CONTRACT DOCUMENTS

&

TECHNICAL SPECIFICATIONS FOR

RFP -18-04

KINGSVILLE CITY HALL IRRIGATION & LANDSCAPING SERVICES FOR

CITY OF KINGSVILLE, TEXAS

City Manager

Jesus A Garza

Mayor

Sam Fugate

Commissioner(s)

Edna Lopez Dianne Leubert Arturo Pecos Hector Hinojosa

July 2018

Prepared by:



Engineering Department 400 W. King Avenue Kingsville, Texas 78363 (361) 595-8007

TABLE OF CONTENTS

	<u>ITEM</u>	NO. OF PAGES
1.	ADVERTISEMENT AND INVITATION FOR BIDDERS	1
2.	INSTRUCTION TO BIDDERS	3
3.	BID PROPOSAL	2
4.	NON-COLLUSION AFFIDAVIT OF PRIME BIDDER	1
5.	CERTIFICATION OF BIDDER REGARDING CIVIL RIGHT LAWS AND REGULATIONS	1
6.	STANDARD FORM OF AGREEMENT	5
7.	EQUAL OPPORTUNITY CLAUSE	2
8.	EQUAL OPPORTUNITY GUIDELINES FOR CONSTRUCTION CONTRACTORS	2
9.	FEDERAL LABOR STANDARDS LABOR PROVISIONS (HUD-4010)	4
10.	TITLE 29 PART 3 – LABOR	6
11.	SECTION 504 CERTIFICATION	1
12.	CONCERNING LABOR STANDARDS AND PREVAILING WAGE REQUIREMENTS	2
13.	BID BOND	1
14.	CONSTRUCTION PAYMENT BOND	2
15.	CONSTRUCTION PERFORMANCE BOND	4
16.	GENERAL CONDITIONS	17
17.	SPECIAL CONDITIONS	5
18.	STATEMENT OF BIDDER'S QUALIFICATIONS	3
19.	ATTORNEY'S REVIEW CERTIFICATION	1
20.	TECHNICAL SPECIFICATIONS	25
21.	DRAWINGS	4



ADVERTISEMENT AND INVITATION FOR BIDS

The City of Kingsville, Texas will receive sealed bids for **RFP 18-04** "Kingsville City Hall Irrigation & Landscaping Services" until 2:00 p.m. on Tuesday, August 14, 2018. Sealed proposals will be addressed to, Charley Sosa, Purchasing Manager, City of Kingsville, 400 W. King Ave., Kingsville, TX 78363. The bids will be publicly opened and read aloud immediately thereafter. A Pre-Bid Conference will be held on **Tuesday**, **July 31**, 2018 at 10:00 a.m. at the Kingsville City Hall Community Room, 400 W. King Ave., Kingsville, TX 78363 with an onsite visit being a portion of the proceedings.

Major items of work include the following:

This project consists of the installation of an irrigation system and construction of a landscaping plan for the Kingsville City Hall in accordance with the contract documents, technical specifications, and plans.

Bid/Contract Documents, including Drawings and Technical Specifications can be found on the City of Kingsville website at the following web address.

http://www.cityofkingsville.com/departments/purchasing/rfpbid-openings-2018/

A bid bond by an acceptable surety, in the amount of 5% of the bid amount shall be submitted with each bid.

Attention is called to the fact that not less than, the federally determined prevailing (Davis-Bacon and Related Acts) wage rate, as issued by the Texas Department of Agriculture Office of Rural Affairs and contained in the contract documents, must be paid on this project. In addition, the successful bidder must ensure that employees and applicants for employment are not discriminated against because of race, color, religion, sex, sexual identity, gender identity, or national origin.

The City of Kingsville is an Affirmative Action/Equal Opportunity Employer that reserves the right to reject any and all bids and/or waive any formalities in the bidding.

Bids may be held by the City for a period not to exceed 90 days from the date of the bid opening for the purpose of reviewing the bids and investigating the bidder's qualifications prior to the contract award.

INSTRUCTION TO BIDDERS

Use of Separate Bid Forms:

These contract documents include a complete set of bid and contract forms which are for the convenience of the bidders and are not to be detached from the contract document, completed or executed. **Separate bid forms are provided and are to be used for preparation of the bid.**

Interpretations or Addenda:

No oral interpretations will be made to any bidder. Each request for an interpretation shall be made in writing to the City of Kingsville Engineering Department no less than four (4) days prior to the bid opening. Each interpretation made will be in the form of an Addendum to the bid documents and will be distributed to all parties holding bid documents no less than three (3) days prior to the bid opening. It is, however, the bidder's responsibility to make inquiry as to any addenda issued. All such addenda shall become part of the contract documents and all bidders shall be bound by such addenda, whether or not received by the bidders.

Inspection of Site:

Each bidder should visit the site of the proposed work and should become acquainted with the existing conditions and facilities, the difficulties and restrictions pertaining to the performance of the contract. A Pre-Bid conference will be held on Tuesday, July 31, 2018, at 10:00 a.m. at the City Hall Community Room, 400 W. King Ave., Kingsville, Texas 78363. The bidder should thoroughly examine and become familiar with the drawings, technical specifications and all other contract documents. The contractor by the execution of the contract shall in no way be relieved of any obligation under it due to failure to receive or examine any form or legal document or to visit the site or the conditions existing at the site. The City will be justified in rejecting any claim based on lack of inspection of the site prior to the bid.

Alternate Bid Items:

Alternate bids or bid items will be considered as shown in the Bid Proposal:

- 1. Deductive Alternate "A"
 - a. Floratam St. Augustine Sod provided by Owner and Installed by Contractor.

Bids:

- A. All bids must be submitted on the forms provided and are subject to all requirements of the Contract Documents, including the Drawings.
- B. All bids must be regular in every respect and no interlineation, excisions or special conditions may be made or included by the bidder.
- C. Bid documents, including the bid, the bid bond, and the statement of bidder's qualifications shall be sealed in an envelope and clearly labeled with the words "Bid Documents", the project number, name of bidder and the date and time of bid opening.
- D. The City may consider as irregular any bid on which there is an alteration of or departure from the bid form and, at its option, may reject any irregular bid.
- E. If a contract is awarded, it will be awarded to a responsible bidder on the basis of the lowest/best bid and the selected alternate bid items, if any. The contract will require the completion of the work in accordance with the contract documents.

F. Contractor must bid the following, Base Bid and Additive Alternate "A" in order for the bid proposal to be considered a Responsive Bid.

Bid Modification Prior to Bid Opening:

- A. Any bidder may modify his bid by email at any time prior to the scheduled closing time for receipt of bids, provided such email is received by the City prior to the closing time, and provided further, the City is satisfied that a written confirmation of the modification over the signature of the bidder was mailed prior to the closing time. The email should not reveal the bid price but should provide the addition, subtractions or other modifications so that the final prices or terms will not be known by the Owner until the sealed bid is open. If written confirmation is not received within two (2) days from the closing time, no consideration will be given to the email.
- B. Likewise, any bidder may modify a bid by submitting a supplemental bid in person prior to the scheduled closing time for receipt of bids. Such supplemental bid should mention only additions or subtractions to the original bid so as to not reveal the final prices or terms to the City until the sealed bid is open.

Bid Bond:

- A. A bid bond in the amount of 5% of the bid issued by an acceptable surety shall be submitted with each bid.
- B. The bid bond, or its comparable, will be returned to the bidder as soon as practical after the opening of the bids.

Statement of Bidder's Qualifications:

Each bidder shall submit on the form furnished for that purpose a statement of the bidder's qualifications. The City shall have the right to take such steps as it deems necessary to determine the ability of the bidder to perform his obligations under the contract, and the bidder shall furnish the City all such information and data for this purpose as it may request. The right is reserved to reject any bid where an investigation of the available data does not satisfy the City that the bidder is qualified to carry out properly the terms of the contract.

Unit Price:

The unit price for each of the several items in the bid shall include its pro rata share of overhead so that the sum of the products obtained by multiplying the quantity for each item by the unit price bid represents the total bid. Any bid not conforming to this requirement may be rejected as nonconforming. Special attention is drawn to this condition, as the unit prices will be used to determine the amount of any change orders resulting from an increase or decrease in quantities.

Corrections:

Erasures or other corrections in the bid must be noted over the signature of the bidder.

Time for Receiving Bids:

Bids received prior to the advertised hour of opening shall be kept securely sealed. The officer appointed to open the bids shall decide when the specified time has arrived and no bid received thereafter will be considered; except that when a bid arrives by mail after the time fixed for opening, but before the reading of all other bids is completed, and it is shown to the satisfaction of the City that the late arrival of the bid

was solely due to delay in the mail for which the bidder was not responsible, such bid will be received and considered.

Opening of Bids:

The City shall, at the time and place fixed for the opening of bids, open each bid and publicly read it aloud, irrespective of any irregularities therein. Bidders and other interested individuals may be present.

Withdrawal of Bids:

Bidder may withdraw the bid before the time fixed for the opening of bids, by communicating his purpose in writing to the locality. Upon receipt of such notice, the unopened bid will be returned to the bidder. The bid guaranty of any bidder withdrawing his bid will be returned promptly.

Award of Contract/Rejection of Bids:

- A. The contract will be awarded to the responsive, responsible Bidder submitting a bid that provides goods or services at the best value for the City. The bidder selected will be notified at the earliest possible date. The City reserves the right to reject any or all bids and to waive any informality in bids received where such rejection or waiver is in its interest.
- B. The City reserves the right to consider as unqualified to do the work any bidder who does not habitually perform with his own forces the major portions of the work involved in construction of the improvements embraced in this contract.

Execution of Agreement/Performance and Payment Bonds:

- A. Performance and Payment Bonds are required of all Prime Contractors which enter into a formal contract in excess of \$50,000 with the State, any department, board, agency, municipality, county, school district, or any division or subdivision thereof, to obtain a Payment Bond in the amount of the contract before commencing with work and a performance bond for public works contracts in excess of \$100,000.
- B. The failure of the successful bidder to execute the agreement and supply the required bonds within then (10) days after the prescribed forms are presented for signature, or within such extended period as the City may grant, shall constitute a default and the City may, at its option either award the contract to the next bidder to who provides goods or services at the best value for the City, or re-advertise for bids. In either case, the City may charge against the bidder the difference between the amount of the bid, and the amount for which a contract is subsequently executed irrespective of whether this difference exceeds the amount of the bid bond. If a more favorable bid is received through re-advertisement, the defaulting bidder shall have no claim against the City for a refund.

Equal Employment Opportunity:

Attention is called to the requirements for ensuring that employees and applicants for employment are not discriminated against because of their race, color, creed, sex, or national origin.

BID PROPOSAL

Proposal of	
a *	(hereinafter called "BIDDER"), organized and existing under the laws of
the State of Texas to	City of Kingsville, Texas (hereinafter called "OWNER.)"
	by proposes to perform all WORK for the construction of the "Kingsville City Hall caping Services" in accordance with the CONTRACT DOCUMENTS, within the time set
forth therein, and at the	ne prices stated below.
certifies as to its ow	n of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto on organization, that this BID has been arrived at independently, without consultation, agreement as to any matter relating to this BID with any other BIDDER or with any
the NOTICE TO Pl thereafter. BIDDER	by agrees to commence WORK under this contract on or before a date to be specified in ROCEED and to fully complete the PROJECT within <u>90</u> consecutive calendar days further agrees to pay as liquidated damages, the sum of <u>\$ 200.00</u> for each consecutive er as provided in the General Conditions.
BIDDER ackı	nowledges receipt of the following ADDENDUM:

^{*}Insert "a corporation", "a partnership", or "an Individual" as applicable.

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following amount:

BID SCHEDULE

	QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL PRICE
DACE	DID KINGSVII	I I E CITV	HALL IRRIGATION & LA	NDCCADING CEDVIC	CEC
DASE	DID – KINGSVII	LLE CITY	HALL IRRIGATION & LA	NDSCAPING SERVIC	<u></u>
A-1)	1	LS	INSTALLATION OF IRR (WITH EXCEPTION OF per plans and		
			specifications, complete in place.	\$	\$
A-2)	103,000	SF	INSTALLATION OF SOI (SOD PROVIDED BY & I per plans and		TTRACTOR)
			specifications, complete in place per square foot.	\$	\$
			TOTAL 1	BASE BID \$	
	TIVE/DEDUCTIVE		RNATIVES		
(Note: (Items p	Only difference in orice, a negative version of the control of the	n price betwalue should	RNATIVES veen Bid Items shall be entered to that item.) NGSVILLE CITY HALL IRE	l below. If the different	ce in price is lower than to
(Note: (Items p DEDUC	Only difference in orice, a negative version of the control of the	n price betw alue should <u>ATE "A"</u> ATE – KIN	RNATIVES veen Bid Items shall be entered be entered for that item.) NGSVILLE CITY HALL IRE INSTALLATION OF SOI (SOD PROVIDED BY OW per plans and	l below. If the different	ce in price is lower than to
(Note: (Items p DEDUC	Only difference in orice, a negative version of the control of the	n price betw alue should <u>ATE "A"</u> ATE – KIN	RNATIVES veen Bid Items shall be entered be entered for that item.) NGSVILLE CITY HALL IRE INSTALLATION OF SOI (SOD PROVIDED BY OV	d below. If the different RIGATION & LANDS O VNER & INSTALLED	ce in price is lower than to
(Note: (Items p DEDUC	Only difference in orice, a negative version of the control of the	n price betw alue should <u>ATE "A"</u> <u>ATE – KIN</u> SF	RNATIVES veen Bid Items shall be entered to that item.) NGSVILLE CITY HALL IRE INSTALLATION OF SOI (SOD PROVIDED BY OV per plans and specifications, complete	d below. If the differences RIGATION & LANDS VNER & INSTALLED \$	ce in price is lower than to be considered by CONTRACTOR) \$

Respectfully submitted:			
Signature	Address		
Title	Date		
License number (if applicable)	Date		

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

State of)		
County of)		
	, being first duly sworn, dep		
(1) He issubmitted the attached	of Bid;	, the B	idder that has
	respecting the preparation and co		
(3) Such Bid is genuine	and is not a collusive or sham Bi	•	
employees or parties in connived or agreed, dire collusive or sham Bid in submitted or to refrain fr directly or indirectly, sou other Bidder, firm or per or to fix an overhead, pr or to secure through any	der nor any of its officers, partner interest, including this affiant, has ectly or indirectly with another Bid connection with the Contract for om bidding in connection with surght by agreement or collusion or son to fix the price or prices in the offit or cost element of the Bid price of collusion, conspiracy, connivance (Lo ed Contract; and	in any way colluded, corer, firm or person to surhich the attached Bid In Contract, or has in an artached Bid or of any error the Bid price of any error unlawful agreement.	onspired, ubmit a has been ny manner, erence with any other Bidder, y other Bidder,
collusion, conspiracy, co	quoted in the attached Bid are fair onnivance or unlawful agreement , owners, employees, or parties in	on the part of the Bidde	er or any of its
	(Sigr	ed)	
		Title	
Subscribed and sworr	n to me this day of	·	
		Ву:	
		Notary	y Public
My commission expire	es		

EQUAL OPPORTUNITY CLAUSE

(b) Federally assisted construction contracts. Except as otherwise provided, each administering agency shall require the inclusion of the following language as a condition of any grant, contract, loan, insurance, or guarantee involving federally assisted construction which is not exempt from the requirements of the equal opportunity clause:

The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discourage or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.
- (c) Subcontracts. Each nonexempt prime contractor or subcontractor shall include the equal opportunity clause in each of its nonexempt subcontracts.
- (d) Incorporation by reference. The equal opportunity clause may be incorporated by reference in all Government contracts and subcontracts, including Government bills of lading, transportation requests, contracts for deposit of Government funds, and contracts for issuing and paying U.S. savings bonds and notes, and such other contracts and subcontracts as the Deputy Assistant Secretary may designate.
- (e) Incorporation by operation of the order. By operation of the order, the equal opportunity clause shall be considered to be a part of every contract and subcontract required by the order and the regulations in this part to include such a clause whether or not it is physically incorporated in such contracts and whether or not the contract between the agency and the contractor is written.
- (f) Adaptation of language. Such necessary changes in language may be made in the equal opportunity clause as shall be appropriate to identify properly the parties and their undertakings.

[43 FR 49240, Oct. 20, 1978, as amended at 62 FR 66971, Dec. 22, 1997; 79 FR 72993, Dec. 9, 2014; 80 FR 54934, September 11, 2015]



Equal Opportunity Guidelines for Construction Contractors

Note: To be included in bid packet and distributed at the preconstruction conference (optional)

1. What are the responsibilities of the offeror or bidder to ensure equal employment opportunity?

For contracts over \$ 10,000, the offeror or bidder must comply with the "Equal Opportunity Clause" and the "Standard Federal Equal Opportunity Construction Contract Specifications."

2. Are construction contractors required to ensure a legal working environment for all employees?

Yes, it is the construction contractor's responsibility to provide an environment free of harassment, intimidation, and coercion to all employees and to notify all foremen and supervisors to carry out this obligation, with specific attention to minority or female individuals.

- 3. To alleviate developing separate facilities for men and women on all sites, can a construction contractor place all women employees on one site?

 No, two or more women should be assigned to each site when possible.
- 4. Are construction contractors required to make special outreach efforts to Section 3 or minority and female recruitment sources?

Yes, construction contractors must establish a current list of Section 3, minority and female recruitment sources. Notification of employment opportunities, including the availability of on-the-job training and apprenticeship programs, should be given to these sources. The efforts of the construction contractors should be kept in file.

- 5. Should records be maintained on the number of Section 3 residents, minority and females applying for positions with construction contractors?
 - Yes, records must be maintained to include a current list of names, addresses and telephone numbers of all Section 3, minority and female applicants. The documentation should also include the results of the applications submitted.
- 6. What happens if a woman or minority is sent to the union by the Contractor and is not referred back to the Contractor for employment?

If the unions impede the construction contractor's responsibility to provide equal employment opportunity, a written notice should be submitted to TDA.

7. What efforts are made by construction contractors to create entry-level positions for Section 3 residents, women and minorities?

Construction contractors are required to develop on-the-job training programs, or participate in training programs, especially those funded by the Department of Labor, to create positions for Section 3 residents, women and minorities and to meet employment needs.

8. Are any efforts made by the Contractor to publicize their Equal Employment Opportunity (EEO) policy?

Yes, the construction contractor is responsible for notifying unions and sources of training programs of their equal employment opportunity policy. Unions should be requested to cooperate in the effort of equal opportunity. The policy should be included in any appropriate manuals, or collective bargaining agreements. The construction contractor is encouraged to publicize the equal employment opportunity policy in the company newspaper and annual report. The Contractor is also responsible to include the EEO policy in all media advertisement.

- 9. Are any in-service training programs provided for staff to update the EEO policy? At least annually a review of the EEO policy and the affirmative action obligations are required of all personnel employees of a decision-making status. A record of the meeting including date, time, location, persons present, subject matter discussed, and disposition of the subject matter should be maintained.
- 10. What recruitment efforts are made for Section 3 residents, minorities and women? The construction contractor must notify both orally and in writing, Section 3, minority and female recruitment sources one month prior to the date of acceptance for apprenticeship or other training programs.
- 11. Are any measures taken to encourage promotions for minorities and women? Yes, an annual evaluation should be conducted for all minority and female personnel to encourage these employees to seek higher positions.
- 12. What efforts are taken to ensure that personnel policies are in accordance with the EEO policy?

Personnel policies in regard to job practices, work assignments, etc. should be continually monitored to ensure that the EEO policy is carried out.

- 13. Can women be excluded from utilizing any facilities available to men?

 No, all facilities and company activities are non-segregated except for bathrooms or changing facilities to ensure privacy.
- 14. What efforts should be utilized to include minority and female contractors and suppliers?

Take affirmative steps to ensure that small, minority, and women owned businesses are included on all lists for contractors/service providers. Solicit these businesses when issuing RFPs and RFQs and soliciting construction bids. Divide project activities into small tasks to allow participation. Keep records of all offers to minority and female construction contractors.

15. If a construction contractor participates in a business related association that does not comply with equal opportunity affirmative action standards, does that show his/her failure to comply?

No, the construction contractor is responsible for its own compliance.

16. Can a construction contractor hire a subcontractor who has been debarred from government contracts pursuant to EEO?

No. The construction contractor must suspend, terminate or cancel its contract with any Subcontractor who is in violation of the EEO policy.

17. What effort has been taken by the construction contractor to monitor all employment to insure the company EEO policy is being carried out?

The construction contractor must designate a responsible individual to keep accurate records of all employees that includes specific information required by the government.

Title 29 — LABOR

Subtitle A — **Office of the Secretary of Labor**

PART 3 — CONTRACTORS AND SUBCONTRACTORS ON PUBLIC BUILDING OR PUBLIC WORK FINANCED IN WHOLE OR IN PART BY LOANS OR GRANTS FROM THE UNITED STATES

Sec.

- 3.1 Purpose and scope
- 3.2 Definitions
- 3.3 Weekly statement with respect to payment of wages
- 3.4 Submission of weekly statements and the preservation and inspection of weekly payroll records.
- 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.
- 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.
- 3.7 Applications for the approval of the Secretary of Labor
- 3.8 Action by the Secretary of Labor upon applications.
- 3.9 Prohibited payroll deductions.
- 3.10 Methods of payment of wages.
- 3.11 Regulations part of contract.

AUTHORITY: The provisions of this Part 3 issued under R.S. 161, sec. 2, 48 Stat. \$48; Reorg. Plan No. 14 of 1950, 64 Stat. 1267, 5 U.S.C. Appendix; 5 U.S.C. 301; 40 U.S.C. 276c.

SOURCE: The provisions of this Part 3 appear at 29 F.R. 97, Jan. 4, 1964, unless otherwise noted.

Section 3.1 Purpose and Scope.

This part prescribes "anti-kickback" regulations under section 2 of the Act of

June 13, 1934, as amended (40 U.S.C. 276c), popularly known as the Copeland Act. This part applies to any contract which is subject to Federal wage standards and which is for the construction, prosecution, completion, or repair of public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States. The part is intended to aid in the enforcement of the minimum wage provisions of the Davis-Bacon Act and the various statutes dealing with Federallyassisted construction that contain similar minimum wage provisions, including those provisions which are not subject to Reorganization Plan No. 14 (e.g., the College Housing Act of 1950, the Federal Water Pollution Control Act, and the Housing Act of 1959), and in the enforcement of the overtime provisions of the Contract Work Hours Standards Act whenever they are applicable to construction work. The part details the obligation of contractors and subcontractors relative to the weekly submission of statements regarding the wages paid on work covered thereby; sets forth the circumstances and procedures governing the making of payroll deductions from the wages of those employed on such work; and delineates the methods of payment permissible on such work.

Section 3.2 Definitions.

As used in the regulations in this part:

- (a) The terms "building" or "work" generally include construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, powerlines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing, and landscaping. Unless conducted in connection with and at the site of such a building or work as is described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a "building" or "work" within the meaning of the regulations in this part.
- (b) The terms "construction," "prosecution," "completion," or "repair" mean all types of work done on a particular building or work at the site thereof, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.
- (c) The terms "public building" or "public work" include building or work for whose construction, prosecution, completion, or repair, as defined above, a Federal agency is a contracting party, regardless of whether title thereof is in a Federal agency.

- (d) The term "building or work financed in whole or in part by loans or grants from the Unites States" includes building or work for whose construction, prosecution, completion, or repair, as defined above, payment or part payment is made directly or indirectly from funds provided by loans or grants by a Federal agency. The term includes building or work for which the Federal assistance granted is in the form of loan guarantees or insurance.
- (e) Every person paid by a contractor or subcontractor in any manner for his labor in the construction, prosecution, completion, or repair of a public building or public work or building or work financed in whole or in part by loans or grants from the United States is "employed" and receiving "wages," regardless of any contractual relationship alleged to exist between him and the real employer.
- (f) The term "any affiliated person" includes a spouse, child, parent, or other close relative of the contractor or subcontractor; a partner or officer of the contractor or subcontractor; a corporation closely connected with the contractor or subcontractor as parent, subsidiary or otherwise, and an officer or agent of such corporation.
- (g) The term "Federal agency" means the United States, the District of Columbia, and all executive departments, independent establishments, administrative agencies, and instrumentality's of the United States and of the District of Columbia, including corporations, all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or any of the foregoing departments, establishments, agencies, and instrumentality's.

{29 FR 97, Jan. 4, 1964, as amended at 33 FR 32575, Nov. 27, 1973}

Section 3.3 Weekly statement with respect to payment of wages.

- (a) As used in this section, the term "employee" shall not apply to persons in classifications higher than that of laborer or mechanic and those who are the immediate supervisors of such employees.
- (b) Each contractor or subcontractor engaged in the construction, prosecution, completion, or repair of any public building or public work, or building or work financed in whole or in part by loans or grants from the United States, shall furnish each week a statement with respect to the wages paid each of its employees engaged on work covered by 29 CFR Parts 3 and 5 during the preceding weekly payroll period. This statement shall be executed by the contractor or subcontractor or by an authorized officer of employee of the contractor or subcontractor who supervises the payment of wages, and shall be on form WH 348, "Statement of Compliance," or on an identical form on the back of WH 347, "Payroll (For Contractors Optional Use)" or on any form with identical wording. Sample copies of WH 347 and WH 348 may be obtained from the Government contracting or sponsoring agency, and copies of these forms may be purchased at the Government Printing Office.
- (c) The requirements of this section shall not apply to any contract of \$2,000 or less.
- (d) Upon a written finding by the head of a Federal agency, the Secretary of Labor may provide reasonable limitations, variations, tolerances, and exemptions from the requirements of this section subject to such

conditions as the Secretary of Labor may specify.

{29 F.R. 95, Jan. 4, 1964, as amended at 33 F.R. 10186, July 17, 1968}

Section 3.4 Submission of weekly statements and the preservation and inspection of weekly payroll records.

- (a) Each weekly statement required under §3.3 shall be delivered by the contractor or subcontractor, within seven days after the regular payment date of the payroll period, to a representative of a Federal or State agency in charge at the site of the building or work, or if there is no representative of a Federal or State agency at the site of the building or work, the statement shall be mailed by the contractor or subcontractor, within such time, to a Federal or State agency contracting for or financing the building or work. After such examination and check as may be made, such statement, or a copy thereof, shall be kept available, or shall be transmitted together with a report of any violation, in accordance with applicable procedures prescribed by the United States Department of Labor.
- (b) Each contractor or subcontractor shall preserve his weekly payroll records for a period of three years from date of completion of the contract. The payroll records shall set out accurately and completely the name and address of each laborer and mechanic, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Such payroll records shall be made available at all times for inspection by the contracting officer or his authorized representative, and by authorized representatives of the Department of Labor.

Section 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.

Deductions made under the circumstances or in the situations described in the paragraphs of this section may be made without application to and approval of the Secretary of Labor:

- (a) Any deduction made in compliance with the requirements of Federal, State, or local law, such as Federal or State withholding income taxes and Federal social security taxes.
- (b) Any deduction of sums previously paid to the employee as a bona fide prepayment of wages when such prepayment is made without discount or interest. A "bona fide prepayment of wages" is considered to have been made only when cash or its equivalent has been advanced to the person employed in such manner as to give him complete freedom of disposition of the advanced funds.
- (c) Any deduction of amounts required by court process to be paid to another, unless, the deduction is in favor of the contractor, subcontractor or any affiliated person, or when collusion or collaboration exists.
- (d) Any deduction constituting a contribution on behalf of the person employed to funds established by the employer or representatives of employees, or both, for the purpose of providing either from principal or income, or both, medical or hospital care, pensions, or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disability, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of employees, their

- families and dependents: Provided, however, That the following standards are met: (1) The deduction is not otherwise prohibited by law; (2) it is either: (i) Voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment, or (ii) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; (3) no profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commission, dividend, or otherwise; and (4) the deductions shall serve the convenience and interest of the employee.
- (e) Any deduction contributing toward the purchase of United States Defense Stamps and Bonds when voluntarily authorized by the employee.
- (f) Any deduction requested by the employee to enable him to repay loans to or to purchase shares in credit unions organized and operated in accordance with Federal and State credit union statutes.
- (g) Any deduction voluntarily authorized by the employee for the making of contributions to governmental or quasigovernmental agencies, such as the American Red Cross.
- (h) Any deduction voluntarily authorized by the employee for the making of contributions to Community Chests, United Givers Funds, and similar charitable organizations.
- (i) Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments:

Provided, however, that a collective bargaining agreement between the contractor or subcontractor and representatives of its employees provides for such deductions and the deductions are not otherwise prohibited by law.

- (j) Any deduction not more than for the "reasonable cost" of board, lodging, or other facilities meeting the requirements of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and Part 531 of this title. When such a deduction is made the additional records required under §516.27(a) of this title shall be kept.
- (k) Any deduction for the cost of safety equipment of nominal value purchased by the employee as his own property for his personal protection in his work, such as safety shoes, safety glasses, safety gloves, and hard hats, if such equipment is not required by law to be furnished by the employer, if such deduction is not violative of the Fair Labor Standards Act or prohibited by other law, if the cost on which the deduction is based does not exceed the actual cost to the employer where the equipment is purchased from him and does not include any direct or indirect monetary return to the employer where the equipment is purchased from a third person, and if the deduction is either (1) voluntarily consented to be the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance; or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees. {36 F.R. 9770, May 28, 1971.}

Section 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.

Any contractor or subcontractor may apply to the Secretary of Labor for permission to make any deduction not permitted under §3.5. The Secretary may grant permission whenever he finds that:

- (a) The contractor, subcontractor, or any affiliated person does not make a profit or benefit directly or indirectly from the deduction either in the form of a commission, dividend, or otherwise:
- (b) The deduction is not otherwise prohibited by law;
- (c) The deduction is either (1) voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance, or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; and (d) The deduction serves the convenience and interest of the employee.

Section 3.7 Applications for the approval of the Secretary of Labor.

Any application for the making of payroll deductions under §3.6 shall comply with the requirements prescribed in the following paragraphs of this section:

- (a) The application shall be in writing and shall be addressed to the Secretary of Labor.
- (b) The application need not identify the contract or contracts under which the work in question is to be performed. Permission will be given for deductions on all current and future contracts of the applicant for a period of 1 year. A renewal of permission to make such payroll deduction will be granted

upon the submission of an application which makes reference to the original application, recites the date of the Secretary of Labor's approval of such deductions, states affirmatively that there is continued compliance with the standards set forth in the provisions of §3.6, and specifies any conditions which have changed in regard to the payroll deductions. {36 F.R. 9770, May 28, 1971.}

- (c) The application shall state affirmatively that there is compliance with the standards set forth in the provisions of §3.6. The affirmation shall be accompanied by a full statement of the facts indicating such compliance.
- (d) The application shall include a description of the proposed deduction, the purpose to be served thereby, and the classes of laborers or mechanics from whose wages the proposed deduction would be made.
- (e) The application shall state the name and business of any third person to whom any funds obtained from the proposed deductions are to be transmitted and the affiliation of such person, if any, with the applicant.

Section 3.8 Action by the Secretary of Labor upon applications.

The Secretary of Labor shall decide whether or not the requested deduction is permissible under provisions of §3.6; and shall notify the applicant in writing of his decision.

Section 3.9 Prohibited payroll deductions.

Deductions not elsewhere provided for by this part and which are not found to be permissible under §3.6 are prohibited.

Section 3.10 Methods of payment of wages.

The payment of wages shall be by cash, negotiable instruments payable on demand, or the additional forms of compensation for which deductions are permissible under this part. No other methods of payment shall be recognized on work subject to the Copeland Act.

Section 3.11 Regulations part of contract.

All contracts made with respect to the construction, prosecution, completion, or repair of any public building or public work or building or work financed in whole or in part by loans or grants from the United States covered by the regulations in this part shall expressly bind the contractor or subcontractor to comply with such of the regulations in this part as may be applicable. In this regard, see §5.5(a) of this subtitle.

SECTION 504 CERTIFICATION

POLICY OF NONDISCRIMINATION ON THE BASIS OF DISABILITY

The			does 1	not discriminate on the basis of disability in
the admission activities.	or access to	, or treatment	or employ	ment in, its federally assisted programs or
(Name)				_
(Address)				
	City	State	Zip	
Telephone Nur	mber ()		_ Voice _ TDD

has been designated to coordinate compliance with the nondiscrimination requirements contained in the Department of Housing and Urban Development's (HUD) regulations implementing Section 504 (24 CFR Part 8. dated June 2, 1988).

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT CONTRACTOR'S CERTIFICATION

CONCERNING LABOR STANDARDS AND PREVAILING WAGE REQUIREMENTS

TO (TO (appropriate recipient)		DATE			
			PROJECT NUMBER (if any)			
C/O	0			PROJECT NAME		
1.	The undersigned, having executed a contract with					
		for the	he construction of the a	above-identified project, a	cknowledges that:	
	(a)	The Labor Standards provisions a	are included in the afor	esaid contract,		
	(b) Correction of any infractions of the aforesaid condition subcontractors, is Contractor's responsibility.			including infractions by a	ny subcontractors and any lower tier	
2.	Certi	fies that:				
	(a)	Neither Contractor nor any firm, p ineligible contractor by the Compt Secretary of Labor, Part 5 (29 CF	roller General of the U	nited States pursuant to S	Section 5.6(b) of the Regulations of the	
	 (b) No part of the aforementioned contract has been or will be subcontracted to any subcontractor if such subcontractor or any firm, corporation, partnership or association in which such subcontractor has a substantial interest is designated as an ineligible contractor pursuant to any of the aforementioned regulatory or statutory provisions. Contractor agrees to obtain and forward to the aforementioned recipient within ten days after the execution of any subcontract, including those executed by subcontractors and any lower tier subcontractors, a Subcontractor's Certification Concerning Labor Standards and Prevailing Wage Requirements executed by the subcontractors. 			a substantial interest is designated as		
3.				ors, a Subcontractor's Certification		
4.	Certifies that:					
	(a)	The legal name and the business	address of the unders	igned are:		
	(b)	The undersigned is (choose one): (1) A SINGLE PROPRIETORSHIP		(3) A COPPORATION OPGAN	IIZED IN THE STATE OF	
		(1) A SINGLE PROPRIETORSHIP		(3) A CORPORATION ORGANIZED IN THE STATE OF		
		(2) A PARTNERSHIP		(4) OTHER ORGANIZATION (I	Describe)	
	(c)	The name, title and address of the		<u> </u>		
		NAME	'	TTLE	ADDRESS	

inte	rest are:		
	NAME	ADDRESS	NATURE OF INTEREST
(e) The	names addresses and trade	le classifications of all other building construction of	contractors in which the undersigned
(e) The	a substantial interest are:	classifications of all other building construction (contractors in which the undersigned
nas	NAME	ADDRESS	TRADE CLASSIFICATION
	INAIVIE	ADDRESS	TRADE CLASSIFICATION
		<u> </u>	
			(0.1.1.)
			(Contractor)
		Ву	(Contractor)

CITY OF KINGSVILLE

BID BOND

KNOW ALL MEN BY THESE PRESENTS,

That we,	(Name and Addr	ress of Bidder	r)	
to transact surety business in the companies Holding Certificon Reinsuring Companies, herein hereinafter called the Obligee, bidder's proposal, as a proposal.	he City of Kingsville and liste rates of Authority as Acceptab after called the Surety, are hel in the sum of not less than fiv al guarantee, the payment of v	d in the currentle Sureties on the Sureties on the and firmly the percent (5% which sum wil	rety), a corporation or firm duly author ent notice of the Department of Treasury in Federal Bonds and as Acceptable bound unto the City of Kingsville %) of the greatest total amount of the ll and truly be made, the said Principal essors and assigns, jointly and severally	list and
WHEREAS, the Prin	cipal has submitted a bid for:	Project Num	nber	. 11
	name and locati	on of project)		ull
performance of such Contract then this bond shall be null and such bonds and other instrume	and for the prompt payment of void. If in the event of failuents required by the Contract I	of labor and mare of the Prince Occuments to	d sufficient surety for the faithful naterial furnished in the prosecution the cipal to execute such contract and furnithe Principal for execution, this bond solor Surety, not as a penalty but as	sh
Signed this	DAY of	A.D.	., 20	
Ву:	(Bidder)		-	
*By:	(Surety)		_	
*Attach Power of Attorney (So	(Attorney-in Fact) urety) for Attorney-in-Fact.		- Surety Seal	

DISCLOSURE OF GUARANTY FUND NONPARTICIPATION

In the event the insurer is unable to fulfill its contractual obligation under this policy or contract or application or certificate or evidence of coverage the policyholder or certificateholder is not protected by an insurance guaranty fund or other solvency protection arrangement.

INSERT CERTIFICATE OF LIABILITY INSURANCE

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that:

	(Name of Contractor or Company)
	(Address)
a(Corporation / Partnership)	, hereinafter called Principal,
and	
	(Name of Surety Company)
	(Address)
hereinafter called Surety, are held and firm	mly bound unto
	(Name of Recipient)
	(Recipient's Address)
hereinafter called OWNER, in the penal s	sum of \$
Dollars, \$	in lawful money of the United States, for this paymen
of which sum well and truly to be made, we firmly by these presents.	bind ourselves, successors, and assigns, jointly and severally,
	BLIGATION is such that whereas, the Principal entered into a the day of
a copy of which is hereto attached and ma	
	(Project Name)
	•

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUB-CONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUB-CONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed

thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is		counter-parts, each on of	
(Number) which shall be deemed an original, this the	day o	of	
ATTEST:			
	(Pı	rincipal)	
	By		(s)
(Principal Secretary)			
(SEAL)			
(Witness as to Principal)	(1	Address)	
(Address)			
ATTEST:	(Sı	urety)	
		• 1	
(Witness as to Surety	(A	ttorney in Fact)
(Address)	(A	ddress)	

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that:

(Name of Contractor or Company)
(Address)
a hereinafter called Principal, and
(Name of Surety Company)
(Address)
hereinafter called Surety, are held and firmly bound unto
(Name of Grant Recipient)
(Grant Recipient's Address)
hereinafter called OWNER, in the penal sum of \$
Dollars (\$) in lawful money of the United States, for the payment of which sum well and truly to b
made we bind ourselves, successors, and assigns, jointly and severally, firmly in these presents.
THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain
contract with the OWNER dated the day of, a
copy of which is hereto attached and made a part hereof for the construction of:

NOW THEREFORE, if the Principal shall well, truly and faithfully perform its duties in all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the

Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the Principal shall abridge

the right of any beneficiary hereunder, whose claim may be unsatisfied. IN WITNESS WHEREOF, this instrument is executed in _____ counterparts, each one of which shall be deemed an original, this the ATTEST: (Principal) By _____ (s) (Principal Secretary) (SEAL) (Witness as to Principal) (Address) (Address) ATTEST: (Surety) (Attorney in Fact) (Witness as to Surety)

(Address)

(Address)

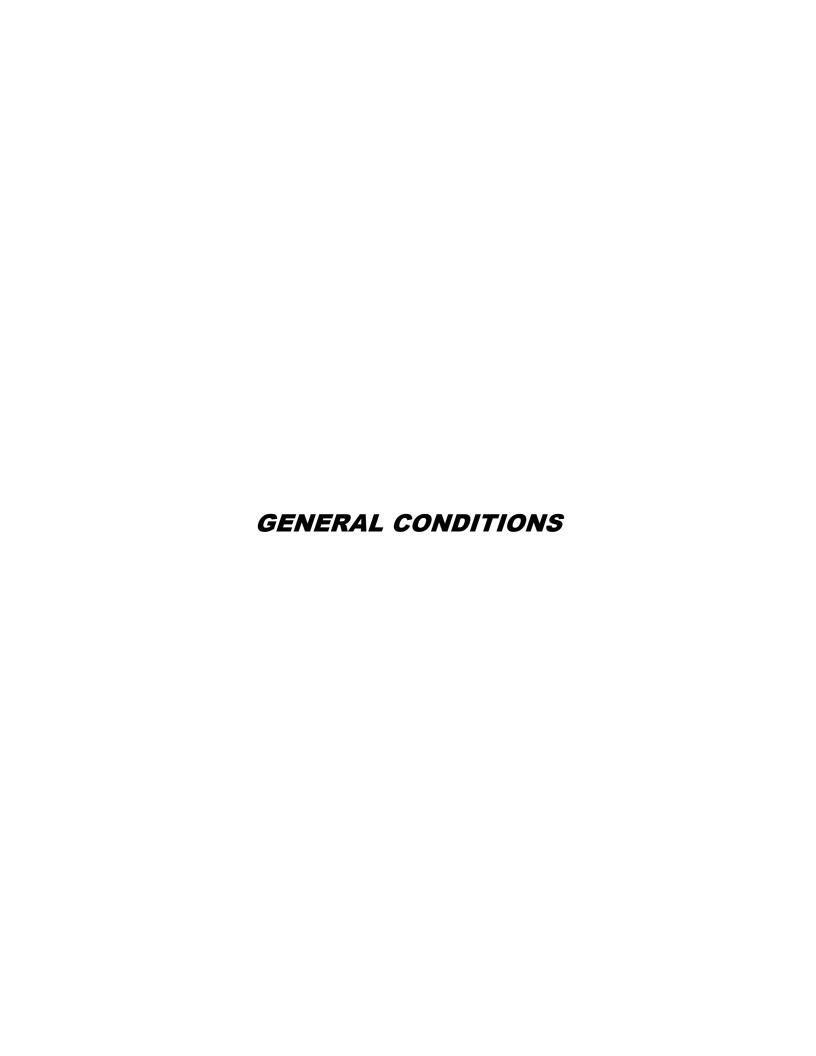
NOTE: Date of BOND must not be prior to date of Contract. If PRINCIPAL/CONTRACTOR is Partnership, all partners should execute BOND. KNOW ALL MEN BY THESE PRESENTS, that we the undersigned, as PRINCIPAL, and ______, as SURETY are held and firmly bound unto (City of Kingsville, Texas) hereinafter called the "Local Public Agency", in the penal sum of ______ Dollars, (\$_____), lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents. THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the Accompanying Bid, dated ______, for _____ NOW, THEREFORE, the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or, if no period be specified, within thirty (30) days after the said opening, and shall within the period specified therefor, or if no period be specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written contract with the Local Public Agency in accordance with the Bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract; or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Local Public Agency the difference between the amount specified in said Bid and the amount for which the local Public Agency may procure the required work or supplies or both, if the latter be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

, t affixed and these present signed	ove parties have executed this instrument thise name and corporate seal of each corporate party by its undersigned representative, pursuant to author	eing hereto
governing body.		(SEAL)
		(SEAL)
Attest:	Ву:	

		Corporate Seal
Attest:	Ву:	
		A CC'
		Affix Corporate Seal
Attest:	Ву:	
Countersigned		
Ву		
* Attorney-in-Fact, State of	of Texas	
C	ERTIFICATE AS TO CORPORATE PRINCIPAL	
I,, ce	rtify that I am the Secretary of the Corporation named as I	Principal in
the bid bond; that	, who signed the said bond on behalf of the Pri	incipal was
then of	said corporation; that I know his/her signature, and his/her	r signature
thereto is genuine; and tha	at said bond was duly signed, sealed, and attested to, on be	chalf of said
corporation by authority o	of its governing body.	
		Corporate Seal
	Title:	

Affix

^{*} Power-of-attorney for person signing for Surety Company must be attached to bond.



GENERAL CONDITIONS FOR CONSTRUCTION

1. Contract and Contract Documents

(a) The Plans, Specifications and Addenda shall form part of this contract and the provisions thereof shall be binding upon the parties as if they were herein fully set forth.

2. Definitions

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

- (a) The term "Contract" means the Contract executed between the City of Kingsville, hereinafter called the "City" or "Owner" and (Name of Construction Co.), hereinafter called "Contractor", of which these GENERAL CONDITIONS, form a part.
- (b) The term "Project Area" means the area within the specified Contract limits of the Improvements contemplated to be constructed in whole or in part under this contract.
- (c) The term "Engineer" means the City of Kingsville Engineer, Engineer in charge, serving the City with architectural or engineering services, his successor, or any other person or persons, employed by the City for the purpose of directing or having in charge the work embraced in this Contract.
- (d) The term "Contract Documents" means and shall include the following: Executed Contract, Addenda (if any), Invitation for Bids, Instructions to Bidders, Signed Copy of Bid, General Conditions, Special Conditions, Technical Specifications, and Drawings (as listed in the Schedule of Drawings).

3. <u>Supervision by Contractor</u>

- (a) Except where the Contractor is an individual and personally supervises the work, the Contractor shall provide a competent superintendent, satisfactory to the Engineer, on the work at all times during working hours with full authority to act as Contractor's agent. The Contractor shall also provide adequate staff for the proper coordination and expediting of his work.
- (b) The Contractor shall be responsible for all work executed under the Contract. Contractor shall verify all figures and elevations before proceeding with the work and will be held responsible for any error resulting from his failure to do so.

4. Subcontracts

- (a) No proposed subcontractor shall be disapproved by the City except for cause.
- (b) The Contractor shall be as fully responsible to the City for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them.
- (c) Nothing contained in the Contract shall create any contractual relation between any subcontractor and the City.

5. Fitting and Coordination of Work

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, subcontractors, or material suppliers engaged upon this Contract.

6. Payments to Contractor

(a) Partial Payments

- 1) The Contractor shall prepare the requisition for partial payment as of the last day of the month and submit it, with the required number of copies, to the Engineer for approval. The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting (1) ten percent (10%) of the total amount, to be retained until final payment, and (2) the amount of all previous payments. The total value of work completed to date shall be based on the estimated quantities of work completed and on the unit prices contained in the agreement. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of all invoices shall be available for inspection of the Engineer.
- 2) Monthly or partial payments made by the City to the Contractor are advanced for the purpose of assisting the contractor to expedite the work of construction. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the City. Such payments shall not constitute a waiver of the right of the City to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the City in all details.

(b) Final Payment

- 1) After final inspection and the acceptance by the City of all work under the Contract, the Contractor shall prepare the requisition for final payment which shall be based upon the careful inspection of each item of work at the applicable unit prices stipulated in the Contract. The total amount of the final payment due the Contractor under this Contract shall be the amount computed as described above less all previous payments.
- 2) Before paying the final estimate, City shall require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor. The City may make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments made shall in no way impair the obligations of any surety or sureties furnished under this Contract.
- 3) Any amount due the City under Liquidated Damages shall be deducted from the final payment due the contractor.

(c) Payments Subject to Submission of Certificates

Each payment to the Contractor by the City shall be made subject to submission by the Contractor of all written certifications required of it and its subcontractors.

(d) Withholding Payments

The City may withhold any payment due the Contractor as deemed necessary to protect the City, and if so elects, may also withhold any amounts due from the Contractor to any subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the City and will not require the City to determine or adjust any claims or disputes between the Contractor and its subcontractors or material dealers, or to withhold any moneys for their protection unless the City elects to do so. The failure or refusal of the City to withhold any moneys from the Contractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

7. <u>Changes in the Work</u>

- (a) The City may make changes in the scope of work required to be performed by the Contractor under the Contract without relieving or releasing the Contractor from any obligations under the Contract or any guarantee given pursuant to the Contract provisions, and without affecting the validity of the guaranty bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless it is expressly provided otherwise.
- (b) Except for the purpose of affording protection against any emergency endangering health, life, limb or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the improvements or supply additional labor, services or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the City authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price will be valid unless so ordered.
- (c) If applicable unit prices are contained in the Contract, the City may order the Contractor to proceed with desired unit prices specified in the Contract; provided that in case of a unit price contract the net value of all changes does not increase the original total amount of the agreement by more than twenty-five percent (25%) or decrease the original the total amount by eighteen percent (18%).
- (d) Each change order shall include in its final form:
 - 1) A detailed description of the change in the work.
 - 2) The Contractor's proposal (if any) or a confirmed copy thereof.
 - 3) A definite statement as to the resulting change in the contract price and/or time.
 - 4) The statement that all work involved in the change shall be performed in accordance with contract requirements except as modified by the change order.
 - 5) The procedures as outlined in this Section for a unit price contract also apply in any lump sum contract.

8. Claims for Extra Cost

(a) If the Contractor claims that any instructions by Drawings or otherwise involve extra cost or extension of time, he shall, within ten days after the receipt of such instructions, and in any event before proceeding to execute the work, submit his protest thereto in writing to the City, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.

- (b) Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be recognized unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonably estimated from the Drawings and maps issued.
- (c) Any discrepancies which may be discovered between actual conditions and those represented by the Drawings and maps shall be reported at once to the City and work shall not proceed except at the Contractor's risk, until written instructions have been received from the City.
- (d) If, on the basis of the available evidence, the City determines that an adjustment of the Contract Price and/or time is justifiable, a change order shall be executed.

9. <u>Termination, Delays, and Liquidated Damages</u>

(a) Right of the City to Terminate Contract for Convenience

City may at any time and for any reasons terminate Contractor's services and work at City's convenience upon providing written notice to the Contractor specifying the extent of termination and the effective date. Upon receipt of such notice, Contractor shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities and supplies in connection with the performance of this Agreement.

Upon such termination, Contractor shall be entitled to payment only as follows: (1) the actual cost of the work completed in conformity with this Agreement; plus, (2) such other costs actually incurred by Contractor as are permitted by the prime contract and approved by City; (3) plus ten percent (10%) of the cost of the work referred to in subparagraph (1) above for overhead and profit. There shall be deducted from such sums as provided in this subparagraph the amount of any payments made to Contractor prior to the date of the termination of this Agreement. Contractor shall not be entitled to any claim or claim of lien against City for any additional compensation or damages in the event of such termination and payment.

(b) Right of the City to Terminate Contract for Cause

In the event that any of the provisions of this contract are violated by the Contractor, or by any subcontractors, the City may serve written notice upon the Contractor and the Surety of its intention to terminate the contract. The notices shall contain the reasons for such intention to terminate the contract, and unless such violation or delay shall cease and satisfactory arrangement of correction be made within ten days, the contract shall, upon the expiration of said ten (10) days, cease and terminate. In the event of any such termination, the City shall immediately serve notice thereof upon the Surety and the Contractor. The Surety shall have the right to take over and perform the contract. Provided, however, that if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of notice of termination, the City may take over the work and complete the project by bid/contract or by force account at the expense of the Contractor and his Surety shall be liable to the City for any excess cost incurred. In such event the City may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefore.

(c) Liquidated Damages for Delays.

If the work is not completed within the time stipulated in the applicable bid for Lump Sum or Unit Price Contract provided, the Contractor shall pay to the City as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) the amount of \$200.00 for each calendar day of delay, until the work is completed. The Contractor and Contractor's sureties shall be liable to the City for the amount thereof.

(d) Excusable Delays.

- 1) The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due to:
- 2) Any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, national defense, or any other national emergency;
- 3) Any acts of the City;
- 4) Causes not reasonably foreseeable by the parties to this Contract at the time of execution which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God, terrorism, war, acts of another Contractor in the performance of some other contract with the City, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions.
- 5) Provided, however, that the Contractor promptly notifies the City within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the City shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this contract, the delay is properly excusable, the City shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

10. Assignment or Novation

The Contractor shall not assign nor transfer, whether by assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the City. No assignment or novation of this Contract shall be valid unless the assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment supplied for the performance of the work under this Contract in favor of all persons, Contractors, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

11. Technical Specifications and Drawings

Anything mentioned in the Technical Specifications and not shown on the Drawings or vice versa shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in Drawings, or Technical Specifications, the matter shall be immediately submitted to the City for review. Contractor shall be liable for any issues or expenses in the event the discrepancy is not submitted to the City.

12. Shop Drawings

(a) All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Engineer in hard copies for approval sufficiently in advance of requirements to afford ample time for

checking, including time for correcting, resubmitting and rechecking if necessary. The Contractor may proceed, only at Contractor's own risk, with manufacture or installation of any equipment or work covered by said shop drawings, etc. until they are approved and no claim, by the Contractor, for extension of the contract time shall be granted by reason of his failure in this respect.

- (b) Any drawings submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of contract price and/or time, otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the drawings have been approved.
- (c) If a shop drawing is in accordance with the contract or involves only minor adjustment in the interest of the City not involving a change in contract price or time, the engineer may approve the drawing. The approval shall not relieve the Contractor from responsibility to adhere to the contract or for any error in the drawing.

13. Requests for Supplementary Information

It shall be the responsibility of the Contractor to make timely requests of the City for any additional information which should be furnished by the City under the terms of this Contract, and which is required in the planning and execution of the work. Such requests may be submitted from time to time as the need approaches, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and list the various items and the latest date by which each will be required by the Contractor. The first list shall be submitted within two weeks after Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the Engineer may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provision of this section.

14. Materials and Workmanship

- (a) Unless otherwise specifically provided for in the technical specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the technical specifications as "equal to" any particular standard, the Engineer shall decide the question of equality.
- (b) The Contractor shall furnish to the City for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics, and all other pertinent information as required, and shall likewise submit for approval full information concerning all other materials or articles which he proposes to incorporate.
- (c) Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.
- (d) Materials specified by reference to the number or symbol of a specific standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the

date of the Invitation for Bids, except as limited to type, class or grade, or modified in the technical specifications shall have full force and effect as though printed therein.

(e) The City may require the Contractor to dismiss from the work such employee or employees as the City or the Engineer may deem unqualified.

15. <u>Samples, Certificates and Tests</u>

- (a) The Contractor shall submit all material or equipment samples, certificates, affidavits, etc., as called for in the contract documents or required by the Engineer, promptly after award of the contract and acceptance of the Contractor's bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the Engineer. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time.
- (b) Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer and all specifications or other detailed information which will assist the Engineer in making a prompt decision regarding the acceptability of the sample. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.
- (c) Approval of any materials shall be general only and shall not constitute a waiver of the City's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the Engineer will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.
- (d) Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:
 - 1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the Engineer;
 - 2) The Contractor shall assume all costs of re-testing materials which fail to meet contract requirements;
 - 3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient;
 - 4) The City will pay all other expenses.

16. <u>Permits and Codes</u>

(a) The Contractor shall give all notices required by and comply with all applicable federal and state laws, ordinances, and codes of the Local Government. All construction work and/or utility

installations shall comply with all applicable ordinances, and codes including all written waivers. Before installing any work, the Contractor shall examine the drawings and technical specifications for compliance with applicable ordinances and codes and shall immediately report any discrepancy to the City. Where the requirements of the drawings and technical specifications fail to comply with such applicable ordinances or codes, the City will adjust the Contract by Change Order to conform to such ordinances or codes (unless waivers in writing covering the difference have been granted by the governing body or department) and make appropriate adjustment in the Contract Price or stipulated unit prices.

- (b) Should the Contractor fail to observe the foregoing provisions and proceed with the construction and/or install any utility at variance with any applicable ordinance or code, including any written waivers (notwithstanding the fact that such installation is in compliance with the drawings and technical specifications), the Contractor shall remove such work without cost to the City.
- (c) The Contractor shall at his own expense, secure and pay for all permits for street pavement, sidewalks, shed, removal of abandoned water taps, sealing of house connection drains, pavement cuts, buildings, electrical, plumbing, water, gas and sewer permits required by the local regulatory body or any of its agencies.
- (d) The Contractor shall comply with applicable local laws and ordinances governing the disposal of surplus excavation, materials, debris and rubbish on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the Improvements contained in this Contract.
- (e) The Contractor will be required to make arrangements for and pay the water, electrical power, or any other utilities required during construction.
- (f) During construction of this project, the Contractor shall use every means possible to control the amount of dust created by construction. Prior to the close of a day's work, the Contractor, if directed by the City, shall moisten the surrounding area to prevent a dusty condition.

17. Care of Work

- (a) The Contractor shall be responsible for all damages to person or property that occur as a result of its fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance.
- (b) In an emergency affecting the safety of life, limb or property, including adjoining property, the Contractor, without special instructions or authorization from the City is authorized to act to prevent such threatened loss or injury. Contractor shall follow all instructions of City.
- (c) The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and shall be responsible for completely repairing any damage thereto caused by the operations.
- (d) The Contractor shall shore up, brace, underpin, secure, and protect as maybe necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the improvements included in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party

before the commencement of any work. The Contractor shall indemnify and save harmless the City from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the City may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

18. Accident Prevention

- (a) No laborer or mechanic employed in the performance of this Contract shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety as determined under construction safety and health standards promulgated by the Department of Labor.
- (b) The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work.
- (c) The Contractor shall maintain an accurate record of all cases of death, occupational disease, or injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the City with reports concerning these matters.
- (d) The Contractor shall indemnify and hold harmless the City from any claims for damages resulting from property damage, personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this contract.
- (e) The Contractor shall provide trench safety for all excavations more than five feet deep prior to excavation. All OSHA Standards for trench safety must be adhered to by the Contractor.
- (f) The contractor shall at all time conduct work in such a manner as to ensure the least possible inconvenience to vehicular and pedestrian traffic. At the close of the work each day, all streets where possible in the opinion of the City, shall be opened to the public in order that persons living in the area may have access to their homes or businesses by the use of the streets. Barricades, warning signs, and necessary lighting shall be provided to the satisfaction of the City at the expense of the Contractor.

19. <u>Sanitary Facilities</u>

The Contractor shall furnish, install and maintain ample sanitary facilities for laborers. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

20. Use of Premises

(a) The Contractor shall confine equipment, storage of materials, and construction operations to the contract limits as shown on the drawings and as prescribed by ordinances or permits, or as may be desired by the City, and shall not unreasonably encumber the site or public rights of way with materials and construction equipment. (b) The Contractor shall comply with all reasonable instructions of the City and all existing federal, state and local regulations regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades.

21. Removal of Debris, Cleaning, Etc.

The Contractor shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris and unused materials provided for work, and put the whole site of the work and public rights of way in a neat and clean condition.

22. <u>Inspection</u>

- (a) All materials and workmanship shall be subject to inspection, examination, or test by the City and Engineer at any and all times during manufacture or construction and at any and all places where such manufacture or construction occurs. The City shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge. If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the City may by contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any Monies which may be due the Contractor, without prejudice to any other rights or remedies of the City.
- (b) The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. All tests by the City will be performed in such manner as not to delay the work unnecessarily and will be made in accordance with the provisions of the technical specifications.
- (c) The Contractor shall notify the City sufficiently in advance of back filling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent of the City, the Contractor shall uncover for inspection and recover such facilities at Contractor's expense, when so requested by the City.
- (d) Should it be considered necessary or advisable by the City at any time before final acceptance of the entire work to make an examination of work already completed, the Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or subcontractors, the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, shall be reimbursable and if completion of the work of the entire Contract has been delayed, a suitable extension of time will be approved.
- (e) Inspection of materials and appurtenances to be incorporated in the improvements included in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the technical specifications, shall be final, except as regards to: (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.

(f) Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the City or its agents shall relieve the Contractor or its sureties of full responsibility for materials furnished or work performed not in strict accordance with the Contract.

23. Review by City

The City and its authorized representatives and agents shall have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however that all instructions and approval with respect to the work will be given to the Contractor only by the City through its authorized representatives or agents.

24. Final Inspection

When the Improvements included in this Contract are substantially completed, the Contractor shall notify the City in writing that the work will be ready for final inspection on a definite date which shall be stated in the notice. The City will make the arrangements necessary to have final inspection commenced on the date stated in the notice, or as soon thereafter as is practicable.

25. Deduction for Uncorrected Work

If the City deems it not expedient to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and the City and subject to settlement, in case of dispute, as herein provided.

26. <u>Insurance</u>

The Contractor shall not commence work under this contract until all required insurance under this paragraph has been secured and approved by the City.

- (a) Worker's Compensation Insurance: The Contractor shall procure and shall maintain during the life of this contract Worker's Compensation Insurance as required by the State of Texas for all of his employees to be engaged in work at the site of the project under this contract and, in case of any such work sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Worker's Compensation Insurance.
- (b) Contractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance: Please see the following Exhibit for the City of Kingsville's Insurance Requirements:

EXHIBIT

INSURANCE REQUIREMENTS

I. CONTRACTOR'S LIABILITY INSURANCE

A. Contractor must not commence work under this contract until all insurance required has been obtained and such insurance has been approved by the City. Contractor must not allow any

subcontractor to commence work until all similar insurance required of any subcontractor has been obtained.

B. Contractor must furnish to the City's Risk Manager and Public Works Director, one copy of Certificates of Insurance (COI) with applicable policy endorsements showing the following minimum coverage by an insurance company(s) acceptable to the City's Risk Manager. The City of Kingsville must be listed as an additional insured on the General Liability and Auto Liability policies **by endorsement**, and a waiver of subrogation is required on all applicable policies including Workers' Compensation. **Endorsements** must be provided with COI. Project name and or number must be listed in Description Box of COI.

TYPE OF INSURANCE	MINIMUM INSURANCE COVERAGE			
30-written day notice of cancellation, required	Bodily Injury and Property Damage			
on all certificates or by applicable policy	Per occurrence - aggregate			
endorsements				
	\$1,000,000 P			
Commercial General Liability including:	\$1,000,000 Per Occurrence			
1. Commercial Broad Form	\$2,000,000 Aggregate			
2. Premises – Operations				
3. Products/ Completed Operations				
4. Contractual Liability				
5. Independent Contractors				
AUTO LIABILITY (including)	\$1,000,000 Combined Single Limit			
1. Owned				
2. Hired and Non-Owned				
3. Rented/Leased				
WORKERS' COMPENSATION	Statutory			
EMPLOYER'S LIABILITY	\$500,000 /\$500,000 /\$500,000			

C. In the event of accidents of any kind related to this agreement, Contractor must furnish the Risk Manager with copies of all reports of any accidents within 10 days of the accident.

II. <u>ADDITIONAL REQUIREMENTS</u>

- A. Applicable for paid employees, Contractor must obtain workers' compensation coverage through a licensed insurance company. The coverage must be written on a policy and endorsements approved by the Texas Department of Insurance. The workers' compensation coverage provided must be in an amount sufficient to assure that all workers' compensation obligations incurred by the Contractor will be promptly met.
- B. Contractor shall obtain and maintain in full force and effect for the duration of this Contract, and any extension hereof, at Contractor's sole expense, insurance coverage written on an occurrence basis, by companies authorized and admitted to do business in the State of Texas and with an A.M. Best's rating of no less than A-VII.
- C. Contractor shall be required to submit a copy of the replacement certificate of insurance to City at

the address provided below within 10 days of the requested change. Contractor shall pay any costs incurred resulting from said changes. All notices required by this exhibit shall be given to City at the following address:

City of Kingsville Attn: Risk Manager P.O. Box 1458 Kingsville, TX 78364

- D. Contractor agrees that with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain the following required provisions:
 - List the City of Kingsville and its officers, officials, employees, volunteers, and elected representatives as additional insured by endorsement, as respects operations, completed operation and activities of, or on behalf of, the named insured performed under contract with the City, with the exception of the workers' compensation policy;
 - Provide for an endorsement that the "other insurance" clause shall not apply to the City of Kingsville where the City is an additional insured shown on the policy;
 - Workers' compensation and employers' liability policies will provide a waiver of subrogation in favor of the City. An All States Endorsement will be required for companies not domiciled in Texas; and
 - Provide thirty (30) calendar days advance written notice directly to City of any suspension, cancellation, non-renewal or material change in coverage, and not less than ten (10) calendar days advance written notice for nonpayment of premium.
- E. Within five (5) calendar days of a suspension, cancellation, or non-renewal of coverage, Contractor shall provide a replacement Certificate of Insurance and applicable endorsements to City. City shall have the option to suspend Contractor's work should there be a lapse in coverage at any time during this contract. Failure to provide and to maintain the required insurance shall constitute a material breach of this contract.
- F. In addition to any other remedies the City may have upon Contractor's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the City shall have the right to order Contractor to stop work hereunder, and/or withhold any payment(s) if any, which become due to Contractor hereunder until Contractor demonstrates compliance with the requirements hereof.
- G. Nothing herein contained shall be construed as limiting in any way the extent to which Contractor may be held responsible for payments of damages to persons or property resulting from Contractor's or its subcontractor's performance of the work covered under this contract.
- H. It is agreed that Contractor's insurance shall be deemed primary and non-contributory with respect to any insurance or self-insurance carried by the City of Kingsville for liability arising out of operations under this contract.
- I. It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this contract.

(c) Proof of Insurance: The Contractor shall furnish the City with certificates showing the type, amount, class of operations covered, effective dates and date of expiration of policies. Such certificates shall also contain substantially the following statement: "The insurance covered by this certificate will not be canceled or materially altered, except after ten (10) days written notice has been received by the City."

27. Warranty of Title

No material, supplies, or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease-purchase or other agreement by which an interest is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same, together with all improvements and appurtenances constructed or placed by Contractor, to the City free from any claims, liens, or charges. Neither the Contractor nor any person, firm, or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any law permitting such persons to look to funds due the Contractor. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

28. Warranty of Workmanship and Materials

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the improvements included in this Contract by the City or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of 3 months from the date of final acceptance of the work.

29. Job Offices

- (a) The Contractor and its subcontractors may maintain such office and storage facilities on the site as are necessary for the proper conduct of the work. These shall be located so as to cause no interference to any work to be performed on the site. The City shall be consulted with regard to locations.
- (b) Upon completion of the improvements, or as directed by the City, the Contractor shall remove all such temporary structures and facilities from the site, and leave the site of the work in the condition required by the Contract.

30. Partial Use of Site Improvements

The City may give notice to the Contractor and place in use those sections of the improvements which have been completed, inspected and can be accepted as complying with the technical specifications and if in its opinion, each such section is reasonably safe, fit, and convenient for the use and accommodation for which it was intended, provided:

(a) The use of such sections of the Improvements shall in no way impede the completion of the remainder of the work by the Contractor.

(b) The Contractor shall not be responsible for any damages or maintenance costs due directly to the use of such sections.

31. Local Program Liaison

For purposes of this Agreement, the City's Capital Improvement's Manager or equivalent authorized person will serve as the Local Program Liaison and primary point of contact for the Contractor. All required progress reports and communication regarding the project shall be directed to this liaison and other local personnel as appropriate.

32. Records Retention

- (a) The Contractor shall retain all required records for three years after the City makes its final payment and all pending matters are closed.
- (b) Contractor shall include the substance of this clause in all subcontracts it awards.

33. Conflicts of interest.

- (a) Governing Body. No member of the governing body of the City and no other officer, employee, or agent of the City, who exercises any functions or responsibilities in connection with administration, construction, engineering, or implementation of this award, shall have any personal financial interest, direct or indirect, in the Contractor or this Contract; and the Firm shall take appropriate steps to assure compliance.
- (b) Other Local Public Officials. No other public official, who exercises any functions or responsibilities in connection with the planning and carrying out of administration, construction, engineering or implementation of this award, shall have any personal financial interest, direct or indirect, in the Contractor or this Contract; and the Contractor shall take appropriate steps to assure compliance.

34. Debarment and Suspension (Executive Orders 12549 and 12689)

The Contractor certifies, by entering into this Contract, that neither it nor its principals are presently debarred, suspended, or otherwise excluded from or ineligible for participation in federally-assisted programs under Executive Orders 12549 (1986) and 12689 (1989). The term "principal" for purposes of this Contract is defined as an officer, director, owner, partner, key employee, or other person with primary management or supervisory responsibilities, or a person who has a critical influence on or substantive control over the operations of the Contractor. The Contractor understands that it must not make any award or permit any award (or contract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549, "Debarment and Suspension."

35. Procurement of Recovered Materials

The Contractor shall comply with section 6002 of the Solid Waste Act, as amended by the Resource Conservation and Recovery Act, procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the

item exceeds \$10,000 or the value of the quantity acquired by the preceding fiscal year exceeded \$10,000 as long as such procurement is economically feasible.

36. [For Contracts > \$100K] Overtime Requirements

No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics, including watchmen and guards, shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of 40 hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of 40 hours in such work week, as the case may be.

37. [For Contracts > \$150K] Clean Air Act and the Federal Water Pollution Control Act

The Contractor or subcontractor shall comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251–1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

38. Contract Documents and Drawings

The City will furnish the Contractor without charge <u>5</u> copies of the Contract Documents, including Technical Specifications and Drawings. Additional copies requested by the Contractor will be furnished at cost.

39. Contract Period

The work to be performed under this contract shall commence within the time stipulated by the City in the Notice to Proceed, and shall be fully completed within <u>90</u> calendar days thereafter.

40. Liquidated Damages

Since the actual damages for any delay in completion of the work under this contract are impossible to determine, the Contractor and his Sureties shall be liable for and shall pay to the City the sum of <u>Two-Hundred Dollars</u> (\$200) as fixed, agreed and liquidated damages for each calendar day of delay from the above stipulated time for completion.



DESCRIPTION OF WORK:

"KINGSVILLE CITY HALL IRRIGATION & LANDSCAPING SERVICES"

The Contractor shall furnish all labor, materials, equipment, tools, services and supervision necessary to perform all the work as described in the Proposal and shall deliver the work complete in all respects and in full accordance with the Contract Documents. All incidental services and materials which may be reasonably inferred as necessary to accomplish the intended end result shall be provided by the Contractor whether or not specifically shown on the Drawings or itemized in the Specifications.

CONSTRUCTION SEQUENCE:

Within ten (10) days after receiving a written "Notice to Proceed" the Contractor will be expected to pursue continuous progress of the overall Project from beginning of the work to completion. The Contractor will, in general, be left to schedule his work as he sees fit in so far as the Owner remains satisfied that an orderly progress is being made on the project to the extent of finishing within the stated contract time.

The Contractor will, however, be required to coordinate the sequencing of this work with the Owner and various utility companies, and any other individual or entity which may suffer inconvenience or damage as a result of a lack of cooperation in the construction of the project.

TIME OF COMPLETION:

Construction time is to start ten (10) days after receipt of a written "Notice to Proceed". All items of work contemplated in these Specifications and the accompanying drawings are to be fully complete in the number of days specified in the bid proposal. After the notification of final completion and a final inspection, Contractor shall have thirty (30) days to remedy any incomplete or defective work.

PROJECT MEETINGS:

Prior to starting work, the Contractor shall attend a pre-construction conference to review the Contractor's schedules, to establish procedures for processing applications for payment, and to establish a working understanding between Owner, Engineer and Contractor. Representatives of all parties shall be in attendance. Other meetings will be scheduled during the construction as need dictates.

LIQUIDATED DAMAGES FOR DELAY:

The Contractor agrees that a delay in substantial completion of the project beyond the total number of days anticipated for substantial completion plus such extensions to the allotted time as may be provided for in the General Conditions shall cause a damage to the Owner and that the Owner may withhold, permanently, from the Contractor's total compensation a sum of two hundred dollars (\$200.00) per calendar day as the stipulated damages for such delay.

GUARANTEES:

The Contractor shall provide a warranty which shall guarantee work against defective materials and workmanship for a period of one (1) year from the date of issue of certificate of acceptance. Neither final acceptance nor final payment or any provision in the contract documents will relieve Contractor of above guarantee. Failure to repair or replace defect upon notice entitles Owner to repair or replace same and recover reasonable cost thereof from the Contractor and/or his surety.

PERMITS AND RIGHT-OF-WAY:

The Owner will provide right-of-way for the purpose of construction without cost to the Contractor by securing permits in areas of public dedication or by obtaining easements across privately owned property. It shall be the responsibility of the Contractor prior to the initiation of construction on easements through private property, or upon areas of public dedication, to familiarize himself with the requirements of the pertinent easement or permit and to abide by all of the stated terms of such easements or permits. The Contractor shall give notice of intent to begin construction on privately owned property or permitted areas as required by the relevant easement or permit but in no case less than 48 hours before commencing work.

MATERIALS AND EQUIPMENT:

Incorporate into work only new materials and equipment of domestic manufacture unless otherwise designated. Store these materials and equipment in manner to protect them from damage.

REPAIR OF DAMAGE:

Driveways, curbs, culverts, yards or items of private or public ownership, if damaged during the course of construction of this project, shall be, to the greatest extent practicable, repaired or replaced to the condition of such items before their being damaged, at no cost.

SITE MAINTENANCE AND CLEAN-UP:

Maintain work site during construction neat and free of trash, rubbish or other debris. In cleanup operations, remove from site temporary structures, rubbish and waste materials, and leave site in a neat and presentable condition throughout. Dispose of excavated material beyond that which is needed to bring site to required final elevations.

MEASUREMENT AND PAYMENT:

Estimated quantities shown in the Contract Documents are provided solely for the purpose of allowing a uniform comparison of submitted bids. Payment will be made on either the basis of actual measured quantities or a lump sum as may be relevant to the particular item. For those items for which payment is based on actual measured quantities, the Contractor shall verify all measurements at the site and shall be responsible for the correctness of same. Unit prices shall then be used to calculate payment. Methods of measurement shall be given in the Technical Specifications for each measured item.

RETAINAGE:

The Owner will retain from the Contractor's monthly estimate and request for payment an amount equal to 10% of the invoice amount. This 10% shall be retained by the Owner until final acceptance of the total project and then paid to the Contractor.

PAYMENT FOR MATERIALS ON SITE:

Contractor shall present to the Owner with his monthly estimate of production and request for payment a list of all material delivered to the project site, but not installed, with the total invoice cost of that material and the Owner shall pay to the Contractor the invoice cost of such material as has been verified by the Engineer to be "on site", less a 10% retainage. "On site" shall mean on or immediately adjacent to the work area or point of material installation, or a central storage yard or office area which has been set up for the project in the immediate project area. This does not include material in transit to the job site, material stored in yards or areas located in other towns, or materials stored in a manufacturer's warehouse, even though Contractor may have been invoiced for such material. Materials considered as consumables, i.e. chlorine for disinfection, testing pipe and equipment, etc., shall not be considered as material on-site, and only principle material items shall be considered for payment for material on-site.

STATE SALES TAX:

The improvements proposed for construction under the terms of these Contract Documents shall become a part of the utility system of the Owner. The Owner qualifies as an exempt organization under the Limited Sales Excise Tax Rules and Regulations of the State of Texas. Since the Owner and the Contractor shall be exempt from the state sales tax, the state sales tax shall not be included in the Bid.

Prior to the execution of the Contract, the Contractor shall obtain a Limited Sales Tax Permit and shall show evidence of this permit when signing the Contract. The Contractor shall then issue Resale Certificates in lieu of payment of the sales tax, on material purchased for incorporation into the project. These instructions are in strict compliance with the State Sales Tax Code, Section 151.311. The Contractor is assumed to be fully aware of the sales tax regulations and agrees to cooperate fully with the Owner claiming its lawful exemption from the state sales tax.

TRAFFIC CONTROL:

It will be the Contractor's responsibility to adequately provide for the safety of the public during the course of the construction of the project to include flagmen. No separate compensation will be paid to the Contractor for traffic control.

MATERIALS TESTING:

The Owner will provide for the initial testing of materials to be incorporated into the project to such extent as may be desired including the testing of concrete samples taken at the time of concrete placement. The Contractor shall be responsible for supplying samples of materials as may be required for testing. Any retesting required shall be at the Contractor's expense as stated in the General Conditions.

WATER FOR CONSTRUCTION:

Water used for the mixing of concrete, jetting or flooding trenches, or testing, or any other purposes incidental to this project, will be furnished by the Contractor. If water is obtained from the Owner's water supply, the Contractor shall make the necessary arrangements for securing and transporting such water and shall take such water in a manner and at such times that will not produce a harmful drain or decrease pressure in the Owner's water system. There will be no charge to Contractor for water used in the construction of this project.

LINES AND GRADES:

Detailed construction staking shall be the full responsibility of the Contractor.

LOCATION OF AND DAMAGE TO EXISTING UTILITIES:

The Contractor shall be solely responsible for all above ground utilities, structures, and appurtenances in regard to protection and replacement or repair of same. The Contractor shall also be solely responsible for visible below ground utilities, structures and appurtenances that may be accurately located by removing manhole covers, valve box covers, and other access point coverings, with a reasonable effort on the part of two workmen, using hand tools for such removal and inspection. The cost of protecting, replacing, or repairing the utilities, structures, and appurtenances covered by this paragraph shall be borne solely by the Contractor and shall be included in the prices bid for the various affected items in the Contract.

The Contractor shall notify all private and public utilities 48 hours prior to performing any work in the vicinity of said utilities. Such 48-hour notice shall not include Saturdays, Sundays and holidays.

In those instances where faults, caverns or subsidence zones are encountered during construction, the design engineer will make the necessary adjustments and/or modifications to ensure proper installation. This subject is further defined in the detailed specification list which governs this project.

CONTRACTOR'S FIELD ADMINISTRATION STAFF:

The Contractor shall employ for this project, as its field administration staff, superintendents and foremen who are careful and competent and acceptable to the Owner. The criteria upon which the Owner shall make this determination shall include the following:

- A. The superintendent shall have at least five (5) years experience in the day-to-day field management and oversight of projects of a similar size and complexity to the project which is the subject of this Contract. This experience shall include, but is not limited to, scheduling of manpower and materials, safety, coordination of subcontractors, and familiarity with the submittal process, federal and state wage rate requirements, and contract close-out procedures.
- B. The foreman shall have at least five (5) years experience in oversight and management of the work of various subcontractors and crafts. Should the scope of the project be such that a foreman is not required, the Contractor's superintendent shall assume the responsibilities of a foreman.

Documentation concerning these matters shall be reviewed by the Owner. The Contractor's field administration staff, and any subsequent substitutions or replacements thereto, shall be approved by the Owner in writing prior to such superintendent or foreman assuming responsibilities on the project.

Such written approval of field administration staff is a prerequisite to the Owner's obligation to execute a contract for this project. If such approval is not obtained, the award may be rescinded. Further, such written approval is also necessary prior to a change in field administration staff during the term of this Contract. If the Contractor fails to obtain prior written approval of the Owner concerning any substitutions or replacements in its field administration staff for this project, the award may be rescinded. Further, such written approval is also necessary prior to a change in field administration staff during the term of this Contract. If the Contractor fails to obtain prior written approval of the Owner concerning any substitutions or replacements in its field administration staff for this project during the term of the Contract, such a failure will constitute a basis to annul the Contract.

CHARACTER OF WORKMEN AND CONDITION OF EQUIPMENT:

The Contractor shall employ such superintendents, foremen, and workmen as are careful and competent and the Engineer may demand the dismissal of any person or persons employed by the Contractor, in, about or on the work who shall misconduct himself or be incompetent or negligent in the proper performance of his or their duties or neglect or refuse to comply with the directions of the Engineer, and such person or persons shall not be employed thereon again without the written consent of the Engineer. All workmen shall have sufficient skill and experience to perform properly the work assigned them.

The Contractor shall furnish such equipment as is considered necessary for the prosecution of the work in an acceptable manner and at a satisfactory rate of progress. All equipment, tools and machinery used for handling materials and executing any part of the work shall be subject to the approval of the Engineer and shall be maintained in a satisfactory working condition. Equipment on any portion of the work shall be such that no injury to the work or adjacent property will result from its use.

AS-BUILT DRAWINGS:

Contractor shall maintain daily a set of "As-Built" drawings detailing the location and depths of new and existing utilities. The completed set of "As-Builts" shall be submitted to the ENGINEER at the completion of the project.

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. **This statement must be notarized.** If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information it desires.

Date:		
Bidder (Legal Name of Firm):		
Date Organized:		
Address :		
<u> </u>		
Date Incorporated		
Federal ID Number:		
Number of Years in contracting business under pres	sent name	
List all other names under which your business has	operated in the last 10) years:
Work Presently Under Contract: Contract	Amount \$	Completion Date
Type of work performed by your company:		
Total Staff employed by Firm (Break down by Mana	gers and Trades on se	eparate sheet):
Have you ever failed to complete any work awarded (If yes, please attach summary of details on a separand resolution)		rief explanation of cause
Have you ever defaulted on a contract? \square Yes \square No (If yes, please attach summary of details on a separate		
Has your organization had any disbarments or sus five years or that was still in effect during the five-year		

(If yes, list and explain; such list must include disbarme principals, partners, members, and employees of your organization.)	ents and suspens	sions of officers,	
List the projects most recently completed by your firm (include project o	f similar importar	nce):
Project		·	
Major equipment available for this contract:			
Are you in compliance with all applicable EEO requirent (If no, please attach summary of details on a separate] No	-
Bank References			
Address:		Contact	Name:
City & State:Zip:			
Credit available: \$			
Has the firm or predecessor firm been involved in a bar (If yes, please attach summary of details on a separate		janization? □ Ye	s □ No
List on a sheet attached hereto all judgements, claims, outstanding against bidder over the last five (5) years v			
List on a sheet attached hereto all lawsuits or reque- contracts which bidder has initiated within the last five outcome.			
Attach resume(s) for the principal member(s) of your o the proposed superintendent for the project.	rganization, inclu	uding the officers	as well as
Signed this day of	_, 20		
Signature			

Printed Name and Title								
Company Name								
Notary Statement:								
•								
,Position/Title,	being	duly	sworn,	says	that	he/she	is	the
hereby swears that the answers to the are true and correct. He/she hereby a furnish any information requested City comprising this Statement of Bidder's 0	foregoing authorizes of	g quest and re	tions and quests ar	all state ny perso	ements on, firm	therein on, or corp	conta oratio	ined on to
Subscribed and sworn before me this		_day o	f	, 2	0			
Notary Public								
<u>Signature</u>								
Printed Name								
My Commission Expires:	,							

The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U.S.C. 1001.

ATTORNEY'S REVIEW CERTIFICATION

I, the undersigned,	, the duly authorized and
acting legal representative of the	, do hereby
certify as follows:	
I have examined the attached contract(s) and surety bonds	and am of the opinion that
each of the agreements may be duly executed by the pro	per parties, acting through
their duly authorized representatives; that said representatives	atives have full power and
authority to execute said agreements on behalf of the resp	ective parties; and that the
agreements shall constitute valid and legally binding ob	ligations upon the parties
executing the same in accordance with terms, conditions and	d provisions thereof.
Attorney's signature:	Date:
Print Attorney's Name:	
Teyas State Bar Number:	



SECTION 32 84 23

UNDERGROUND SPRINKLERS

PART 1 - GENERAL

1.1 SUMMARY

A. Includes But Not Limited To:

1. Furnish and install planting irrigation system as described in Contract Documents complete with accessories necessary for proper function.

B. Related Requirements:

- 1. Section 01 43 01: Quality Assurance Qualifications.
- 2. Section 01 81 13: Sustainability Design Requirements.
- 3. Section 32 91 13: Soil Preparation.
- 4. Section 32 92 23: Sodding.
- 5. Section 32 93 00: Plants.

1.2 REFERENCES

A. Definitions:

- 1. Low Voltage: As defined in NFPA 70 for circuits and equipment operating at less than 50 V or for remote-control, signaling power-limited circuits.
- Non-Pressure Lateral Line: Downstream from electric control valves to pop-up spray heads and drip valve assemblies to emitters. Piping or tubing is under pressure during flow. In areas where potable or secondary water are used, pressure supply line shall be white. In areas where non-potable or reclaimed water are used, pressure supply line shall be purple.
- 3. Point of Connection: The location where the meter for the irrigation system is located.
- 4. Pressure Supply Line: Downstream from point of connection to electric control valves. Piping is under water-distribution-system pressure when activated by master valve or hydrometer. In areas where potable or secondary water are used, pressure supply line shall be white. In areas where non-potable or reclaimed water are used, pressure supply line shall be purple.
- 5. Hunter Controllers: Hunter controllers are irrigation clocks that automatically adjust irrigation run times in response to environmental changes using sensors and weather information to manage watering times and frequency. As environmental conditions vary, the controller increases or decreases irrigation. Hunter controllers have the ability to turn off your sprinklers automatically during rain, high wind or low temperature.
- 6. Static Water Pressure: The pressure at the point of connection when the system is not operable.
- 7. Working Pressure: The pressure at the point of connection when the system is operable.

1.3 ADMINISTRATIVE REQUIREMENTS

A. Coordination:

- 1. Provide Coordination for required tests and inspections.
- a. Manufacturer's Field Service: Provide necessary manufacturer's field service.
- b. Pressure Test: In the presence of Landscape Architect provide a pressure test.
- c. Walk Through for Substantial Completion: In the presence of Landscape Architect, plan and provide walk through for Substantial Completion after Contractor has completed all Work.
- d. Final Walk Through: In the presence of the Landscape Architect, plan and provide final walk through after Contractor has completed all work listed on substantial completion walk through punch list provided by Architect.

B. Pre-Installation Conference:

- 1. Schedule pre-installation conference before irrigation system installation begins.
- 2. In addition to agenda items specified in Section 01 3100, review the following:
- a. Landscape architect or designated landscape consultant shall demonstrate or describe method to be used to maintain head spacing from concrete and to stabilize heads.
- b. Within the field yard, provide one installed example of each type of irrigation detail for review and approval by the architect and owner prior to beginning work in the field.

C. Sequencing:

 Sleeves are installed and shown on the lirrigation plan as existing or noted as bored sleeve by the contractor..

1.4 SUBMITTALS

A. Action Submittals:

- 1. Product Data:
- a. Manufacturer's cut sheets for each element of system.
- b. Parts list for operating elements of system.

B. Informational Submittals:

- Certificates:
- a. Acceptance certificate of irrigation system.
 - Upon acceptance of irrigation system, reviewer will provide signed acceptance certificate.
 - 2) Certificate will include name and signature of reviewer, reviewer's company, date of review, and reviewer's telephone number.
- 2. Test And Evaluation Reports:
 - a. Results of mainline service pressure test before beginning work on system should be submitted as a report following the testing and before burial of the mainline.
- b. Provide the following from Main Line Irrigation test and observation:
 - Record and submit documentation of Irrigation Main Line tests, issues, and measure taking to correct problems.
- 3. Manufacturer Instructions:
- a. Manufacturer's printed literature on operation and maintenance of operating elements of system.
- b. Instruction Manual:
 - Includes complete directions for system operation and maintenance, including winterizing, controller program worksheet and annual service and scheduling calendar based on local site specific conditions.
- 4. Qualification Submittals:
 - a. Irrigation Installer:
 - 1) Provide documentation of the following:
 - a) Firm experience in irrigation projects (minimum of five years)
 - b) Financial stability.
 - c) Comply with specifications and contract documents.
 - d) Agree to complete reporting documents, including:
 - (1) Assist landscape architect in completing the Watering Schedule

C. Closeout Submittals:

- 1. Include following in Operations And Maintenance Manual
 - 1) Instruction Manual.
 - 2) Manufacturer's printed literature.
 - 3) Manufacturer's cut sheets for each element of system.
 - 4) Manufacturer's parts list.
 - 5) Main Line Irrigation observation report.
 - 6) Controller Program Schedule:
 - a) Watering Schedule.

- b. Record Documentation:
 - 1) Certificates:
 - a) Acceptance certificate of irrigation system.
 - 2) Testing and Inspection Reports:
 - a) Mainline Pressure Test.
 - b) Main Line Irrigation test and observation.
 - 3) Record drawings: As installation occurs, prepare accurate record drawing to be submitted before final inspection, including:
 - a) Detail and dimension changes made during construction.
 - b) Significant details and dimensions not shown in original Contract Documents.
 - c) Field dimensioned locations of valve boxes, manual drains, quick-coupler valves, control wire runs not in mainline ditch, soil moisture sensors (soil moisture sensor technology are selected these improvements) and both ends of sleeves.
 - Take dimensions from permanent constructed surfaces or edges located at or above finish grade.
 - e) Take and record dimensions at time of installation.
 - f) Reduced copy of record drawings to 11 by 17 inches with color key circuits and laminated both sides with 5 mil thick or heavier plastic. Mount on 12 x 18 inch hard board drilled with (2) two 1/2 inch holes at top of board and hang on hooks in Custodial Room or location designated by Owner's Representative.
 - g) Two (2) additional reduced copies of record drawings to 11 by 17 inches with color key circuits, unlaminated, and unmounted to be given to Owner's Representative.

D. Maintenance Material Submittals:

- 1. Tools:
- a. Furnish following items before Final Closeout Review:
 - 1) Two quick coupler keys per school with brass hose swivels.

1.5 QUALITY ASSURANCE

- A. Regulatory Requirements:
 - 1. Work and materials shall be in accordance with latest rules and regulations, and other applicable state or local laws.
 - 2. Nothing in Contract Documents is to be construed to permit work not conforming to these codes.

B. Qualifications:

- Installer Qualifications:
 - a. General:
 - 1) Perform installation under direction of foreman or supervisor with five (5) years minimum experience in sprinkling system installations.
 - b. Automatic controller:
 - Trained certified personnel familiar with required irrigation system and controller installation procedures.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Storage And Handling Requirements:
 - 1. Storage and handling during installation: protect materials from damage and prolonged exposure to sunlight.

1.7 WARRANTY

- A. Manufacturer Warranty:
 - Standard one year guarantee stipulated in General Conditions shall include:

- Filling and repairing depressions and replacing plantings due to settlement of irrigation system trenches.
- b. Adjusting system to supply proper coverage of areas to receive water.

PART 2 - PRODUCTS

2.1 SYSTEM

A. Manufacturers:

- 1. Manufacturer Contact List (for reference only):
- a. 3M, Austin, TX www.3m.com/elpd.
- b. Carson Industries LLC, Glendora, CA www.carsonind.com.
- c. Hunter Industries, San Marcos, CA www.hunterindustries.com...
- d. Netafim Industries.

B. Materials:

- Rock-Free Soil:
- a. Backfill soil around PVC pipe.
- b. Soil having rocks no larger than 1/2 inch in any dimension.
- Pea Gravel:
- a. For use around drains, valves, and quick couplers.
- b. 1/2 inch maximum dimension, washed rock.
- 3. Native Material: Soil native to project site free of wood and other deleterious materials and rocks over 1-1/2 inches
- 4. Topsoil: Remove rocks, roots, sticks, clods, debris, and other foreign matter over 1-1/2 inches longest dimension encountered during trenching.
- 5. Pipe, Pipe Fittings, And Connections:
 - a. Pipe shall be continuously and permanently marked with Manufacturer's name, size, schedule, type, and working pressure.
- b. Pipe sizes shown on Drawings are minimum. Larger sizes may be substituted if at no additional cost to Owner.
- c. Zone Pipe:
 - 1) Pressure Lines: Class 200.
 - 2) Lateral Lines: Class 200
 - 3) Backflow Assembly Piping: Schedule 40.
 - Quick Coupler Piping: PVC
- d. Fittings: Same material as pipe, except where detailed otherwise.
- e. Sleeves:
 - 1) Under Parking Area And Driveway Paving: Schedule 40 PVC Pipe.
 - 2) All Other: Class 200 PVC Pipe.
 - Sleeve diameter refer to irrigation plan.

6. Sprinkler Heads:

- a. Each type of head shall be product of single manufacturer.
- b. Shrub Head Bubblers: If Used
 - 1) Approved Products.
 - a) Hunter: PCN series.
- c. Spray Heads in Lawn Areas:
 - 1) Category Four Approved Products.
 - a) Rainbird: Spray 4" Pop-up
- d. Gear Driven Rotor Pop-ups:
 - 1) Category Four Approved Products.
 - a) Hunter: PGJ Series & PGP Series

- Sprinkler Risers:
- a. All 3/4" inlet rotor pop-up sprinklers shall have an adjustable pre-assembled swing assembly riser. Swing assemblies shall be equal as approved by Landscape Architect before installation. Swing assemblies shall be 3/4" x 12" and shall be threaded both ends.
- b. Pop-up rotor sprinkler heads shall have adjustable riser assembly, three ell swing joint assembly, unless detailed otherwise on Drawings. These swing joint fittings shall be of schedule 40 PVC plastic and nipples schedule 80 gray PVC unless otherwise designated on Drawings. Horizontal nipple parallel to side of lateral line shall be 8 inches long minimum. All other nipples on swing joint riser shall be of length required for proper installation of sprinkler heads.
- c. Pop-up sprinkler heads, shrub spray heads, bubbler heads, and stationary spray sprinkler heads shall have risers made up one of the following ways:
- 2. Automatic Irrigation Control Wiring And Controller:
- a. Communication wire between controller and valve.
- b. Hunter controller:
 - 1) Provide the specified controller see irrigation legend.
- c. Waterproof Wire Connectors:
 - Control wire connections shall consist of a properly-sized wire nut inserted in a waterproof grease cap.
 - 2) Type Two Acceptable Products:
 - a) DBY or DBR by 3M
 - b) 'One Step' 20111SP by King Innovation
 - c) Equal as approved by Architect before installation.
- d. Automatic controllers: Hunter IC
- e. Automatic Rain Sensors:
 - 1) Hunter: MINI-CLIK, Wireless.
- Valves:
- f. Automatic Valves:
 - 1) Category Four Approved Products.
 - a) Hunter: ICV series.
- g. Isolation Valves:
 - 1) PVC ball valves, size to match pipe size
 - 2) Nibco T-113 non-rising stem gate valve, size to match pipe size (use in cold, northern climates- eco-regions 6.0, 9.1 and 10.1).
 - 3) Class Quality Standards.
 - a) Salco
- Backflow Preventer: Make and Model shown on Drawings or as required by local code.
- Pressure Reducing Valve: Make and model shown on Drawings or as required by local code.
- j. Quick Coupling Valves and Keys:
 - 1) Category Four Approved Products. .
 - a) Hunter: HQ-3, HQ4 Series with HK-3, HK-4 key and HS-100 hose swivel.
 - b) Rainbird: 33DRC, 33DLRC, 33DK with SH-O swivel.
- k. Valve Boxes And Extensions:
 - 1) Lid Colors:
 - a) Green: Lawn areas
 - 2) Type Two Acceptable Products:
 - a) Rainbird or Nelson Series,1"
- I. Valve:
 - 1) Type Acceptable Products:
 - a) Hunter:
 - b) Valve Box Supports: Standard size fired clay paving bricks without holes or compacted gravel base.
- 3. Other Components:
 - a. Recommended by Manufacturer and subject to Architect's review and acceptance before installation.
 - b. Provide components necessary to complete system and make operational.

3.1 INSTALLERS

- A. Approved Irrigation System Installers.
 - 1. Irrigation company with Five Year experience minimum.
- B. Category Three National Account Approved Baseline Controller Installers.
 - Provide Qualification documentation as described under Informational Submittals in Part 1 GENERAL:
- C. Approved irrigation system installers shall be pre-approved and included in Construction Documents

3.2 EXAMINATION

- A. Verification Of Conditions:
 - Perform pressure test at stub-out on main water line provided for irrigation system, or at nearby fire hydrant.
 - 2. Notify Architect if pressures over 70 psi or under 50 psi are found to determine if some redesign of system is necessary before beginning work on system.

3.3 PREPARATION

A. Protection:

- Protection Of In-Place Conditions:
- a. Repair or replace work damaged during course of the Work at no additional cost to Owner. If damaged work is new, installer of original work shall perform repair or replacement.
- b. Do not cut existing tree roots measuring over 2 inches in diameter in order to install irrigation lines. Hand dig within the drip lines of all existing trees.

B. Surface Preparation:

- 1. Layout of Irrigation Heads:
- a. Location of heads and piping shown on Drawings is approximate. Actual placement may vary slightly as is required to achieve full, even coverage without spraying onto buildings, sidewalks, fences, etc.
- b. During layout, consult with Landscape Architect to verify proper placement and make recommendations, where revisions are advisable.
- c. Minor adjustments in system layout will be permitted to avoid existing fixed obstructions.
- d. Make certain changes from Contract Documents are shown on record drawings.

3.4 INSTALLATION

- A. Trenching And Backfilling:
 - 1. Pulling of pipe is not permitted.
 - 2. Excavate trenches to specified depth. Remove rocks larger than 1-1/2 inch in any direction from bottom of trench. Separate out rocks larger than 1-1/2 inch in any direction uncovered in trenching operation from excavated material and remove from areas to receive landscaping.
 - 3. Cover pipe both top and sides with 2 inches of rock-free soil as specified under PART 2 PRODUCTS.
 - 4. Do not cover pressure main, irrigation pipe, or fittings until Architect has inspected and approved system.

B. Sleeving:

- 1. Sleeve water lines and control wires under walks and paving or bored. Extend sleeves 18-24" inches minimum beyond walk or pavement edge. Cover sleeve ends until pipes and wires are installed to keep sleeve clean and free of dirt and debris.
- Position sleeves with respect to buildings and other obstructions so pipe can be easily removed.

C. Installation of Pipe:

- Install pipe in manner to provide for expansion and contraction as recommended by Manufacturer.
- Unless otherwise indicated on Drawings, install main lines and lateral lines connecting pop-up
 rotor and impact sprinklers with minimum cover of 18 inches based on finished grade. Install
 remaining lateral lines, including those connecting drip tubing, with minimum of 12 inches of
 cover based on finish grade.
- 3. Install pipe and wires under driveways or parking areas in specified sleeves 18-24 inches below finish grade or as shown on Drawings.
- 4. Locate no sprinkler head closer than 3 inches from building foundation. Heads immediately adjacent to mow strips, walks, or curbs shall be one inch below top of mow strip, walk, or curb and have one to 3 inches clearance between head and mow strip, walk, or curb.
- 5. Cut plastic pipe square. Remove burrs at cut ends before installation so unobstructed flow will result.
- 6. Make solvent weld joints as follows:
 - a. Do not make solvent weld joints if ambient temperature is below 35 deg F
- b. Clean mating pipe and fitting with clean, dry cloth and apply one coat of P-70 primer to each.
- c. Apply uniform coat of 711 solvent to outside of pipe.
- d. Apply solvent to fitting in similar manner.
- e. Give pipe or fitting a quarter turn to insure even distribution of solvent and make sure pipe is inserted to full depth of fitting socket.
- f. Allow joints to set at least 24 hours before applying pressure to PVC pipe.
- 7. Tape threaded connections with Teflon tape

D. Control Valves And Controller

- 1. Install valves in plastic boxes with reinforced heavy duty plastic covers. Locate valve boxes within 12 inches of sidewalks and shrub bed edges with tops at finish grade. Do not install more than one valve in single box.
- 2. Place 3 inches minimum of pea gravel below bricks supporting valve boxes to drain box. Set valve boxes over valve so all parts of valve can be reached for service. Set cover of valve box even with finish grade. Valve box cavity shall be reasonably free from dirt and debris.
- 3. Wiring:
 - a. Tape control wire to side of main line every 10 feet.
 - b. Use waterproof wire connectors consisting of properly-sized wire nut and grease cap at splices and locate all splices within valve boxes.

E. Backflow Preventer:

- 1. As directed by GPISD & Landscape Architect
- After installation, remove handles and turn over to Owner together with extra maintenance materials.

F. Sprinkler Heads:

- Set sprinkler heads and quick-coupling valves perpendicular to finish grade.
- 2. Do not install sprinklers using side inlets. Install using base inlets only.
- Set sprinkler heads at a consistent distance from existing walks, curbs, and other paved areas and to grade by using specified components or other method demonstrated in Pre-Construction Conference.
- G. Before installation of sprinkler heads and drip emitters, open control valves and use full head of water to flush out system.
- H. Arrange valve stations to operate in an easy-to-view progressive sequence around building.

3.5 FIELD QUALITY CONTROL

A. Field Tests:

- 1. Main Line:
- a. Before backfilling main line, test pressure at 100 psi minimum for 2 hours minimum and make certain there are no leaks.
 - A report of the test results along with photographs of the testing process are to be provided by the landscape architect or his authorized representative at completion of testing.
 - 2) This report shall be included in the Operations and Maintenance Manual along with the acceptance certificate at the end of the project.
 - 3) Notify Architect 2 working days minimum before conducting test.
- b. Test report:
 - Report of the test results along with photographs of the testing process are to be provided by the landscape architect or his authorized representative at completion of testing.
 - 2) This report shall be included in the Operations and Maintenance Manual along with the acceptance certificate at the end of the project.
- c. Notify Landscape Architect 2 working days minimum before conducting test.

B. Field Inspections:

- Architect's irrigation design consultant, or certified water auditor recommended by consultant and approved in writing by Architect, will review irrigation system before substantial completion.
- 2. Upon acceptance of irrigation system, reviewer will provide signed acceptance certificate.

3.6 ADJUSTING

- A. Adjust sprinkler heads to proper grade when turf is sufficiently established to allow walking on it without appreciable harm. Such lowering and raising of sprinkler heads shall be part of original contract with no additional cost to Owner.
- B. Adjust sprinkler heads for proper distribution and trim so spray does not fall on building.
- C. Adjust watering time of valves to provide proper amounts of water to plants.

3.7 CLOSEOUT ACTIVITIES

A. Training:

1. After system is installed and approved, instruct Owner's designated personnel in complete operation and maintenance.

END OF SECTION

SECTION 32 90 01

COMMON PLANTING REQUIREMENTS

PART 1 - GENERAL

SUMMARY

Includes But Not Limited To:

- 1. Common procedures and requirements for landscaping work.
- 2. Provide maintenance for new landscaping as described in Contract Documents.

Related Requirements:

- 3. Section 01 43 01: Quality Assurance Qualifications.
- 4. Section 32 84 23: Underground Sprinklers.
- 5. Section 32 91 13: Soil Preparation.

ADMINISTRATIVE REQUIREMENTS

Pre-Installation Conference:

- 6. Schedule pre-installation conference as specified in Section 31 22 13.
- 7. Schedule planting pre-installation conference after completion of Fine Grading specified in but before beginning landscape work.
- 8. In addition to agenda items specified in Section 01 3100, review the following:
 - Establish responsibility for maintenance of new landscaping during all phases of construction period.
 - b. Prepare two typical landscape planting excavations and conduct percolation test to verify that water drains away within two hours. Discuss results of percolation tests with Architect and Owner's representative.

SUBMITTALS

- B. Closeout Submittals:
 - Include following in Operations And Maintenance Manual specified in Section 01 78 00:
 - a. Operations And Maintenance Data:
 - 1) At completion of landscape work, submit two copies of typewritten instructions recommending procedures to be established by Owner for maintenance of landscape work for one full year after contract maintenance period ends.

QUALITY ASSURANCE

Qualifications: Requirements of Section 01 43 01 applies, but not limited to the following:

- Installer:
 - a. Use trained personnel familiar with required planting procedures and with Contract Documents.
 - b. Planting shall be performed under direction of foreman or supervisor with minimum five years experience in landscape installations.

DELIVERY, STORAGE, AND HANDLING

Storage And Handling Requirements:

- 3. Deliver packaged materials in containers showing weight, analysis, and name of Manufacturer.
- 4. Deliver plants, trees, palms and shrubs in healthy and vigorous condition.
- 5. Protect materials from deterioration during delivery.

Storage And Handling Requirements:

- 6. Store in location on site where they will not be endangered and where they can be adequately watered and kept in healthy and vigorous condition.
- 7. Protect materials from deterioration while stored at site.

PART 2 - PRODUCTS:

POST-EMERGENT WEED CONTROL:

Type Two Acceptable Products:

- 1. Treflan or Surflan by Dow Agrosciences.
- 2. Eptan by Syngenta.
- 3. Equal as approved by Architect before use. See Section 01 62 00.

PART 3 - EXECUTION

INSTALLERS

Acceptable Installers:

- Coastal landscape contractors that have experience in successful landscape installation in this
 region.
- 2. Equal approved by Landscape Architect bidding. See Section 01 43 01.

Approved landscaping installers shall be pre-approved and included in Construction Documents by Addendum.

EXAMINATION

Verification Of Conditions:

- 3. Inspect site and Contract Documents to become thoroughly acquainted with locations of irrigation, ground lighting, and utilities.
- 4. Repair damage to irrigation, ground lighting, and utilities and other items adjacent to landscaping caused by work of this Section or replace at no additional cost to Owner.

PREPARATION

Before proceeding with work, verify dimensions and quantities. Report variations between Drawings and site to Landscape Architect before proceeding with landscape work.

- 5. Plant totals are for convenience of Contractor only and are not guaranteed. Verify amounts shown on Drawings.
- 6. All planting indicated on Drawings is required unless indicated otherwise.

Protection:

- Take care in performing landscaping work to avoid conditions that will create hazards. Post signs
 or barriers as required.
- 8. Provide adequate means for protection from damage through excessive erosion, flooding, heavy rains, etc. Repair or replace damaged areas.

9. Keep site well drained and landscape excavations dry.

INSTALLATION

Interface With Other Work:

 Do not plant trees or palms and shrubs until major construction operations are completed. Do not commence landscaping work until work of Section 31 22 16 and Section 32 84 23 has been completed and approved.

Coordinate installation of planting materials during normal planting seasons for each type of plant material required.

Hand excavate as required.

Maintain grade stakes until parties concerned mutually agree upon removal.

When conditions detrimental to plant growth are encountered, such as rubble fill, high water table or adverse drainage conditions, notify Landscape Architect before planting.

FIELD QUALITY CONTROL

Field Inspection:

- 11. Landscape Architect will inspect landscaping installation approximately two weeks before Substantial Completion.
- 12. Replace landscaping that is dead or appears dead as directed by Architect within 10 days of notification and before Substantial Completion.

CLEANING

Waste Management:

13. Immediately clean up soil or debris spilled onto pavement and dispose of deleterious materials.

CLOSEOUT ACTIVITIES

Instruction Of Owner:

14. Replace damaged plantings at no additional cost to Owner.

PROTECTION

Protect planted areas against traffic or other use immediately after planting is completed by placing adequate warning signs and barricades.

Provide adequate protection of planted areas against trespassing, erosion, and damage of any kind. Remove this protection after Landscape Architect has accepted planted areas.

MAINTENANCE

General:

15. Before beginning maintenance period (during construction), plants shall be in at least as sound, healthy, vigorous, and in approved condition as when delivered to site, unless accepted by Architect in writing at final landscape inspection.

- 16. Maintain landscaping until final acceptance.
- 17. Replace landscaping that is dead or appears unhealthy or non-vigorous as directed by Architect before end of maintenance period. Make replacements within 10 days of notification. Lawn that does not live and has to be replaced shall be guaranteed and maintained an additional 30 days from date of replacement.

END OF SECTION

BLANK PAGE

Topsoil Testing Report

DTA Area Office	Date	This form should be given to the person or lab doing the testing each time a soils test is requested.
Ward/Branch	·	Date Requested: By Whom:
City	State	Contact Phone #: Fax #:
Stake/Mission	·	Property Number

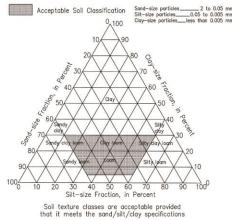
Site Street Address

- The architect is to determine, by investigation, the quality and quantity of topsoil on a site before the Owner's review. All information on this form must be provided.
- 2. A horticultural topsoil test is recommended at each site.
- The costs for the testing and report will be paid by the Owner.
- Copies of the report shall be made available to the landscape architect and the DTA Area Office.
- Report location where soil is from and a history of its use on the back of this form.
- At least two test samples shall be made of the topsoil on the project site and each anticipated topsoil source. If the site soil profile or borrow pit are not uniform, additional samples shall be taken. Uniform composite samples may also be used if properly acquired and documented.
- The soil report must provide interpretation and recommendations for soil amendments, fertilizers, and soil conditioners for use by the architect and the landscape architect.

("Acceptable Levels" refers to the allowable soil specifications prior to being amended) NO3-%⁽³⁾ P⁽⁵⁾ K⁽⁵⁾ EC(1) Fe⁽⁵⁾ Text(2) $N^{(4)}$ SAR(1) Sample No. pH(1) Mmhos/cm Sand Silt Clay Class OM Ppm ppm ppm ppm Acceptable 5.5-<3.0 <6.0 15-60 10-60 5-30 (2) >1.0 >20 >11 >130 >10 Level(s) 8.0

(Specification Section 32-9113 - Finish Grading and Soil Preparation)

- Fertile, loose, friable soil, capable of sustaining vigorous plant growth.
- Clean and free from toxic minerals & chemicals, noxious weeds, weed seeds and rock (coarse fragments) or other objectionable/construction materials. Remove any such objects. No more than 2% by volume of soil measuring over 2.0mm.



	Composition in Percent		
	Sand	Silt	Clay
Acceptable %	15-60	10-60	5-30

Textural Classification Chart

Soil Sample No.	Description of location where sample was taken	History of Use of the soil

*T~	460	nearest	4/40	of on	inah
I O	tne	nearest	1/10	or an	ıncn

⁽⁵⁾ AB-DTPA method
--If other methods are used for NO3-N, P, K, and Fe, then note.
Changes in acceptable levels shall also be made by the testing laboratory.

Name of Soil Lab performing the analysis			
Address			
Phone Number			
Fax Number			
Sample No.	Infiltration Rate:		
	Inches/Hour		

^{. &}quot;To the hearest 1/10 of an Inch."

(1) saturated soil paste 1:1 soil:water method (please Indicate)

(2) hydrometer method (Acceptable soil- sand:15-60%, silt:160%, clay-5-30%)

(3) potassium dichromate method (Walkey-Black) or loss of ignition

(4) chromotropic acid method

(5) AP DETRA method silt:10-

SECTION 32 91 13

SOIL PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Includes But Not Limited To:
 - 1. Perform soil preparation work as described in Contract Documents.
 - 2. Furnish and apply soil amendments as described in Contract Documents.
- B. Related Requirements:
 - 1. Section 31 05 01: Common Site Construction Requirements.
 - 2. Section 31 14 13: 'Topsoil Stripping And Stockpiling'.
 - 3. Section 31 22 13: 'Rough Grading' and pre-installation conference held in conjunction with other Division 31 and Division 32 specifications.

1.2 REFERENCES

- A. Reference Standards:
 - 1. ASTM International:
 - ASTM D1557-09, 'Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³)'.

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Pre-Installation Conference:
 - 1. Schedule pre-installation conference as specified in Section 31 2213.
 - 2. In addition to agenda items specified in Section 01 3100, review the following:
 - a. Review soil amendments and fertilizer requirements.

1.4 SUBMITTALS

- A. Action Submittals:
 - 1. Product Data:
 - a. Product literature and chemical / nutrient analysis of soil amendments and fertilizers.
 - 2. Samples:
 - a. Sample of soil conditioner for approval before delivery to site. Include product analysis list.
- B. Informational Submittals:
 - 1. Field Quality Control Submittals:
 - a. Submit tests on imported and site topsoil by licensed laboratory before use, using Owner Form 'Topsoil Test Report':
 - Before use, topsoil shall meet minimum specified requirements and be approved by Architect.
 - 2) If necessary, submit proposed amendments and application rates necessary to bring topsoil up to minimum specified requirements.
 - b. Submit report stating location of source of imported topsoil and account of recent use.
 - Installer Reports:
 - a. Delivery slips indicating amount of soil conditioner delivered to Project site.

C. Closeout Submittals:

- 1. Include following in Operations And Maintenance Manual specified in Section 01 7800:
 - a. Operations and Maintenance Data:
 - 1) 'Topsoil Test Report'.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Topsoil:

- 1. Topsoil used in landscaped areas, whether imported, stockpiled, or in place, shall be fertile, loose, friable soil meeting following criteria:
 - a. Chemical Characteristics:
 - 1) Acidity / alkalinity range: pH 6.5 to 7.5.
 - 2) Soluble Salts: less than 5.0 mmhos/cm.
 - 3) Sodium Absorption Ratio (SAR): less than 10.0.
 - 4) Organic Matter: greater than one percent.
 - b. Physical Characteristics:
 - Gradation as defined by USDA triangle of physical characteristics as measured by hydrometer.
 - a) Sand: 15 to 60 percent.
 - b) Silt: 10 to 60 percent.
 - c) Clay: 5 to 30 percent.
 - 2) Clean and free from toxic minerals and chemicals, noxious weeds, rocks larger than 1-1/2 inch in any dimension, and other objectionable materials.
 - Soil shall not contain more than 2 percent by volume of rocks measuring over 3/32 inch in largest size.

B. Soil Amendments:

- 1. Incorporate following soil amendments into topsoil used for Project:
 - a. Acceptable Soil Amendments, Soil Conditioners, And Application Rates. (Choose one):
 - 'Soil Pep:' < Insert Application Rate from Topsoil Testing Report>.
 - 2) EPA Class 'A' co-compost or compost with SAR less than 3.0, EC less than 4.0, and CN ratio of 15 to 25:1 passing through 1/2 inch mesh screen: Apply compost at 6 cubic yards per 1000 sq.ft. for every three inches of soil depth.
 - b. Acceptable Fertilizers And Application Rates:
 - 1) Apply a NP and iron fertilizer at label rate. Submit brand and analysis for approval.
 - 2) Equal as approved by Architect before installation. See Section 01 6200.

PART 3 - EXECUTION

3.1 PERFORMANCE

A. Soil Amendments:

- 1. Add specified soil amendments at specified rates to lawn areas.
- 2. Roto-till or otherwise mix amendments evenly into top 4 inches of topsoil.
- 3. Incorporate and leach soil amendments which require leaching, such as gypsum, within such time limits that soil is sufficiently dry to allow proper application of fertilizer and soil conditioners.

END OF SECTION

SECTION 32 92 23

SODDING

PART 1 - GENERAL

1.1 SUMMARY

- A. Includes But Not Limited To:
 - Furnish and install sodded lawn as described in Contract Documents.
- B. Related Requirements:
 - 1. Section 32 84 23: Irrigation system.
 - 2. Section 32 90 01: Common Planting Requirements.

1.2 REFERENCES

A. Definitions:

- 1. Crop Coefficients and Hydro-Zones: Crop coefficients (Kc) are used with ETo to estimate specific plant evapotranspiration rates. The crop coefficient is a dimensionless number (between 0 and 1.2) that is multiplied by the ETo value to arrive at a plant ET (ETc) estimate. Plants grouped by water needs, organized into one irrigation zone.
- Eco-Region Irrigation Design: A bio-regional approach to irrigation and planting design that is
 relevant to the geographic area for which the planting plan and irrigation system is designed.
 These geographic areas are defined by the Environmental Protection Agency and have been
 modified by the CCISD into 15 geographical areas throughout North America, and the Hawaiian
 Islands.
- 3. Hardiness Zone: A hardiness zone is a more precisely geographically-defined zone within an Eco-Region in which a specific category of plant life is capable of growing, as defined by temperature hardiness, or ability to withstand the minimum temperatures of the zone. Hardiness Zones may be defined by one of two sources:
 - a. Sunset Western Garden Book Maps.
 - b. USDA Hardiness Zone Map.
 - Plant Hardiness zone sources shall be listed by the architect through the planting and irrigation design process.
- 4. Hydro-Zone: Plants grouped by water needs (similar Crop Coefficients (Kc), organized into one irrigation zone.
- Reference Evapotranspiration (ETo): The total water lost from the soil (evaporation) and from the plant surface (transpiration) over some period.

1.3 SUBMITTALS

- A. Informational Submittals:
 - 1. Source Quality Control Submittals:
 - a. Written certification confirming lawn seed quality and mix...
 - 2. Sustainable Design Submittals:
 - a. Product Data for Credit WE 1.1:
 - 1) For water efficient landscape.
 - b. Product Data for Credit WE 1.3:
 - 1) For water use reduction.

B. Closeout Submittals:

1. Include following in Operations And Maintenance Manual specified in Section 01 78 00:

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Delivery And Acceptance Requirements:
 - 1. Harvest, deliver, store, and handle sod in accordance with requirements of Turfgrass Producers International (TPI) (formally American Sod Producers Association) Specifications for Turfgrass Sod Materials and Transplanting / Installing.
 - 2. Schedule deliveries to coincide with topsoil operations and laying. Keep storage at job site to minimum without causing delays.
 - a. Deliver, unload, and store sod on pallets within 24 hours of being lifted.
 - b. Do not deliver small, irregular, or broken pieces of sod.

B. Storage And Handling Requirements:

- 1. Cut sod in pieces approximately 3/4 to one inch thick. Roll or fold sod so it may be lifted and handled without breaking or tearing and without loss of soil.
- 2. During wet weather, allow sod to dry sufficiently to prevent tearing during lifting and handling.
- During dry weather, protect sod from drying before installation. Water as necessary to insure vitality and to prevent excess loss of soil in handling. Sod that dries out before installation will be rejected.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Description:

- Superior sod grown from certified, high quality, seed of known origin or from plantings of certified grass seedlings or stolons:
 - Assure satisfactory genetic identity and purity.
 - b. Assure over-all high quality and freedom from noxious weeds or an excessive amount of other crop and weedy plants at time of harvest.
- 2. Sod shall be 100% St. Augustine 'Raleigh' weed free and 2 year old sod.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Interface With Other Work:

1. Do not commence work of this Section until work of Sections 32 9113 and 32 9300 has been completed and approved.

B. Tolerances:

1. Final grade of soil after sodding of lawn areas is complete shall be one inch below top of adjacent pavement of any kind.

C. Laying of Sod:

- 1. Lay sod during within 48 hours of being lifted.
- 2. Lay sod while top 6 inches of soil is damp, but not muddy.
- 3. Lay sod in rows perpendicular to slope with joints staggered. Butt sections closely without overlapping or leaving gaps between sections. Cut out irregular or thin sections with a sharp knife.
- 4. Lay sod flush with adjoining existing sodded surfaces.

D. After Laying of Sod Is Complete:

- 1. Roll horizontal surface areas in two directions perpendicular to each other.
- 2. Repair and re-roll areas with depressions, lumps, or other irregularities. Heavy rolling to correct irregularities in grade will not be permitted.

3. Water sodded areas immediately after laying sod to obtain moisture penetration through sod into top 6 inches of topsoil.

3.2 FIELD QUALITY CONTROL

- A. Field Inspection:
 - 1. Sodded areas will be accepted at Project closeout if:
 - a. Sodded areas are properly established.
 - b. Sod is free of bare and dead spots and is without weeds.
 - c. No surface soil is visible when grass has been cut to height of 2 inches
 - 2. Sodded areas have been mowed a minimum of twice.

END OF SECTION

SECTION 32 93 00

PLANTS

PART 1 - GENERAL

1.1

- A. Includes But Not Limited To:
 - 1. Furnish and install landscaping plants as described in Contract Documents.
- B. Related Requirements:
 - 1. Section 32 84 23: Irrigation system.
 - 2. Section 32 90 01: Common Planting Requirements.
 - 3. Section 32 91 13: Soil Preparation.
 - 4. Section 32 92 23: Sodding.

1.2 REFERENCES

A. Definitions:

- 1. Crop Coefficients and Hydro-Zones: Crop coefficients (Kc) are used with ETo to estimate specific plant evapotranspiration rates. The crop coefficient is a dimensionless number (between 0 and 1.2) that is multiplied by the ETo value to arrive at a plant ET (ETc) estimate. Plants grouped by water needs, organized into one irrigation zone.
- 2. Hardiness Zone: A hardiness zone is a more precisely geographically-defined zone within an Eco-Region in which a specific category of plant life is capable of growing, as defined by temperature hardiness, or ability to withstand the minimum temperatures of the zone. Hardiness Zones may be defined by one of two sources:
 - a. Sunset Western Garden Book Maps.
 - b. USDA Hardiness Zone Map.
 - Plant Hardiness zone sources shall be listed by the architect through the planting and irrigation design process.
- 3. Hydro-Zone: Plants grouped by water needs (similar Crop Coefficients (Kc), organized into one irrigation zone.
- 4. Reference Evapotranspiration (ETo): The total water lost from the soil (evaporation) and from the plant surface (transpiration) over some period.
- B. Reference Standards:
 - 1. American Nursery & Landscape Association / American National Standards Institute:
 - a. ANLA / ANSI Z60.1-2004, 'American Standard for Nursery Stock.'

1.3 SUBMITTALS

- A. Action Submittals:
 - Samples:
 - a. Top dressing mulch and gravel for approval before delivery to site.
- B. Informational Submittals:
 - 1. Sustainable Design Submittals:
 - a. Product Data for Credit WE 1.1:
 - 1) For water efficient landscape.
 - b. Product Data for Credit WE 1.3:
 - 1) For water use reduction.

C. Closeout Submittals:

- 1. Include following in Operations And Maintenance Manual specified in Section 01 7800:
 - a. Maintenance Contracts:
 - 1) See Site Management Plan (SMP) for Establishment Period Maintenance.
 - b. Operations And Maintenance Data:
 - 1) Installer Instructions:
 - a) Provide written instructions covering maintenance requirements by Owner for one year beyond Contract maintenance period specified in Section 32 9001.
 - c. Warranty Documentation:
 - 1) Include final, executed copy of warranty.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Delivery And Acceptance Requirements:

- 1. Deliver trees, shrubs, ground covers, and plants after preparations for planting have been completed and install immediately.
- 2. Do not prune before delivery, except as approved by Landscape Architect.
- 3. Protect bark, branches, and root systems from sun scald, drying, whipping, and other handling and tying damage.
- 4. Do not bend or bind-tie trees or shrubs in such a manner as to destroy natural shape.
- 5. Provide protective covering during delivery.

B. Storage And Handling Requirements;

- 1. Handle balled stock by root ball or container. Do not drop trees and shrubs during delivery.
- 2. If planting is delayed more than six hours after delivery, set planting materials in shade and protect from weather and mechanical damage.
- 3. Set balled stock on ground and cover ball with soil, saw dust, or other acceptable material approved by Architect. Do not place on pavement.
- 4. Do not remove container-grown stock from containers before time of planting.
- 5. Water root systems of trees and shrubs stored on site with fine spray. Water as often as necessary to maintain root systems in moist condition. Do not allow plant foliage to dry out.

1.5 WARRANTY

A. Special Warranty:

- 1. Provide written warranties as follows:
 - Guarantee shrubs, ground covers, and vines to live and remain in strong, vigorous, and healthy condition for 90 days minimum from date landscape installation is accepted as complete.
 - b. Guarantee trees and shrubs to live and remain in strong, vigorous, and healthy condition for one year from date landscape installation is accepted as complete.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Plants:

- 1. Conform to requirements of Plant List and Key on Drawings and to ANLA / ANSI Z60.1.
- 2. Nomenclature:
 - a. Plant names used in Plant List conform to 'Standardized Plant Names' by American Joint Committee on Horticultural Nomenclature except in cases not covered. In these instances, follow custom of nursery trade. Plants shall bear a tag showing the genus, species, and variety of at least 10 percent of each species delivered to site.

3. Quality:

- a. Plants shall be sound, healthy, vigorous, free from plant disease, insect pests or their eggs, noxious weeds, and have healthy, normal root systems. Container stock shall be well established and free of excessive root-bound conditions.
- b. Do not prune plants or top trees prior to delivery.
- c. Plant materials shall be subject to approval by Landscape Architect as to size, health, quality, and character.
- d. Bare root trees are not acceptable.
- e. Provide plant materials from licensed nursery or grower.

4. Measurements:

- a. Measure height and spread of specimen plant materials with branches in their normal position as indicated on Drawings or Plant List.
- b. Measurement should be average of plant, not greatest diameter.
- c. Plants properly trimmed should be measured same in every direction.
- d. Tree measurements for caliper on trees to be 4" above the rootball.
- e. Where caliper or other dimensions of plant materials are omitted from Plant List, plant materials shall be normal stock for type listed.
- f. Plant materials larger than those specified may be supplied, with prior written approval of Landscape Architect, and:
 - 1) If complying with Contract Document requirements in all other respects.
 - 2) If at no additional cost to Owner.
 - 3) If sizes of roots or balls are increased proportionately.

5. Shape and Form:

- Plant materials shall be symmetrical or typical for variety and species and conform to measurements specified in Plant List.
- b. Well grown material will generally have height equal to or greater than spread. However, spread shall not be less than 2/3's of height.

2.2 ACCESSORIES

A. Planting Mix:

 Mixture of three parts topsoil mix as specified in Section 32 911 3 and one part well rotted composted manure, or approved commercial landscape mix from 'New Earth'..

B. Planting Tablets:

1. 21 gram Agriform 20-10-5.

C. Tree Stakes:

- 1. Acceptable Products:
 - a. (3) 6' & 8' for 3 ½" caliper or greater 'T' Post.

2.

D. Tree Staking Ties:

- 1. Acceptable Products:
 - a. One inch poly Chain

E. Pre-Emergent Herbicide:

- Category Four Approved Products. See Section 01 6200 for definitions of Categories.
 - a. Chipco Dimension Granular by The Andersons Inc, Maumee, IL www.andersonsinc.com.
 - b. Elanco XL2G granular by Crop Data Management Systems, Marysville, CA www.cdms.net.
 - c. Ronstar G granular by Bayer Crop Science, Monheim, Germany www.bayercropscience.com.
 - d. Surflan AS liquid by United Phosphorous Inc, Trenton, NJ www.upi-usa.com.
 - e. Oryzalin 4 A.S. liquid by FarmSaver, Seattle, WA www.farmsaver.com.

F. Weed Barrier:

1. Acceptable Products:

- a. DeWitt Pro 5, 20 year woven polypropylene weed barrier..
- G. Hardwood Top Dressing Mulch: Submit Sample of approval.
 - 1. Acceptable Products:
 - a. Medium size.
 - b. Double ground mulch.
 - c. Dark brown in color.

H. Decomposed Granite

- Acceptable size & color:
 - a. Pink to rose in color
 - b. Size to 'Fine to 3/8" in size. Install in compacted lifts (submit sample for approval)

Mixed Gravel

1. Washed 1 ½" mixed gravel to a thickness of 4".

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Evaluation And Assessment:
 - 1. Before proceeding with work, check and verify dimensions and quantities. Report variations between Drawings and site to Architect before proceeding with work of this Section.
 - 2. Plant totals are for convenience only and are not guaranteed. Verify amounts shown on Drawings. All planting indicated on Drawings is required unless indicated otherwise.

3.2 PREPARATION

A. Layout individual tree and shrub locations and areas for multiple plantings. Stake locations and outline areas. Secure Architect's acceptance before planting. Make minor adjustments as may be requested.

3.3 INSTALLATION

- A. Interface With Other Work:
 - Do not commence work of this Section until work of Section 32 9113 has been completed and approved.
- B. Excavation:
 - If underground construction work or obstructions are encountered in excavation of planting holes, Landscape Architect will select alternate locations.
 - 2. Plant Excavation Size:
 - a. Diameter: Twice diameter of root ball or container minimum.
 - b. Depth: Equal to container or rootball depth. See landscape details.
 - Unless excavated material meets topsoil requirements as specified in Section 32 9113, remove from landscape areas and do not use for landscaping purposes.
 - 4. Roughen sides and bottoms of excavations.

C. Planting:

- 1. Removing Binders And Containers:
 - a. Remove top one / third of wire basket and burlap binders.
 - b. Remove plastic and twine binders from around root ball and tree trunk.
 - c. Remove wood boxes from around root ball. Remove box bottoms before positioning plant in hole. After plant is partially planted, remove remainder of box without injuring root ball.

- 2. Plant immediately after removing binding material and containers. Place tree and shrub rootballs on undisturbed soil. After watering and settling, top of tree root balls shall be approximately one inches higher than finished grade and trunk flare is visible. Shrub root balls shall be approximately one inch higher than finished grade
- Properly cut off broken or frayed roots.
- 4. Center plant in hole, remove remaining wire basket, and backfill with specified planting mix. Make ring of mounded soil around hole perimeter to form watering basin.
- 5. Add planting tablets in plant pit as follows. Place tablets in relation to root ball as recommended by Manufacturer.
 - a. One Gallon (4.5 L) Shrub: 1 tablet.
 - b. 5 Gallon (23 L) Shrub / Tree: 3 tablets.
 - c. 15 Gallon (68 L) Tree: 4 tablets.
 - d. 24 inch600 mm) Box Tree or greater: 6 Tablets.
- 6. Fill landscape excavations tamped planting mix. Settle by firming and watering to ensure top of ball one inch higher than surrounding soil.
- 7. Do not use muddy soil for backfilling.
- 8. Make adjustments in positions of plants as directed by Landscape Architect.
- 9. Thoroughly water trees and shrubs immediately after planting.
- 10. At base of each tree, leave 36 inch diameter circle free of any grass.

D. Supports for New Trees:

- 1. Provide new supports for trees noted on Drawings to be staked.
 - a. Remove nursery stakes delivered with and attached to trees.
 - Support shall consist of at least two tree stakes driven into hole base before backfill so roots are not damaged. Place stakes vertically and run parallel to tree trunk. Install stakes so 3 feet of stake length is below finish grade.
 - c. Place tree ties 6 to 12 inches below crotch of main tree canopy. Second set of tree ties may be required 18 to 24 inches above finish grade, if directed by Architect.
 - d. Remove tops of tree stakes so top of stake is 6 inches below main tree canopy to prevent damage to tree branches and canopy growth.
- 2. Provide root guying kits to support 24 inch box, 3-3 ½" inch caliper and larger trees.

E. Ground Covers:

1. Container-grown unless otherwise specified on Drawings. Space evenly to produce a uniform effect, staggered in rows and intervals shown.

F. Post Planting Weed Control:

- 1. Apply specified pre-emergent herbicide to shrub and ground cover planting areas and grass-free areas at tree bases after completion of planting.
- 2. Areas shall be free of existing weed growth before application of herbicide.
- 3. Protect existing trees to remain.

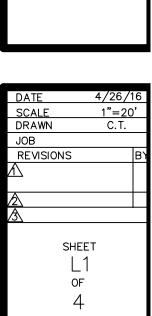
G. Weed Barrier Fabric:

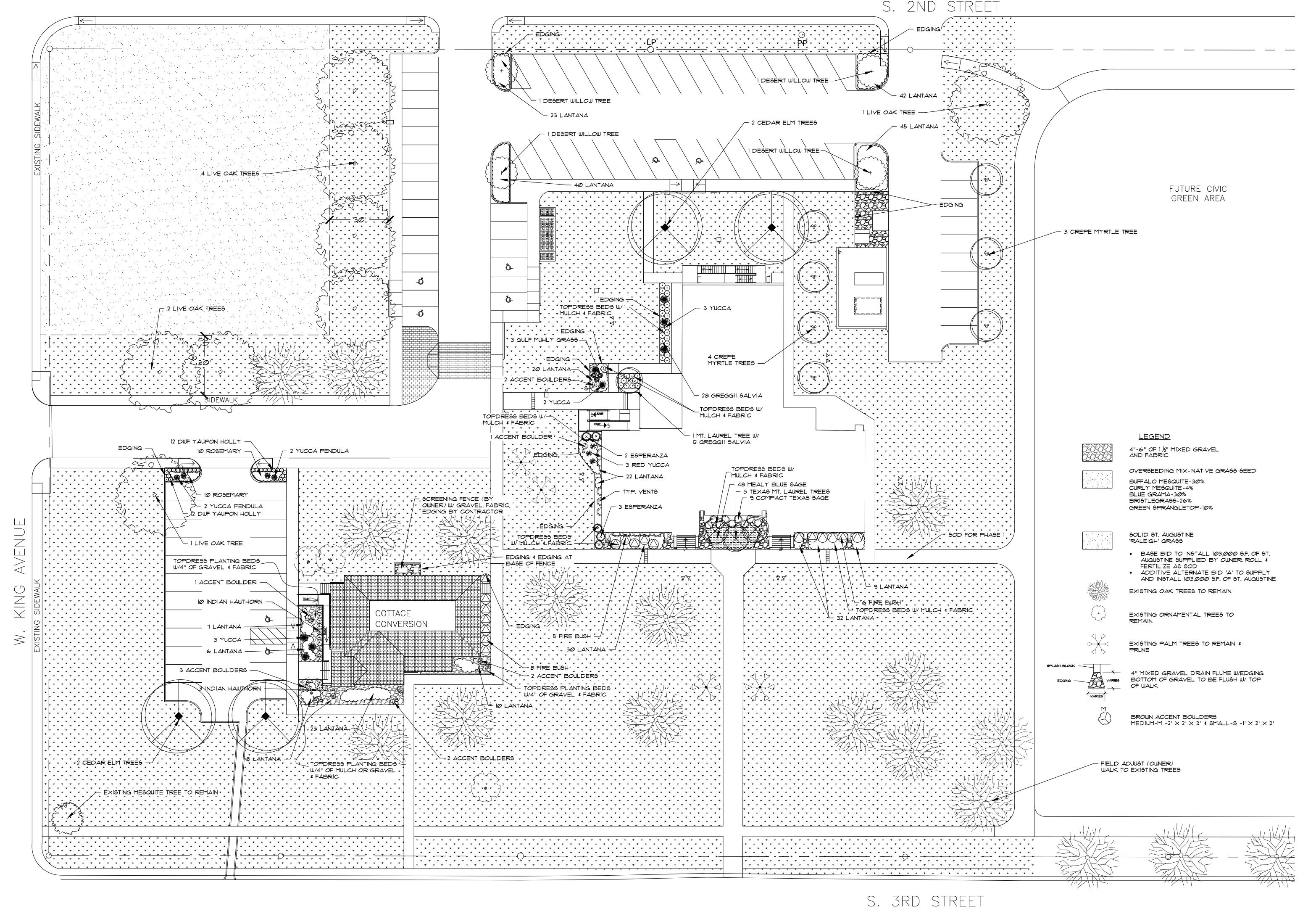
- After planting and application or herbicide in shrub beds, apply covering of specified weed barrier fabric.
- 2. Achieve 100 percent coverage over ground areas.
- 3. Overlap seams 6 inches minimum.
- 4. Staple at 5 feet on center each way and within 3 inches of edge of shrub bed, with two at each corner.

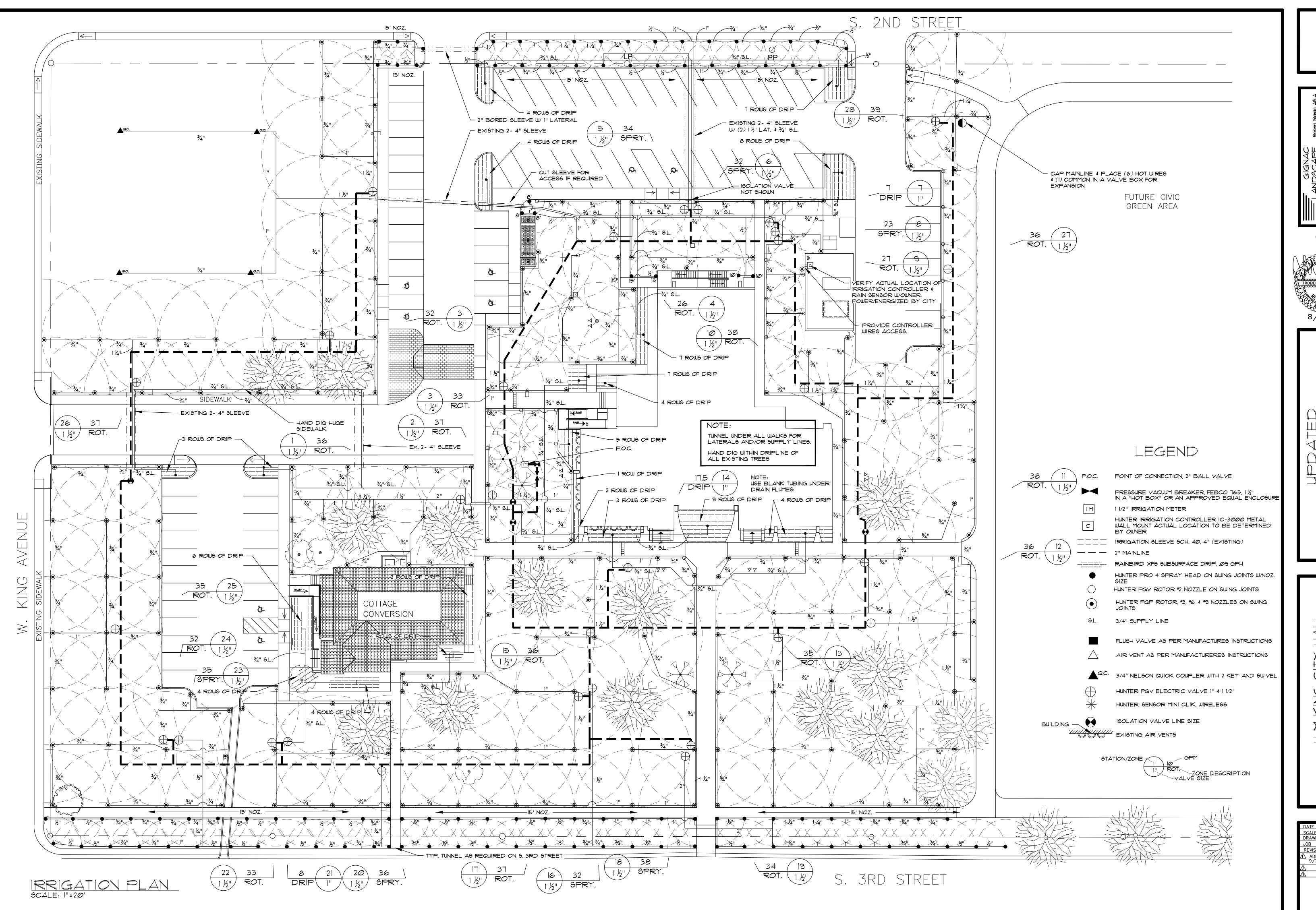
H. Mulching:

- 1. After application of herbicide, mulch shrub and ground cover planting areas with 4 inches deep layer of specified top dressing or gravel mulch.
- Cover grass-free area at tree bases with weed barrier and 4 inches of top dressing mulch or rock mulch.
- 3. Place mulch to uniform depth and rake to neat finished appearance.









GIGNAC

GIGNAC

Robert Gignac, ASLA

ARCHITECTURE

Design • Planning • Irrigation • Landscape

3833 6. Staples Ste. N II9 P. 361853Ø195 F. 361814Ø195

Corpus Christi Texas 184II Email: gignaclandscape@aol.com



UPDATED IRRIGATION PLAN

DATE 4/26/16
SCALE 1"=20'
DRAWN C.T.

JOB
REVISIONS BY
ADD. INFORMATION RO
9/7/16
SHEET
L2
OF

Muhlenbergia capillaris

Lagerstromia indica 'Natchez'

Crepe Myrtle Tree

QTY.	NAME	SIZE	COMMENTS	SPACING
8	Live Oak	3" Caliper Container	Str. Trk., Grade 'A', Match	As Shown
	Quercus virginiana	45 Gal. Min.	6'-7' 5prd., 9-10' Ht.	
19	Fire Bush	3 Gallon	Blooms, 18" Ht. \$ Sprd.	4' <i>O.</i> C.
	Hamelia patens		Orange, Not Leggy	+ 0.0 .
32Ø	Lantana	1 Gallon	Rooted, 12" Ht.	30" O.C.B.W.
Lantana camara 'Radiation'	Blooms, Full Pot			
48	Mealy Blue Sage	1 Gallon	Rooted, 12" Ht., 8" Sprd.	32" O.C.
	Salvia farinacea		Good Color	
40	Greggi Salvia	1 Gallon	Rooted, Bloom, Purple,	32" <i>O.C.</i>
2	Salvia greggii		Full Pot, 15" Ht.	
20	Rosemary	1 Gallon	Rooted, 12" Sprd Good Color	32" O.C.
	Rosmarimus officimallis	Prostrata'	3000 Color	
4	Texas Mountain Laurel Tree	6'-7' Ht.	Specimen, Grade 'A' , Multi Trk	As Shown
	Sophora secumdiflora		4' 1/2' Sprd.	
5	Esperanza	3 Gallon	Blooms, 30" Ht., 24" Sprd.	4'-6' Apart
	Tecoma stans		Bush, Yellow	
8	Yucca	5' Ht.	Specimen, Match, Clean Trk	As Shown
	Yucca treculeana	B\$B or Container	Multi Bayonet	
9	Compact Texas Sage	3 Gallon	30" ht., 18" sprd.,	4' Apart
	Leucophyllum frutecens 'compacta'		full pots	
3	Red Yucca	5 Gallon	3 Plant Minimum	4' Apart
	Hesperaloe parviflora		Full Pots, 15" Ht.	or As Shown
24	Dwf. Yaupon Holly Ilex vomitora 'Nana'	3 Gallon	Full Pot, Rooted	3' Apart
			15" Round Shape	
4	Yucca Pendula Pendula yucca	5 Gallon	Full Pot, Rooted	As Shown
4	Desert Willow	25/30 Gallon	15" Ht., good color 6'-7' Ht., 4'-5' Sprd.,	As Shown
7	Chilopsis linearis	(2" Caliper)	Good shape, Multi. Trk	70 01 10 WI
3	Gulf Muhly Grass	1 Gallon	Good, New Foilage	32" O.C.
	Muhlenhergia capillarie			

45 Gallon

LANDSCAPE NOTES

1. CONTRACTOR SHALL EXAMINE THE SITE & FAMILIARIZE HIMSELF W/ ALL CONDITIONS PERTINENT TO THIS WORK.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING FAMILIAR W/ ALL UNDERGROUND UTILITIES, PIPES & LINE RUNS. CONTRACTOR SHALL LOCATE & ESTABLISH ALL EXISTING UTILITIES IN THE CONSTRUCTION AREA BEFORE ANY EXCAYATION SHALL OCCUR.

3. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH

IRRIGATION AND SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH ALL LANDSCAPE OPERATIONS.

4. BIDDER SHALL VERIFY ALL QUANTITIES, AND COUNTS PER DRAWING AND BID HIS/HER VERIFIED QUANTITY.

5. CONTRACTOR IS RESPONSIBLE FOR ALL GRADING. INSTALLER SHALL PROVIDE PROPER & POSITIVE DRAINAGE IN ALL LAWN & PLANTING BEDS.

6. ALL TREES & SHRUBS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR.

1. PREPARE ALL PLANTING BEDS BY TILLING BED TO A 8" DEPTH WITH 4" OF LANDSCAPE MIX FROM "NEW EARTH" OR APPROVED EQUAL AND GRADE SMOOTH PRIOR TO PLANTING. CONTRACTOR TO FINE AND FINISH GRADE PRIOR TO FABRIC.

8. BACKFILL MATERIALS FOR ALL TREES SHALL BE IN THE FOLLOWING PROPORTIONS :

TREE - 2/3 NEW TOP SOIL \$ 1/3 LANDSCAPE MIX PLACE "AGRIFORM" TABLETS IN ALL BACKFILL MIX OR A PLANTING MIX FROM 'NEW EARTH'

9. STAKE AND GUY ALL TREES W/ (3) 6' 'T' POST, I" POLY CHAIN. FLAG ALL GUY WIRES. GUY YUCCA IF REQUIRED.

10. CONTRACTOR SHALL FINE GRADE ALL LAWN AREAS TO A SMOOTH, FREE DRAINING EVEN

SURFACE WITH LOOSE, MODERATELY COARSE TEXTURE. SOD TO BE ST. AUGUSTINE SOD 'RALEIGH'. CONTRACTOR SHALL HERBICIDE ALL PLANTING & SOD AREAS, SEEDED AREAS BE 'SPOT' HERBICIDE

OF ALL UNWANTED GRASSES (EXCEPT BERMUDA)

11. FINISHED GRADE TO BE 4" BELOW TOP OF WALK, CURB OR EDGING PRIOR TO TOPDRESSING IN ALL PLANTING BEDS.

12. INSTALL A LANDSCAPE FABRIC IN ALL PLANTING BEDS. INSTALL A DEWITT PRO 5 FABRIC

13. TOP DRESS BEDS WITH 4" OF MIXED GRAVEL: 1 1/2" OF MIXED GRAVEL OR MULCH. (REFER TO LANDSCAPE PLAN.) SUBMIT SAMPLE FOR APPROVAL. GRAVEL TO BE A 4" DEPTH ON A DEWITT PRO 5 FABRIC.

14. SEEDING TO BE A NATIVE SEED MIXTURE GRASS SEEDS MIXTURE BY WEIGHT:30% BUFFALO (PRIMED),

4% CURLY MESQUITE, 30% BLUE GRAMA, 26% BRISTLE GRASS, 10% GREEN SPRANGLE TOP.

TILL SEEDED AREA TO A 1" DEPTH AND SEED. PROVIDE (3) DOCUMENTED WATERINGS.

* 15. SOD AREA SHALL HAVE SCARIFIED OR TILLED TO A 1" DEPTH PRIOR TO SODDING. SPRAY ALL LAWN AREA WITH ROUND UP PRIOR TO SOD INSTALLATION.

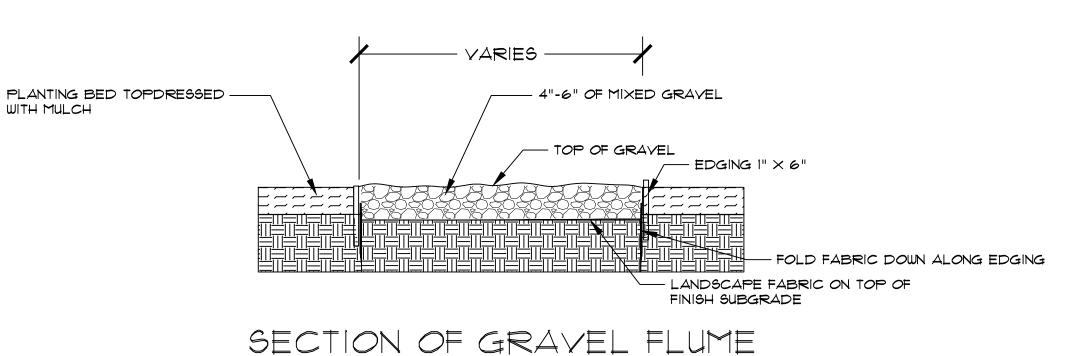
16. EDGING TO BE A 1" X 6" 'BEND A BOARD'.

17. PLACE BOULDERS IN A 'OUT CROPPING POSITION' (BURY 1/4) BOULDERS TO BE BROWN IN COLOR.

*SOD TO BE ST. AUGUSTINE 'RALEIGH' SOD

- BASE BID TO INSTALL SOD PROVIDED BY OWNER
- ADDITIVE ALTERNATE 'A' TO SUPPLY & INSTALL SOD

- I" POLY 'CHAIN LOC' GUY WIRESW/ IØ" WHITE FLAGGING TAPE - 6' 'T' POST ATTACH TO 3 MOST DOMINANT BRANCHES DRIVE INTO UNDISTURBED SOIL - SET TREE PLUMB & IN CENTER OF PIT TOP DRESS 4" OF MULCH ON TOP OF FABRIC - MINOR SOIL SAUCER, USE GOOD SOIL - PREPARED PLANTING MIX-COMPACT IN 6" LAYERS - VERTICAL SIDES & CIRCULAR WALLS - SCARIFY SIDES OF PITS - COMPACTED SUBSOIL TO FORM PEDESTAL TO PREVENT SETTLING TOP OF ROOT BALL
SHALL BEAR SAME
RELATION TO FINISHED
GRADE AS IT BORE
TO PREVIOUS GRADE PLANTING DETAIL FOR MULTI-TRUNK TREES



SECTION OF GRAVEL FLUME

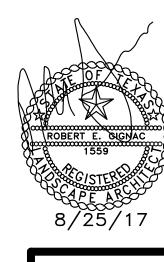
PLANTING DETAIL FOR SINGLE-TRUNK TREES N.T.S.

-12" WHITE FLAGGING — 1" POLY 'CHAIN LOC' w/ 10" WHITE FLAGGING TAPE — "T" POSTS 6' HT., ATTACH CHAIN TO POSTS. DRIVE INTO UNDISTURBED SOIL - SET TREE PLUMB & IN CENTER OF PIT -TOP OF ROOT BALL TO BE FLUSH w/ GROUND TOP DRESS 4" OF MULCH 2" WATER SAUCER PREPARED PLANTING MIX - COMPACT IN 6" LAYERS AGRIFORM TABLETS -VERTICAL SIDES & CIRCULAR WALLS - SCARIFY SIDES OF PITS -LOOSEN SUBSOIL TO A 6" DEPTH -UNDISTURBED SOIL

6'-7' Ht., 5' Sprd., Multi Trk

- MOUND CENTER TO A 4" HT.

As Shown



ADD. DETAIL 9/7/16 SHEET

WORK UNDER THIS CONTRACT. 2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LABOR & MATERIALS NECESSARY TO

FULLY EXECUTE & GUARANTEE THE WORK ENTAILED IN THESE CONTRACT DOCUMENTS.

3. THE AUTOMATIC CONTROL CLOCK IS SCHEMATICALLY INDICATED ON THE IRRIGATION PLAN. FINAL

LOCATION WILL BE DETERMINED BY THE OWNER. COORDINATE POWER W/ G.C.

4. IRRIGATION SYSTEM IS DESIGNED W/ MINIMUM OF 1 ½" METER. ALL NECESSARY CONNECTIONS & FITTINGS "DOWNSTREAM" OF P.O.C. SHALL BE SUPPLIED & INSTALLED BY THE IRRIGATION CONTRACTOR. 5. IRRIGATION SYSTEM LAYOUT IS DIAGRAMMATIC, EXACT LOCATIONS OF PIPING, SPRINKLER

HEADS, VALVES & OTHER COMPONENTS SHALL BE ESTABLISHED BY CONTRACTOR AND SUBCONTRACTOR IN THE FIELD AT TIME OF INSTALLATION AND APPROVED BY THE

PROJECT MANAGER OR LANDSCAPE ARCHITECT. 6. ALL VALVES SHALL BE PLACED IN 10" & JUMBO VALVE BOXES (FOR DRIP)W/ MIN. OF 3" OF GRAVEL FOR DRAINAGE.

1. ACCURATE AS-BUILT SHOWING AS A MIN., VALVE LOCATION, WIRE RUNS & SLEEVE LOCATIONS, WILL BE REQUIRED ALONG W/ ALL PRODUCT INFORMATION & OPERATION'S MANUALS AT PROJECT CLOSE OUT.

8.A BALL VALVE SHALL BE PROVIDED AT THE P.O.C. FOR THE IRRIGATION SYSTEM

COORDINATE WITH GENERAL CONTRACTOR. 9.INSTALLER WILL ESTABLISH EXACT LOCATIONS OF ALL PIPING, DRIP LINES, VALVES 4 COMPONENTS IN THE FIELD AT THE TIME OF INSTALLATION FOR APPROVAL BY THE

LANDSCAPE ARCHITECT.

10.6LEEVES SHALL BE INSTALLED W/ A MIN. OF 18" OF COVER \$ 18" PAST THE EDGE OF CURBS. SLEEVES UNDER WALKS AND DRIVES SHALL BE 2",3" & 4" DIAMETER PYC,

SCHEDULE 40. SLEEVES BY IRRIGATION CONTRACTOR.

ILINSTALLER IS RESPONSIBLE FOR ALL COORDINATION W/ THE LANDSCAPE CONTRACTOR, GENERAL CONTRACTOR & ALL SUB-CONTRACTORS. 12.CONTRACTOR IS RESPONSIBLE FOR COODINATING CITY TAP 4 METER. CONTRACTOR SHALL BE

RESPONSIBLE FOR OBTAINING AND PAYMENT OF APPLICATION PERMIT FEES.

13.THE ENTIRE IRRIGATION SYSTEM SHALL BE UNCONDITIONALLY GUARANTEED BY THE CONTRACTOR AS TO MATERIAL AND WORKMANSHIP. INCLUDING SETTLING OF BACK FILLED

AREAS BELOW GRADE FOR A PERIOD OF (1) YEAR FOLLOWING THE DATE OF FINAL ACCEPTANCE OF WORK CONTRACTOR HEREBY AGREES TO REPAIR OR REPLACE ANY SUCH DEFECTS OCCURRING

WITHIN THAT YEAR AT HIS EXPENSE.

14.CONTRACTOR SHALL WINTERIZE THE SYSTEM AS PER LOCAL CONDITIONS. 15.PVB TO BE ENCLOSED IN A 'STRONG BOX' OR APPROVED EQUAL.

SUBSURFACE IRRIGATION SYSTEM PRODUCT : RAINBIRD DRIP XFS (NETAFIM IS A ACCEPTABLE SUBSTITUTION)

FLOW RATE : .09 GPH

EMITTERS SPACED 12"

DEPTH : BURIAL DEPTH OF SUBIRRIGATION SYSTEM TO BE INSTALLED 4" BELOW THE TOPDRESSING MATERIAL & ON TOP OF FABRIC. PROVIDE FILTER, PRESSURE REGULATOR, FLUSH CAP & AIR VENTS.

INSTALLATION :

1. THE DRIP LINE SHALL BE INSTALLED AT A UNIFORM DEPTH & WIDTH.

2. PRESSURE TEST THE SYSTEM BEFORE COVERING TRENCHES FOR LEAKS PRIOR TO PLANTING.

3. PRE-IRRIGATE AREAS TO ENSURE THAT THE SOIL IS HYDRATED TO FIELD CAPACITY BEFORE PLANTING BEGINS.

4. PIN ALL DRIPS 5' O.C.

1. PROVIDE A PROPER SUB GRADE PRIOR TO INSTALLING THE DRIP LINE LATERALS. 2. PLANT ALL TREES AND SHRUBS PRIOR TO INSTALLING THE DRIPLINE LATERALS

INSTALLATION STEPS

1. ASSEMBLE & INSTALL FILTER, REMOTE CONTROL VALVE & PRESSURE REGULATING VALVE ASSEMBLY. 2. ASSEMBLE & INSTALL SUPPLY HEADERS.

3. ASSEMBLE & INSTALL EXHAUST HEADERS. TAPE OR PLUG ALL OPEN ENDS WHILE INSTALLING

THE DRIP LINE TO PREVENT DEBRIS CONTAMINATION.

4. INSTALL DRIP LINE LATERALS. 5. INSTALL AIR VACUUM RELIEF VALVES AT THE ZONES HIGHEST POINTS.

6. THOROUGHLY FLUSH SUPPLY HEADERS & CONNECT DRIP LINE LATERALS WHILE FLUSHING.

7. THOROUGHLY FLUSH DRIP LINE LATERALS & CONNECT TO EXHAUST HEADERS OR

INTER-CONNECTING LATERALS WHILE FLUSHING.

8. THOROUGHLY FLUSH EXHAUST HEADERS & INSTALL LINE FLUSHING VALVES. FLUSH EACH

SEGMENT TO ENSURE THAT NO CONTAMINATION OCCURS.

9. INSTALL SYSTEM AS PER RAINBIRD SUBSURFACE DRIP MANUAL FOR INSTALLATION.

FINISH GRADE rotary spray-MANUFACTER'S SWING-PVC LATERAL LINE-HUNTER PGP & PGJ ROTARY

SECTION/ELEVATION

REMOTE CONTROL VALVE PRESS.

REG. AND FILTER FOR SUBSURFACE DRIP

- PYC MAINLINE

- FINISHED GRADE

— PVC LATERAL

- SCH. 80 UNION

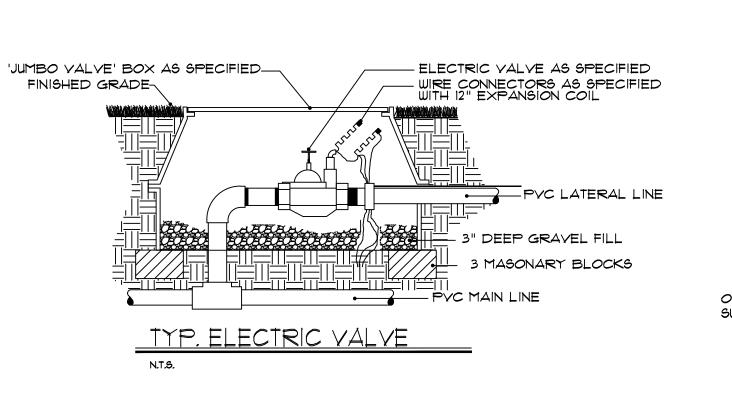
- JUMBO VALVE BOX

SERVICE EXPANSION COIL

PRESSURE REGULATOR

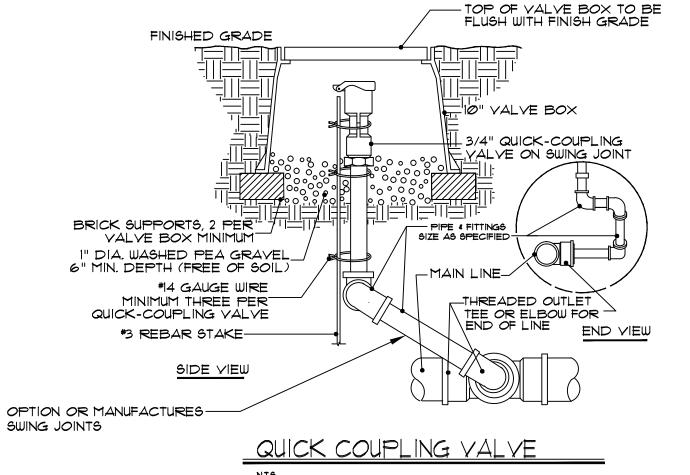
- VALVE BOX EXTENSION

- BRICK SUPPORTS



SECTION

SUBSURFACE IRRIGATION INSTALLATION FOR PLANTING BEDS

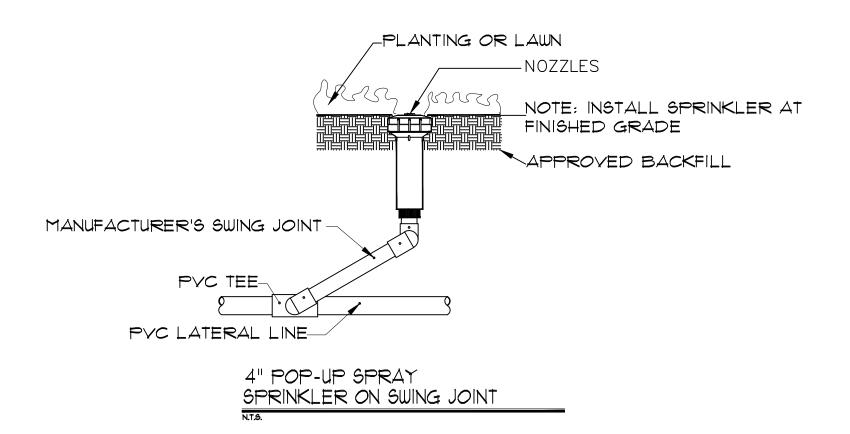


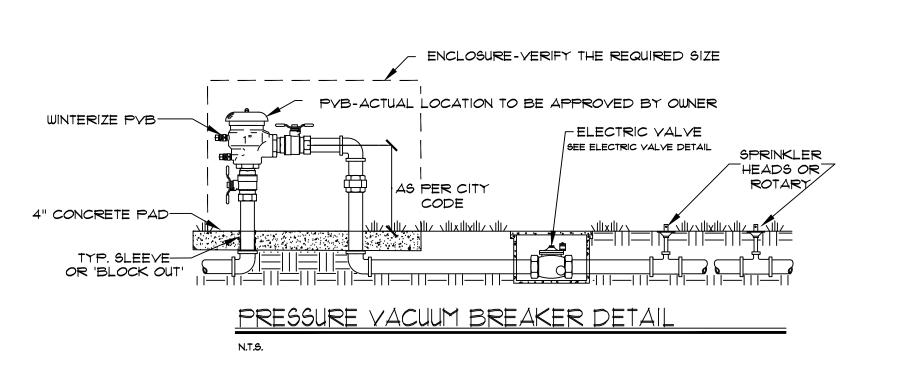
NOTE: IRRIGATION SYSTEM WAS DESIGNED WITH A MINIMUM STATIC PRESSURE OF 45 PSI AT THE P.O.C. INSTALLER SHALL FIELD VERIFY THE PRESSURE PRIOR TO ANY INSTALLATION. IF ANY DISCREPANCIE EXIST NOTIFY THE LANDSCAPE ARCHITECT.

Pressure Lost Calculation

Ione #28, 39 GPM

 1. 1/2" Copper Service Line - 5' 2. Meter, 1/2" 3. Electric Valve, 1/2" 4. Pressure Vacuum Breaker 1/2" 5. Mainline 2" (Loop) 	.21 PSI 1.30 PSI 2.25 PSI .30 PSI .01 PSI
6. Lateral	1.75 PSI
7. Elevation, Loss/Gain, 5'	Ø PSI
8. Head Pressure Requirement	25 PSI
Design Pressure =	30.88 PSI
Static Pressure =	45.00 PSI
Residual Pressure	19.12 PSI





- STAPLE ALL DRIP LINES 5' O.C.

DEPTH OF DRIP TO BE 5" FOR MULCH

- MULCH TOP DRESSING

\$ 6" FOR BULL ROCK

SEE IRRIGATION PLAN

FOR DRIPLINE ROW SPACING OR CIRCULAR SPACING

LANDSCAPE FABRIC

-DRIPLINE

LATERAL LINE, -MAIN LINE, 15" COVER FINISHED GRADE -WIRE BUNDLE PIPE SHALL REST FIRMLY ON TRENCH BOTTOM. BUNDLE WIRE AT 20' INTERVALS. SNAKE PIPE IN TRENCH FROM SIDE TO SIDE. DO NOT STACK PIPES IN THE TRENCH. PROVIDE HORIZONTAL SEPARATION.

PIPE IN TRENCH DETAIL

(LAWN)

ADD. INFORMATION 9/7/16 SHEET