resurfacing is limited to those areas shown in the plans. This work is to direct surface flow to existing inlets. The contractor is to coordinate all work with Town personnel and provide a minimum of 1 week notice to all residents in the work area.

SIGNATURE: _____

DATE OF CERTIFICATION: _____

CONTRACTORS CERTIFICATION

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERIC STORM WATER PERMIT ISSUED PURSUANT TO SECTION 403.0885, F.S., THAT AUTHORIZES THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION."

NAME: _____

TITLE: _____

COMPANY NAME: _____

COMPANY ADDRESS: _____

COMPANY PHONE #: _____

➤ **PROJECT SITE DESCRIPTION:**

Scope of work consists of installing grass swales of variable width, limited milling of asphalt, limited laying new asphalt to direct surface water flow, utility adjustments, maintenance of traffic, excavation, grading sodding/seeding and associated work. In order to protect the street asphalt, no metal track machines will be allowed - rubber tired or rubber track machines only. Existing-Landscape Vegetation (not grass or sod) is not to be removed from swale construction. The only vegetation allowed to be removed is associated with storm sewer construction. Care must be taken to minimize vegetation damage. Asphalt milling and resurfacing is limited to those areas shown in the plans. This work is to direct surface flow to existing inlets. The contractor is to coordinate all work with Town personnel and provide a minimum of 1 week notice to all residents in the work area.

SIGNATURE: _____

DATE OF CERTIFICATION: _____

CHANGE ORDER**PROJECT:** Town of Melbourne Beach –
Basin 1 Improvements**DATE OF ISSUANCE:****OWNER:** Town of Melbourne Beach
507 Ocean Avenue
Melbourne Beach, FL 32951**OWNER PROJECT NO.:** 11440.25**CONTRACTOR:****ENGINEER:** B.S.E. Consultants, Inc.
312 South Harbor City Blvd. #4
Melbourne, FL 32901**CONTRACT FOR:**

Installing grass swales of variable width, limited milling of asphalt limited laying new asphalt, to direct surface water flow, utility adjustments, maintenance of traffic, excavation, grading sodding/seeding and associated work. In order to protect the street asphalt, no metal track machines will be allowed - rubber tired or rubber track machines only. Existing-Landscape Vegetation (not grass or sod) is not to be removed from swale construction. The only vegetation allowed to be removed is associated with storm sewer construction. Care must be taken to minimize vegetation damage. Asphalt milling and resurfacing is limited to those areas shown in the plans. This work is to direct surface flow to existing inlets. The contractor is to coordinate all work with Town personnel and provide a minimum of 1 week notice to all residents in the work area.

ENGINEER PROJECT NO.: 11440.25**You are directed to make the following changes in the Contract Documents:****Description:****Purpose of Change Order:****Attachments (List documents supporting change):** See Attached Exhibit A**CHANGE IN CONTRACT PRICE:****Original Contract Price:**

\$ _____

Previous Change Orders 0 to 0

\$ _____

Net Increase OR Decrease of this Change Order

\$ _____

Contract Price with all Approved Change Orders

\$ _____

CHANGE IN CONTRACT TIME:**Original Contract Time:**90 days Substantial / 120 days Final Completion**Days or date****Net Change from Previous Change Orders**

_____0_____

Net Increase of this Change Order

_____0_____

Days or date**Contract Time with all Approved Change Orders**90 days Substantial / 120 days Final Completion**Days or date****RECOMMENDED:****APPROVED:****APPROVED:**

By: _____

Engineer

By: _____

Owner

By: _____

Contractor

Date: _____

Date: _____

Date: _____

APPLICATION FOR PAYMENT

Enclosed Application for Payment or approved equal (approved by Engineer) may be used.

APPLICATION AND CERTIFICATE FOR PAYMENT

Page ____ of ____

To:	Project:	Distributed To:
	Project No:	[] Owner
	Contract Date:	[] Architect
		[] Developer
Attn:	Application No.:	[] Engineer
Contractor:	Period:	
Contract For:	Completion Date:	Date:

DEVELOPER'S APPLICATION FOR PAYMENTChange Order Summary

CHANGE ORDERS		ADDITIONS	DEDUCTIONS
Total Approved in Previous Months			
Approved This Month			
Number	Date of Approval		
Total		\$ -	\$ -
Net Change by Change Orders		\$ -	\$ -

Application is made for payment, as shown below, in conjunction with the Contract. Continuation Sheet(s) is attached.

1. Original Contract Sum	\$	-
2. Net Change by Change Orders	\$	-
3. Contract Sum to Complete	\$	-
4. Total Completed/Stored to Date (Column ____)	\$	-
5. Retainage:		
a. % Completed Work	\$	-
b. % Stored Material	\$	-
Total Retainage - 5a + 5b	\$	-
6. Total Earned, Less Retainage (Line 4 - Line 5 Total)	\$	-
7. Less Previous Certification for Payment (Line 6 - Prior Certificates)	\$	-
8. Current Payment Due	\$	-
9. Balance to Finish, Plus Retainage (Line 3 - Line 6)	\$	-

The undersigned Contractor certifies that, to the best of his knowledge, information, and belief, the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by him for Work for which previous Certificates of Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

Contractor Signature _____ Date: _____

**STATE OF FLORIDA
COUNTY OF BREVARD**

Sworn to and subscribed before me this _____ day of _____, 19 ____.

Notary Public: _____

ARCHITECT/ENGINEER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on site observations and the data comprising the above application, the ARCHITECT/ENGINEER certifies to the CONTRACTOR that, to the best of the ARCHITECT/ENGINEER's knowledge, information, and belief, the Work has progressed as indicated, the quality of Work is in accordance with the Contract Documents, and the Subcontractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$ -

Signature of ARCHITECT/ENGINEER

Date

This certificate is not negotiable. The **AMOUNT CERTIFIED** is payable only to the Subcontractor named herein. Issuance, payment, and acceptance are without prejudice to any rights of the Owner, Developer, or Contractor under this contract.

Distributed To:

[] **Owner**

[] Architect

☐ **Developer**

[] Engineer

Application No.:**Period:**

Date:

PP-3

PUBLIC CONSTRUCTION BOND

BY THIS BOND, We, _____, as Principal and _____, a corporation, as Surety, are bound to _____, herein called Owner, in the sum of \$_____, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the contract dated _____, 20____, between Principal and Owner for construction of _____, the contract being made a part of this bond by reference, at the times and in the manner prescribed in the contract, and;
2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying Principal with labor, material, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract, and;
3. Pays Owner all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that Owner sustains because of a default by Principal under the contract, and;
4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise, it remains in full force.

Any changes in or under the contract documents and compliance or noncompliance with any formalities connected with the contract or the changes does not affect Surety's obligation under this bond.

DATED ON _____, 20_____.

Name of Principal

As Attorney in Fact

Name of Surety

NOTICE OF AWARD

Dated: _____

TO: _____
(Contractor)

ADDRESS: _____

OWNER'S PROJECT NO. 11440.25

PROJECT NAME: Town of Melbourne Beach – Basin 1 Improvements

CONTRACT FOR: Scope of work consists of installing grass swales of variable width, limited milling of asphalt, limited laying new asphalt to direct surface water flow, utility adjustments, maintenance of traffic, excavation, grading sodding/seeding and associated work. In order to protect the street asphalt, no metal track machines will be allowed - rubber tired or rubber track machines only. Existing-Landscape Vegetation (not grass or sod) is not to be removed from swale construction. The only vegetation allowed to be removed is associated with storm sewer construction. Care must be taken to minimize vegetation damage. Asphalt milling and resurfacing is limited to those areas shown in the plans. This work is to direct surface flow to existing inlets. The contractor is to coordinate all work with Town personnel and provide a minimum of 1 week notice to all residents in the work area.

You are notified that your bid dated _____, 20____, for the above Contract has been considered. You are the successful bidder and have been awarded a contract for **Town of Melbourne Beach – Basin 1 Improvements**.

The Contract Price of your contract is \$_____.

Three (3) copies of each of the proposed Contract Documents (except drawings) accompany this Notice of Award. Three (3) sets of the drawings will be delivered separately or otherwise made available to you immediately.

You must comply with the following conditions precedent within fifteen (15) days of the date of this Notice of Award which is by _____, 20____.

1. You must deliver the OWNER three (3) fully executed counterparts of the Agreement including all the Contract Documents, including the triplicate set of drawings. Each of the Contract Documents must bear your signature where indicated.
2. You must deliver with the executed Agreement the Contract Security (Bonds) as specified in the Instruction to Bidders (Paragraph 17), General Conditions (Paragraph 5.1) and Supplementary Conditions (Paragraph SC 5.1).

NOTICE TO PROCEED

Dated: _____

TO:

ADDRESS:

OWNER'S PROJECT NO. 11440.25

PROJECT: Town of Melbourne Beach – Basin 1 Improvements

CONTRACT FOR: Scope of work consists of installing grass swales of variable width, limited milling of asphalt, limited laying new asphalt to direct surface water flow, utility adjustments, maintenance of traffic, excavation, grading sodding/seeding and associated work. In order to protect the street asphalt, no metal track machines will be allowed - rubber tired or rubber track machines only. Existing-Landscape Vegetation (not grass or sod) is not to be removed from swale construction. The only vegetation allowed to be removed is associated with storm sewer construction. Care must be taken to minimize vegetation damage. Asphalt milling and resurfacing is limited to those areas shown in the plans. This work is to direct surface flow to existing inlets. The contractor is to coordinate all work with Town personnel and provide a minimum of 1 week notice to all residents in the work area.

You are notified that the Contract Time under the above contract will commence to run on _____. By that date, you are to start performing your obligations under the Contract Documents. In accordance with the Agreement the dates of Substantial Completion and Final Completion are _____, respectively.

Before you may start Work at the site, the General Conditions provides that you must deliver certificates of insurance, which is required to be purchased and maintained in accordance with the Contract Documents.

Copy to ENGINEER:
B.S.E. Consultants, Inc.

Owner's Signature/Title

Date



CONTRACT CONDITIONS

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT*

ARTICLE 1 DEFINITIONS

Wherever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

Addenda – Written or graphic instruments issued prior to the opening of Bids which clarify, correct or change the bidding documents or the Contract Documents.

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

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

Bid – The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

Bonds – Bid, performance and payment bonds and other instruments of security.

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 Time, issued on or after the Effective Date of the Agreement.

Contract Documents – The Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post-Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all amendments, modifications and supplements issued pursuant to paragraphs 3.4 and 3.5 on or after the Effective Date of the Agreement.

*These General Conditions are a retyped copy of EJCDC Form 1910-9 (1983 Edition).

Contract Price – The moneys payable by OWNER to CONTRACTOR under the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.9.1 in the case of Unit Price Work).

Contract Time – The number of days (computed as provided in paragraph 17.2) or the date stated in the Agreement for the completion of the Work.

CONTRACTOR – The person, firm or corporation with whom OWNER has entered into the Agreement.

Defective – An adjective which, when modifying the word "Work" refers to work that is unsatisfactory, faulty or deficient, or 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 14.8 or 14.10).

Drawings – The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by ENGINEER and are referred to in the Contract Documents.

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.

ENGINEER – The person, firm or corporation named as such in the Agreement.

Field Order – A written order issued by ENGINEER which orders minor changes in the Work in accordance with paragraph 9.5, but which does not involve a change in the Contract Price or the Contract Time.

General Requirements – Sections of Division 1 of the Specifications.

Laws and Regulations; Laws or Regulations – Law, rules, regulations, ordinances, codes and/or orders.

Notice of Award – The written notice by OWNER to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the Agreement.

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

OWNER – The public body or authority, corporation, association, firm or person with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be provided.

Partial Utilization – Placing a portion of the Work in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the Work.

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

Resident Project Representative – The authorized representative of ENGINEER who is assigned to the site or any part thereof.

Shop Drawings – All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by CONTRACTOR to illustrate material or equipment for some portion of the Work.

Specifications – Those portions of the Contract Documents consisting of written technical description of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

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

Substantial Completion – The Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER as evidenced by ENGINEER's definitive certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended; or if there be no such certificate issued, when final payment is due in accordance with paragraph 14.13. The terms "substantially complete" and "substantially completed" as applied to any Work refer to Substantial Completion thereof.

Supplementary Conditions – The part of the Contract Documents which amends or supplements these General Conditions.

Supplier – A manufacturer, fabricator, supplier, distributor, materialman or vendor.

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

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

Work – The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

Work Directive Change – A written directive 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 physical conditions under which the Work is to be performed as provided in paragraph 4.2 or 4.3 or to emergencies under paragraph 6.22. A Work Directive Change may not change the Contract Price or the Contract Time, but is evidence that the parties expect that the change directed or documented by a Work Directive Change 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 Time as provided in paragraph 10.2.

Written Amendment – A written amendment on the Contract Documents, signed by OWNER and Contractor on or after the Effective Date of the agreement and normally dealing with non-engineering or nontechnical rather than strictly Work-related aspects of the Contract Documents.

ARTICLE 2

PRELIMINARY MATTERS

Delivery of Bonds:

2.1. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish in accordance with paragraph 5.1.

Copies of Documents:

2.2. OWNER shall furnish to CONTRACTOR up to ten copies (unless otherwise specified in the Supplementary Conditions) of the Contract Documents as are reasonable necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

Commencement of Contract Time; Notice to Proceed:

2.3. The Contract Time will commence to run on the thirtieth day after the Effective Date of the Agreement, or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within thirty days after the Effective Date of the Agreement. In no event will the Contract Time commence to run later than the seventy-fifth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

Starting the Project:

2.4. CONTRACTOR shall start to perform the Work on the date when the Contract Time commences to run, but no Work shall be done at the site prior to the date on which the Contract Time commences to run.

Before Starting Construction:

2.5. Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report, in writing to ENGINEER, any conflict, error or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before providing with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents, unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

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

2.6.1. an estimated progress schedule indicating the starting and completion dates of the various stages of Work:

2.6.2. a preliminary schedule of Shop Drawing submissions; and

2.6.3. a preliminary schedule of values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by CONTRACTOR at the time of submission.

2.7. Before any Work at the site is started, CONTRACTOR shall deliver to OWNER, with a copy to ENGINEER, certificates (and other evidence of insurance requested by OWNER) which CONTRACTOR is required to purchase and maintain in accordance with paragraphs 5.3 and 5.4 and OWNER shall deliver to CONTRACTOR certificates (and other evidence of insurance requested by CONTRACTOR) which OWNER is required to purchase and maintain in accordance with paragraphs 5.6 and 5.7.

Preconstruction Conference:

2.8. Within twenty days after the Effective Date of the Agreement, but before CONTRACTOR starts the Work at the site, a conference attended by CONTRACTOR,

ENGINEER and others as appropriate will be held to discuss the scheduled referred to in paragraph 2.6, to discuss procedures for handling Shop Drawings and other submittals and for processing applications for payment, and to establish a working understanding among the parties as to the Work.

Finalizing Schedules:

2.9. 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 finalize the schedule submitted in accordance with paragraph 2.6. The finalized progress schedule will be acceptable to ENGINEER as providing an orderly progression of the Work to completion within the Contract Time, but such acceptance will neither impose on ENGINEER responsibility for the progress or scheduling of the Work nor relieve CONTRACTOR from full responsibility therefore. The finalized schedule of Shop Drawing submissions will be acceptable to ENGINEER as providing a workable arrangement for processing the submissions. The finalized schedule of values will be acceptable to ENGINEER as to form and substance.

ARTICLE 3
CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

Intent:

3.1. The Contract Documents comprise the entire agreement between OWNER and CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the Project.

3.2. 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 Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied, whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials or equipment, such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or Laws or Regulations 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. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR or ENGINEER, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to ENGINEER, or any of ENGINEER's consultants, agents or employees, any duty or authority to

supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in paragraph 9.4.

3.3 If, during the performance of the Work, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, CONTRACTOR shall so report to ENGINEER in writing at once and before proceeding with the Work affected thereby shall obtain a written interpretation or clarification from ENGINEER; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents, unless CONTRACTOR had actual knowledge thereof or should reasonable have know thereof.

Amending and Supplementing Contract Documents:

3.4. 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:

3.4.1. a formal Written Amendment,

3.4.2. a Change Order (pursuant to paragraph 10.4),

3.4.3. a Work Directive Change (pursuant to paragraph 10.1).

As indicated in paragraphs 11.2 and 12.1, Contract Price and Contract Time may only be changed by a Change Order or a Written Amendment.

3.5 In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, in one or more of the following ways:

3.5.1. a Field Order (pursuant to paragraph 9.5),

3.5.2. ENGINEER's approval of a Shop Drawing or sample (pursuant to paragraphs 6.26 and 6.27), or

3.5.3. ENGINEER's written interpretation or clarification (pursuant to paragraph 9.4).

Reuse of Documents:

3.6. Neither CONTRACTOR nor any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with OWNER shall have or acquire any title to 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; and they shall not reuse any of them on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaptation by ENGINEER.

ARTICLE 4
AVAILABILITY OF LANDS; PHYSICAL CONDITIONS;
REFERENCE POINTS

Availability of Lands:

4.1. OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract Documents. In CONTRACTOR believes that any delay in OWNER's furnishing these lands, rights-of-way or easements entitles CONTRACTOR to an extension of the Contract Time, CONTRACTOR may make a claim therefore as provided in Article 12. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

Physical Conditions:

4.2.1. Explorations and Reports: Reference is made to the Supplementary Conditions for identification of those reports of explorations and tests of subsurface conditions at the sites that have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data, interpretations or opinions contained in such reports, but not upon nontechnical data, interpretations or opinions contained therein or for the completeness thereof for CONTRACTOR's purposes. Except as indicated in the immediately preceding sentence and in paragraph 4.2.6., CONTRACTOR shall have full responsibility with respect to subsurface conditions at the site.

4.2.2. Existing Structures: Reference is made to the Supplementary Conditions for identification of those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities referred to in paragraph 4.3) which are at or contiguous to the site that have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such drawings, but not for the completeness thereof for CONTRACTOR's purposes. Except as

indicated in the immediately preceding sentence and in paragraph 4.2.6, CONTRACTOR shall have full responsibility with respect to physical conditions in or relating to such structures.

4.2.3. Report of Differing Conditions: If CONTRACTOR believes that:

4.2.3.1. any technical data on which CONTRACTOR is entitled to rely as provided in paragraphs 4.2.1 and 4.2.2 is inaccurate, or

4.2.3.2. any physical condition uncovered or revealed at the site differs materially from that indicated, reflected or referred to in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work in connection therewith (except in an emergency as permitted by paragraph 6.22), notify OWNER and ENGINEER in writing about the inaccuracy or difference.

4.2.4. ENGINEER's Review: ENGINEER will promptly review the pertinent conditions, determine the necessity of obtaining additional explorations or test with respect thereto and advise OWNER in writing (with copy to CONTRACTOR) of ENGINEER's findings and conclusions.

4.2.5. Possible Document Change: If ENGINEER concludes that there is a material error in the Contract Documents or that, because of newly discovered conditions, a change in the Contract Documents is required, a Work Directive Change or a Change Order will be issued as provided in Article 10 to reflect and document the consequences of the inaccuracy or difference.

4.2.6. Possible Price and Time Adjustments: In each such case, an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, or any combination thereof, will be allowable to the extent that they are attributable to any such inaccuracy or difference. If OWNER and CONTRACTOR are unable to agree as to the amount or length thereof, a claim may be made therefore as provided in Articles 11 and 12.

Physical Conditions - Underground Facilities:

4.3.1. 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 or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

4.3.1.1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and,

4.3.1.2. CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Facilities shown or indicated in the Contract Documents, for coordination of the Work with the owners of such

Underground Facilities during construction, for the safety and protection thereof as provided in paragraph 6.20 and repairing any damage thereto resulting from the Work, the cost of all of which shall be considered as having been included in the Contract Price.

4.3.2. Not Shown or Indicated: If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work affected thereby (except in an emergency as permitted by paragraph 6.22), identify the owner of such Underground Facility and give written notice thereof to the owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and the Contract Documents will be amended or supplemented to the extent necessary. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 6.20. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any Underground Facility that was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of. If the parties are unable to agree as to the amount or length thereof, CONTRACTOR may make a claim therefore as provided in Articles 11 and 12.

Reference Points:

4.4. 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 layout out the Work (unless otherwise specified in the General Requirements), shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point 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 by professionally qualified personnel.

ARTICLE 5

BONDS AND INSURANCE

Performance and Other Bonds:

5.1. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as otherwise

provided by Law or Regulation or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall be in the form prescribed by Law or Regulation or by the Contract Documents and 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 Accounts, U.S. Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of the authority to act.

5.2. If the surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.1, CONTRACTOR shall, within five days thereafter, substitute another Bond and Surety, both of which must be acceptable to OWNER.

Contractor's Liability Insurance:

5.3. CONTRACTOR shall purchase and maintain such comprehensive general liability and other insurance as is appropriate for the Work being performed and furnished and as will provide protection from claims set forth below 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, by any Subcontractor, 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:

5.3.1. Claims under workers' or workmen's compensation, disability benefits and other similar employee benefit acts;

5.3.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

5.3.3. Claims for damages because of bodily injury, occupational sickness or disease, or death of any person other than CONTRACTOR's employees;

5.3.4. Claims for damages insured by personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (b) by any other person for any other reason;

5.3.5. 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 therefrom;

5.3.6. Claims arising out of operation of Laws or Regulations for damages because of bodily injury or death of any person or for damage to property; and

5.3.7. 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.

The insurance required by this paragraph 5.3 shall include the specific coverage and be written for not less than the limits of liability and coverage provided in the Supplementary Conditions, or required by law, whichever is greater. The comprehensive general liability insurance shall include completed operations insurance. All of the policies of insurance so required to be purchased and maintained (or the certificates or other evidence thereof) shall contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty days' prior written notice has been given to OWNER and ENGINEER by certified mail.

All such insurance shall remain in effect until final payment and at all times thereafter when CONTRACTOR may be correcting, removing or replacing defective Work in accordance with paragraph 13.12. In addition, CONTRACTOR shall maintain such completed operations insurance for at least two years after final payment and furnish OWNER with evidence of continuation of such insurance at final payment and one year thereafter.

Contractual Liability Insurance:

5.4. The comprehensive general liability insurance required by paragraph 5.3 will include contractual liability insurance applicable to CONTRACTOR's obligations under paragraphs 6.30 and 6.31.

Owner's Liability Insurance:

5.5. OWNER shall be responsible for purchasing and maintaining OWNER's own liability insurance and, at OWNER's option, may purchase and maintain such insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

Property Insurance:

5.6. Unless otherwise provided in the Supplementary Conditions, OWNER shall purchase and maintain property insurance upon the Work at the site to the full insurable value thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER and ENGINEER's consultants in the Work, all of whom shall be listed as insured or additional insured parties, shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in the Supplementary Conditions, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of insured property (including but not limited to fees and charges of engineers, architects, attorneys and other professionals). If not covered under the "all risk" insurance or

otherwise provided for in the Supplementary Conditions, CONTRACTOR shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in an Application for Payment.

5.7. OWNER shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER and ENGINEER's consultants in the Work, all of whom shall be listed as insured or additional insured parties.

5.8. All the policies of insurance (or the certificates or other evidence thereof) required to be purchased and maintained by OWNER in accordance with paragraphs 5.6 and 5.7 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least thirty days' prior written notice has been given to CONTRACTOR by certified mail and will contain waiver provisions in accordance with paragraphs 5.11.2.

5.9. OWNER shall not be responsible for purchasing and maintaining any property insurance to protect the interests of CONTRACTOR, Subcontractors or others in the Work to the extent of any deductible amounts that are provided in the Supplementary Conditions. The risk of loss within the deductible amount will be borne by CONTRACTOR, Subcontractor or others suffering any such loss and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

5.10. If CONTRACTOR requests in writing that other special insurance be included in the property insurance policy, OWNER shall, if possible, include such insurance, and the cost thereof will be charged to CONTRACTOR by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the site, OWNER shall, in writing, advise CONTRACTOR whether or not such other insurance has been procured by OWNER.

Waiver of Rights:

5.11.1. OWNER and CONTRACTOR waive all rights against each other for all losses and damages caused by any of the perils covered by the policies of insurance provided in response to paragraphs 5.6 and 5.7 and any other property insurance applicable to the Work, and also waive all such rights against the Subcontractors, ENGINEER, ENGINEER's consultants and other parties named as insured in such policies for losses and damages so caused. As required by paragraph 6.11, each subcontract between CONTRACTOR and a Subcontractor will contain similar waiver provisions by the Subcontractor in favor of OWNER, CONTRACTOR, ENGINEER, ENGINEER's consultants and all other parties named as insured. None of the above waivers shall extend to the rights that any of the insured parties may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.

5.11.2. OWNER and CONTRACTOR intend that any policies provided in response to paragraphs 5.6 and 5.7 shall protect all of the parties insured and provide primary coverage for all losses and damages caused by the perils covered thereby. Accordingly, all such policies shall contain provisions to the effect that in the event of payment of any loss or damage, the insurer will have no rights of recovery against any of the parties named as insured or additional insured, and if the insurers require separate waiver forms to be signed by ENGINEER or ENGINEER's consultant, OWNER will obtain the same, and if such waiver forms are required of any Subcontractor, CONTRACTOR will obtain the same.

Receipt and Application of Proceeds:

5.12. Any insured loss under the policies of insurance required by paragraphs 5.6 and 5.7 will be adjusted with OWNER and made payable to OWNER as trustee for the insured, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.13. OWNER shall deposit in a separate account any money so received, and shall distribute it in accordance with such agreements as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

5.13. OWNER, as trustee, shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within fifteen days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER as trustee shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If required in writing by any party in interest, OWNER as trustee shall, upon the occurrence of an insured loss, give bond for the proper performance of such duties.

Acceptance of Insurance:

5.14. If OWNER has any objection to the coverage afforded by other provisions of the insurance required to be purchased and maintained by CONTRACTOR in accordance with paragraphs 5.3 and 5.4 on the basis of its not complying with the Contract Documents, OWNER shall notify CONTRACTOR in writing thereof within ten days of the date of delivery of such certificates to OWNER in accordance with paragraph 2.7. If CONTRACTOR has any objection to the coverage afforded by or other provisions of the policies of insurance required to be purchased and maintained by OWNER in accordance with paragraphs 5.6 and 5.7 on the basis of their not complying with the Contract Documents, CONTRACTOR shall notify OWNER in writing thereof within ten days of the date of delivery of such certificates to CONTRACTOR in accordance with paragraph 2.7. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided by each as the other may reasonably request.

Failure by OWNER or CONTRACTOR to give any such notice of objection within the time provided shall constitute acceptance of such insurance purchased by the other as complying with the Contract Documents.

Partial Utilization-Property Insurance:

5.15. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, such use or occupancy may be accomplished in accordance with paragraph 14.10, provided that no such use or occupancy shall commence before the insurers providing the property insurance have acknowledged notice thereof and, in writing, effected the changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or lapse on account of any such partial use or occupancy.

ARTICLE 6
CONTRACTOR'S RESPONSIBILITIES

Supervision and Superintendence:

6.1. CONTRACTOR shall supervise 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 others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is indicated in and required by the Contract Documents. CONTRACTOR shall be responsible to see that the finish Work complies accurately with the Contract Documents.

6.2. CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent, 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 the superintendent shall be as binding as if given to CONTRACTOR.

Labor, Materials and Equipment:

6.3. CONTRACTOR shall provide competent, suitable qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular work 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 given after prior written notice to ENGINEER.

6.4. Unless otherwise specified in the General Requirements, CONTRACTOR shall furnish and assume full responsibility for all 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 furnishing, performance, testing, start-up and completion of the Work.

6.5. All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to ENGINEER, or any of ENGINEER's consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16.

Adjusting Progress Schedule:

6.6. CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.9) adjustments in the progress schedule to reflect the impact thereon of new developments; these will conform generally to the progress schedule then in effect and, additionally, will comply with any provisions of the General Requirements applicable thereto.

Substitutes or "Or-Equal" Items:

6.7.1. Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that no substitution is permitted, material or equipment of other Suppliers may be accepted by ENGINEER if sufficient information is submitted by CONTRACTOR to allow ENGINEER to determine that the material or equipment proposed is equivalent or equal to that named.

The procedure for review by ENGINEER will include the following as supplemented in the General Requirements. Requests for review of substitute items of material and equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR. If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall make written application to ENGINEER for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application will state that the evaluation and acceptance of the

proposed substitute will not prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the Work will require a change of 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 and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by ENGINEER in evaluating the proposed substitute. ENGINEER may require CONTRACTOR to furnish, at CONTRACTOR's expense, additional data about the proposed substitute.

6.7.2. If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to ENGINEER, if CONTRACTOR submits sufficient information to allow ENGINEER to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in paragraph 6.7.1 as applied by ENGINEER and as may be supplemented in the General Requirements.

6.7.3. ENGINEER will be allowed a reasonable time within which to evaluate each proposed substitute. ENGINEER will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without ENGINEER's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. OWNER may require CONTRACTOR to furnish, at CONTRACTOR's expense, a special performance guarantee or other surety with respect to any substitute. ENGINEER will record time required by ENGINEER and ENGINEER's consultants in evaluating substitutions proposed by CONTRACTOR and in making changes in the Contract Documents occasioned thereby. Whether or not ENGINEER accepts a proposed substitute, CONTRACTOR shall reimburse ENGINEER for the charges of ENGINEER and ENGINEER's consultants for evaluating each proposed substitute.

Concerning Subcontractors, Suppliers and Others:

6.8.1. CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization (including those acceptable to OWNER or ENGINEER as indicated in paragraph 6.8.2), whether initially or as a substitute, against whom OWNER or ENGINEER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier or other person or organization to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

6.8.2. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers or other persons or organizations (including those who are to furnish the principal

items of materials and equipment) to be submitted to OWNER in advance of the specified date prior to the Effective Date of the Agreement for acceptance by OWNER and ENGINEER and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's or ENGINEER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the bidding documents or the Contract Documents) of any such Subcontractor, Supplier or other person or organization after due investigation, in which case CONTRACTOR shall submit an acceptable substitute, the Contract Price will be increased by the difference in the cost occasioned by such substitution and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER or ENGINEER or any such subcontractor, Supplier or other person or organization shall constitute a waiver of any right of OWNER or ENGINEER to reject defective work.

6.9. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of OWNER or ENGINEER or pay or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by Laws and Regulations.

6.10. 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.

6.11. All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER and contains waiver provisions as required by paragraph 5.11. CONTRACTOR shall pay each Subcontractor a just share of any insurance moneys received by CONTRACTOR on account of losses under policies issued pursuant to paragraphs 5.6 and 5.7.

Patent Fees and Royalties:

6.12. 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 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. CONTRACTOR shall indemnify and hold harmless OWNER and

ENGINEER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses and expenses (including attorney's fees and court and arbitration costs) arising out of any infringement of patent right 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, and shall defend all such claims in connection with any alleged infringement of such rights.

Permits:

6.13. Unless otherwise provided in the Supplementary Conditions, 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 connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto such as plant investment fees.

Laws and Regulations:

6.14.1. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to furnishing and 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.

6.14.2. If CONTRACTOR observes that the Specifications or Drawings are at variance with any Laws or Regulations, CONTRACTOR shall give Engineer prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 3.4. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to such Laws or Regulations, and without such notice to ENGINEER, CONTRACTOR shall bear all costs arising therefrom; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws and Regulations.

Taxes:

6.15. 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.

Use of Premises:

6.16. CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project site and land and areas identified in

and permitted by the Contract Documents and other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against OWNER or ENGINEER by any such owner or occupancy because of the performance of the Work, CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim by arbitration or at law. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold OWNER and ENGINEER harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of engineers, architects, attorneys and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any such other party against OWNER or ENGINEER to the extent based on a claim arising out of CONTRACTOR's performance of the Work.

6.17. During the progress of the Work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work, CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by OWNER. CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract Documents.

6.18. CONTRACTOR shall not load or permit any part of the 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.

Record Documents:

6.19. CONTRACTOR shall maintain, in a safe place at the site, one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Directive changes, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.4) in good order and annotated to show all 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.

Safety and Protection:

6.20. CONTRACTOR shall be 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:

6.20.1. all employees on the Work and other person and organizations who may be affected thereby;

6.20.2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and

6.20.3. other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and Underground Facilities note designated for removal, relocation or replacement in the course of construction.

CONTRACTOR shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of persons or property or to protect them 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 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 6.20.2 or 6.20.3 cause, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish 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 anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR). CONTRACTOR's duties and responsibilities for the safety and 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 14.13 that the Work is acceptable (except as others expressly provided in connection with Substantial Completion).

6.21. CONTRACTOR shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR's superintendent unless otherwise designated in writing by CONTRACTOR to OWNER.

Emergencies:

6.22. In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from ENGINEER or OWNER, 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. If ENGINEER determines that a change in the Contract Documents is required because of the action taken in response to any emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variations.

Shop Drawings and Samples:

6.23. After checking and verifying all field measurements and after complying with applicable procedures specified in the General Requirements, CONTRACTOR shall submit to ENGINEER for review and approval in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 2.9), or for other appropriate action if so indicated in the Supplementary Conditions, five copies (unless otherwise specified in the General Requirements) of all Shop Drawings, which will bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission. All submissions will be identified as ENGINEER may require. 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 enable ENGINEER to review the information as required.

6.24. CONTRACTOR shall also submit to ENGINEER for review and approval, with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and accompanied by a specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission and will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended.

6.25.1. Before submission of each Shop Drawing or sample, CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.

6.25.2. At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each Shop Drawing submitted to ENGINEER for review and approval of each such variation.

6.26. ENGINEER will review and approve with reasonable promptness Shop Drawings and samples, but ENGINEER's review and approval will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in or required 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. 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 revisions other than the corrections called for by ENGINEER on previous submittals.

6.27. 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 submissions as required by paragraph 6.25.2 and ENGINEER has given written approval of each such variation by a 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 errors or omissions in the Shop Drawings or from responsibility for having complied with the provisions of paragraphs 6.25.1.

6.28. Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to ENGINEER's review and approval of the pertinent submission will be the sole expense and responsibility of CONTRACTOR.

Continuing the Work:

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 15.5 or as CONTRACTOR and OWNER may otherwise agree in writing.

Indemnification:

6.30. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER and ENGINEER and their consultants, agents and employees from and against all claims, damages, losses and expenses, direct, indirect or consequential (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs) arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (a) 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 therefrom and (b) is caused in whole or in part by any negligent act or omissions of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder or arises by or is imposed by Law and Regulations regardless of the negligence of any such party.

6.31. In any and all claims against OWNER or ENGINEER or any of their consultants, agents or employees by any employee of CONTRACTOR, any Subcontractor, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them maybe liable, the indemnification obligation under paragraph 6.30 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 or other person or organization under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

6.32. The obligations of CONTRACTOR under paragraph 6.30 shall not extend to the liability of ENGINEER, ENGINEER's consultants, agents or employees arising out of the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications.

ARTICLE 7

OTHER WORK

Related Work at Site:

7.1. OWNER may perform other work related to the Project at the site by OWNER's own forces, have other work performed by utility owners or let other direct contracts therefore which shall contain General Conditions similar to these. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given to CONTRACTOR prior to starting any such other work; and, if CONTRACTOR believes that such performance will involve additional expense to CONTRACTOR or requires additional time and parties are unable to agree as to the extent thereof, CONTRACTOR may make a claim therefore as provided in Articles 11 and 12.

7.2. CONTRACTOR shall afford each utility owner and other contractor who is a party to such a direct contract (or OWNER, if OWNER is performing the additional 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 work, and shall properly connect and coordinate the Work with theirs. CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and 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 responsibilities 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.

7.3. If any part of CONTRACTOR's Work depends for proper execution or results upon the work of any such other contractor or utility owner (or OWNER), CONTRACTOR shall inspect and promptly report to ENGINEER in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. CONTRACTOR's failure to do so will constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR's Work except for latent or non-apparent defects and deficiencies in the other work.

Coordination:

7.4. If OWNER contracts with others for the performance of other work on the Project at the site, the person or organization who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified in the Supplementary Conditions, and the specific matters to be covered by such authority and responsibility will be itemized, and the extent of such authority and responsibilities will be provided, in the Supplementary Conditions. Unless otherwise provided in the Supplementary Conditions, neither OWNER nor ENGINEER shall have any authority or responsibility in respect of such coordination's.

ARTICLE 8
OWNER'S RESPONSIBILITIES

8.1. OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.2. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer against whom the CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER. Any dispute in connection with such appointment shall be subject to arbitration.

8.3. OWNER shall furnish the data required of OWNER under the Contract Documents promptly and shall make payments to CONTRACTOR promptly after they are due as provided in paragraphs 14.4 and 14.13.

8.4. 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 4.4. Paragraph 4.2 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and test of subsurface conditions at the site and in existing structures which have been utilized by ENGINEER in preparing the Drawings and Specifications.

8.5. OWNER's responsibilities in respect of purchasing and maintaining liability and property insurance are set forth in paragraphs 5.5 through 5.8.

8.6. OWNER is obligated to execute Change Orders as indicated in paragraph 10.4.

8.7. OWNER's responsibility in respect of certain inspections, test and approvals is set forth in paragraph 13.4.

8.8. In connection with OWNER's right to stop Work or suspend Work, see paragraphs 13.10 and 15.1. Paragraph 15.2 deals with OWNER's right to terminate services of CONTRACTOR under certain circumstances.

ARTICLE 9
ENGINEER'S STATUS DURING CONSTRUCTION

Owner's Representative:

9.1. ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and shall not be extended without written consent of OWNER and ENGINEER.

Visits to Site:

9.2. ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. ENGINEER's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and on-site observations as an experienced and qualified design professional, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defects and deficiencies in the Work.

Project Representation:

9.3. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in observing the performance of the Work. The duties, responsibilities and limitations of authority of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions. If OWNER designates another agent to represent OWNER at the site who is not ENGINEER's agent or employee, the duties, responsibilities and limitations of authority of such other person will be as provided in the Supplementary Conditions.

Clarifications and Interpretations:

9.4. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. If CONTRACTOR believes that a written clarification or interpretation justifies an increase in the Contract Price or an extension of the Contract Time and the parties are unable to agree to the amount or extent thereof, CONTRACTOR may make a claim therefore as provided in Article 11 and Article 12.

Authorized Variations in Work:

9.5. 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 Time and are consistent with the overall intent of 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 CONTRACTOR believes that a Field Order justifies an increase in the Contract Price or an extension of the Contract Time and the parties unable to agree as to the amount or extent thereof, CONTRACTOR may make a claim therefore as provided in Article 11 or 12.

Rejecting Defective Work:

9.6. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, and will also have authority to require special instruction or testing of the Work as provided in paragraph 13.9, whether or not the Work is fabricated, installed or completed.

Shop Drawings, Change Orders and Payments:

9.7. In connection with ENGINEER's responsibility for Shop Drawings and samples, see paragraphs 6.23 through 6.29 inclusive.

9.8. In connection with ENGINEER's responsibilities as to Change Orders, see Articles 10, 11 and 12.

9.9. In connection with ENGINEER's responsibilities in respect of Applications for Payment, etc., see Article 14.

Determinations for Unit Prices:

9.10. ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR. ENGINEER will review with CONTRACTOR 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 decisions thereon will be final and binding upon OWNER and CONTRACTOR, unless, within ten days after the date of any such decision, either OWNER or CONTRACTOR delivers to the other party the Agreement and to ENGINEER written notice of intention to appeal from such a decision.

Decisions on Disputes:

9.11. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and claims under Articles 11 and 12 in respect of changes in Contract Price or Contract Time will be referred initially to ENGINEER in writing with a request for a formal decision in accordance with this paragraph, which ENGINEER will render in writing within a reasonable time. Written notice of each such claim, dispute and other matter will be delivered by the claimant to ENGINEER and the other party to the Agreement promptly (but in no event later than thirty days) after the occurrence of the event giving rise thereto, and written supporting data will be submitted to ENGINEER and the other party within sixty days after such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim.

9.12. When functioning as interpreter and judge under paragraphs 9.10 and 9.11, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to paragraphs 9.10 and 9.11 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 14.16) will be 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.

Limitations on ENGINEER's Responsibilities:

9.13. Neither ENGINEER's authority to act under this Article 9 or elsewhere in the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization performing any of the Work, or to any surety for any of them.

9.14. Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of ENGINEER as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with 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 furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.15 or 9.16.

9.15 ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

9.16. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

ARTICLE 10

CHANGES IN THE WORK

10.1. Without invalidating the Agreement without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions of the Work; these will be authorized by a Written Amendment, a Change Order, or a Work Directive Change. 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).

10.2. If OWNER and CONTRACTOR are unable to agree as to the extent, if any, of an increase or decrease in the Contract Price or any extension or shortening of the Contract Time that should be allowed as a result of a Work Directive Change, a claim may be made therefore as provided in Article 11 or Article 12.

10.3. CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in paragraphs 3.4 and 3.5, except in the case of an emergency as provided in paragraph 6.22 and except in the case of uncovering Work as provided in paragraph 13.9.

10.4. OWNER and CONTRACTOR shall execute appropriate Change Orders (or Written Amendments) covering:

10.4.1. changes in the Work which are ordered by OWNER pursuant to paragraph 10.1, are required because of acceptance of defective Work under paragraph 13.13 or correcting defective Work under paragraph 13.14, or are agreed to by the parties;

10.4.2. changes in the Contract Price or Contract Time which are agreed to by the parties; and

10.4.3. changes in the Contract Price or Contract Time which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 9.11; 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 6.29.

10.5 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 Time) 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, and the amount of each applicable Bond will be adjusted accordingly.

ARTICLE 11

CHANGE OF CONTRACT PRICE

11.1. The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by CONTRACTOR shall be at his expense without change in the Contract Price.

11.2. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any claim for an increase or decrease in the Contract Price shall be based on written notice delivered by the party making the claim to the other party and to ENGINEER promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within sixty days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by claimant's written statement that the amount claimed covers all known amounts (direct, indirect and consequential) to which the claimant is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Price shall be determined by ENGINEER in accordance with paragraph 9.11 if OWNER and CONTRACTOR cannot otherwise agree on the amount involved. No claim for an adjustment in the Contract Price will be valid if not submitted in accordance with this paragraph 11.2.

11.3. The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

11.3.1. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of paragraphs 11.9.1 through 11.9.3, inclusive).

11.3.2. By mutual acceptance of a lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 11.6.2.1).

11.3.3. On the basis of the Cost of the Work (determined as provided in paragraphs 11.4 and 11.5) plus a CONTRACTOR's Fee for overhead and profit (determined as provided in paragraphs 11.6 and 11.7).

Cost of the Work:

11.4 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. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in 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 11.5:

11.4.1. 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. 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, workers' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by OWNER.

11.4.2. 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 all returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

11.4.3. Payments made by CONTRACTOR to the Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to OWNER who will then determine, with the advice of ENGINEER, which bids will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a Fee, the Subcontractor's Cost of the Work shall be determined in the same manner as CONTRACTOR's Cost of the Work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.4.4. 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.

11.4.5. Supplemental costs including the following:

11.4.5.1. The proportion of necessary transportation, travel and subsistence expense of CONTRACTOR's employees incurred in discharge of duties connected with the Work.

11.4.5.2. 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 workers, 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 CONTRACTOR.

11.4.5.3. Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof - all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

11.4.5.4. Sales, consumer, use or similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

11.4.5.5. 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.

11.4.5.6. Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by CONTRACTOR in connection with the performance and furnishing of the Work (except losses and damages within the deductible amounts of property insurance established by OWNER in accordance with paragraph 5.9), provided they have resulted from causes other than 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. 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. If, however, any such loss or damage requires reconstruction and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraph 11.6.2.

11.4.5.7. The cost of utilities, fuel and sanitary facilities at the site.

11.4.5.8. 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.

11.4.5.9. Cost of premiums for additional Bonds and insurance required because of changes in the Work and premiums for property insurance coverage within the limits of the deductible amounts established by OWNER in accordance with paragraph 5.9.

11.5. The term Cost of the Work shall not include any of the following:

11.5.1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR, whether at the site or in CONTRACTOR's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.4.1 or specifically covered by paragraph 11.4.4 - all of which are to be considered administrative costs covered by the CONTRACTOR's Fee.

11.5.2. Any part of the CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.

11.5.3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.

11.5.4. Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by sub-paragraph 11.4.5.9. above).

11.5.5. 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.

11.5.6. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.

CONTRACTOR's Fee:

11.6. The CONTRACTOR's Fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:

11.6.1. a mutually acceptable fixed fee; or if none can be agreed upon,

11.6.2. a fee based on the following percentages of the various portions of the Cost of the Work:

11.6.2.1. for costs incurred under paragraphs 11.4.2 and 11.4.2, the CONTRACTOR's Fee shall be fifteen percent;

11.6.2.2. for costs incurred under paragraph 11.4.3, the CONTRACTOR's Fee shall be five percent; and if a subcontract is on the basis of Cost of the Work Plus a Fee, the maximum allowable to CONTRACTOR on account of overhead and profit of all Subcontractors shall be fifteen percent;

11.6.2.3. no fee shall be payable on the basis of costs itemized under paragraphs 11.4.4, 11.4.5 and 11.5;

11.6.2.4. the amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR's Fee by an amount equal to ten percent of the net decrease; and

11.6.2.5. 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 11.6.2.1 through 11.6.2.4, inclusive.

11.7. Whenever the cost of any Work is to be determined pursuant to paragraph 11.4 or 11.5, CONTRACTOR will submit a form acceptable to ENGINEER and an itemized cost breakdown together with supporting data.

Cash Allowances:

11.8. It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such Subcontractors or Suppliers and for such sums within the limit of the allowances as may be acceptable to ENGINEER. CONTRACTOR agrees that:

11.8.1. The allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and

11.8.2. CONTRACTOR's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances. No demand for additional payment on account of any thereof will be valid.

Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

Unit Price Work:

11.9.1. 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 established unit prices 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 will be made by ENGINEER in accordance with paragraph 9.10.

11.9.2. 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.

11.9.3. Where 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 there is no corresponding adjustment with respect to any other item of Work and if CONTRACTOR believes that CONTRACTOR has incurred additional expense as a result thereof, CONTRACTOR may make a claim for an increase in the Contract Price in accordance with Article 11 if the parties are unable to agree as to the amount of any such increase.

ARTICLE 12

CHANGE OF CONTRACT TIME

12.1. The Contract Time may only be changed by a Change Order or a Written Amendment. Any claim for an extension or shortening of the Contract Time shall be based on written notice delivered by the party making the claim to the other party and to ENGINEER promptly (but in no event later than thirty days) after the occurrence of the event, giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within sixty days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by ENGINEER in accordance with paragraph 9.11 if OWNER and CONTRACTOR cannot otherwise agree. No claim for an adjustment in the Contract Time will be valid if not submitted in accordance with the requirements of this paragraph 12.1.

12.2. The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of CONTRACTOR if a claim is made therefore as provided in paragraph

12.1. Such delays shall include, but not be limited to, acts or neglect by OWNER or others performing additional work as contemplated by Article 7, or to fires, floods, labor disputes, epidemics, abnormal weather conditions or acts of God.

12.3. All time limits stated in the Contract Documents are of the essence of the Agreement. The provisions of this Article 12 shall not exclude recovery for damages (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs) for delay by either party.

ARTICLE 13
WARRANTY AND GUARANTEE: TEST AND INSPECTIONS;
CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

Warranty and Guarantee:

13.1. CONTRACTOR warrants and guarantees to OWNER and ENGINEER that all Work will be in accordance with the Contract Documents and will not be defective. Prompt notice of all defects shall be given to CONTRACTOR. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article 13.

Access to Work:

13.2. ENGINEER and ENGINEER's representatives, other representatives or OWNER, testing agencies and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide proper and safe conditions for such access.

Test and Inspections:

13.3. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests or approvals.

13.4. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefore, pay all costs in connection therewith and furnish ENGINEER the required certificates of inspection, testing or approval. CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with OWNER's or ENGINEER's acceptance of a Supplier of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. The cost of all inspection tests and approvals, in addition to the above which are required by the Contract Documents, shall be paid by OWNER (unless otherwise specified).

13.5. All inspections or approvals other than those required by Laws or Regulations of any public body having jurisdictional shall be performed by organizations acceptable to OWNER and CONTRACTOR (or by ENGINEER if so specified).

13.6. If any Work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observations. Such uncovering 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.

13.7. Neither observations by ENGINEER nor inspections, tests or approvals by others shall relieve CONTRACTOR from CONTRACTOR's obligations to perform the Work in accordance with the Contract Documents.

Uncovering Work:

13.8. If any Work is covered contrary to the written request of ENGINEER, if must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

13.9. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, 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 questions, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, CONTRACTOR shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals), and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, may make a claim therefore as provided in Article 11. 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 Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction; and, if the parties are unable to agree to the amount or extent thereof, CONTRACTOR may make a claim therefore as provided in Articles 11 and 12.

Owner May Stop the Work:

13.10. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers 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, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been

eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of the OWNER to exercise this right for the benefit of CONTRACTOR or any other party.

Correction or Removal of Defective Work:

13.11. If required by ENGINEER, CONTRACTOR shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or complete, or, if the Work has been rejected by ENGINEER, remove it from the site and replace it with non-defective Work. CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.

One-Year Correction Period:

13.12. 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, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions, either correct such defective Work, or, if it has been rejected by OWNER, remove it from the site and replace it with non-defective Work. 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 the rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement (including, but not limited to, fees and other charges of engineers, architects, attorneys and other professionals) will be paid by CONTRACTOR. 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.

Acceptance of Defective Work:

13.13. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER's recommendation of final payment, also ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall bear all direct, indirect and consequential 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 to include, but not be limited to, fees and charges of engineers, architects, attorneys and other professionals). 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, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefore as provided in Article 11. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

OWNER May Correct Defective Work:

13.14. If CONTRACTOR fails, within a reasonable time after written notice of ENGINEER, to proceed to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.11, 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 the CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. To the extent necessary to complete 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, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery 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 such access to the site as may be necessary to enable OWNER to exercise the rights and remedies under this paragraph. All direct, indirect and consequential costs of OWNER in exercising such rights and remedies will be charged against CONTRACTOR in an amount approved as to reasonableness by ENGINEER, 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, and, if the parties are unable to agree as to the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefore as provided in Article 22. Such direct, indirect and consequential costs will include, but not be limited to, fees and charges of engineers, architects, attorneys and other professionals, all court and arbitration costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal and replacement of CONTRACTOR's defective Work. CONTRACTOR shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies hereunder.

ARTICLE 14

PAYMENTS TO CONTRACTOR AND COMPLETION

Schedule of Values:

14.1. The schedule of values established as provided in paragraph 2.9 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.

Application for Progress Payment:

14.2. At least twenty days before each progress payment is scheduled (but more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitable stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice or other documentation warranting that OWNER has received the materials and equipment free and clear of all liens, charges, security interests and encumbrances (which are hereinafter in these General Conditions referred to as "Liens") and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect OWNER's interest therein, all of which will be satisfactory to OWNER. The amount of retainage with respect to progress payments will be stipulated in the Agreement.

CONTRACTOR's Warranty of Title:

14.3. CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by an Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

Review of Applications for Progress Payment:

14.4. ENGINEER will, within ten days after receipt of each Application for Payment, either indicated in writing a recommendation of payment and present the Application to OWNER, or return the Application to CONTRACTOR indicating, in writing, ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application. Ten days after presentation of the Application for Payment with ENGINEER's recommendation, the amount recommended will (subject to the provisions of the last sentence of paragraph 14.7) become due and, when due, will be paid by OWNER to CONTRACTOR.

14.5. ENGINEER's recommendation of any payment requested in an Application for Payment will constitute a representation by ENGINEER to OWNER, based on ENGINEER's on-site observations of the Work in progress as an experienced and qualified design professional and on ENGINEER's review of the Application for Payment and the accompanying data and schedules that the Work has progressed to the point indicated; that, to the best of the ENGINEER's knowledge, information and belief, the quality of the Work is 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 9.10, and to any other qualifications stated in the recommendation); and that CONTRACTOR is entitled to payment of the amount recommended. However, by

recommending any such payment, ENGINEER will not thereby be deemed to have represented that exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work beyond the responsibilities specifically assigned to ENGINEER in the Contract Documents or that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or OWNER to withhold payment to CONTRACTOR.

14.6. ENGINEER's recommendation of final payment will constitute an additional representation by ENGINEER to OWNER that the conditions precedent to CONTRACTOR's being entitled to final payment as set forth in paragraph 14.13 have been fulfilled.

14.7. ENGINEER may refuse to recommend the whole or any part of any payment if, in ENGINEER's opinion, it would be incorrect to make such representations to OWNER. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or test, nullify any such payment previously recommended, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

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

14.7.2. the Contract Price has been reduced by Written Amendment or Change Order,

14.7.3. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.14, or

14.7.4. of ENGINEER's actual knowledge of the occurrence of any of the events enumerated in paragraph 15.2.1 through 15.2.9 inclusive.

OWNER may refuse to make payment of the full amount recommended by ENGINEER because claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work or Liens have been filed in connection with the Work or there are other items entitling OWNER to a set-off against the amount recommended, but OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating that reason for such action.

Substantial Completion:

14.8. When CONTRACTOR considers the entire Work ready for its intended use, CONTRACTOR shall notify OWNER and ENGINEER in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) 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

Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving the reasons therefore. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objection, ENGINEER concludes that the Work is not substantially complete, ENGINEER will, within fourteen days after submission of the tentative certificate to OWNER, notify CONTRACTOR in writing, stating the reasons therefore. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will, within said fourteen days, execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion, ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

14.9. OWNER shall have the right to exclude CONTRACTOR from the Work after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

Partial Utilization:

14.10. Use by OWNER of any finished part of the Work, which has specifically been identified in the Contract Documents, or which OWNER, ENGINEER and CONTRACTOR agree constitutes a separately functioning and useable part of the Work that can be used by OWNER without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following:

14.10.1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees, CONTRACTOR will certify to OWNER and ENGINEER that said part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of

the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify OWNER and CONTRACTOR in writing giving the reasons therefore. If ENGINEER considers that part of the Work to be substantially complete, the provisions of paragraphs 14.8 and Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

14.10.2. OWNER may at any time request CONTRACTOR in writing to permit OWNER to take over operation of any such part of the Work, although it is not substantially complete. A copy of such request will be sent to ENGINEER and within a reasonable time thereafter, OWNER, CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If CONTRACTOR does not object in writing to OWNER and ENGINEER that each part of the Work is not ready for separate operation by OWNER, ENGINEER will finalize the list of items to be completed or corrected and will deliver such list to OWNER and CONTRACTOR together with a written recommendation as to the division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, utilities, insurance, warranties and guarantees for that part of the Work which will become binding upon OWNER and CONTRACTOR at the time when OWNER takes over such operation (unless they shall have otherwise agreed in writing and so informed ENGINEER). During such operation and prior to Substantial Completion of such part of the Work, OWNER shall allow CONTRACTOR reasonable access to complete or correct items on said list and to complete other related Work.

14.10.3. No occupancy or separate operation of part of the Work will be accomplished prior to compliance with the requirements of paragraph 5.15 in respect of property insurance.

Final Inspection:

14.11. Upon written notice from CONTRACTOR that the Work or an agreed portion thereof is complete, ENGINEER will conduct 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 measures as are necessary to remedy such deficiencies.

Final Application for Payment:

14.12. After CONTRACTOR has completed all such corrections to the satisfaction of ENGINEER and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in paragraph 6.19) and other documents - all as required by the Contract Documents, and after ENGINEER has indicated that the Work is acceptable (subject to the provisions of paragraph 14.16),

CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to OWNER) of all Liens arising out of or filed in connection with the Work. In lieu thereof and as approved by OWNER, CONTRACTOR may furnish receipts or releases and receipts must include all labor, services, material and equipment for which a Lien could be filed, and that 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; and consent of the surety, if any, to final payment. If any Subcontractor or Supplier fails to furnish a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

Final Payment and Acceptance:

14.13. 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 - all 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 to OWNER for payment. Thereupon ENGINEER will give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.16. Otherwise, ENGINEER will return the Application 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. Thirty days after presentation to OWNER of the Application and accompanying documentation, in appropriate form and substance, and with ENGINEER's recommendation and notice of acceptability, the amount recommended by ENGINEER will become due and will be paid by OWNER to CONTRACTOR.

14.14. If, through no fault of the 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 the 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 completed 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.

Contractor's Continuing Obligation:

14.15. CONTRACTOR's obligation to perform and complete that Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by ENGINEER, nor the issuance of a certificate of Substantial Completion, nor any payment by OWNER to CONTRACTOR under the Contract Document, nor any use or occupancy of the Work or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor the issuance of a notice of acceptability by ENGINEER pursuant to paragraph 14.13, nor any correction of defective Work by OWNER will constitute an acceptance of Work not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents (except as provided in paragraph 14.16).

Waiver of Claims:

14.16. The making and acceptance of final payment will constitute:

14.16.1. a waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.11 or from failure to comply with the Contractor Documents or in terms of any special guarantees specified therein; however, it will not constitute a waiver by OWNER of any rights in respect of CONTRACTOR's continuing obligations under the Contract Documents; and

14.16.2. a waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

ARTICLE 15
SUSPENSION OF WORK AND TERMINATION

Owner May Suspend Work:

15.1. OWNER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety 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 increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if CONTRACTOR makes an approved claim therefore as provided in Articles 11 and 12.

Owner May Terminate:

15.2. Upon the occurrence of any one or more of the following events:

15.2.1. if CONTRACTOR commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if CONTRACTOR takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;

15.2.2. if a petition is filed against CONTRACTOR under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency;

15.2.3. if CONTRACTOR makes a general assignment for the benefit of creditors;

15.2.4. if a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of CONTRACTOR is for the purpose of enforcing a Lien against such property or for the purpose of general administration of such property for the benefit of CONTRACTOR's creditors;

15.2.5. if CONTRACTOR admits in writing an inability to pay its debts generally as they become due;

15.2.6. if CONTRACTOR persistently fails 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 2.9 as revised from time to time);

15.2.7. if CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;

15.2.8. if CONTRACTOR disregards the authority of ENGINEER; or

15.2.9. if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

OWNER may, after giving CONTRACTOR (and the surety, if there be one) seven days' written notice and to the extent permitted by Laws and Regulations, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), 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 the direct, indirect and consequential costs of completing the Work (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals and court and arbitrator costs) such excess will be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such costs incurred by OWNER will be approved as to reasonableness by ENGINEER and incorporated in a Change Order, but 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. Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.4. Upon seven days' written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement. In such case, CONTRACTOR shall be paid for all Work executed and any such expense sustained plus reasonable termination expenses, which will include, but not be limited to, direct, indirect and consequential costs (including, but not limited to, fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs).

Contractor May Stop Work or Terminate:

15.5. If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within thirty days after it is submitted, or OWNER fails for thirty days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days' written notice to OWNER and ENGINEER, terminate the Agreement and recover from OWNER payment for all Work executed and any expense sustained plus reasonable termination expenses. In addition and in lieu of terminating the Agreement, if ENGINEER has failed to act on an Application for Payment or OWNER has failed to make any payment as aforesaid, CONTRACTOR may, upon seven days' written notice to OWNER and ENGINEER, stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve CONTRACTOR of the obligations under paragraph 6.29 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with OWNER.

ARTICLE 16

ARBITRATION

16.1. All claims, disputes and other matters in question between OWNER and CONTRACTOR arising out of, or relating to the Contract Documents or the breach thereof (except for claims which have been waived by the making or acceptance of final payment as provided by paragraph 14.16) will be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then obtaining subject to the limitations of this Article 16. This agreement so to arbitrate and any other agreement or consent to arbitrate entered into in accordance herewith as provided in this Article 16 will be specifically enforceable under the prevailing law of any court having jurisdiction.

16.2. No demand for arbitration of any claim, dispute or other matter that is required to be referred to ENGINEER initially for decision in accordance with paragraph 9.11 will be made until the earlier of (a) the date on which ENGINEER has rendered a decision or (b) the tenth day after the parties have presented their evident to ENGINEER if a written division has not been rendered by ENGINEER before that date. No demand for arbitration of any such claim, dispute or other matter will be made later than thirty days after the date on which ENGINEER has rendered a written decision in respect thereof in accordance with paragraph 9.11; and the failure to demand arbitration within said thirty days' period shall result in ENGINEER's decision being final and binding upon OWNER and CONTRACTOR. If ENGINEER renders a decision after arbitration proceedings have been initiated, such decision may be entered as evident but will not supersede the arbitration proceedings, except where the decision is acceptable to the parties concerned. No demand for arbitration of any written decision of ENGINEER rendered in accordance with paragraph 9.10 will be made later than ten days after the party making such demand has delivered written notice of intention to appeal as provided in paragraph 9.10.

16.3. Notice of the demand for arbitration will be filed in writing with the other party to the Agreement and with the American Arbitration Association, and a copy will be sent to ENGINEER for information. The demand for arbitration will be made within the thirty-day or ten-day period specified in paragraph 16.2 as applicable, and in all other cases within a reasonable time after the claim, dispute or other matter in question has arisen, and in no event shall any such demand be made after the date when institution of legal or equitable proceedings based on such claim, dispute or other matter in questions would be barred by the applicable statute of limitations.

16.4. No arbitration arising out of or relating to the Contract Documents shall include by consolidation, joinder or in any other matter any other person or entity (including ENGINEER, ENGINEER's agents, employees or consultants) who is not a party to this contract unless:

16.4.1. the inclusion of such other person or entity is necessary if complete relief is to be afforded among those who are already parties to this arbitration.

16.4.2. such other person or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration and which will arise in such proceedings, and

16.4.3. the written consent of the other person or entity sought to be included and of OWNER and CONTRACTOR has been obtained for such inclusion, which consent shall make specific reference to this paragraph; but no such consent shall constitute consent to arbitration of any dispute not specifically described in such consent or to arbitration with any party not specifically identified in such consent.

16.5. The award rendered by the arbitrators will be final, judgment may entered upon it in any court having jurisdiction thereof, and will not be subject to modification or appeal except to the extent permitted by Sections 10 and 11 of the Federal Arbitration Act (9 U.S. C. SS10, 11).

ARTICLE 17

MISCELLANEOUS

Giving Notice:

17.1. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given 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 if delivered at or sent by registered by certified mail, postage prepaid, to the last business address known to the giver of the notice.

Computation of Time:

17.2.1. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.2.2. A calendar day of twenty-four hours measured from midnight to the next midnight shall constitute a day.

General:

17.3. Should OWNER or CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim will be made in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph 17.3 shall not be construed as a substitute for a waiver of the provisions of any applicable statute of limitations or repose.

17.4. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 6.30, 13.1, 13.12, 13.14, 14.3 and 15.2 and all of the rights and remedies available to OWNER and ENGINEER thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. All representations, warranties and guarantees made in the Contract Documents will survive final payment and determination or completion of the Agreement.

SUPPLEMENTARY CONDITIONS TO THE STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT*

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

SC-1.

The terms used in these Supplementary Conditions which are defined in the Standard General Conditions of the Construction Contract have the meanings assigned to them in the General Conditions.

SC-2.

Add a new paragraph immediately before paragraph 2.1 of the General Conditions which is to read as follows:

The Owner, before awarding the Contract, may request the Bidder submit written evidence of his ability to perform the Work, such as financial data, including a recent financial statement prepared by a certified public accountant and evidence of the necessary organization, capital, equipment, and machinery to complete the Work.

SC-2.7.

Delete paragraph 2.7 of the General Conditions in its entirety and insert the following in its place:

Before any Work at the site is started, Contractor shall deliver to Owner, with a copy to Engineer, certificates (and other evidence of insurance requested by Owner) which Contractor is required to purchase and maintain in accordance with paragraphs 5.3, 5.4 and 5.5 of the General Conditions.

SC-4.2.1.

Delete paragraphs 4.2.1 and 4.2.2 of the General Conditions and insert the following:

The Contractor acknowledges that he has investigated prior to bidding and satisfied himself as to the conditions affecting the Work, including, but not restricted to, those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, river stages, tides, water tables or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the Work. The Contractor further acknowledges that he has satisfied himself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonable ascertainable from an inspection of the site, including all exploratory work done on behalf of the Owner on the site or any contiguous site, as well as from information presented by the Drawings and Specifications made a part of this Contract, or any other information made available to him prior to receipt of Bids. Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the Work.

Investigations of subsurface conditions at the site have been made for the purpose of design. The results are available for review by prospective bidders, but are not a part of the Contract Documents. The Owner and Engineer assume no responsibility with respect to the sufficiency or interpretation, and there is no guarantee, either expressed or implied, the conditions indicated are representative of those existing throughout the Work or any part of it, no that unforeseen developments may not occur. Any interpretation, opinion or conclusion made by the Contractor are his own and the Owner and Engineer shall be held harmless from any use of these investigations.

SC-4.2.3

Delete paragraphs 4.2.3, 4.2.4, 4.2.5 and 4.2.6 of the General Conditions.

SC-4.3.1.

Delete paragraphs 4.3.1 and 4.3.2 of the General Conditions in its entirety and insert the following in its place:

The information and data shown or indicated in the Contract Documents with respect to existing 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 or by others. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data. Contractor shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Facilities shown or indicated in the Contract Documents, for coordination of the Work with the owners of such Underground Facilities during construction, for the safety and protection thereof as provided in paragraph 6.20 and repairing any damage thereto resulting from the Work, the cost of all of which will be considered as having been included in the Contract Price.

SC-5.3

The limits of liability for the insurance required by paragraph 5.3 of the General Conditions shall provide coverage for not less than the following amounts:

- A. Worker's Compensation: Coverage to apply for all employees for Statutory Limits in compliance with the applicable state and federal laws. The policy must include Employer's Liability with a minimum limit of \$500,000 each accident.
- B. Comprehensive General Liability: Shall have minimum limits of *\$500,000 Per Occurrence Combined Single Limit for Bodily Injury Liability and Property Damage Liability.. This shall include premises and/or Operations, Independent Contractors, Products and/or Completed Operations, Broad Form Property Damage and XCU Coverage, and a Contractual Liability Endorsement.
- C. Business Auto Policy: Shall have minimum limits of *\$500,000 Per Occurrence Combined Single Limit for Bodily Injury Liability and Property Damage Liability. This shall include Owner Vehicles, Hired and Non-Owned Vehicles, and Employee Non-Ownership.

***If any law or regulation requires an amount greater than set out in these regulations, the Contractor shall provide such greater amount.**

SC-5.5.

Delete paragraph 5.5 of the General Conditions in its entirety and insert the following in its place:

Contractor shall include the Owner and Engineer and their consultants, agents and employees in the Contractor's general liability and automobile liability policies as additional insured.

SC-5.6

Delete paragraph 5.6 of the General Conditions in its entirety.

SC-5.7.

Delete paragraph 5.7 of the General Conditions in its entirety.

SC-5.9.

Delete paragraph 5.9 of the General Conditions in its entirety.

SC-5.10.

Delete paragraph 5.10 of the General Conditions in its entirety.

SC-5.11.

Delete paragraph 5.11 of the General Conditions in its entirety.

SC-5.12.

Delete paragraph 5.12 of the General Conditions in its entirety.

SC-5.13.

Delete paragraph 5.13 of the General Conditions in its entirety.

SC-5.14.

Delete paragraph 5.14 of the General Conditions in its entirety and insert the following in its place:

If Owner has any objection to the coverage afforded by or other provisions of the insurance required to be purchased and maintained by Contractor in accordance with paragraphs 5.3, 5.4 and 5.5 on the basis of its not complying with the Contract Documents, Owner shall notify Contractor in writing thereof within ten days of the date of delivery of such certificates to Owner in accordance with paragraph 2.7. Contractor shall provide to the Owner such additional information in respect of insurance as may reasonable be requested. Failure by Owner to give any such notice of objection within the time provided shall constitute acceptance of such insurance purchased as complying with the Contract Documents.

SC-6.13.

Delete paragraph 6.13 of the General Conditions in its entirety and insert the following in its place:

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 charges of utility owners for connections to the Work. During performance of the Contract, the Contractor shall keep all permits on the project site. Contractor shall not be responsible for paying impact fees or other connection charges associated with providing utility service to residential or commercial units as the case maybe.

SC-6.28.1.

Add a new paragraph immediately after paragraph 6.28 of the General Conditions which is to read as follows:

Five bound sets of the manufacturer's Operation and Maintenance Manuals for each piece of equipment shall be submitted to the Engineer. Manuals shall contain, but not be limited to, the following:

- A. Detailed assembly drawings, clear and concise instructions for the operation, adjustment, overhaul, troubleshooting and other maintenance of the equipment.
- B. Lubrication schedules and types of lubricants for all equipment requiring lubrication.

- C. Parts list for the equipment, with catalog numbers, and other data necessary for ordering replacement parts. Instructions on parts lists shall have been prepared for the specific equipment furnished and shall not refer to other types or models of similar equipment.

SC-6.30.

Delete paragraphs 6.30 through 6.31 of the General Conditions and insert the following:

In consideration of Ten Thousand dollars (\$10,000.00) receipt and sufficiency of which is accepted through the signing of this document by an authorized party or agent shall hold harmless and defend Owner and Engineer and their consultants, agents and employees from all suits and actions, including attorneys fees and all costs of litigation and judgments of any name and description arising out of or incidental to the performance of this contract or work performed thereunder up to the sum of Five Million dollars (\$5,000,000.00)

This provision shall also pertain to any claims brought against the Owner and Engineer and their consultants, agents and employees by any other employees of the named Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them.

The Contractor's obligation under this provision shall not be limited in any way by the agreed upon contract price as shown in this contract or the Contractor's limit of, or lack of, sufficient insurance protection.

The first Ten Thousand dollars (\$10,000.00) of money received on the contract price is considered as payment of this obligation by the Owner.
(Reference: F.S. s725.06).

SC-8.5.

Delete paragraphs 8.5 - 8.8 of the General Conditions in its entirety.

SC-12.4.

Add a new paragraph immediately after paragraph 12.3 of the General Conditions which is to read as follows:

The Owner shall charge to Contractor and may deduct from the periodical and final payment for the Work all engineering and inspection expenses incurred by Owner in connection with any overtime work. For any such overtime during the regular specified construction period beyond the regular 8-hour day and for any time worked on Saturday, Sunday or holidays, the charges for such personnel will be as shown in column 2 of the schedule.

The Owner will require payment by Contractor to the Owner of certain engineering and inspection expenses in the event the Contractor exceeds the Contract Time regardless whether Owner should grant Contractor an extension of time.

The amount of said engineering and inspection expense for work associated with a time extension shall be computed and determined on the basis of the per hour schedule of charges for a 40-hour straight time work week as shown in Column 1 of the schedule. For any overtime beyond the regular 8-hour day and for any time worked on Saturday, Sunday, or holidays, the charges for such personnel will be as shown in Column 2 of the schedule. The payments are independent of any liquidated damages which the Owner may assess.

	(1) Straight Time for each hour	(2) Overtime for each hour
Senior Engineer	\$170.00	
\$225.0011440.17		
Construction Inspector	\$105.00	\$157.50

SC-13.5.

Delete the last sentence in paragraph 13.5 of the General Conditions in its entirety.

SC-14.16.

Delete paragraphs 14.16, 14.16.1 and 14.16.2 and insert the following:

SC-7

Waiver of Claims:

SC-14.16. The acceptance of final payment will constitute a waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

SC-15.5.

Delete Paragraph 15.5 - Contractor May Stop Work or Terminate, in its entirety.

SC-15.6.

Add a new paragraph immediately after Paragraph 15.5 of the General Conditions, which is to read as follows:

DELAY/TIME EXTENSIONS

Contractor expressly agrees that an extension of time shall constitute Contractor's sole and exclusive remedy against Owner and Engineer should Contractor be delayed, interfered with, disrupted or hindered in his work by acts or omissions of Owner or Engineer, unless such delay, interference, disruption or hindrance is the result of Owner's or Engineer's bad faith or active interference with the Contractor's work. In lieu of any compensation for delay, interference, disruption or hindrance, Owner hereby expressly grants subcontractor the right to claim appropriate extensions of time should Contractor be delayed, interfered with, disrupted or hindered in his work by Owner or Engineer. In such case, Owner shall grant Contractor cause and then only if written notice of delay interference, disruption or hindrance is made to Owner within 72 hours from the time of the beginning of the event giving rise to the delay, interference, disruption or hindrance. Contractor's failure to give such written notice shall constitute a waiver of Contractor's right to claim an extension of time for such delay, disruption, interference or hindrance.

SC-16.

Delete Article 16 in its entirety.



SPECIFICATIONS

SECTION 01010
SUMMARY OF WORK

PART 1 - GENERAL

1.01. SECTION INCLUDES

- A. Work by Owner
- B. Contractor use of site.
- C. Future work.
- D. Work Sequence
- E. Owner Occupancy

1.02 WORK BY OWNER

- A. Items noted "NIC" (Not in Contract), will be furnished and installed by Owner or Owner's Contractor.

1.03 CONTRACTOR USE OF SITE

- A. Limit use of site to allow:
 - 1. Owner occupancy
 - 2. Work by Others and Work by Owner
- B. Construction Operations: Limited to areas noted within Special Conditions.

1.04 FUTURE WORK

- A. Provide for future installations and connections as noted within the plans.
- B. Provide for future connections for subsequent phases of construction.

1.05 WORK SEQUENCE

- A. Construct Work in phases to accommodate Owner's occupancy requirements during the construction period, coordinate construction schedule and operations with Owner and/or Owner's Representative.

1.06 OWNER OCCUPANCY

- A. Cooperate with Owner to minimize conflict, and to facilitate Owner's operations.
- B. Schedule the Work to accommodate this requirement.

END OF SECTION

SECTION 01027
APPLICATION FOR PAYMENT

PART I - GENERAL

1.01 SECTION INCLUDES

- A. Procedures for preparation and submittal of Application for Payment.

1.02 FORMAT

- A. EJCDC 1910-8-E--Application for Payment, including continuation sheets when required, or approved equal.
- B. For each item, provide a column for listing Item Number, Description of Work, Scheduled Value, Previous Applications, Work in Place under this Application, Authorized Change Orders, Total Completed to Date of Application, Percentage of Completion, Balance to Finish, and Retainage.

1.03 PREPARATION OF APPLICATIONS

- A. Present required information in typewritten form or electronic media printout.
- B. Execute certification by signature of authorized officer.
- C. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed.
- D. List each authorized Change Order as an extension on continuation sheet, listing Change Order number and dollar amount as for an original item of Work.
- E. Prepare Application for Final Payment as specified in Section 01700.

1.04 SUBMITTAL PROCEDURES

- A. Submit three certified copies of each Application for Payment.
- B. Submit within time frames outlined within contract agreement.

END OF SECTION

SECTION 01028
CHANGE ORDER PROCEDUREIS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Submittals
- B. Documentation of change in Contract Sum/Price and Contract Time.
- C. Change procedures.
- D. Construction Change Authorization
- E. Unit price change order
- F. Time and material change order.
- G. Execution of change orders.
- H. Correlation of Contractor submittals.

1.02 SUBMITTALS

- A. Submit name of the individual authorized to receive change documents, and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
- B. Change Order Forms: EJCDC 1910-8-B Change Order, or as included in the documents.

1.03 DOCUMENTATION OF CHANGE IN CONTRACT SUM/PRICE AND CONTRACT TIME

- A. Maintain detailed records of work done on a time and material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs of changes in the Work.
- B. Document each quotation for a change in cost or time with sufficient data to allow evaluation of the quotation.

- C. On request, provide additional data to support computations:
 - 1. Quantities of products, labor, and equipment.
 - 2. Taxes, insurance, and bonds.
 - 3. Overhead and profit.
 - 4. Justification for any change in Contract Time.
 - 5. Credit for deletions from Contract, similarly documented.
- D. Support each claim for additional costs, and for work done on a time and material basis, with additional information:
 - 1. Origin and date of claim.
 - 2. Dates and times work was performed, and by whom.
 - 3. Time records and wage rates paid.
 - 4. Invoices and receipts for products, equipment, and subcontracts, similarly documented.

1.04 CHANGE PROCEDURES

- A. The Engineer will advise of minor changes in the Work not involving an adjustment to Contract Sum/Price or Contract Time as authorized by EJCDC 1910-B Paragraph 9.5 by issuing supplemental instructions.
- B. The Engineer may issue a Notice of Change which includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change and the period of time during which the requested price will be considered valid. Contractor will prepare and submit an estimate within four (4) days.
- C. The Contractor may propose a change by submitting a request for change to the Engineer, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum/Price and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors.

1.05 CONSTRUCTION CHANGE AUTHORIZATION

- A. Engineer may issue a document, signed by the Owner, instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
- B. The document will describe changes in the Work, and will designate method of determining any change in Contract Sum/Price or Contract Time.
- C. Promptly execute the change in Work.

1.06 UNIT PRICE CHANGE ORDER

- A. For pre-determined unit prices and quantities, the Change Order will be executed on a fixed unit price basis.
- B. For unit costs or quantities of unit of work which are not pre-determined, execute Work under a Construction Change Authorization.
- C. Changes in Contract Sum/Price or Contract Time will be computed as specified for time and Material Change Order.

1.07 TIME AND MATERIAL CHANGE ORDER

- A. Submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.
- B. Engineer will determine the change allowable in Contract Sum/Price and Contract Time as provided in the Contract Documents.
- C. Maintain detailed records of work done on Time and Material basis.
- D. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.

1.08 EXECUTION OF CHANGE ORDERS

- A. Execution of Change Orders: Engineer will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

1.09 CORRELATION OF CONTRACTOR SUBMITTALS

- A. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum/Price.

- B. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust time for other items of work affected by the change, and resubmit.
- C. Promptly enter changes in Project Record Documents.

END OF SECTION

SECTION 01030
ALTERNATES

PART I - GENERAL

1.01 SECTION INCLUDES

- A. Submission procedures.
- B. Documentation of changes to Contract Sum/Price and Contract Time.

1.02 REQUIREMENTS

- A. Submit Alternates with full description of the proposed Alternate and the affect on adjacent or related components.
- B. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- C. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.03 SELECTION AND AWARD OF ALTERNATIVES

- A. Indicate variation of Bid Price for Alternates described below and list in Bid Form Document or any supplement to it, which requests a "difference" in Bid Price by adding to or deducting from the base bid price.
- B. Bid may be evaluated on base bid price. After determination of preferred bidder, consideration will be given to Alternates and Bid Price adjustments.

1.04 SCHEDULE OF ALTERNATES

- A. See Bid Forms for listing of Alternate Bid.

END OF SECTION

SECTION 01039
COORDINATION & MEETINGS

PART I - GENERAL

1.01 SECTION INCLUDES

- A. Coordination.
- B. Field Engineering.
- C. Alteration project procedures.
- D. Cutting and patching.
- E. Preconstruction conference.
- F. Site mobilization conference.
- G. Progress meetings.
- H. Preinstallation conferences.

1.02 COORDINATION

- A. Coordinate scheduling, submittals, and Work of the various Sections of specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Verify that utility requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordinate space requirements, indicated diagrammatically on Drawings. Follow routing shown for pipes and conduit as closely as practicable. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. Coordinate completion and clean up of Work of separate Sections in preparation for Substantial Completion.

- E. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.03 FIELD ENGINEERING

- A. Employ a Land Surveyor registered in the State of Florida and acceptable to the Architect/Engineer.
- B. Contractor to locate and protect survey control and reference points.
- C. Control datum for survey is that established by Owner provided survey.
- D. Provide field engineering services. Establish elevations, lines, and levels, utilizing recognized engineering survey practices.
- E. Submit a copy of registered site drawing and certificate signed by the Land Surveyor that the elevations and locations of the Work are in conformance with the Contract Documents.

1.04 ALTERATION PROJECT PROCEDURES

- A. Materials: As specified in product Sections; match existing products and work for patching and extending work.
- B. Remove, cut, and patch work in a manner to minimize damage and to provide a means of restoring products and finished to specified condition.
- C. Where new work abuts or aligns with existing, perform a smooth and even transition. Patched work to match existing adjacent work in texture and appearance.
- D. When finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Engineer.

1.05 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching.
- B. Execute cutting, fitting and patching, including excavation and fill, to complete Work, and to:
 - 1. Fit the several parts together, to integrate with other Work.
 - 2. Uncover Work to install or correct ill-timed Work.
 - 3. Remove and replace defective and non-conforming Work.

- C. Execute work by methods which will avoid damage to other Work, and provide proper surfaces to receive patching and finishing.
- D. Cut rigid materials using masonry saw or core drill.
- E. Restore Work with new products in accordance with requirements of Contract Documents.
- F. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

1.05 PRE-CONSTRUCTION CONFERENCE

- A. Owner or Owner's Engineer will schedule a conference after Notice of Award.
- B. Attendance Required: Owner, Owner's Engineer, and Contractor.
- C. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractor, list of products, Schedule of Values, and progress schedule.
 - 5. Designation of personnel representing the parties in Contract, and the Architect/Engineer.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and Contract closeout procedures.
 - 7. Scheduling.
 - 8. Scheduling activities of various subcontractor's.
 - 9. Use of premises by Owner and Contractor.
 - 10. Owner's requirements and partial occupancy.
 - 11. Construction facilities and controls provided by Owner.

1.06 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum semi-monthly intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings, record minutes, and distribute copies within two days to Architect/Engineer, Owner, participants, and those affected by decisions made.
- C. Attendance Required: Job superintendent, major Subcontractors and suppliers, Architect/Engineer, as appropriate to agenda topics for each meeting.

- D. Agenda:
1. Review minutes of previous meetings.
 2. Review of Work progress.
 3. Field observations, problems, and decisions.
 4. Identification of problems which impede planned progress.
 5. Review of submittals, schedule, and status of submittals.
 6. Review of off-site fabrication and delivery schedules.
 7. Maintenance of progress schedule.
 8. Corrective measures to regain projected schedules.
 9. Planned progress during succeeding work period.
 10. Coordination of projected progress.
 11. Maintenance of quality and work standards.
 12. Effect of proposed changes on progress schedule and coordination.
 13. Other business relating to Work.

1.07 PRE-INSTALLATION CONFERENCES

- A. When required in individual specification Section, convene a pre-installation conference at work site prior to commencing work of the Section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific Section.
- C. Notify Architect/Engineer four days in advance of meeting date.
- D. Prepare agenda, preside at conference, record minutes, and distribute copies within two days after conference to participants, with two copies to Architect/Engineer.
- E. Review conditions of installation, preparation and installation procedures, and coordination with related work.

END OF SECTION

SECTION 01300
SUBMITTALS

PART I - GENERAL

1.01 PROCEDURES

- A. Deliver four copies of submittals to Engineer at address listed on cover sheet of Specifications.
- B. Transmit each item under Engineer-accepted form. Identify Project, Contractor, subcontractor, major supplier; identify pertinent Drawing sheet and detail number and Specification Section number as appropriate. Identify deviations from Contract Document. Approve all submittals prior to forwarding to Engineer by stamping and signing approval stamp. Provide space for Contractor and Engineer review stamps.
- C. After Engineer review of submittal, revise and resubmit as required, identifying changes made since previous submittal.
- D. Distribute copies of reviewed submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.

END OF SECTION

SECTION 01310
PROGRESS SCHEDULES

PART I - GENERAL

1.01 SECTION INCLUDES

- A. Format.
- B. Content.
- C. Revisions to schedules.
- D. Submittals.

1.02 FORMAT

- A. Prepare Schedules as a horizontal bar chart with separate bar for each major portion of Work or operation, identifying first work day of each week.
- B. Sequence of Listings: The chronological order of the start of each item of Work.
- C. Scale and Spacing: To provide space for notations and revisions.
- D. Sheet Size: As required to clearly depict all required information.

1.03 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by Specification Section number.
- C. Identify work of separate stages and other logically grouped activities.
- D. Provide sub-schedules to define critical portions of the entire schedule.
- E. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.

1.04 REVISIONS TO SCHEDULES

- A. Indicate progress of each activity of submittal, and project completion date of each activity.

- B. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
- C. Provide narrative report to define problem areas, anticipated delays, and impact on schedule. Report corrective action taken, or proposed, and its effect including the effect of changes on schedules of separate contractors.

1.05 SUBMITTALS

- A. Submit initial Schedules within ten (10) days after date of Owner-Contractor Agreement. After review, resubmit required revised data within five (5) days.
- B. Submit revised Progress Schedules with each Application for Payment.

1.06 DISTRIBUTION

- A. Distribute copies of reviewed Schedules to project site file, Subcontractors, suppliers, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in Schedules.

END OF SECTION

SECTION 01340
SHOP DRAWINGS, PRODUCT DATA, & SAMPLES

PART I - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures for submittals.

1.02 SHOP DRAWINGS

- A. Present in a clear and thorough manner. Title each drawing with Project name and number; identify each element of drawings by reference to sheet number and specification section of Contract Documents.
- B. Identify field dimensions; show relation to adjacent or critical features or Work or products.

1.03 PRODUCT DATA

- A. Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.
- B. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.

1.05 CONTRACTOR REVIEW

- A. Review submittals prior to transmittal; determine and verify field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittal with requirements of Contract Documents.
- B. Coordinate submittals with requirements of Work and of Contractor Documents.
- C. Sign each sheet of shop drawings and product data, and each sample label to certify compliance with requirements of Contract Documents. Notify Engineer in writing at time of submittal, of any deviations from requirements of Contract Documents.
- D. Do not fabricate products or begin work which requires submittals until return of submittal with Engineer acceptance.

1.06 SUBMITTAL REQUIREMENTS

- A. Transmit submittals in accordance with approved Progress Schedule, and in such sequent to avoid delay in the Work or work of other Contracts.
- B. Apply Contractor's stamp, signed certifying to review and approval, verification of products, field dimensions and field construction criteria, and coordination of information with requirements of Work and Contract Documents.
- C. Coordinate submittals into logical groupings to facilitate interrelation of the several items:
 - 1. Finishes which involve Engineer selection of colors, textures, or patterns.
 - 2. Associated items which require correlation for efficient function or for installation.
- D. Provide six (6) copies of all submittals under transmittal letter. Identify Project by title and number.

1.07 RESUBMITTALS

- A. Make resubmittals under procedures specified for initial submittals; identify changes made since previous submittal.

1.08 ENGINEER REVIEW

- A. Engineer will review shop drawings, product data, and samples and return submittals within 14 calendar days of Engineer's receipt under normal circumstances. Engineer will notify Contractor if additional review time is required.

1.09 DISTRIBUTION

- A. Distribute reproductions of shop drawings, copies of product data, and samples, which bear Engineer's review stamp, to job site file, Record Documents file, subcontractors, suppliers, and other entities requiring information. If additional copies are required by the Contractor, he shall submit additional copies to the Engineer.

1.10 OPERATION AND MAINTENANCE DATA

- A. Submit six sets prior to final inspection, bound in 8½ x 11 inch three-ring side binders with durable plastic covers. Sets shall be divided into two parts:

Part 1: Directory, listing names, addresses and telephone numbers of Engineer and Contractor.

Part II: Operation and maintenance instructions, arranged by system. For each system, give names, addresses, and telephone numbers of subcontractor and suppliers. List:

- a. Appropriate design criteria.
- b. List of equipment.
- c. Parts list.
- d. Operation instructions.
- e. Maintenance instructions, equipment.
- f. Maintenance instructions, finishes.
- g. Shop drawings and shop data.
- h. Warranties.

END OF SECTION

SECTION 01400
QUALITY CONTROL

PART I - GENERAL

1.01 SECTION INCLUDES

- A. Quality assurance and control of installation.
- B. References
- C. Inspection and testing laboratory services.

1.02 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to product Work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.03 REFERENCES

- A. Conform to reference standard by date of issue current on date of Contract Documents.
- B. Obtain copies of standards when required by Contract Documents.
- C. Should specified reference standards conflict with Contract Documents, request clarification for Engineer before proceeding.

- D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.04 INSPECTION AND TESTING LABORATORY SERVICES

- A. Contractor will appoint, employ, and pay for services of an independent firm to perform inspection and testing. Name and qualifications of testing firm to be submitted to Engineer for approval.
- B. The independent firm will perform inspections, tests, and other services specified in individual specification Sections and as required by the Engineer.
- C. Reports will be submitted by the independent firm to the Engineer, in duplicate, indicating observations and results of tests and indicating compliance and non-compliance with Contract Documents.
- D. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.
 - 1. Notify Architect/Engineer and independent firm 24 hours prior to expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.
- E. Retesting required because of non-conformance to specified requirements shall be performed by the same independent firm on instructions by the Engineer. Contractor shall be responsible for all retesting costs.

END OF SECTION

SECTION 01700
CONTRACT CLOSEOUT

PART I - GENERAL

1.01 SECTION INCLUDES

- A. Closeout procedures.
- B. Final cleaning.
- C. Adjusting.
- D. Project record documents.
- E. Operation and maintenance data.
- F. Warranties.
- G. Spare parts and maintenance materials.

1.02 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect/Engineer's inspection.
- B. Provide submittals to Engineer that are required by governing or other authorities.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

1.03 FINAL CLEANING

- A. Execute final cleaning prior to final inspections.
- B. Clean debris from drainage systems.
- C. Clean site; sweep paved areas, rake clean landscaped surfaces.
- D. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.04 ADJUSTING

- A. Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.05 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Contract Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other Modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and Modifications.
- E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction, including:
 - 1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 2. Field changes of dimension or detail.
 - 3. Details not on original Contract Drawings.
- F. Submit reproducible documents to Engineer with claim for final Application for Payment.

1.06 WARRANTIES

- A. Provide duplicate notarized copies.
- B. Execute and assemble documents from Subcontractors, suppliers, and manufacturers.
- C. Provide Table of Contents and assemble in binder with durable plastic cover.
- D. Submit prior to final Application for Payment.

- E. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

END OF SECTION

SECTION 01701
GOVERNMENT SPECIFICATIONS

All work described herein and indicated on the accompanying drawings entitled PROJECT as designed by the Owner or Engineer or as specified herein, shall conform to:

1. Florida Department of Transportation Standard Specifications for Road & Bridge Construction(latest edition).
2. Florida Department of Transportation Roadway and Traffic Design Standards (latest edition).
3. Criteria for Water and Sanitary Sewer Systems within appropriate Governmental Agency.
4. Appropriate Governmental Agency criteria for potable water distribution systems.
5. Appropriate Govenmental Agency Subdivision Ordinance, latest edition.

END OF SECTION

SECTION 01740
WARRANTIES AND BONDS

PART I - GENERAL

1.01 SECTION INCLUDES

- A. Preparation and submittal.
- B. Time and schedule of submittals.

1.02 FORM OF SUBMITTALS

- A. Bind in commercial quality binders with hardback, cleanable, plastic covers.
- B. Label cover of each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor; and name of responsible principal.
- C. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of the product or work item.
- D. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.

1.03 PREPARATION OF SUBMITTALS

- A. Obtain warranties and bonds, executed in duplicate by responsible subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item or work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial Completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.

1.04 TIME OF SUBMITTALS

- A. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.
- B. Make other submittals within ten days after Date of Substantial Completion, prior to final Application for Payment.
- C. For items of Work when acceptance is delayed beyond Date of Substantial Completion, submit within ten days after acceptance, listing the date of acceptance as the beginning of the warranty period.

END OF SECTION

SECTION 01800
TOWN ORDINANCES - NOISE ORDINANCES

§ 48-1 UNUSUAL AND LOUD NOISE PROHIBITED.

(a) It shall be unlawful for any person, firm or corporation to create or assist in creating any unreasonably loud and disturbing noise in the town. Noise of such character, intensity and duration as to be detrimental to the public health, welfare and peace is prohibited.

(b) The following acts, among others, are declared to be loud and disturbing noises in violation of this section, but this enumeration shall not be deemed to be exclusive:

(1) The sounding of any horn or signal device on any automobile, motorcycle, bus or other vehicle, except as a danger signal, so as to create any unreasonably loud or harsh sound or the sounding of such device for an unreasonable period of time, or the use of any gong or siren upon any vehicle, other than police, fire or other emergency vehicle.

(2) The playing of any radio (except in a motor vehicle as defined in Section 316.003, Florida Statutes), phonograph, or other musical instrument in a manner or with such volume, particularly during hours between 11:00 p.m. and 7:00 a.m. as to annoy or disturb the quiet, comfort, or repose of any person in any dwelling, hotel or other type of residence.

(3) The keeping of any animal or bird which, by causing frequent or long continued noise, shall disturb the comfort and repose of any person in the vicinity.

(4) The use of any automobile, motorcycle or vehicle so out of repair, so loaded or in a manner as to create loud grating, grinding, rattling or other noise.

(5) The blowing of any steam whistle attached to any stationary boiler or engine, except to give notice of the time to begin or stop work or as a warning of danger.

(6) The sounding of any bell or gong (except emergency equipment) attached to any building or premises which disturbs the quiet or repose of persons in the vicinity thereof.

(7) The conducting, operating or maintaining of any garage or service station in any residential area so as to cause loud or offensive noises to be emitted therefrom between the hours of 10:00 p.m. and 7:00 a.m. on weekdays or on Sundays.

(8) The creation of any excessive noise on any street adjacent to any school, institution of learning, or court while the same are in session, or within 150 feet of any hospital, which unreasonably interferes with the working of those institutions, provided conspicuous signs are displayed in those streets indicating that the area is a school, court or hospital area.

(9) The creation of any excessive noise on Sundays on any street adjacent to any church, provided conspicuous signs are displayed in such streets adjacent to churches indicating that the same is a church street.

(10) The erection (including excavation), demolition, alteration, or repair in the event that such alteration or repair creates noise of such character, intensity and duration as to be detrimental to public health, welfare, and peace, of any building in a residential or business district other than between the hours of 7:00 a.m. and 6:00 p.m., on weekdays, except in the case of urgent necessity in the interest of public safety and then only with a permit from the Building Inspector, which permit may be renewed for a period of three days or less while the emergency continues.

(11) The use of any mechanical device operated by compressed air unless the noise created thereby is effectively muffled and reduced.

(12) The shouting and crying of peddlers, barkers, hawkers and vendors which disturbs the quiet and peace of the neighborhood.

(13) The use of any drum, loud speaker or other instrument or device for the purpose of attracting attention by creation of noise to any performance, show, or sale or display of merchandise.

(14) The use of any mechanical loud speakers or amplifiers on trucks or other moving vehicles for advertising purposes or other purposes except where specific license is received from the Town Commission.

(15) The operation of a radio, tape player or other mechanical sound-making device or instrument from a motor vehicle, as defined in Section 316.003, Florida Statutes, on a street or highway by any person operating or occupying said motor vehicle, so that the sound is plainly audible at a distance of 100 feet or more from the motor vehicle or is louder than necessary for the convenient hearing by persons inside the motor vehicle in areas adjoining churches, schools, or hospitals. This provision shall not apply to circumstances as described in Section 316.3045, Florida Statutes.

§ 48-2. PENALTY.

Any person, firm, or corporation violating any provision of this chapter shall upon conviction be punished by a fine not to exceed \$200.

01800-2

END OF SECTION

SECTION 02000
MAINTENANCE OF TRAFFIC AND NOTIFICATION

PART I – GENERAL

The contractor may only detour traffic for one installation at a time. There may be no more than six (6) crossings with lime rock surface until asphalt paving is mobilized. The Town must be notified in writing three (3) days in advance of proposed detours so that the Town may coordinate with emergency services.

END OF SECTION

SECTION 02211
SITE CLEARING, EXCAVATION AND GRADING

PART I - GENERAL

1.01 WORK INCLUDED

- A. Site work outside structural earthwork

1.02 PROJECT RECORD DOCUMENTS

- A. Submit documents under provisions of Section 01700, Contract Closeout.
- B. Accurately record location of utilities remaining, rerouted utilities, new utilities by horizontal dimensions, elevations or inverts, and slope gradients.

1.03 PROTECTION

- A. Protect trees, shrubs, lawns, and other features remaining as portion of final landscaping.
- B. Protect bench marks, existing structures, fences, roads, sidewalks, and paving and curbs.
- C. Protect above or below grade utilities which are to remain.

PART II - PRODUCTS

2.01 MATERIALS

- A. Topsoil: Excavated material, graded free of roots, rocks, subsoil, debris, and large weeds.
- B. Fill: Excavated material (excluding top six inches) or imported material shall be clean sand or sand rock. Material shall contain not more than 20 percent rock with maximum rock size of two inches, free from organic material.

PART III - EXECUTION

3.01 PREPARATION

- A. Clear areas as shown on the construction plans or as designated by the Owner and/or Engineer.
- B. Remove trees and shrubs within marked areas. Grub out stumps, roots and surface rock to a depth of two feet below existing grade.
- C. Clear undergrowth and dead wood.
- D. Strip grass and roots to a depth of 6 inches below existing grade.
- E. Identify required lines, levels, contours, and datum.
- F. Identify known below grade utilities. Stake and flag locations.
- G. Identify and flag above grade utilities.
- H. Maintain and protect existing utilities remaining which pass through work area.
- I. Notify utility company to remove and relocate utilities.
- J. Upon discovery of unknown utility or concealed conditions, discontinue affected work; notify Engineer.

3.02 CLEARING AND GRUBBING

- A. Clean all construction areas to provide adequate work space within the rights-of-way, including space for control stakes and hubs and silt fence or other erosion control devices. Removal of trees and permanent structures in or along the rights-of-way shall be done according to right-of-way and tree clearing permit requirements.
- B. Trees and shrubs to remain in construction areas and privately owned trees and shrubs bordering construction areas shall be protected from damage. The Contractor shall take full responsibility for such damage.
- C. Clearing and grubbing shall be performed in the areas where required. Include complete removal and satisfactory disposal of all timber, brush, stumps, weeds, rubbish, and all other obstructions.

- D. All timber, logs, stumps, roots, brush, rotten wood and other refuse from clearing operations shall be disposed of in a dump area approved by the Owner. If burning is allowed, obtain and conform to permit.
- E. Install all required Erosion Control Devices as required by the plans and/or permit regulations.

3.03 TOPSOIL EXCAVATION

- A. Excavate topsoil (± 6 " depth) from entire site and store all topsoil for reuse on site, or spread in location as designated by Owner and/or Engineer. Stockpile and/or spreading location shall be within a 1,000' radius of source.
- B. Do not excavate wet topsoil.
- C. Stockpile topsoil to depth not exceeding 8 feet. Cover to protect from erosion.

3.04 FILLING

- A. Areas to be filled shall be filled in eight inch maximum layers and compacted to a density of at least 95 percent of maximum density as determined by AASHTO T-180.
- B. Materials shall be compacted at a moisture content permitting the specified compaction. If required, water shall be added or the material permitted to dry until the proper moisture content for the specified compaction is obtained.
- C. The density of compacted fill layer shall be field tested by approved methods prior to placement of succeeding lifts. At least one test per layer shall be made.
- D. A laboratory retained by the Owner will make the field density test as specified. One Proctor Test (ASTM D-698) for each source of fill used will be made by the laboratory. Additional field tests will be required for each test that does not meet the required density. Costs of all retests will be paid by the Contractor .

3.05 GRADING

- A. Grading shall be accomplished to meet the proposed elevations as shown on the Drawings and shall include all work in bringing the excavation to the required grade, alignment and cross-section. Any excess excavated material shall remain the property of the Owner and shall be disposed of or moved as directed by the Engineer.

END OF SECTION

SECTION 02235
ASPHALTIC PAVING, PRIME, BASE AND STABILIZED SUBGRADE

PART I - GENERAL

1.01 WORK INCLUDED

- A. Stabilized Subgrade
- B. Base Material and Construction
- C. Prime and Wearing Surface

1.02 Governing Specifications

- A. Appropriate Governmental Agency Subdivision or Land Development Ordinance
- B. Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction, 2004 Edition.

PART II - PRODUCTS

2.01 MATERIALS

- A. Stabilized Subgrade and Base: Material shall conform to Section 911 of FDOT Standard Specifications.
- B. Prime: Cut-back Asphalt Grade RC-70 according to Section 300 of FDOT Standard Specifications.
- C. Wearing Surface: Asphaltic concrete of the type, compacted thickness conforming to Sections 320, 330, 331 and 334 of FDOT Standard Specifications.

PART III - EXECUTION

3.01 INSPECTION

- A. During construction, a field inspection of each phase shall be made by the Engineer. It is the Contractor's responsibility to notify the Engineer when paving is ready for inspection.

3.02 CONSTRUCTION

- A. Stabilized Subgrade: Stabilization of the subgrade and shoulders shall be in accordance with Section 160 of FDOT Standard Specifications. The subgrade and shoulders shall be stabilized to a depth of 12 inches and to the width as shown on the drawings and shall have a minimum Limerock Bearing Ratio (LBR) of 40. The subgrade and shoulders shall be compacted to at least 98% of maximum density as determined by AASHTO T-180.
- B. Base: Construction of the base course shall be in accordance with FDOT Standard Specifications. The base course shall have a compacted thickness and width as shown on the Drawings. Compaction of the base course shall be at least 98% of the maximum density as determined by AASHTO T-180.
- C. Prime: The base shall be primed in accordance with Section 300 of FDOT Standard Specifications. The base surface shall be cleaned until free of objectionable foreign material. When the prime is applied adjacent to curb and gutter or any other concrete surface, such surface shall be protected by means of heavy paper or other approved material. The base shall be primed at the rate of not less than 0.1 gallons per square yard and not more than 0.2 gallons per square yard.
- D. Wearing Surface: Wearing surface shall be constructed according to Sections 320, 330, 331 and 334 of the FDOT Standard Specifications. The density, after final compaction, shall not be less than 95% of the laboratory compacted density of the mixture. In all inaccessible places such as adjacent to curb, gutters, manholes, etc., the required compactions shall be secured by a tamper. Depression, honeycombs and high spots of any unbonded material after rolling shall be corrected as directed by the Engineer.
- E. Timing: No construction of asphaltic concrete pavement shall take place until such time that all underground utility lines have been tested and certified that they meet local and state requirements.
- F. Temporary patches will be permitted at all locations in order for the Contractor to complete the permanent asphaltic repairs upon completion of all the crossings.
- G. Strict adherence to proper maintenance and protection of traffic during contractor activities, including any required "detours" must be accomplished in accord with directions from the Engineer.

3.03 TESTING

- A. Wearing Surface: The Contractor shall furnish and bear the cost of holes to make spot check thickness measurements of the compacted wearing surface. The depth of each layer shall be checked at intervals not to exceed 400 feet or as may otherwise be specified in the FDOT Standard Specifications or the local governmental agency having jurisdiction over the work. Any deviation from the required thickness shall be immediately corrected.
- B. All testing to be completed by methods and with the frequency required by appropriate Governmental Agency criteria.

END OF SECTION

SECTION 02236
SIGNING AND MARKING

PART 1 - GENERAL

1.01. SECTION INCLUDES

- A. The work covered in this Division includes furnishing materials and construction installation of traffic signs, street signs, pavement marking and striping, and Drawings and Specifications.

PART II - PRODUCTS

2.01 SIGNS, STRIPING AND MARKERS

- A. Traffic Signs, Street Signs, Paint Striping - Traffic signs, street signs and paint striping shall conform to "Manual of Uniform Traffic Control Devices," U.S. Bureau of Public Roads.
- B. Reflective Pavement Markers - Reflective pavement markers shall be specified in Section 706 of FDOT Standard Specifications. They will have overall dimensions of 4" x .79" with a 30° reflective face. The adhesive shall be pressure sensitive 100% solids . 120" thick. Minimum application pressure shall be 60 p.s.i. Minimum shear stress shall exceed 10 p.s.i. at 70° F.

END OF SECTION

SECTION 02720
STORM SEWERS AND STRUCTURES

PART I - GENERAL

1.01 SCOPE OF SECTION

- A. The scope of this section is to cover materials and methods of performing the work necessary to construct or repair and place into operation a storm sewer system as shown on the Drawings and as directed in the field. All material and construction shall be in compliance with current appropriate Governmental Agency criteria.

PART II - MATERIALS

2.01 MORTAR

- A. Mortar used for constructing and plastering manholes, catch basins, junction boxes and weir structures shall be in accordance with ASTM Specifications Serial Designation C-270. The Contractor will have the option of using either a portland cement/hydrated lime mixture or a portland cement mixture with masonry cement added for improved workability; however, the same materials must be used throughout the project. The mortar materials shall be proportioned by volume and shall be as follows:
1. One (1) part Type I Portland Cement - ASTM C-150.
 2. Three (3) parts Aggregate (sand) - ASTM C-144.
 3. The addition of masonry cement (ASTM C- 91) will be permitted to improve workability of mortar.

2.02 PIPE

- A. Reinforced Concrete Pipe: ASTM C76, Class III with Wall Type B reinforcement; inside nominal diameter as shown on Drawings; bell and spigot end joints. Pipe joints shall be rubber gasket joints.
- B. No reinforced concrete pipe may be “seconds”, “resold pipe”, “repaired pipe” pipe that contains “bug holes” that jeopardise internal reinforcement or have reinforcement wire rust stains.

In addition:

- NO continuous crack having a surface width of 0.01 in. or more

- NO crack extending for a length of 12 in. or more, regardless of the position in the wall of the pipe or structure
- NO fractures or cracks passing through the wall
- NO indications of insufficient concrete cover or misplaced reinforcement
- NO imperfect proportioning, mixing or molding
- NO surface defects that may adversely affect the function of the pipe, including honeycombing, open texture, bug holes, air pockets, or pitting
- NO damaged or unsatisfactorily manufactured ends that would prevent creating a satisfactory joint

2.03 BARS

- A. All bars shall be deformed Reinforcing Steel and shall conform to Specifications for Deformed and Plain BilleSteel Bards for Concrete Reinforcement (ASTM A-615), for concrete reinforcement. All bars shall be lapped and placed in accordance with ACI requirements and specifications.

PART III - INSTALLATION

3.01 HANDLING

- A. Pipe and accessories shall be loaded and unloaded by lifting with hoists or skidding or rolled against pipe already on the ground.
- B. In distributing material at the site of the work, each piece shall be unloaded near the place where it is to be laid in the trench.

3.02 LAYING PIPE

- A. Trenching and backfilling shall be completed as specified. Sewers will be inspected when the line is completed and backfill has been placed to a depth of one foot over the pipe. Backfill may be completed only after approval of each section has been given for line and grade.
- B. Faulty sections of line, rejected by the Engineer, shall be removed and relaid by the Contractor.
- C. Care shall be exercised to insure the pipe being carefully centered so that the laid storm sewer will have a uniform invert.
- D. The pipe joints shall be kept clean at all times, and no pipe shall be used in the work which does not conform to the ASTM standard.

- E. At all times when pipe-laying operations are not in process (including noon hours), a suitable stopper shall be placed in the end of the pipe last laid to prevent water, mud or other foreign materials from entering the pipe. All construction shall conform to Section 430 of FDOT Standard Specifications.

3.03 JOINTING PIPE

- A. All pipe shall be jointed by band joints applied in strict accordance with recommendations of the pipe manufacturer and good construction practice. The joint shall be designed to limit movement due to expansion, contraction and normal settlement. Pipe joints shall be included in the lineal foot price of the pipe.

3.04 JUNCTION BOXES, CATCH BASINS, STORM SEWER MANHOLES AND CONCRETE HEADWALLS AND WEIR STRUCTURES

- A. Junction boxes, storm sewer manholes, concrete headwalls and weir structures shall be constructed at the location and to the depth indicated on the drawings and in accordance with the details shown thereon. Excavation and backfill shall be made in accordance with the applicable sections of the specifications. Concrete for the catch basins, storm sewer manholes and concrete headwalls, shall develop a strength of 3,000 psi in 28 days. Joints between walls and incoming and outgoing pipes shall be sealed with portland cement mortar to form a watertight joint. All pipes with junction shall be cut off flush with the face of the structure and the broken ends of these pipes shall be grouted with portland cement mortar to a smooth uniform covering with no steel exposed. All structures shall conform to Sections 400, 415 and 425 of FDOT Standard Specifications.
- B. Construction of grated inlets and junction boxes shall be to the elevations and dimensions shown on the Drawings. Construction shall include any reasonable adjustment and realignment of the grate necessary, or the installation on the inlet grates. Frames shall be secured in mortar struck smooth inside and out.

3.05 IRON CASTINGS

- A. Casting shall conform to the latest revision of the ASTM Specifications for Class 30 Grey Iron. They shall be cast in a closed mold with controlled sand and be true to pattern. Casting shall be free from blow holes and porosity, well cleaned, with fine and sharp edges ground smooth. All circular frames and covers shall have the words "Storm Sewer" cast thereon. Casting shall be as manufactured by USF, with numbers as shown on the Drawings, or equal. All square and rectangular frames, covers and grates shall be individually fitted as sets and installed as sets in the field.

- B. Manufacturers shall provide a letter of guarantee for a period of 15 years. Upon request of Engineer, manufacturers shall also furnish an independent testing laboratory's report of castings supplied. Frame and cover surfaces shall be machined and any tendency to rattle, as determined by tests before or after installation, will be sufficient cause for rejection of the frame and cover.

END OF SECTION

SECTION 02936
SEEDING

PART I - GENERAL

1.01 WORK INCLUDED

- A. Preparation of soil.
- B. Fertilizing.
- C. Seeding.
- D. Mulching.
- E. Maintenance.

1.02 REFERENCES

- A. FS O-F-241 - Fertilizers, Mixed, Commercial.

1.03 DEFINITIONS

- A. Weeds: Includes Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwort, Bermuda Grass, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Perennial Sorrel, and Brome Grass.

1.04 REGULATORY REQUIREMENTS

- A. Comply with regulatory agencies for fertilizer seed and herbicide composition.

1.05 QUALITY ASSURANCE

- A. Provide seed mixture in containers showing percentage of seed mix, year of production, net weight, date of packaging, and location of packaging.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.
- B. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.07 MAINTENANCE SERVICE

- A. Maintain seeded areas until all work is accepted by the Owner.

PART II - PRODUCTS

2.01 SEED MIXTURE

- A. During the period between February 15 and October 15, the seed mixture shall be 175 lbs. Argentina Bahia per acres and 45 lbs. hulled Bermuda per acre.
- B. During period between October 15 and February 15, the seed mixture shall be 175 lbs. Argentina Bahia per acre, 45 lbs. hulled Bermuda per acre and 45 lbs. Winter Rye per acre.
- C. All seed shall meet the requirements of the State Department of Agriculture and Consumer Services and all applicable Federal, State and Local laws.

2.02 SOIL MATERIALS

- A. Topsoil: Excavated from site and free of weeds.

2.03 ACCESSORIES

- A. Mulching Material: Oat, rye or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Coastal Bermuda or Bahia grass are acceptable.
- B. Manufactured Mulch: Cellulose-fiber or wood-pulp mulch shall be products commercially available for such use.
- C. Asphalt Binder: Asphalt binder material shall conform to the requirements of AASHTO M 140, Type SS-1, or RS-1, as appropriate.
- D. Fertilizer: Commercial 8-8-8.
- E. Water: Clean, fresh and free of substances or matter which could inhibit vigorous growth of grass.

PART III - EXECUTION

3.01 INSPECTION

- A. Verify that prepared soil base is ready to receive the work of this Section. Soil base should be at appropriate line and grade.

- B. Beginning of installation means acceptance of existing site conditions.

3.02 PREPARATION OF SOIL

- A. Prepare soil to eliminate uneven areas and low spots. Maintain lines, levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.
- B. Remove foreign materials, weeds, and undesirable plants and their roots. Remove contaminated subsoil.
- C. Scarify soil to a depth of 8 inches. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted subsoil.
- D. Grade to eliminate rough, low, or soft areas, and to ensure positive drainage.

3.03 FERTILIZING

- A. Apply fertilizer in accordance with manufacturer's instructions.
- B. Apply after smooth raking of soil and prior to roller compaction.
- C. Do not apply fertilizer at same time or with same machine as will be used to apply seed.
- D. Lightly water to aid the dissipation of fertilizer.

3.04 SEEDING

- A. Apply seed uniformly at a rate of 50 lbs. per acre. Rake in lightly. Do not seed area in excess of that which can be mulched on same day.
- B. Do not sow immediately following rain, when ground is too dry, or during windy periods.
- C. Immediately following seeding, apply mulch to a thickness of two inches. Maintain clear of shrubs and trees.
- D. Apply water with a fine spray immediately after each area has been mulched. Saturate to 4 inches of soil.

3.05 SEED PROTECTION

- A. Cover seeded slopes where grade is 4 inches per foot or greater with erosion fabric. Roll fabric onto slopes without stretching or pulling.

- B. Lay fabric smoothly on surface, bury top end of each section in 6-inch deep excavated topsoil trench. Provide 12-inch overlap of adjacent rolls. Backfill trench and rake smooth, level with adjacent soil.
- C. Secure outside edges and overlaps at 36-inch intervals with stakes.
- D. Lightly dress slopes with topsoil to ensure close contact between fabric and soil.
- E. At sides of ditches, lay fabric laps in direction of water flow. Lap ends and edges minimum 6 inches.

3.06 MULCHING

- A. Mulch shall be held in place by light dicing, a very thin covering of topsoil, asphalt binder, or other adhesive material approved by the Engineer. Where mulches have been secured by the asphalt binder method, it will not be permissible to walk on the slopes after the binder has been applied. The contractor is warned that in the application of asphalt binder material, he must take every precaution to guard against damaging or disfiguring structures or property on or adjacent to the areas worked and that he will be held responsible for any such damage resulting from his operations.
- B. All mulched surfaces shall be sprayed with asphalt binder material so that the surface has uniform appearance. The binder shall be uniformly applied to the mulch at the rate of approximately 8.0 gallons per 1,000 square feet, with a minimum of 6.0 and a maximum of 10.0 gallons per 1,000 square feet depending on the type of mulch and the effectiveness of the binder securing it. Bituminous binder material may be sprayed on the mulched slope areas from either the top or the bottom of the slope. A pump or an air compressor of adequate capacity shall be used to insure uniform distribution of the bituminous material.

3.07 MAINTENANCE

- A. Water to prevent grass and soil from drying out.
- B. Roll surface to remove minor depressions or irregularities.
- C. Control growth of weeds. Apply herbicides in accordance with manufacturer's instructions. Remedy damage resulting from improper use of herbicides.
- D. Immediately reseed areas which show bare spots.
- E. Protect seeded areas with warning signs during maintenance period.

END OF SECTION

SECTION 02938

SODDING

PART I - GENERAL

1.01 SECTION INCLUDES

- A. Preparation of subsoil.
- B. Placing topsoil (when specified within the plans).
- C. Fertilizing (when specified within the plans).
- D. Sod installation.

1.02 RELATED WORK

- A. Section 02950 - Landscape Grading: Preparation of subsoil and placement of topsoil in preparation for the work of this Section.
- B. Section 02936 – Seeding.

1.03 REFERENCES

- A. ASPA (American Sod Producers Association) - Guideline Specifications to Sodding.
- B. FS O-F-241 - Fertilizers, Mixed, Commercial.

1.04 DEFINITIONS

- A. Weeds: Includes Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwort, Bermuda Grass, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Perennial Sorrel, and Brome Grass.

1.05 QUALITY ASSURANCE

- A. Sod Producer: Company specializing in sod production and harvesting. Certified by State of Florida.

- B. Sod: Minimum age of 12 (twelve) months, with root development that will support its own weight, without tearing, when suspended vertically by holding the upper two corners.

1.06 REGULATORY REQUIREMENTS

- A. Comply with regulatory agencies for fertilizer and herbicide composition (when specified in the plans).

1.07 TESTS

- A. Provide analysis of topsoil fill under provisions of Section 01400 (when specified within the plans).

1.08 MAINTENANCE DATA

- A. Submit maintenance data for continuing Owner maintenance under provision of Section 01700 (when specified in the plans).
- B. Include maintenance instructions, cutting method and maximum grass height; types, application frequency, and recommended coverage of fertilizer (when specified in the plans).

PART II - PRODUCTS

2.01 ACCESSORIES

- A. Wood Pegs: Softwood; sufficient size and length to ensure anchorage of sod on slopes into level areas.

PART III - EXECUTION

3.01 PREPARATION OF SUBSOIL

- A. Prepare subsoil to eliminate uneven areas and low spots. Maintain lines, levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.
- B. Remove foreign materials and undesirable plants and their roots. Do not bury foreign material beneath areas to be sodded. Remove contaminated subsoil.

- C. Scarify subsoil to a depth of 4 (four) inches where topsoil is to be placed. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted subsoil.

3.02 PLACING TOPSOIL

- A. Spread topsoil to a minimum depth of 2 (two) inches over area to be sodded.
- B. Place topsoil during dry weather.
- C. Remove vegetable matter and foreign non-organic material while spreading.
- D. Grade to eliminate rough, low, or soft areas, and to ensure positive drainage.

3.03 LAYING SOD

- A. Moisten prepared surface immediately prior to laying sod.
- B. Lay sod tight with no open joints visible, and no overlapping unless specified; stagger end joints 12 inches minimum. Do not stretch or overlap sod pieces.
- C. Lay smooth. Align with adjoining grass areas. Place top elevation of sod 1/2 to 1 inch below adjoining paving/curbs.
- D. On slopes steeper than 3:1, lay sod perpendicular to slope and secure every row with wooden pegs at maximum 2 feet on center. Drive pegs flush with soil portion of sod.
- E. Water sodded areas immediately after installation.
- F. Rolling: After laying sod, roll to eliminate irregularities and to form good contact between the sod and soil.
- G. Replace all dead sod until the project receives final sign-off following final walk through inspections.
- H. Fertilizer: Spread turf fertilizer (8-20-0) onto the soil evenly at a rate of one pound per 100 square feet. Rake in lightly.

END OF SECTION

SECTION 03300
CURBS, GUTTERS AND SIDEWALKS

PART I - GENERAL

1.01 WORK INCLUDED

- A. Work Included: Furnish all labor, equipment, materials and perform all operations necessary for construction of all concrete curbs, gutters, sidewalks, medians, aprons, etc.

PART II - MATERIALS

2.01 MATERIALS

- A. All concrete and concrete work shall conform to the following unless otherwise noted on the Drawings. All concrete specified in this Section shall attain a minimum compressive strength of 3,000 psi in 28 days.
1. Concrete Mix Materials: Coarse aggregate shall be hard, clean, washed gravel or crushed stone. Maximum aggregate size shall not be larger than 1 inch not smaller than ½ inch equivalent diameter, free from injurious amount of minerals, organic substances, acids or alkalies. Cement shall be Type 1, domestic Portland cement, conforming to ASTM C-150.
 2. Concrete Admixtures: Air-entrainment admixtures in concrete are permitted in accordance with manufacturers specifications provided the specified strength and quality are maintained and unless the admixture appears to be causing abnormal field results, and provided that the total entrained air content does not exceed 5.0 percent. No other admixture of any type will be permitted without written approval of Engineer.
 3. Reinforcing Steel: Reinforcing bars shall be intermediate grade, new billet-steel deformed bars free of loose rust, scale, dirt or oil, and shall conform to ASTM A-615. Welded wire fabric for concrete reinforcement shall conform to A-185. All reinforcement steel shall be placed, spliced, lapped, etc., in accordance with the ACI Standard 318.

Fiber Reinforcement: Commercial grade concrete with nylon fiber additive in lieu of reinforcement steel, 1½ pounds of 1-1½" long fibers added to each cubic yard of concrete.
 4. Transit or Read-Mixed Concrete: May be used provided it conforms to ASTM C-94 and specifications herein stated and the central plant

producing the concrete, batching, mixing and transportation equipment is, in the opinion of the Engineer, suitable for production and transportation of specified concrete.

PART III - EXECUTION

3.01 METHODS, PLACING CONCRETE, MACHINE-LAYING, CURING And JOINTS

- A. Construction Methods: Forms shall be of sufficient strength to resist pressure of the concrete without springing. Do not remove bottom forms within 24 hours after concrete has been placed. Do not remove side or top forms within twelve hours after concrete has been placed. Upon removal of forms, correct minor defects with a rich mix cement mortar. Finish curbs, gutters, walks or medians until a smooth surface is attained. Final finish shall be a light broom finish. When completed, cure concrete as specified.
- B. Placing of Concrete: Deposit concrete in clean, wet forms and as nearly as practicable in its final position to avoid segregation. Place concrete at a rate so concrete is at all times plastic and flows readily into the spaces between the bars. Concreting shall be a continuous operation until the panel or section is completed. Vibrate all structural concrete. No concrete shall be allowed a free fall of more than 4 feet or allowed to strike against a vertical or inclined surface or reinforcement above the point of deposit. Placing by means of pumping may be allowed, contingent upon the adequacy of the equipment for this particular work. Operation of pumping shall insure a continuous stream of concrete shall be so regulated that the pressure caused by wet concrete shall not exceed that used in the design of the forms. After the concrete has taken its initial set, exercise care to avoid jarring forms or placing any strain on ends of projecting reinforcement.
- C. Machine-Laying: Will be permitted, providing all quality conditions of conventional construction are met. Saw contraction joints unless an alternate method of constructing them is approved in writing by Engineer. Saw joints at times designated by Engineer, and at intervals of 10 feet, except where shorter intervals are required for closures, but no joints shall be sawed or constructed at intervals of less than 4 feet.
- D. Curing: As soon as practicable after finishing all concrete, cover with burlap and keep moist for a period of 7 days, or apply an approved membrane curing compound at Contractor's option. Where membrane curing compound is used, allow no walking or other traffic over the slab for 72 hours after application unless surface is protected by burlap or heavy building paper.
- E. Joints:

1. Construction Joints: Locate joints not shown or specified so as to least impair strength and appearance of the work. Place concrete at such a rate so surfaces of concrete high have not been carried to joint levels will not have attained initial set before additional concrete is placed thereon.
 2. Contraction Joints: Construct curbs, curb-and-gutters, and valley gutters with contraction joints at intervals of 10 feet except where shorter intervals are required for closures, but no joint shall be constructed at intervals of less than 4 feet. Construct sidewalks and concrete medians with contraction joints at intervals equal to the width of the walk or median respectively unless otherwise noted on the Drawings. Contraction joints may be of the open type or sawed. Construction of contraction joints shall conform to Sections 520 and 522 of FDOT Standard Specifications.
 3. Expansion Joints: Construct curbs, curb-and-gutters, and valley curbs with expansion joints at all inlets, all radius points, all points where operations cease for any considerable time and at intervals of not more than 100 feet. Construct walks and concrete medians with expansion joints at points of walk or median termination against any unyielding surface and at intervals not to exceed 90 feet. Construct expansion joints with PVC slips encasing the reinforcing bars. Expansion joint material shall be ½ inch bituminous impregnated expansion joint material. Construction of expansion joints shall conform to Sections 520 and 522 of FDOT Standard Specifications.
 4. Other: Where the drawings call for sealed joints between walks or concrete medians and curbs, construct such joints in conformance with Sections 520 and 522 of FDOT Standard Specifications.
- F. Contractor's Responsibilities: Reject all delivered concrete and finishes not meeting these specifications. Secure laboratory tests or reports if such test or reports are requested by Engineer.
- G. Testing:
1. Excavation shall be to the required depth, and supporting earth, base, or subgrade shall be compacted. When Drawings call for a stabilized subgrade under curb or gutter, the subgrade shall be stabilized, and tested if required, as set forth elsewhere in these Specifications and as indicated on the Drawings. When the Drawings call for a soil-cement base, compact subgrade supporting curb or gutter by watering, rolling or stamping to 95% of maximum density as determined by AASHTO T-180. Compact subgrades for walks and concrete medians to a firm, even surface, by means of rolling, watering or stamping.

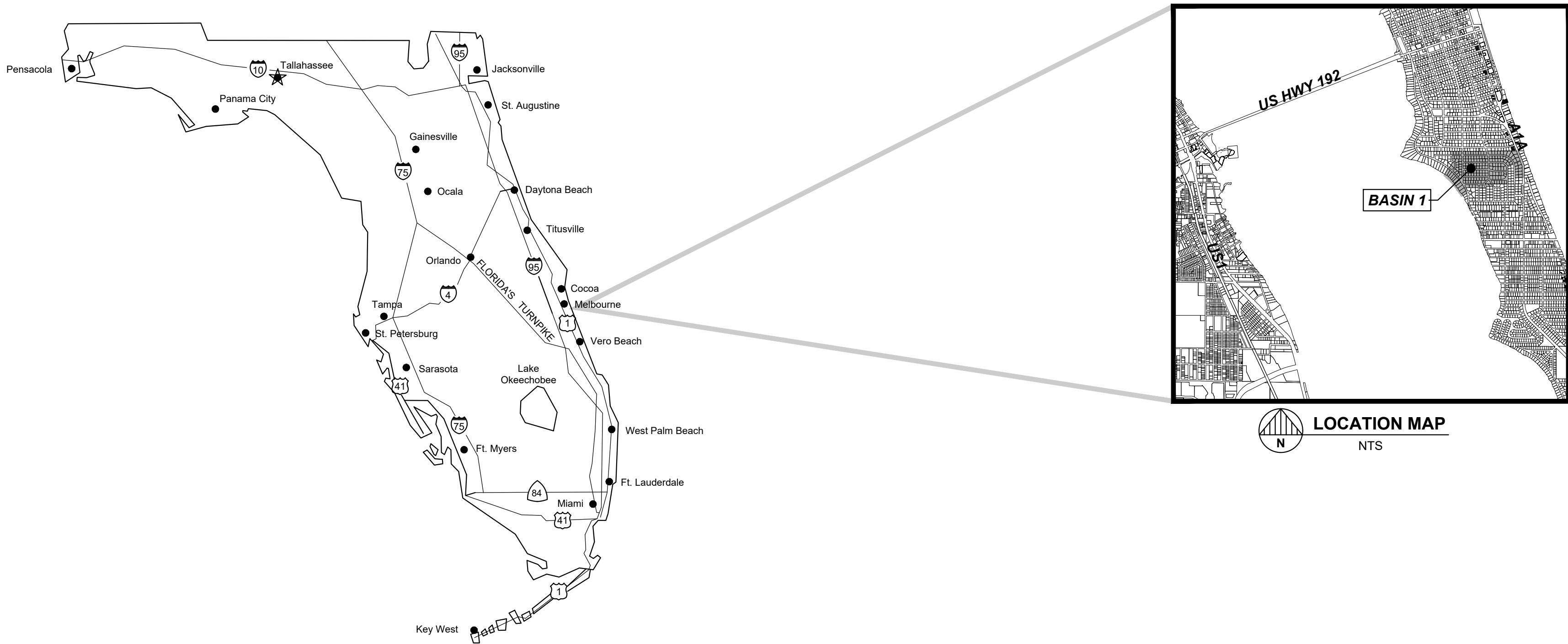
2. After concrete has set sufficiently, but not later than three days after placing, backfill and compact spaces in front and back with suitable material. When street bases are to be constructed adjacent to curbs, gutters, etc., the curb, gutter, etc., shall cure for a period of not less than three days before any base material is placed against it.

END OF SECTION

BASIN 1 DRAINAGE IMPROVEMENTS

SECTION 6, TOWNSHIP 28 SOUTH, RANGE 38 EAST
MELBOURNE BEACH, BREVARD COUNTY, FLORIDA

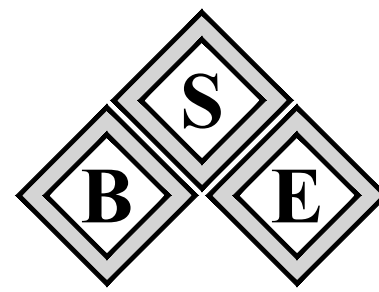
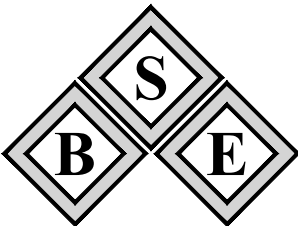
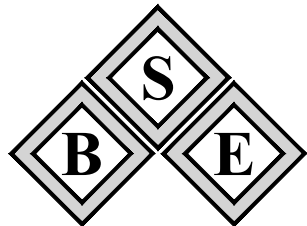
SHEET INDEX		
SHEET #	DRAWING #	SHEET TITLE
1	1144025_400_001	COVER SHEET
2	1144025_400_002	SYMBOLS AND ABBREVIATIONS
3	1144025_400_003	OVERALL PLAN
4	1144025_400_004	DRAINAGE PLAN
5	1144025_400_005	DRAINAGE PLAN
6	1144025_400_006	DRAINAGE PLAN
7	1144025_400_007	DRAINAGE PLAN
8	1144025_400_008	DRAINAGE PLAN
9	1144025_400_009	DRAINAGE PLAN



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HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951

VERTICAL DATUM: NAVD88

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DATE: 01/30/25
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE

**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE

COVER SHEET

PROJECT NO.

11440.25

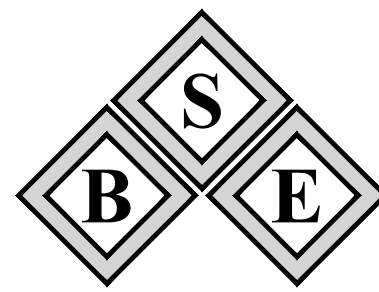
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1144025_400_001

SHEET

1 of 9

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STATE OF FLORIDA, No. 41951

**LANDSCAPE
SYMBOL LEGEND**

	CABBAGE PALM TREE
	PALM TREE
	PINE TREE
	OAK TREE
	TREE LINE
	SHRUB 1
	SHRUB 2

**IRRIGATION
SYMBOL LEGEND**

	SPRINKLER
	RAINBIRD 1/4
	RAINBIRD 1/2
	RAINBIRD 3/4
	RAINBIRD FULL

LINE TYPES

	BEL	EXISTING BURIED ELECTRIC
	BTL	EXISTING BURIED TELEPHONE
	CATV	EXISTING CABLE TV
	FENCE	FENCE (TYPE, HEIGHT AS NOTED)
	FM	EXISTING FORCE MAIN (SIZE, TYPE AS NOTED)
	FO	EXISTING FIBER OPTIC
	GAS	EXISTING GAS LINE
	IRR	EXISTING IRRIGATION (SIZE, TYPE AS NOTED)
	OHE	EXISTING OVERHEAD ELECTRIC
	OHU	EXISTING OVERHEAD UTILITY
	RM	EXISTING REUSE MAIN (SIZE, TYPE AS NOTED)
	SF	SILT FENCE
	SS	EXISTING SANITARY SEWER (SIZE, TYPE AS NOTED)
	WM	EXISTING WATER MAIN (SIZE, TYPE AS NOTED)
	CENTERLINE	CENTERLINE
	BASIN BOUNDARY	BASIN BOUNDARY
	COLUMN / WALL	COLUMN / WALL
	GUARD RAIL	GUARD RAIL
	TREE LINE	TREE LINE
	DRAINAGE PIPE	DRAINAGE PIPE (SIZE, TYPE AS NOTED)

SYMBOL LEGEND

	EXISTING SANITARY MANHOLE
	EXISTING MANHOLE (TYPE NOTED)
	PROPOSED MANHOLE
	TYPE 2 INLET
	TYPE 3 INLET
	TYPE 4 INLET
	TYPE 5 INLET
	CATCH BASIN
	YARD DRAIN
	FLARED END SECTION
	MITERED END SECTION
	EXISTING GATE VALVE
	PROPOSED GATE VALVE
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	EXISTING BLOW-OFF
	PROPOSED BLOW-OFF ASSEMBLY WITH GATE VALVE
	EXISTING FIRE DEPT. CONNECTION
	PROPOSED FIRE DEPT. CONNECTION
	EXISTING WATER METER
	PROPOSED WATER METER
	EXISTING WATER SERVICE
	PROPOSED WATER SERVICE
	EXISTING REUSE SERVICE
	PROPOSED REUSE SERVICE
	SANITARY SERVICE
	STUB OUT
	EXISTING AIR RELEASE VALVE
	AIR RELEASE VALVE
	EXISTING CLEAN OUT
	CLEAN OUT
	CROSS TEE
	TEE
	BACK FLOW PREVENTION DEVICE
	REDUCER
	POST INDICATOR VALVE
	UTILITY RISER
	CONCRETE POWER POLE
	WOOD UTILITY POLE
	GUY WIRE
	GUY POLE
	EXISTING LIGHT POLE
	PROPOSED LIGHT POLE
	EXISTING SIGN
	PROPOSED SIGN
	DIRT PAD ELEVATION
	FINISHED FLOOR ELEVATION
	TYPE A LOT DRAINAGE
	TYPE B LOT DRAINAGE
	LOT NUMBER
	FLOW ARROW

ABBREVIATIONS

'	MINUTES/FEET
"	SECONDS/INCHES
°	DEGREES
(C)	CALCULATED DIMENSION
(D)	DEED DIMENSION
(F)	FIELD MEASURED DIMENSION
(M)	METER(S)
(NR)	NOT RADIAL
(P)	PLAT DIMENSION
A/C	AIR CONDITIONER
AC	ACRES
ADS	ADVANCED DRAINAGE SYSTEMS (CPP)
AL	ARC LENGTH
ARV	AIR RELEASE VALVE
AVE	AVENUE
BLVD	BOULEVARD
BM	BENCH MARK
BVC	BEGIN VERTICAL CURVE
BVP	BEGIN VERTICAL PROFILE
CL	CENTERLINE
C/O	CLEAN OUT
CA	CENTRAL ANGLE
CATV	CABLE TELEVISION
CB	CHORD BEARING
CBS	CONCRETE BLOCK STRUCTURE
CH	CHORD LENGTH
CM	CONCRETE MONUMENT
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
COR	CORNER
CPP	CORRUGATED PLASTIC PIPE
DE	DRAINAGE EASEMENT
DEL	DELTA/CENTRAL ANGLE
DI	DITCH INLET/ CATCH BASIN
DIP	DUCTILE IRON PIPE
DS	DRAINAGE STRUCTURE
E	EAST
EG	EXISTING GROUND
ELEC	ELECTRIC
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EW	EDGE OF WATER
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE
ESMT	EASEMENT
EVC	END VERTICAL CURVE
EVP	END VERTICAL PROFILE
EX	EXISTING
FD	FOUND
FDC	FIRE DEPARTMENT CONNECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FES	FLARED END SECTION
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
FL	FLOW LINE
FM	FORCE MAIN
FPL	FLORIDA POWER AND LIGHT
FT	FEET
GLO	GENERAL LAND OFFICE
GR	GROUND
GV	GATE VALVE(S)
H/C	HANDICAP
HP	HIGH POINT
HWY	HIGHWAY
ID#	IDENTIFICATION NUMBER
INV	INVERT
IP	IRON PIPE
IPC	IRON PIPE AND CAP
IR	IRON ROD
IRC	IRON ROD AND CAP
JCT	JUNCTION
LF	LINEAR FEET
L	LEFT
LP	LOW POINT

ABBREVIATIONS

LS	LANDSCAPE
LWP	LIGHTER WOOD POST
MAX	MAXIMUM
MES	MITERED END SECTION
MH	MANHOLE
MHW	MEAN HIGH WATER
MI	MILE(S)
MIN	MINIMUM
N	NORTH
N&D	NAIL AND DISK
NAVD88	NORTH AMERICAN VERTICAL DATUM 1988
NGVD29	NATIONAL GEODETIC VERTICAL DATUM 1929
NG	NATURAL GROUND
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NWL	NORMAL WATER LEVEL
OHE	OVERHEAD ELECTRIC UTILITY
OR/ORB	OFFICIAL RECORDS BOOK
PL	PROPERTY LINE
PAVT	PAVEMENT
PB	PLAT BOOK
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCP	PERMANENT CONTROL POINT
PD&UE	PUBLIC DRAINAGE AND UTILITY EASEMENT
PDE	PUBLIC DRAINAGE EASEMENT
PG(S)	PAGE(S)
PGL	PROPOSED GRADE LINE
PK	PARKER-KALEN
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
POL	POINT ON LINE
PP	POWER/UTILITY POLE
PR	PRIVATE
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS/RIGHT
R/W	RIGHT-OF-WAY
RAD	RADIAL
RB	RADIAL BEARING
RCP	REINFORCED CONCRETE PIPE
REF	REFERENCE
RGE	RANGE
RM	REUSE MAIN
RND	ROUND
RPB	ROAD PLAT BOOK
RR	RAILROAD
S	SOUTH
SEC	SECTION
SF	SQUARE FOOT
SMH	SEWER MANHOLE
SPK	SPIKE
SS	SANITARY SEWER
ST	STREET
STA	STATION
SVC	SERVICE
SW	SIDEWALK
TEL	TELEPHONE
TOB	TOP OF BANK
TOE	TOE OF SLOPE
TWP	TOWNSHIP
TYP	TYPICAL
UE	UTILITY EASEMENT
UG	UNDERGROUND
UTIL	UTILITY
W	WEST
WM	WATER MAIN

DATE: 01/30/25
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE

**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE

**SYMBOLS AND
ABBREVIATIONS**

PROJECT NO.

11440.25

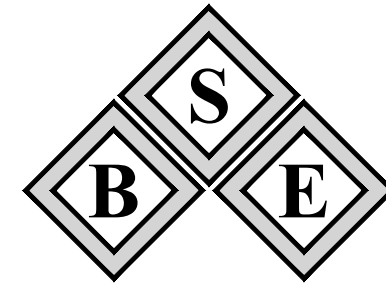
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SHEET

2 of 9

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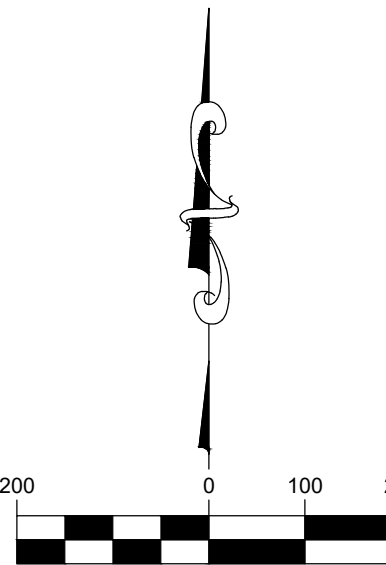


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STATE OF FLORIDA, No. 33659 No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951



VERTICAL DATUM: NAVD83

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DATE: 01/30/25
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE

**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE

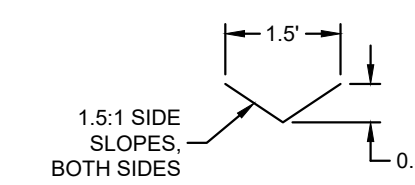
OVERALL PLAN

PROJECT NO.
11440.25

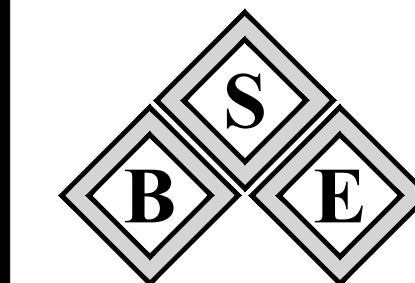
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SHEET
3 of 9

SYMBOLS SHOWN ARE GRAPHIC IN NATURE; DUE TO SCALE, ALL DESIGN ELEMENTS ARE NOT NECESSARILY SHOWN ON PLAN VIEWS. THE CONTRACTOR SHALL ALSO REFER TO SPECIFICATION AND DETAIL SHEETS AS WELL AS THE COMPLETE PLAN SET.

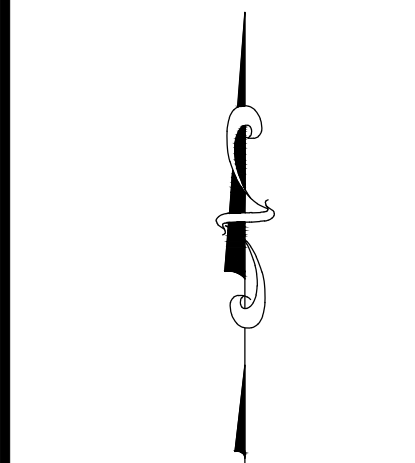


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PROJECT TITLE

**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE


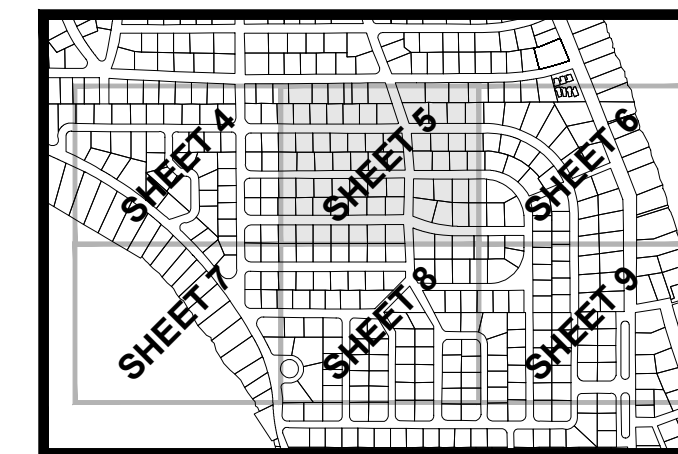
DRAINAGE PLAN

PROJECT
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PROJECT NO.	11440.25
DRAWING NO.	1144025_400_004
SHEET	4 of 9

SYMBOLS SHOWN ARE GRAPHIC IN NATURE. DUE TO SCALE, ALL DESIGN ELEMENTS ARE NOT NECESSARILY SHOWN ON PLAN VIEWS. THE CONTRACTOR SHALL ALSO REFER TO SPECIFICATION AND DETAIL SHEETS AS WELL AS THE COMPLETE PLAN SET.

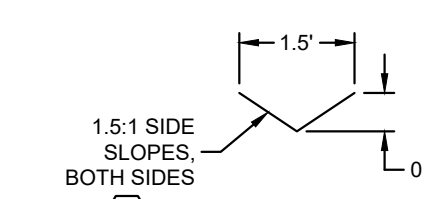
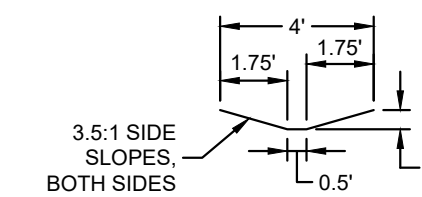
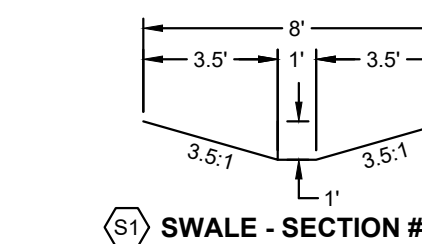


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- ~~SW~~ ~~SW~~ SWALE
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 2. CONTRACTOR SHALL SOD ALL DISTURBED AREAS WITH "LIKE KIND" NON-MUCK SOIL
 3. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGES TO EXISTING IRRIGATION SYSTEMS THAT MAY OCCUR DURING CONSTRUCTION.
 4. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ANY EXISTING MAILBOXES THAT MAY BE MOVED, RELOCATED, AND/OR DAMAGED DURING CONSTRUCTION.

WHERE NEW PIPE INSTALLATION CONFLICTS WITH EXISTING DRIVEWAYS:

CONCRETE DRIVEWAYS SHALL BE SAW CUT AT NEAREST
JOINT. REPLACE WITH:

- 6" THICK CONCRETE, 3000 PSI REINFORCED WITH FIBER MESH
- 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180

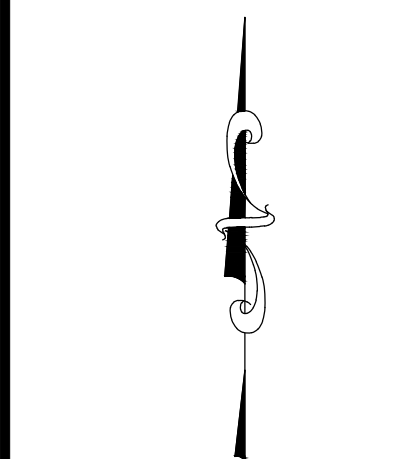
ASPHALT DRIVEWAY REPLACEMENT

- 1-1/2" TYPE SP 12.5 ASPHALTIC CONCRETE
- 6" LIMEROCK / COQUINA, MINIMUM LBR 100
COMPACTED TO 98% MAXIMUM DENSITY PER
AASHTO T-180
- 6" THICK STABILIZED SUBGRADE COMPACTED TO
98% MAXIMUM DENSITY PER AASHTO T-180

PAVER DRIVEWAY REPLACEMENT

ADDITIONAL CARE SHALL BE TAKEN TO NOT DAMAGE
EXISTING PAVERS DURING REMOVAL

- REINSTALL REMOVED PAVERS
- 4" LIMEROCK / COQUINA, MINIMUM LBR 100
COMPACTED TO 98% MAXIMUM DENSITY PER
AASHTO T-180
- 6" THICK STABILIZED SUBGRADE COMPACTED TO
98% MAXIMUM DENSITY PER AASHTO T-180



(IN FEET)

VERTICAL DATUM: NAVD88

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DATE:	01/3
DESIGN/DRAWN:	SMG/

PROJECT TITLE

BASIN 1 DRAINAGE IMPROVEMENTS

SHEET TITLE

DRAINAGE PLAN

PROJECT	114
DRAWING	114

PROJECT NO. _____

11440.2

DRAWING NO.

1144025 400 005

SHEET

5 of 9

SEE SHEET 4 FOR CONTINUATION

SEE SHEET 6 FOR CONTINUATION

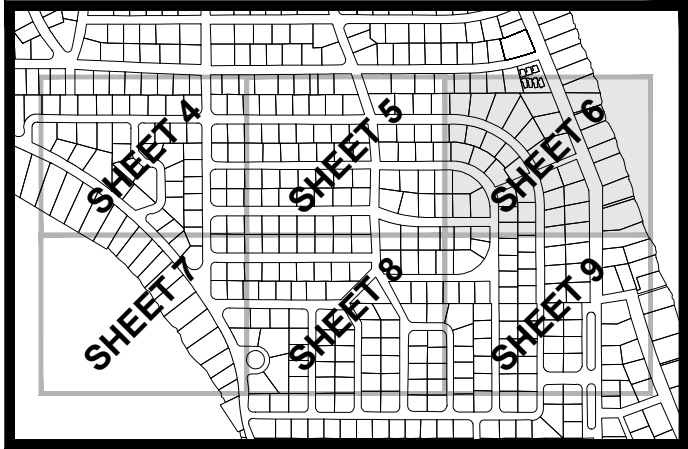
SEE SHEET 8 FOR CONTINUATION

SYMBOLS SHOWN ARE GRAPHIC IN NATURE: DUE TO SCALE. ALL DESIGN ELEMENTS ARE NOT NECESSARILY SHOWN ON PLAN VIEWS. THE CONTRACTOR SHALL ALSO REFER TO SPECIFICATION AND DETAIL SHEETS AS WELL AS THE COMPLETE PLAN SET.

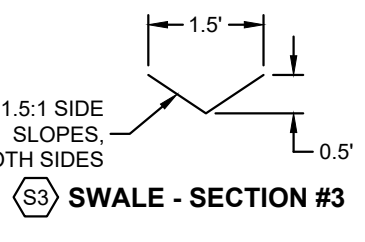
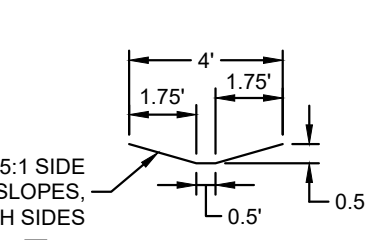
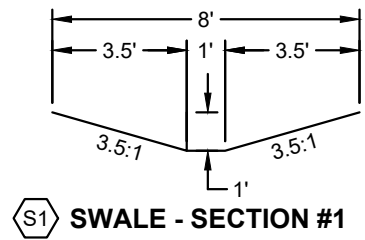
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SEE SHEET 9 FOR CONTINUATION

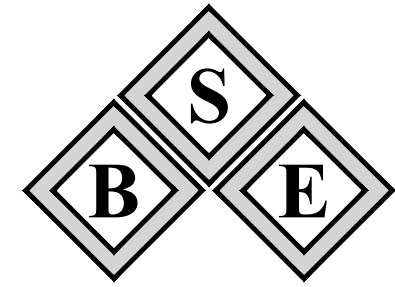


KEY MAP
N.T.S.



- SWALE
- SWALE LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL CONSTRUCT SWALES WHERE SHOWN FOLLOWING THE PLAN INDICATORS AND THE DETAIL SECTIONS ABOVE. CONTRACTOR TO MINIMIZE IMPACTS TO EXISTING TREES, SHRUBS, AND LANDSCAPED AREAS UNLESS NOTED OTHERWISE. WHERE EXISTING CONDITIONS DICTATE, SWALE CONSTRUCTION MAY UTILIZE A COMBINATION OF THE ABOVE SECTION DESIGNS (I.E. LARGER "S1" SECTION MAY TRANSITION TO A "S2" SECTION).
 - CONTRACTOR SHALL SOD ALL DISTURBED AREAS WITH "LIKE KIND" NON-MUCK SOD.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGES TO EXISTING IRRIGATION SYSTEMS THAT MAY OCCUR DURING CONSTRUCTION.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ANY EXISTING MAILBOXES THAT MAY BE MOVE, RELOCATED, AND/OR DAMAGED DURING CONSTRUCTION.

- WHERE NEW PIPE INSTALLATION CONFLICTS WITH EXISTING DRIVEWAYS:
- CONCRETE DRIVEWAYS SHALL BE SAW CUT AT NEAREST JOINT. REPLACE WITH:
- 6" THICK CONCRETE, 3000 PSI REINFORCED WITH FIBER MESH
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
- ASPHALT DRIVEWAY REPLACEMENT:
- 1-1/2" TYPE SP 12.5 ASPHALTIC CONCRETE
 - 6" LIMEROCK / COQUINA, MINIMUM LBR 100 COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
- OR
- FULL DEPTH RECLAMATION MAY BE UTILIZED
- PAVER DRIVEWAY REPLACEMENT:
- ADDITIONAL CARE SHALL BE TAKEN TO NOT DAMAGE EXISTING PAVERS DURING REMOVAL
- REINSTALL REMOVED PAVERS
 - 4" LIMEROCK / COQUINA, MINIMUM LBR 100 COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180

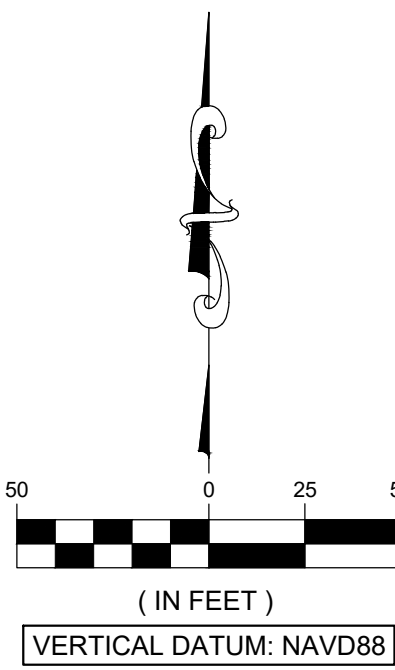


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DATE: 01/30/25
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE

**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE

DRAINAGE PLAN

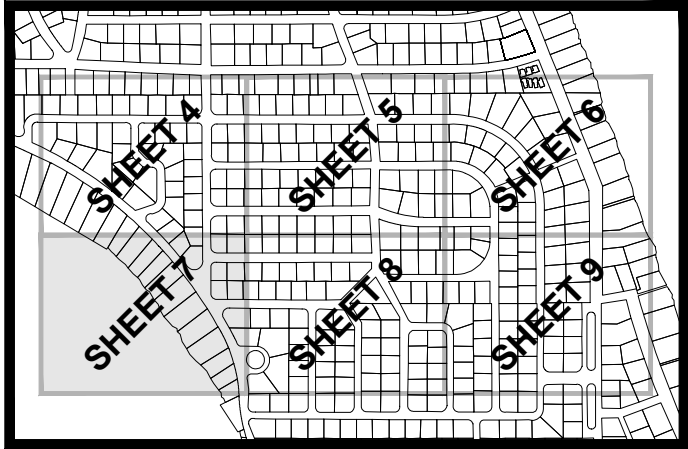
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11440.25

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1144025_400_006

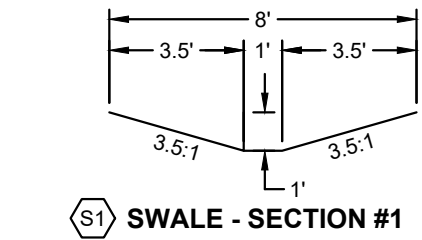
SHEET
6 of 9

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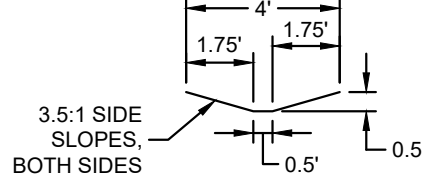
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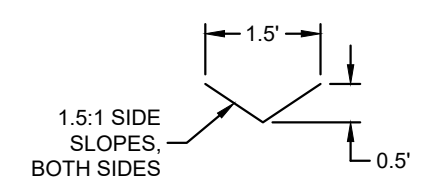
KEY MAP
N.T.S.



S1 SWALE - SECTION #1



S2 SWALE - SECTION #2



S3 SWALE - SECTION #3

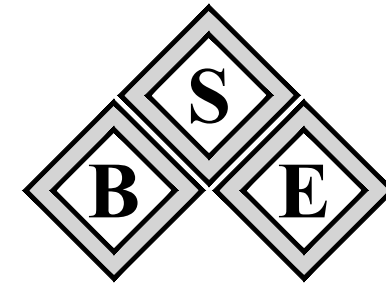
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WHERE NEW PIPE INSTALLATION CONFLICTS WITH EXISTING DRIVEWAYS:

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- 6" THICK CONCRETE, 3000 PSI REINFORCED WITH FIBER MESH
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180

- ASPHALT DRIVEWAY REPLACEMENT:
- 1-1/2" TYPE SP 12.5 ASPHALTIC CONCRETE
 - 6" LIMEROCK / COQUINA, MINIMUM LBR 100 COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
- OR
- FULL DEPTH RECLAMATION MAY BE UTILIZED

- PAVER DRIVEWAY REPLACEMENT:
- ADDITIONAL CARE SHALL BE TAKEN TO NOT DAMAGE EXISTING PAVERS DURING REMOVAL
- REINSTALL REMOVED PAVERS
 - 4" LIMEROCK / COQUINA, MINIMUM LBR 100 COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180

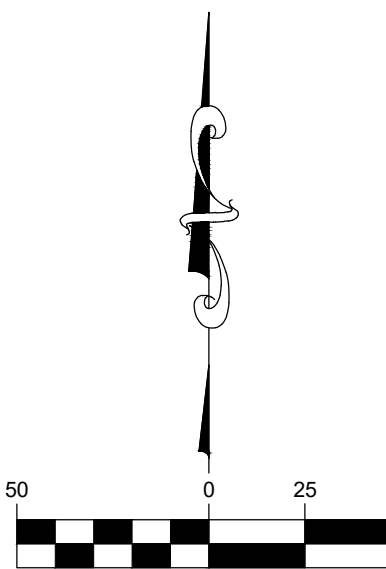


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(IN FEET)
VERTICAL DATUM: NAVD83

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DATE: 01/30/25
DESIGN/DRAWN: SMG/DRB

PROJECT TITLE

**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE

DRAINAGE PLAN

PROJECT NO.

11440.25

DRAWING NO.

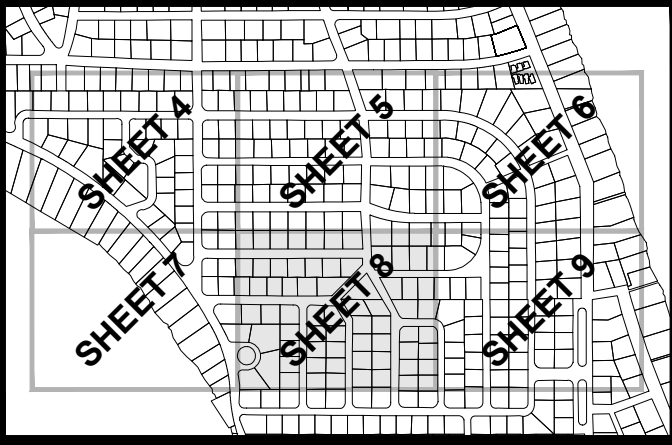
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SHEET

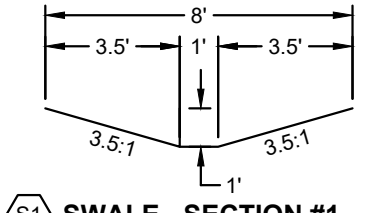
7 of 9

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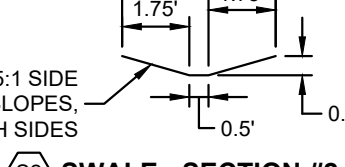
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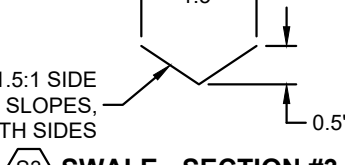
KEY MAP
N.T.S.



SWALE - SECTION #1



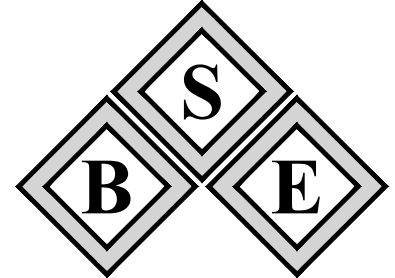
SWALE - SECTION #2



SWALE - SECTION #3

- SWALE LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL CONSTRUCT SWALES WHERE SHOWN FOLLOWING THE PLAN INDICATORS AND THE DETAIL SECTIONS ABOVE. CONTRACTOR TO MINIMIZE IMPACTS TO EXISTING TREES, SHRUBS, AND LANDSCAPED AREAS UNLESS NOTED OTHERWISE. WHERE EXISTING CONDITIONS DICTATE, SWALE CONSTRUCTION MAY UTILIZE A COMBINATION OF THE ABOVE SECTION DESIGNS (I.E. LARGER "S1" SECTION MAY TRANSITION TO A "S2" SECTION).
- CONTRACTOR SHALL SOD ALL DISTURBED AREAS WITH "LIKE KIND" NON-MUCK SOD.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGES TO EXISTING IRRIGATION SYSTEMS THAT MAY OCCUR DURING CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ANY EXISTING MAILBOXES THAT MAY BE MOVE, RELOCATED, AND/OR DAMAGED DURING CONSTRUCTION.

- WHERE NEW PIPE INSTALLATION CONFLICTS WITH EXISTING DRIVEWAYS:
- CONCRETE DRIVEWAYS SHALL BE SAW CUT AT NEAREST JOINT. REPLACE WITH:
 - 6" THICK CONCRETE, 3000 PSI REINFORCED WITH FIBER MESH
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
 - ASPHALT DRIVEWAY REPLACEMENT:
 - 1-1/2" TYPE SP 12.5 ASPHALTIC CONCRETE
 - 6" LIMEROCK / COQUINA, MINIMUM LBR 100 COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
 - OR
 - FULL DEPTH RECLAMATION MAY BE UTILIZED
- PAVER DRIVEWAY REPLACEMENT:
- ADDITIONAL CARE SHALL BE TAKEN TO NOT DAMAGE EXISTING PAVERS DURING REMOVAL
- REINSTALL REMOVED PAVERS
 - 4" LIMEROCK / COQUINA, MINIMUM LBR 100 COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180
 - 6" THICK STABILIZED SUBGRADE COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180

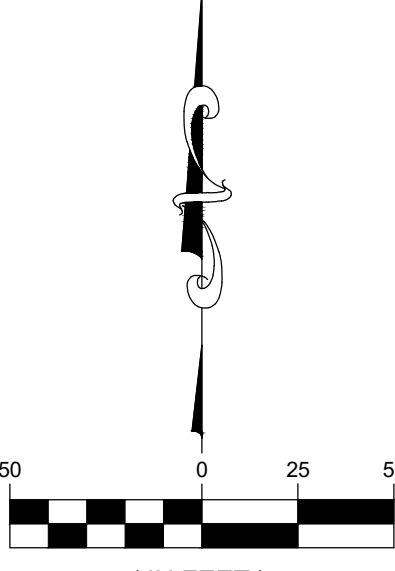


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BUSINESS AUTHORIZATION: LB0004905

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STATE OF FLORIDA, No. 33659 No. 4151

HASSAN A. KAMAL, P.E.
STATE OF FLORIDA, No. 41951



(IN FEET)

VERTICAL DATUM: NAVD83

DATE:	01/30/25
DESIGN/DRAWN:	SMG/DRB

PROJECT TITLE

**BASIN 1
DRAINAGE
IMPROVEMENTS**

SHEET TITLE

DRAINAGE PLAN

PROJECT NO.
11440.25

DRAWING NO.
1144025_400_008

SHEET
8 of 9

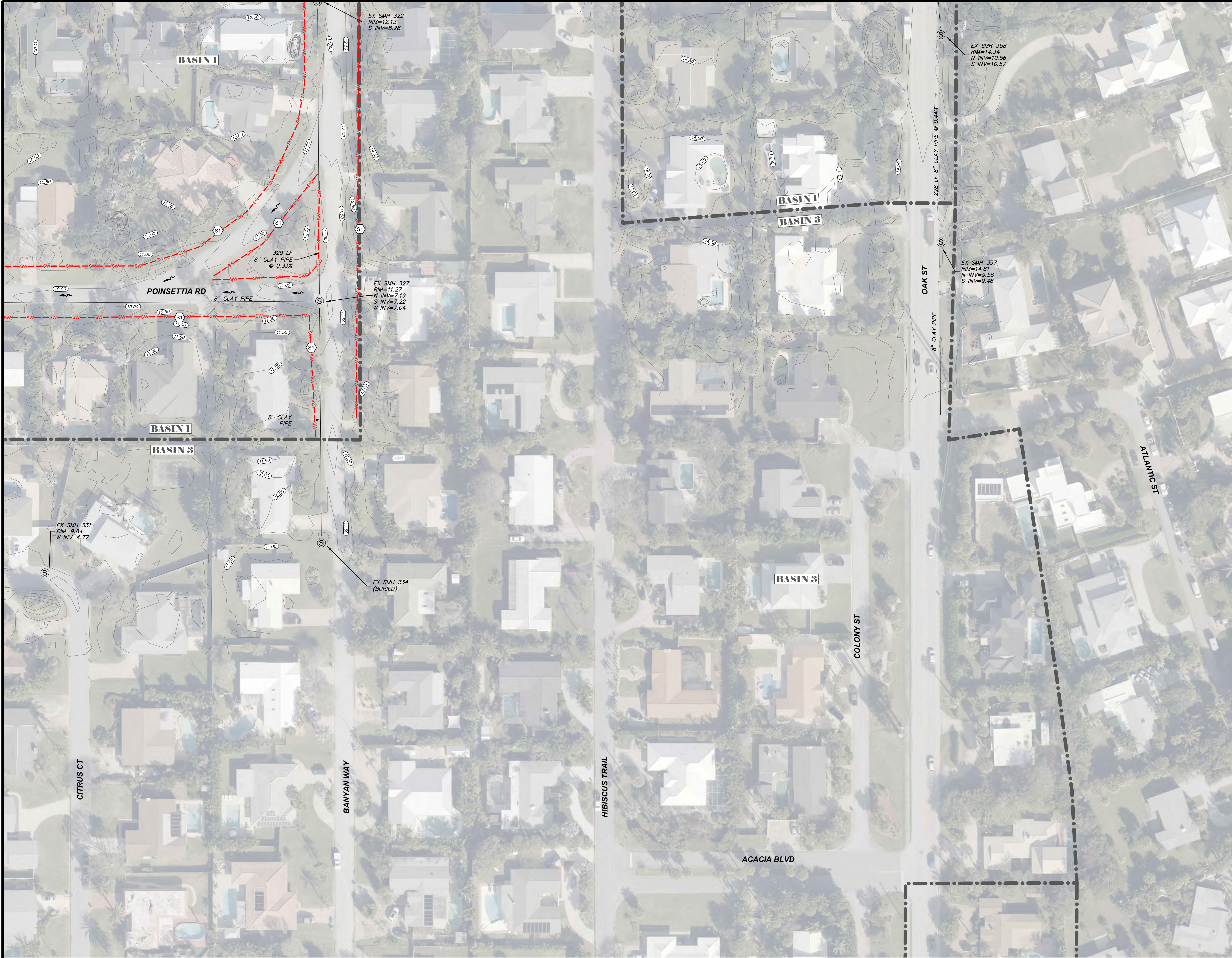
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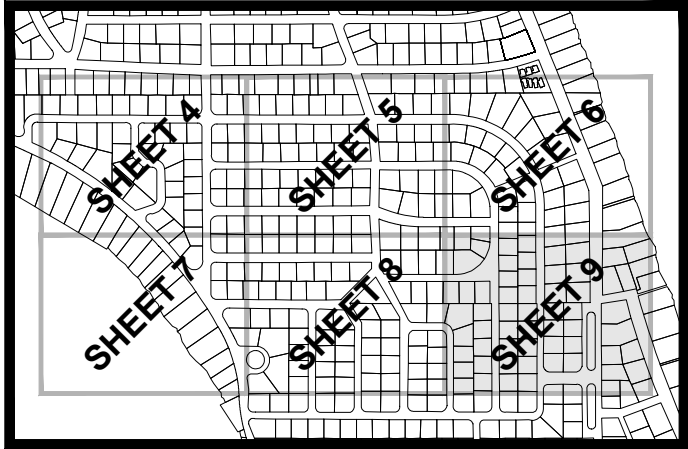
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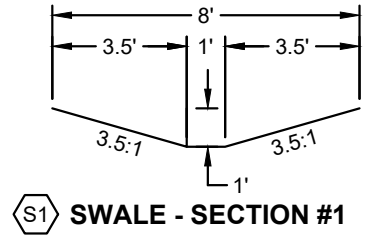
SEE SHEET 6 FOR CONTINUATION



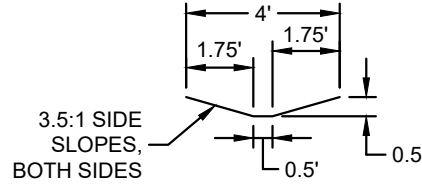
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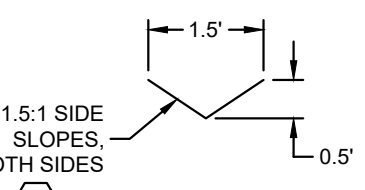
KEY MAP
N.T.S.



SWALE - SECTION #1



SWALE - SECTION #2



SWALE - SECTION #3

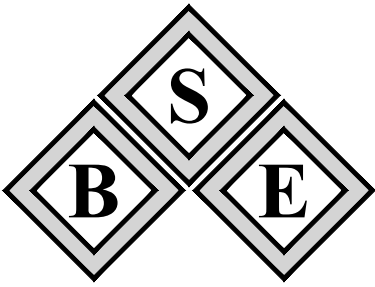
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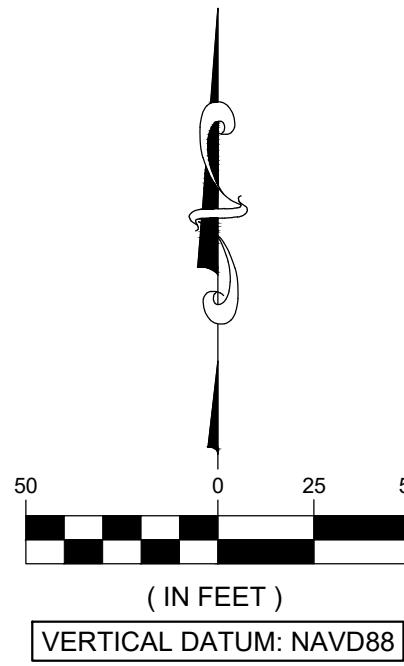


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