

**CONTRACT DOCUMENTS  
CONTRACT SPECIFICATIONS  
FOR  
TEXAS SOUTHMOST COLLEGE**

**“ANNUAL CONTRACT AGREEMENT  
FOR PAVING SERVICES”**

**IN**

**BROWNSVILLE, TEXAS**

**PREPARED FOR:**

**TEXAS SOUTHMOST COLLEGE**

**PREPARED BY:**

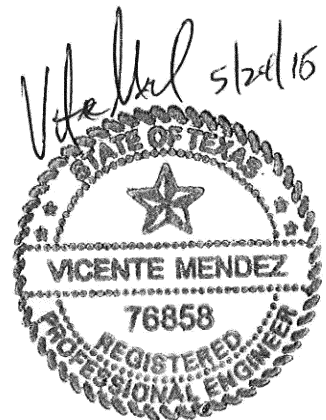


**AMBIOTEC  
GROUP**

TBPE Firm No.: F-4126  
TBPLS Reg. No.: 10005300

5420 PAREDES LINE ROAD  
BROWNSVILLE, TEXAS 78526  
PHONE (956) 548-9333  
FAX (956) 548-9399

SET NO. \_\_\_\_\_



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Texas Southmost College

TRADITION • INNOVATION • OPPORTUNITY

# REQUEST FOR PROPOSAL

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“Annual Contract Agreement for Paving Services”

TSC RFP 16-08

**Submission Date:  
June 24, 2016**

Purchasing Office, Tandy 110, 80 Fort Brown, Brownsville, Texas 78520  
Phone: 956-295-3426, Fax: 956-295-3408  
[purchasing@tsc.edu](mailto:purchasing@tsc.edu)

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# REQUEST FOR COMPETITIVE SEALED PROPOSALS

June 2016

## SECTION 1 – GENERAL REQUIREMENTS

1.1 GENERAL: Texas Southmost College (“TSC”/”College”) is soliciting proposals (“Proposals”) from qualified contractors/companies (“Respondents”) to provide Campus Parking Lot Repairs, in accordance with the terms, conditions, and requirements set forth in this Request for Proposals. This Request for Proposals (“RFP”) provides Respondents with the information necessary to prepare and submit Proposals for consideration by the College.

1.2 COLLEGE’S HISTORICAL BACKGROUND: TSC was initially created in 1926 as The Junior College of the Lower Rio Grande Valley. In 1931, the college name was changed to the Brownsville Junior College and then to TSC in 1949. The main campus is located in Brownsville, Texas and occupies the site of old Fort Brown, a National Historic Site with buildings dating from the 1850’s.

In 1973, TSC offered space on its campus to establish a four-year extension program in Brownsville with Pan American University (now The University of Texas–Pan American in Edinburg, Texas). On September 1, 1991, TSC and The University of Texas–Pan American at Brownsville combined their educational functions with The University of Texas at Brownsville (“UTB”). This entity was created as an upper-division university by the Texas Legislature in May 1991 and was authorized to enter into a partnership agreement with TSC. This resulted in the creation of The UTB/TSC Partnership.

On November 10, 2010, the Board of Regents of the University of Texas System (UTS) voted to terminate the Partnership Agreement. In February 2011, the TSC Board of Trustees approved a motion, whereby TSC would become an autonomous institution and efforts began to develop a model and create legislation. The Texas Legislature approved legislation to provide for the dissolution of the existing partnership agreement, ending on or before August 31, 2015, to the extent necessary to ensure accreditation.

A new president was hired in October 2011. During 2013, TSC began enrolling students independently for their programs and began providing instruction and services to the students of the College. TSC started classes in August 2013 and has developed independent operations for services to the campus.

In December 2015, TSC achieved separate accreditation as fully comprehensive public community college.

1.3 INQUIRIES AND INTERPRETATIONS:

1.3.1 Responses to inquiries which directly affect an interpretation or change to this RFP will be issued in writing by the College as an addendum and faxed or mailed

to all parties recorded by the College as having received a copy of the RFP. All such addenda issued by the College prior to the time that proposals are received shall be considered part of the RFP, and the Respondent shall be required to consider and acknowledge receipt of each addendum in its Proposals.

- 1.3.2 Only those inquiries the College replies to by addenda shall be binding. Oral and other interpretations or clarifications will be without legal effect. All Addendums, if any, can be obtained:

<http://www.tsc.edu/index.php/about/office-of-finance/purchasing/vendor-information.html>

Bidders are responsible to obtain any addendums issued prior to the deadline from this website.

- 1.4 **SUBMITTAL DEADLINE:** College will accept Proposals until Friday, June 24, 2016 at 2:00 p.m. local time. Proposals in print format shall be submitted to the TSC Offices located at the Tandy 110; 80 Fort Brown; Brownsville, Texas 78520 in attention to Mr. Jose L. Limas, Coordinator of Purchasing. Subsequently, proposals will be read aloud in Tandy 109 of the Fort Brown Campus at 2:30 p.m. local time. A non-mandatory pre-proposal conference is scheduled for Thursday, June 16, 2016 at 2:00 p.m. at the Tandy 109 Conference Room.

- 1.5 **OPEN RECORDS:** TSC considers all information, documentation and other materials submitted in response to this solicitation to be of a non-confidential and/or non-proprietary nature and therefore shall be subject to public disclosure under the Texas Public Information Act (Texas Government Code, Chapter 552). Notwithstanding the foregoing, disclosure of information related to this solicitation shall be made only after a contract is award.

- 1.6 **SUBMISSION OF PROPOSALS:**

1.6.1 Submit five (5) copies of the Proposal in print format, including any supplemental material referenced within the Proposal.

1.6.2 Proposal(s) must be received on or before the time and date specified above to the point-of-contact identified below. College delivery hours are from Monday thru Friday from 8:00 a.m. to 5:00 p.m. except during holidays and other College closures.

1.6.3 Late Proposals will be returned to the Respondent unopened.

1.6.4 The College will not accept Proposals delivered by telephone, email or facsimile (fax).

1.6.5 Submittals properly received will not be returned to Respondents.

1.7 SUBMITTAL DOCUMENTS: The following documents, at minimum, must be filled out, signed by an authorized representative, and returned as part of the proposal submittal:

- Exhibit A – Pricing Proposal Form
- Exhibit B – Anti-Collusion Certification Form
- Exhibit C – Execution of Offer Form
- Bid Bond – Each proposal shall include a cashier's check or certified check, or acceptable bidder's bond payable to Texas Southmost College in the amount of not less than **5%** of the largest total of the bid submitted.
- Third Party Vendor/Subcontractor List – The bidder shall provide a list of third party vendor if applicable.

1.8 POINT-OF-CONTACT:

1.8.1 The College requires that Respondents restrict all contact and questions regarding this RFP to the individual named below.

1.8.2 Any questions or concerns regarding this Request for Proposal including terms and conditions, submission requirements, technical requirements and contract award shall be directed in writing to:

Jose L. Limas, Coordinator of Purchasing  
Texas Southmost College  
Tandy 110  
80 Fort Brown  
Brownsville, Texas 78520  
Phone: 956-295-3426  
Fax: 956-295-3408  
[jose.limas@tsc.edu](mailto:jose.limas@tsc.edu)  
[purchasing@tsc.edu](mailto:purchasing@tsc.edu)

It is TSC's intent to respond to all appropriate questions and concerns; however, TSC reserves the right to decline to respond to any question or concern.

1.9 EVALUATION OF PROPOSALS:

1.9.1 All proposals must be complete and convey all of the information requested to be considered responsive. If the proposal fails to conform to the essential requirements of the RFP, TSC alone will determine whether it is a candidate for further consideration.

1.9.2 The evaluation of the Proposals shall be based on the requirements described in this RFP. All properly submitted Proposals will be reviewed, evaluated, and ranked by TSC. A point system will be used to evaluate proposals based on the criteria indicated below.



Criteria Weights:

- PART ONE: COMPANY INFORMATION [5%]
- PART TWO: PROJECT TEAM & MANAGEMENT EXPERTISE [10%]
- PART THREE: REPRESENTATIVE PROJECTS [20 %]
- PART FOUR: PAST RELATIONSHIP WITH THE COLLEGE [5%]
- PART FIVE: WARRANTY AND SERVICE SUPPORT PROGRAM [5%]
- PART SIX: REFERENCES [5%]
- PART SEVEN: PRICING [50%]

1.10 CONTRACT AWARD PROCESS:

1.10.1 Proposer (s) will be notified of any decision made after a contract is approved and awarded by the TSC Board of Trustees.

1.10.2 By submitting a Proposal in response to this RFP, the Respondent accepts the evaluation process and acknowledges and accepts that determination of the “best value” Respondent will require subjective judgments by TSC. If the College awards a contract, it will award the contract to the respondent whose Proposal is considered to be the most advantageous to College and is determined to be the best qualified based on evaluation results. However, TSC Board of Trustees will have the final determination to award a contract.

1.10.3 TSC reserves the right to consider any Proposal “non-responsive” if the fees are determined to be unreasonable or irresponsible in relation to the other submitted Proposals.

1.11 RESERVATION OF RIGHTS:

1.11.1 TSC reserves the right to award one or multiple Proposals, reject any and all Proposals and re-solicit for new Proposals, or to temporarily or permanently abandon the Project.

1.11.2 TSC makes no representations, written or oral, that it will enter into any form of agreement with any respondent(s) to this RFP for any project and no such representation is intended or should be construed by the issuance of this RFP.

SECTION 2 – REQUIREMENTS FOR QUALIFICATIONS

2.1 PART ONE – COMPANY INFORMATION: Provide a general statement of the company history including how many years in business, including legal name of firm, address of principal place of business, address of office that would be providing service (if different), and number of employees. If the firm has multiple locations, TSC is primarily interested in the capabilities and experience of the office that will provide the majority of the required services to TSC.

2.2 PART TWO – PROJECT TEAM & MANAGEMENT EXPERTISE: Provide resumes of the Respondent’s team that will be directly involved in the Project, including their

experience with similar projects, the number of years with the firm, and their city(s) of residence. Include as applicable; Project Managers, Superintendents, Assistant Project Managers and Superintendents, Expeditors, Project Scheduler and Quality Control Inspectors.

2.3 PART THREE – REPRESENTATIVES PROJECTS: Identify and describe the team’s past experience for providing services that are most related to this project within the last five (5) years. List the projects in order of priority, with the most relevant project list first. Provide the following information for each project listed:

- Project name, description, size in gross square footage, cost, contract delivery method, and dates.
- Client, project manager name, and location.
- Color images (photographic or machine reproductions), if available.

2.4 PART FOUR – PAST PERFORMANCE ON TSC AND/OR UTB PROJECTS: identify and describe the team’s past experience for providing services for Texas Southmost College (TSC) and/or University of Texas at Brownsville (UTB) projects within the last ten (10) years. Provide the following information for each project listed:

- Project name, description, size in gross square footage, cost, contract delivery method, and dates.
- Client, project manager name, and location.
- Color images (photographic or machine reproductions), if available.

2.5 PART FIVE – WARRANTY AND SERVICE SUPPORT PROGRAM: Describe your warranty service support philosophy and warranty service implementation plan for this project.

2.6 PART SIX – REFERENCES: Reference checks are a part of TSC’s procedure for evaluation. Reference checks may be in writing or by telephone. The submission of reference information authorizes TSC to request release of information concerning related projects from the references provided. Provide 3 references for any of the projects listed in response to Part Three, 2.3. The references should include:

- Client’s name, Client’s representative who served as the day-to-day liaison, and the Client’s representative’s telephone number and e-mail address.

2.7 PART SEVEN – PRICING: Complete the “Pricing Proposal Form” included within the bidding documents (Refer to Exhibit “A”)

### SECTION 3 – FORMAT

3.1 PAGE SIZE, BINDING, DIVIDERS, and TABS: Submittals should be on letter-size (8-1/2”x11”) paper and assembled with spiral-type bindings or staples. DO NOT USE METAL-RING HARD COVER BINDERS. Preprinted material should be referenced in the submittal and included as labeled attachments. Each part of the Proposal should be separated by use of a divider sheet with an integral tab for ready reference. Tabs should

be identified in accordance with the parts under Section 2 – Proposals Requirements and other documents listed in the submission checklist.

- 3.2 TABLE OF CONTENTS: All submittals should include a Table of Contents for the Proposal and page numbers for each part of the Proposal as well as any separate attachments. Supplementary information not required by Section 2 – Proposal Requirements should be clearly identified in the Table of Contents and provided as a separate part.

#### SECTION 4 – STATEMENT OF WORK:

- 4.1 SCOPE OF WORK: TSC is accepting Bids from qualified contractors for **Annual Contract Agreement for Paving Services**, in accordance with the terms, conditions, and requirements set forth in this Request for Proposal (RFP). This RFP provides respondents with the information necessary to prepare and submit proposals for consideration by the College.

- 4.2 The contractors must demonstrate the ability to supply and provide all materials, equipment, labor and all other incidental material, tools, appliances, delivery and transportation as required to complete the project for all work in accordance with the scope of work, specifications, and drawings provided in this RFP.

4.3 DESCRIPTION OF SERVICES:

- 4.3.1 **Annual Contract Agreement for Paving Services:** The Contractor will agree to hold bid prices for one (1) year for various projects as needed. Paving Services on a term contract shall expire one (1) year from the execution of contract. This contract can be renewed at the discretion of Texas Southmost College for one (1) additional year. TSC reserves the right to award one or multiple Proposals for the Annual Contract Agreement for Paving Services, reject any and all Proposals and re-solicit for new Proposals. Contractor shall obtain and keep in effect during the term of this contract, adequate Liability insurance coverage in the listed types and amounts under section 8.14. TSC reserves the right to terminate the contract upon thirty (30) days' written notice to Contractor if Contractor is in default. Paving Services may consist of, but are not limited to, the items listed below. The paving services listed may or may not be required through the one (1) year term.

4.3.1.1 HMA Pavement Repairs

4.3.1.2 Concrete Pavement Repairs

4.3.1.3 Concrete Valley Gutter

- 4.3.2 The bidders are solely responsible to verify site conditions and material specifications.

- 4.3.3 This is a performance-based specification document. The Contractors are solely responsible for meeting the described scope of work according to their own performance criteria.

SECTION 5 – PROJECT SCHEDULE:

Newspaper Advertisements: May 27<sup>th</sup> and June 04<sup>th</sup>, 2016  
Pre-Proposal Conference: June 16, 2016  
Submission Deadline: June 24, 2016  
Estimated Contract Award: July 2016

SECTION 6 – CONTRACT TERMS:

- 6.1. SPECIAL TERMS AND CONDITIONS: The awarded contractor will be responsible to:
- 6.1.1 Verify site conditions, material specifications, dimensions and square footages prior to any work.
  - 6.1.2 Provide services on an as needed basis according to the period of time and unit prices as specified in the Pricing Proposal Form (Exhibit A).
  - 6.1.3 Dispose all waste materials from the job site and campus facilities.
  - 6.1.4 Obtain Owner’s permission before proceeding with any work.
  - 6.1.5 Exercise reasonable care to avoid any damage to Owner’s property. The contractor shall be responsible for and repair all damage due to carelessness of workers.
  - 6.1.6 Secure and barricade the construction site at all times. The contractor must use appropriate safety construction signs appropriated to the work being performed.
- 6.2 CANCELLATION PROVISIONS
- 6.2.1 TSC shall have the right to terminate the contract upon thirty (30) days’ written notice to Contractor if Contractor is in default.
  - 6.2.2 TSC may terminate this contract, without penalty, either in whole or in part, if funds are not appropriated.

SECTION 7 – ANTICIPATED REIMBURSABLE EXPENSES: Not applicable. Travel, lodging, meals and normal expenses incurred the course of duties during planning and implementation will not be reimbursed with the prior approval by College in writing and must contain all required documentation requested by College to be considered for reimbursement.

SECTION 8 – GENERAL TERMS AND CONDITIONS: These General Terms and Conditions shall be made a part of and govern any Purchase Order and/or contract resulting from this Request for Proposals.

- 8.1 **TITLE AND RISK OF LOSS:** The title and risk of loss for goods delivered under this contract, if any, shall not pass to TSC until it actually receives, takes possession and accepts the goods at the point or points of delivery.
- 8.2 **ACCEPTANCE OF PRODUCTS AND SERVICES:** All products furnished and/or services performed under this Contract shall be to the satisfaction of TSC and in accordance with the specifications, terms, and conditions of the Contract. TSC reserves the right to inspect the products furnished and/or the services performed, and to determine the quality, acceptability, and fitness of such products and/or services. If TSC is unable to inspect all goods immediately upon receipt, it shall not be deemed to have accepted any defective goods that do not conform to specifications of the contract, or to have waived any of its rights arising by virtue of such defect or non-conformance.
- 8.3 **INDEMNIFICATION:** To the fullest extent permitted by law, the Contractor agrees to indemnify and hold harmless TSC, its officers, employees, and agents harmless from and against all claims of any nature or kind arising out of or caused from the performance of services, or provision of goods, by the Contractor pursuant to this contract, which are caused, in whole or in part, by any negligent act or omission of the contractor.
- 8.4 **COMPLIANCE WITH LAW:** Contractor is aware of and in full compliance with its obligations under existing applicable law and regulations, including the Immigration Reform and Control Act of 1986, Title VI of the Civil Rights Act of 1964 (as amended), the Age Discrimination Act of 1975, the Fair Labor Standards Act (as amended), the Americans with Disabilities Act of 1990, and all other applicable laws and regulations.
- 8.5 **PAYMENTS:** Payment for services/goods will be made after acceptable performance of services and/or receipt of items in good condition and after receipt of a valid invoice. Payment shall be in accordance with the State of Texas Prompt Payment Act, Chapter 225 of the Government Code.
- 8.6 **CONTRACT AMENDMENTS:** The Contract may be amended within the Contract period by mutual consent of the parties. No modification or amendment to the Contract shall become valid unless in writing and signed by both parties.
- 8.7 **INDEPENDENT CONTRACTOR STATUS:** Contractor agrees that it is engaged as an independent contractor and acknowledges that TSC will have no responsibility to provide benefits normally associated with an employer-employee relationship. Contractor agrees that it will neither hold itself out as nor claim to be an officer, partner, employee or agent of TSC.
- 8.8 **NON-DISCLOSURE:** Contractor and TSC acknowledge that they or their employees may, in the performance of this contract, come into the possession of proprietary or confidential information owned by or in the possession of the other. Neither party shall use any such information for its own benefit or make such information available to any person, firm, corporation, or other organizations, whether directly or indirectly affiliated with Contractor or TSC, unless required by law.

- 8.9 PUBLICITY: Contractor agrees that it shall not publicize this Contract or disclose, confirm or deny any details thereof to third parties or use any photographs or video recordings of TSC's name in connection with any sales promotion or publicity event without the prior express written approval of TSC.
- 8.10 SEVERABILITY: If any provision of this Contract, or the application of any provision to any party or circumstance is held invalid, unenforceable, or illegal in any respect, the remainder of the Contract and the application of the provision to other parties or circumstances shall remain valid and in full force and effect.
- 8.11 FORCE MAJEURE: If either TSC or Contractor is delayed at any time in the performance of its obligations under this contract by economic industry-wide strikes, fire, floods, acts of government, unavoidable casualties, or other causes reasonably beyond the control of either party and which could not have been reasonably anticipated, then the party affected by such an event shall give notice to the other party of the probable extent to which the affected party will be unable to perform or be delayed in performing its obligations hereunder. If the performance of either party is delayed or prevented by such an event, both parties shall be excused from performing their obligations hereunder while and to the extent the conditions arising from the event exist, after which the parties' performance shall be resumed. A delay or failure in performance by either party under this paragraph shall not constitute default hereunder, or give rise to any claim for damages.
- 8.12 GOVERNING LAW: This contract will be governed and construed according to the laws of the State of Texas. Both parties agree that venue for any litigation arising from this contract shall lie in Cameron County, Texas.
- 8.13 ASSIGNMENT: The contractor shall not sell, assign, transfer or convey this contract, in whole or in part, without the prior written consent of TSC.
- 8.14 INSURANCE: Contractor shall obtain and keep in effect during the term of this contract, insurance coverage in the below listed types and amounts. As evidence of insurance coverage, Contractor shall furnish to TSC certificate(s) of insurance before commencement of any work under this contract.

TYPE OF COVERAGE	LIMITS
A. Worker's Compensation	Statutory
B. Comprehensive General Liability	\$1,000,000 Ea. occurrence \$2,000,000 aggregate
C. Automobile Liability(owned/leased, non-owned, and hired)	
(1) Bodily Injury	\$1,000,000 Ea. Person \$1,000,000 Ea. Occurrence
(2) Property Damage	\$1,000,000 Ea. Occurrence

- 8.15 **MINIMUM WAGE:** TSC requires that all employees of prime and subcontractors who bid for, and perform contractual work for TSC receive a living wage consistent with human dignity and the needs of life. TSC policy requires that the contractor pay all employees' wages at least **\$8.50** per hour as per Resolution in Support of a Living Wage Requirement for Those Employed By, and Those Doing Business With, TSC. Resolution passed by the Board of Trustees on September 30, 2009.

#### SECTION 9 – DRAWINGS AND SPECIFICATIONS

- 9.1 **DEFINITION:** Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Request for Competitive Sealed Proposals, the Proposal Form, and other sample bidding and contract forms. The proposed Contract Documents consist of the Form of Agreement between the Owner and Contractor, Performance and Payment Bonds, Uniform General and Supplementary General Conditions for Building Construction Contracts, Prevailing Wage Rate Determination, other forms and documents identified in the Agreement, Drawings, Specifications, and all Addenda issued prior to receipt of Proposals, and Change Orders issued after execution of the Contract.
- 9.2 **CONTRACT DOCUMENTS, DRAWINGS AND SPECIFICATIONS:** Please refer to attached documents in Exhibit "H". To obtain a complete set of drawings and specifications please contact the TSC Purchasing Office. Contact information included in section 1.8.2.

# EXHIBITS



Exhibit A

**PRICING PROPOSAL FORM**

To: Jose L. Limas  
Coordinator of Purchasing  
Texas Southmost College  
Tandy 110  
80 Fort Brown St.  
Brownsville, Texas 78520

Note: Mark outside of envelope,

Proposal For: **“Annual Contract Agreement for Paving Services”**

I have received Addenda No. (s) \_\_\_\_\_, and I have included their provisions in my bid. I have examined both the documents and the site (if applicable).

In submitting this bid, I agree:

1. To hold price for a period of ninety (90) days after the Proposal Opening date.
2. To enter into and execute a Contract with the Texas Southmost College, if awarded on the basis of the Proposal, and to furnish Bonds if required, in accordance with the owner’s requirements and instructions.
3. To accomplish the work in accordance with the Statement of Work, Description of Services and other terms provided.

Having carefully examined the statement of work, description of services and other requirements of this Request for Proposal and any attachments thereto, the undersigned process to provide services as required will be priced as listed below.

Item No	Item	Units	Estimated Qty.	Unit Cost	Total Cost
1	HMAC Pavement Repairs as Per Detail (Incl. Removal of Existing Pavement)	SY	2,500	\$	\$
2	Concrete Pavement Repairs as Per Detail (Incl. Removal of Existing Pavement)	SY	100	\$	\$
3	Concrete Valley Gutter as Per Detail (Incl. Removal of Existing Pavement)	LF	300	\$	\$

Enter the Price Escalation, if any, for the second year in terms of percentage increase:

2<sup>nd</sup> Year Price Escalation: \_\_\_\_\_%

In submitting this proposal, I certify that \_\_\_\_\_ (Name of Individual/Firm) has not been found guilty in a judicial or state administrative agency proceeding for unfair business practices within the year preceding the date of this statement.

I further certify that I, or any officer of \_\_\_\_\_ (name of individual/firm), has not served within the past years as an officer of another company which has been found guilty in a judicial or state administrative agency proceeding of unfair business practice.

Respectfully submitted,

\_\_\_\_\_  
By: Signature and Title

\_\_\_\_\_  
Firm

\_\_\_\_\_  
Date

\_\_\_\_\_  
Address

\_\_\_\_\_  
City

\_\_\_\_\_  
State

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
Email address

Exhibit B

ANTI-COLLUSION CERTIFICATION

By submission of this proposal, the Proposer certifies that:

1. This proposal has been independently arrived at without collusion with any other Proposer or with any competitor;
2. This proposal has not been knowingly disclosed and will not be knowingly disclosed, prior to the opening of proposals for this project, to any other proposer competitor or potential competitor;
3. No attempt has been or will be made to induce any other person, partnership or corporation to submit or not to submit a proposal;
4. The person signing this proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties being applicable to the proposer as well as to the person signing in its behalf.

\_\_\_\_\_  
By: Signature and Title

\_\_\_\_\_  
Firm

\_\_\_\_\_  
Date

## Exhibit C

### EXECUTION OF OFFER

THIS EXECUTION OF OFFER MUST BE COMPLETED, SIGNED AND RETURNED WITH PROPOSER'S PROPOSAL. FAILURE TO COMPLETE, SIGN AND RETURN THIS EXECUTION OF OFFER WITH THE PROPOSER'S PROPOSAL MAY RESULT IN THE REJECTION OF THE PROPOSAL.

- 2.1** By signature hereon, Proposer represents and warrants the following:
- 2.1.1 Proposer acknowledges and agrees that (1) this RFP/BID is a solicitation for a proposal and is not a contract or an offer to contract; (2) the submission of a proposal by Proposer in response to this RFP/BID will not create a contract between Texas Southmost College (TSC) and Proposer; (3) College has made no representation or warranty, written or oral, that one or more contracts with College will be awarded under this RFP/BID; and (4) Proposer will bear, as its sole risk and responsibility, any cost arising from Proposer's preparation of a response to this RFP/BID.
  - 2.1.2 Proposer is a reputable company that is lawfully and regularly engaged in providing the Services.
  - 2.1.3 Proposer has the necessary experience, knowledge, abilities, skills, and resources to perform the Services.
  - 2.1.4 Proposer is aware of, is fully informed about, and is in full compliance with all applicable federal, state and local laws, rules, regulations and ordinances.
  - 2.1.5 Proposer understands (i) the requirements and specifications set forth in this RFP/BID and (ii) the terms and conditions set forth in the Agreement under which Proposer will be required to operate.
  - 2.1.6 If selected by TSC, Proposer will not delegate any of its duties or responsibilities under this RFP/BID or the Agreement to any sub-contractor, except as expressly provided in the Agreement.
  - 2.1.7 If selected by TSC, Proposer will maintain any insurance coverage as required by the Agreement during the term thereof.
  - 2.1.8 All statements, information and representations prepared and submitted in response to this RFP/BID are current, complete, true and accurate. Proposer acknowledges that College will rely on such statements, information and representations in selecting the Contractor. If selected by the College, Proposer will notify College immediately of any material change in any matters with regard to which Proposer has made a statement or representation or provided information.
  - 2.1.9 Proposer will defend with counsel approved by TSC, indemnify, and hold harmless, The College, the State of Texas, and all of their regents, officers, agents and employees, from and against all actions, suits, demands, costs, damages, liabilities and other claims of any nature, kind or description, including reasonable attorneys' fees incurred in investigating, defending or settling any of the foregoing, arising out of, connected with, or resulting from any negligent acts or omissions or willful misconduct of Proposer or any agent, employee, subcontractor, or supplier of Proposer in the execution or performance of any contract or agreement resulting from this RFP/BID.
  - 2.1.10 Pursuant to Sections 2107.008 and 2252.903, *Government Code*, any payments owing to Proposer under any contract or agreement resulting from this RFP/BID may be applied directly to any debt or delinquency that Proposer owes the State of Texas or any agency of the State of Texas regardless of when it arises, until such debt or delinquency is paid in full.
- 2.2** By signature hereon, Proposer offers and agrees to furnish the Services to College and comply with all terms, conditions, requirements and specifications set forth in this RFP/BID.
- 2.3** By signature hereon, Proposer affirms that it has not given or offered to give, nor does Proposer intend to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor or service to a public servant in connection with its submitted proposal. Failure to sign this Execution of Offer, or signing with a false statement, may void the submitted proposal or any resulting contracts, and the Proposer may be removed from all proposal lists.
- 2.4** By signature hereon, Proposer certifies that it is not currently delinquent in the payment of any taxes due under Chapter 171, *Tax Code*, or that Proposer is exempt from the payment of those taxes, or that Proposer is an out-of-state taxable entity that is not subject to those taxes, whichever is applicable. A false certification will be deemed a material breach of any resulting contract or agreement and, at University's option, may result in termination of any resulting contract or agreement.
- 2.5** By signature hereon, Proposer hereby certifies that neither Proposer nor any firm, corporation, partnership or institution represented by Proposer, or anyone acting for such firm, corporation or institution, has violated the antitrust laws of the State of Texas, codified in Section 15.01, et seq., *Business and Commerce Code*, or the Federal antitrust laws, nor communicated directly or indirectly the proposal made to any competitor or any other person engaged in such line of business.

- 2.6 By signature hereon, Proposer certifies that the individual signing this document and the documents made a part of this RFP/BID, is authorized to sign such documents on behalf of Proposer and to bind Proposer under any agreements and other contractual arrangements that may result from the submission of Proposer's proposal.
- 2.7 By signature hereon, Proposer certifies as follows: "Under Section 231.006, *Family Code*, relating to child support, Proposer certifies that the individual or business entity named in the Proposer's proposal is not ineligible to receive the specified contract award and acknowledges that any agreements or other contractual arrangements resulting from this RFP/BID may be terminated if this certification is inaccurate."
- 2.8 By signature hereon, Proposer certifies that (i) no relationship, whether by blood, marriage, business association, capital funding agreement or by any other such kinship or connection exists between the owner of any Proposer that is a sole proprietorship, the officers, or directors of any Proposer that is a corporation, the partners of any Proposer that is a partnership, the joint venturers of any Proposer that is a joint venture or the members or managers of any Proposer that is a limited liability company, on one hand, and an employee of any component of the College, on the other hand, other than the relationships which have been previously disclosed to College in writing and (ii) Proposer has not been an employee of any component institution of TSC within the immediate twelve (12) months prior to the Submittal Deadline. All disclosures by Proposer in connection with this certification will be subject to administrative review and approval before College enters into a contract or agreement with Proposer.
- 2.9 By signature hereon, Proposer certifies that in accordance with Section 2155.004, *Government Code*, no compensation has been received for its participation in the preparation of the requirements or specifications for this RFP/BID. In addition, Proposer certifies that an award of a contract to Proposer will not violate Section 2155.006, *Government Code*, prohibiting College from entering into a contract that involves financial participation by a person who, during the previous five years, has been convicted of violating federal law or assessed a penalty in a federal civil or administrative enforcement action in connection with a contract awarded by the federal government for relief, recovery, or reconstruction efforts as a result of Hurricane Rita, Hurricane Katrina, or any other disaster occurring after September 24, 2005. Pursuant to Sections 2155.004 and 2155.006, *Government Code*, Proposer certifies that Proposer is not ineligible to receive the award of or payments under the Agreement and acknowledges that the Agreement may be terminated and payment withheld if these certifications are inaccurate.
- 2.10 By signature hereon, Proposer certifies its compliance with all federal laws and regulations pertaining to Equal Employment Opportunities and Affirmative Action.
- 2.11 By signature hereon, Proposer represents and warrants that all products and services offered to College in response to this RFP/BID meet or exceed the safety standards established and promulgated under the Federal Occupational Safety and Health Law (Public Law 91-596) and the *Texas Hazard Communication Act*, Chapter 502, *Health and Safety Code*, and all related regulations in effect or proposed as of the date of this RFP/BID.
- 2.12 Proposer will and has disclosed, as part of its proposal, any exceptions to the certifications stated in this Execution of Offer. All such disclosures will be subject to administrative review and approval prior to the time College makes an award or enters into any contract or agreement with Proposer.

**2.13 Proposer should complete the following information:**

If Proposer is a Corporation, then State of Incorporation: \_\_\_\_\_

If Proposer is a Corporation then Proposer's Corporate Charter Number: \_\_\_\_\_

RFP/BID No.: \_\_\_\_\_

**NOTICE:** WITH FEW EXCEPTIONS, INDIVIDUALS ARE ENTITLED ON REQUEST TO BE INFORMED ABOUT THE INFORMATION THAT GOVERNMENTAL BODIES OF THE STATE OF TEXAS COLLECT ABOUT SUCH INDIVIDUALS. UNDER SECTIONS 552.021 AND 552.023, *GOVERNMENT CODE*, INDIVIDUALS ARE ENTITLED TO RECEIVE AND REVIEW SUCH INFORMATION. UNDER SECTION 559.004, *GOVERNMENT CODE*, INDIVIDUALS ARE ENTITLED TO HAVE GOVERNMENTAL BODIES OF THE STATE OF TEXAS CORRECT INFORMATION ABOUT SUCH INDIVIDUALS THAT IS INCORRECT.

**Submitted and Certified By:**

\_\_\_\_\_  
(Proposer Institution's Name)

\_\_\_\_\_  
(Signature of Duly Authorized Representative)

\_\_\_\_\_  
(Printed Name/Title)

\_\_\_\_\_  
(Date Signed)

\_\_\_\_\_  
(Proposer's Street Address)

\_\_\_\_\_  
(City, State, Zip Code)

\_\_\_\_\_  
(Telephone Number)

## Exhibit D

### BID TERMS AND CONDITIONS

#### 1. BID REQUIREMENTS:

- 1.1 Bid proposal must be properly identified with a Bid Invitation No. and Opening Date. Bids must be time-stamped at Texas Southmost College, 80 Fort Brown St., Brownsville, TX 78520 on or before opening date and time shown on other side of this form. Late bids will not be considered.
- 1.2 Bids should be quoted F.O.B. Destination. If otherwise, bidder will show exact cost to deliver. Bid unit price on the quantity specified, extend and show total. In case of errors, unit prices shall govern. Bid prices will be considered firm for acceptance within 90 days after the bid opening date unless otherwise specified. Cash discounts will not be considered in determining award; all cash discounts offered will be taken if earned. Bidder will list and deduct all trade discounts, educational discounts, and other discounts, not based on early payment from the bidder's prices quoted.
- 1.3 College is exempt from State Sales Tax and Federal Excise Tax. Do not include in bid. Tax Exemption Certificate furnished upon request.
- 1.4 College reserves the right to accept or reject all or part of any bid, waive any formalities or technical inconsistencies, delete any requirement or specification from this invitation, or terminate this solicitation when deemed to be in College's best interest.
- 1.5 Facsimile bids, telephone bids and/or email bids are not acceptable in response to this invitation.
- 1.6 Bidder hereby assigns to College any and all claims for overcharges associated with any resulting contract arising under antitrust laws of the United States, 15 U.S.C.A. Sec. 1 et seq. (1973) and the State of Texas, Tex. Bus. & Comm. Code Ann. Sec. 15.01, at seq. (1967).
- 1.7 The Vendor ID number is the taxpayer number assigned and used by the Comptroller of Public Accounts of Texas. If the Vendor ID number is not known, enter bidder's Federal Employer's Identification Number, or Social Security Number if a sole owner. (Disclosure of SSN, if applicable, is mandatory pursuant to Section 231.005, Texas Family Code, and will be used in determining whether any person having 25% or greater ownership interest in the bidder company is more than 30 days delinquent in paying child support.)
- 1.8 In case of tie bids, any award will be made pursuant to Texas Bldg. & Procurement Comm. Rule 1; T.A.C. Section 113.6 (b)(3)(8) (preferences).
- 1.9 Bidder shall not assign any resulting contractor Purchase Order without prior written approval from the College.
- 1.10 Substitutions will not be allowed after a proposal has been submitted for consideration.
- 1.11 Each sealed bid shall constitute an offer to the Board of Trustees, as outlined therein, and shall be irrevocable after the time announced for the opening thereof. TSC reserves the right to reject any and all bids and to waive informalities in bids and to resolve ambiguities in the District's favor.
- 1.12 Each proposal shall include a cashier's check or certified check, or acceptable bidder's bond payable to the Owner in the amount of not less than **5%** of the largest total of the bid submitted.
- 1.13 A **payment bond in the amount of 100%** of the full contract amount will be required on all contracts over \$25,000.
- 1.14 A **payment performance bond in the amount of 100%** of the full contract amount will be required on all contracts over \$100,000. If the bidder fails to execute the contract and provide satisfactory payment and performance bonds and insurance certificates within ten (10) days of the day on which bidder is notified that said proposal was accepted or Notice to Proceed is issued, the bid security shall be forfeited to TSC.

#### 1. SPECIFICATIONS

- 1.1 Unless specifically stated otherwise, any catalog, brand name or manufacturer's reference used in this Invitation is descriptive (not restrictive), and is used to indicate type and quality desired. Bids on

brands of like nature and quality will be considered. If bidding on other than referenced specifications, the bid MUST show manufacturer brand or trade name and description of product offered. Illustrations and complete descriptions of product offered should be made part of the bid. If bidder does not identify exceptions to the specifications shown in this Invitation, bidder will be required to furnish brand names, numbers, etc., as shown in the Invitation.

- 1.2 All items bid shall be new, in first class condition, including containers suitable for shipment and storage, unless otherwise indicated in this Invitation. Verbal agreements to the contrary will not be recognized.
- 1.3 Bidder warrants fault free performance in the processing of date and date related data (including, but not limited to, calculating, comparing and sequencing) by the product(s) identified on this Invitation. Fault free performance includes, but is not limited to, the manipulation of data with dates prior to, through, and beyond January 1, 2000, and during leap years, and performance shall be transparent to the user.

## **2. DELIVERY**

- 2.1 Bid should show the number of days required to deliver items to College's designated location under normal conditions. Unrealistically short or long delivery promises may cause bid to be disregarded. Failure to state delivery time obligates bidder to complete delivery in 14 calendar days.
- 2.2 The Texas Hazard Communication Act (Article 5182b, VTCS) requires chemical manufacturers and distributors to provide Material Safety Data Sheets (MSDSs) for hazardous materials sold. Products covered by this Act must be accompanied by a MSDS, and such products must be labeled in compliance with the law. For any product not covered under the Act, a statement of exemption must be provided.
- 2.3 Deliveries are accepted from Monday thru Friday from 8:00 a.m. to 5:00 p.m.

## **3. BIDDER AFFIRMATION: BY SIGNATURE HEREON**

- 3.1 Bidder affirms that it has not given or offered to give, and does not intend to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted bid. Failure to sign the bid may, and signing it with a false statement shall, void the submitted bid or any resulting contract and bidder will be removed from all bid lists.
- 3.2 Bidder affirms that no kinship, relationship, or affiliation exists between owners, officers, administrators and employees of the bidder and the College which could be construed as a conflict of interest.
- 3.3 Bidder certifies that it is not currently delinquent in the payment of any franchise tax owed the State of Texas under Chapter 171, Texas Tax Code. Bidder acknowledges that making a false statement as to its corporate tax status is a material breach of any resulting contract.
- 3.4 Bidder certifies that neither the bidder nor any firm, corporation, partnership or institution represented by bidder, or anyone acting for any such entity, has violated the antitrust laws of this State, (codified in Section 15.01 et seq., Texas Business and Commerce Code), or the Federal Antitrust Laws, or communicated directly or indirectly the bid made to any competitor or any other person engaged in such line of business.
- 3.5 Bidder has not received compensation for participation in the preparation of the specifications for this Invitation to Bid.
- 3.6 Under Section 2155.004, Texas Government Code (re: collecting state and local sales and use taxes) bidder certifies that the individual or entity named in its bid is not ineligible to receive the specified contract, which may be terminated and/or payment withheld if certification is inaccurate.
- 3.7 Bidder agrees that any payments due under any resulting contract will be applied towards any debt, including but not limited to delinquent taxes and child support' that is owed to the State of Texas.
- 3.8 Bidder certifies, if awarded a contract, that bidder shall defend, indemnify, and hold harmless the Board of Trustees of Texas Southmost College, and all of their respective officers, agents and employees from and against all claims, actions, suits, demands, proceedings costs, damages, and liabilities, arising out of, connected with, or resulting from any acts or omissions of bidder, or any agent, employee, subcontractor or supplier of bidder in the execution or performance of the contract.

## Exhibit E

### PURCHASE ORDER TERMS AND CONDITIONS

1. Except when issued to carry out a written agreement signed by Vendor and TSC, these Terms and Conditions constitute the entire agreement for the sale and purchase of the goods and/or services covered by this Purchase Order.
2. By acceptance of this Purchase Order, Vendor affirms that it has not given or offered to give, and does not intend to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with this Purchase Order. In addition, Vendor affirms that no kinship, relationship, or affiliation exists between owners, officers, administrators and employees of the bidder and the College which could be construed as a conflict of interest
3. The Vendor certifies that neither the Vendor nor any firm, corporation, partnership or institution represented by Vendor, or anyone acting for any such entity, has violated the antitrust laws of this State, (codified in Section 15.01 et seq., Texas Business and Commerce Code), or the Federal Antitrust Laws.
4. The Vendor agrees to protect, indemnify and hold harmless TSC from and against any claim, damage or liability arising out of or in connection with this Purchase Order, except to the extent that it is directly due to the negligent acts or omissions of any of the officers, employees or agents of TSC.
5. The Vendor certifies that it is not currently delinquent in the payment of any franchise tax owed the State of Texas under Chapter 171, Texas Tax Code
6. The Vendor warrants that it will comply with all federal, State of Texas, and local laws and ordinances and regulations as applicable to its performance under this Purchase Order, including, without limitation, the Fair Labor Standards Act of 1938 as amended, the Equal Employment Opportunity clauses prescribed by Executive Order 11246, as amended by Executive Order 11375, the Contract Work Hours and Safety Standards Act, the Americans with Disabilities Act of 1990 and Title VI of the Civil Rights Act of 1964 as amended.
7. The Vendor certifies that Public Liability Property Damage and Worker's Compensation Insurance will be carried for all personnel making deliveries to or performing services at College's premises.

#### **SPECIFICATIONS**

8. The Vendor warrants that the goods and/or services supplied to TSC will conform to the specifications, drawings or other referenced description upon which this Purchase Order is based. In the event of a conflict between the specifications, drawings and description, the specifications should govern.
9. All products shall be new, in first class condition, including containers suitable for shipment and storage, unless otherwise indicated. Verbal agreements to the contrary will not be recognized.
10. The Vendor warrants fault free performance in the processing of date and date related data (including, but not limited to, calculating, comparing and sequencing) by the product(s) identified on the Purchase Order. Fault free performance includes, but is not limited to, the manipulation of data with dates prior to through, and beyond January 1, 2000, and during leap years, and performance shall be transparent to the user.

#### **DELIVERY**

11. F.O.B Destination Freight prepaid unless delivery terms are specified otherwise in the quote/bid.



12. Deliveries are accepted from Monday thru Friday from 8:00 a.m. to 5:00 p.m. except during Holidays.

13. The place for delivery should be that set forth in the block of the Purchase Order entitled "Shipping Address".

14. Unless otherwise stated in this Purchase Order, title and risk of loss to the goods shall remain with the Vendor until the goods are delivered at the point or points specified in the Purchase Order.

15. The Texas Hazard Communication Act (Article 5182b, VTCS) requires chemical manufacturers and distributors to provide Material Safety Data Sheets (MSDSs) for hazardous materials sold. Products covered by this Act must be accompanied by a MSDS, and such products must be labeled in compliance with the law. For any product not covered under the Act, a statement of exemption must be provided.

#### **PACKING AND RECEIVING**

16. The Purchase Order number must appear on all invoices, packages, statements, and delivery tickets.

17. Vendor shall be responsible for industry standard packaging, which conforms to requirements of carrier tariffs and ICC regulations. Containers must be clearly marked as to lot number, destination, address and Purchase Order number.

#### **INSPECTION**

18. Unless otherwise specified in this Purchase Order, the goods shall be new and unused. Vendor warrants that it will deliver to TSC title to the goods free of all security interests, liens, charges, restrictions or encumbrances of any kind, nature or description and that the goods shall be free from defects in material and/or workmanship.

19. TSC shall have the right to inspect any and all goods upon receipt. TSC, by reason of its election to not inspect any goods immediately upon receipt, shall not be deemed to have accepted any defective goods or goods which do not conform to the specifications herein, or to have waived any of its rights or remedies arising by virtue of such defect or non-conformance.

#### **INVOICING AND PAYMENT**

20. College is exempt from State Sales Tax and Federal Excise Tax. Do not include in invoice. Tax Exemption Certificate furnished upon request.

21. Payment by TSC for goods and/or services provided by Vendor under this Purchase Order shall be subject to the provisions of Texas Government Code, Chapter 2251.

22. TSC shall tender payment within 30 days upon receipt of invoice. Invoices should be prepared and delivered after acceptance of goods and/or completion of services.

23. Price(s) quoted by Vendor's representative(s) shall not be changed after receipt of Purchase Order. For this purpose, such order shall be deemed to have been received on the date it is mailed or transmitted by electronic means such as electronic mail or facsimile.

24. Invoices should be submitted to the TSC authorized Accounts Payable representative as stated in the block of the Purchase Order entitled "Billing Address".

#### **MODIFICATION AND CANCELLATION**

25. Changes or substitutions in merchandise order will not be permitted, unless expressly assented to in writing. No modification of this Purchase Order shall be binding unless TSC agrees to the modification in writing.

**26.** TSC reserves the right to cancel this Purchase Order at any time upon written notice hereof.

**27.** However, this Purchase Order will automatically terminate upon occurrence of the following conditions unless specified in writing: a) incomplete order, where not all merchandise is received by TSC according to the specified delivery date; or b) outstanding orders that are not received on or before the end of the College's fiscal year (August 31<sup>st</sup>).

**GOVERNING LAW**

**28.** This Purchase Order shall be governed by the laws of the State of Texas and suits pertaining to this Purchase Order may be brought only in the courts of the State of Texas, with venue in Brownsville, Texas.

## Exhibit F

Texas Southmost College is required to comply with TEX. LOCAL GOV'T CODE, Chapter 176, *Disclosure of Certain Relationships with Local Government Officers*.

Any company that does business with ASC must fill out a Conflict of Interest Questionnaire (CIQ) whether or not a conflict of interest exists.

<b>CONFLICT OF INTEREST QUESTIONNAIRE</b>		<b>FORM CIQ</b>
<b>For vendor or other person doing business with local governmental entity</b>		
<p>This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session.</p> <p>This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person meets requirements under Section 176.006(a).</p> <p>By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.</p> <p>A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.</p>	<b>OFFICE USE ONLY</b>	
<p><b>1</b> Name of person who has a business relationship with local governmental entity.</p>  	Date Received	
<p><b>2</b> <input type="checkbox"/> Check this box if you are filing an update to a previously filed questionnaire.</p> <p style="font-size: small;">(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)</p>		
<p><b>3</b> Name of local government officer with whom filer has employment or business relationship.</p> <p style="text-align: center;">_____</p> <p style="text-align: center; font-size: small;">Name of Officer</p> <p>This section (item 3 including subparts A, B, C &amp; D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.</p> <p>A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire?</p> <p style="text-align: center;"><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?</p> <p style="text-align: center;"><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?</p> <p style="text-align: center;"><input type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p>D. Describe each employment or business relationship with the local government officer named in this section.</p>  		
<p><b>4</b></p> <p style="text-align: center;">_____</p> <p style="text-align: center; font-size: small;">Signature of person doing business with the governmental entity</p> <p style="text-align: right; text-align: center;">_____</p> <p style="text-align: right; text-align: center; font-size: small;">Date</p>		

Adopted 06/29/2007

# Exhibit G CAMPUS MAP



BUILDINGS	
Fort Brown Memorial Center	23
TSC Arts Center	24
Commandant's Quarters	25
Champion Hall	26
Georgia Hall	27
Old Mesquite	28
Commissary Building	29
Commissary Annex	30
Regiment House	31
Oliviera Student Services Center	32
Tandy Hall	33
Lighthouse Center	34
Music Building	35
Old Education Building	36
Newman Center	37
Edman Hall	38
Garza Gymnasium	39
Gymnasium Annex	40
South Hall	41
North Hall	42
Guerra Early Childhood Center	43
M2 Building	44
M1 Building	45
Center Hall	46
Ruttsberg Hall	47
Smith Amphitheater	48
Bookstore	49
Quinly Hall	50
Science, Engineering and Technology (SETB)	51
SETB MO	52
SETB Lecture Hall	53
Recreation, Education and Kinesiology	54
Scorpion Field	55
Fort Brown Memorial Golf Course	56
Physical Plant and Central Receiving	57
Riverside II Building	58
RKC Center Field	59
American Legion Building	60
Center for Early Childhood Center	61
Old Art League Building	62
Armory Building	63
Thermal Plant	64
UIB University Library	65

PARKING	
General	P1
Student / Visitor	P2
Faculty / Staff	P3
Primary Golf Cart Route	
Golf Cart Parking	
Motorcycle Parking	
International, Technology, Education and Commerce Center (ITECC)	

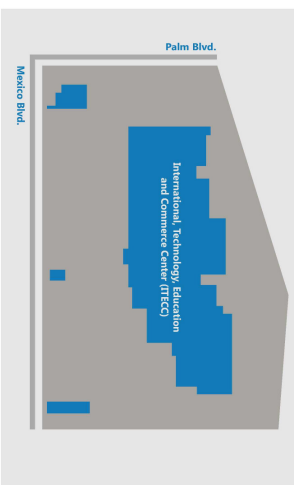


EXHIBIT H  
Technical  
Specifications

## SECTION 01025 - MEASUREMENT AND PAYMENT

### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

- A. Measurement and payment criteria applicable to the Work performed under a unit price payment method.
- B. Defect assessment and non-payment for rejected work.

#### 1.02 AUTHORITY

- A. This Section is the authority for measurement methods and definitions of pay items, and supersedes any such direction which may be stated or implied in the Drawings or in individual sections of the technical specifications.
- B. Take all measurements and compute quantities. The OWNER will verify measurements and quantities.
- C. Assist by providing necessary equipment, workers, and survey personnel as required.

#### 1.03 UNIT QUANTITIES SPECIFIED

- A. Quantities indicated in the Bid Proposal are for bidding and contract purposes only. Quantities and measurements supplied or placed in the Work and verified by the OWNER determine payment.
- B. If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the unit sum/prices contracted.

#### 1.04 MEASUREMENT OF QUANTITIES

- A. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
- B. Measurement by Area: Measured by square dimension using mean length and width or radius.
- C. Linear Measurement: Measured by linear dimension, at the item centerline or mean chord.

- D. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or a combination, as appropriate, as a completed item or unit of the Work.

#### 1.05 PAYMENT

- A. Payment Includes: Full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work, including overhead and profit.
- B. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the OWNER multiplied by the unit sum/price for Work which is incorporated in or made necessary by the Work.

#### 1.06 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. The individual specification sections may modify these options or may identify a specific formula or percentage sum/price reduction for defective Work.
- C. The authority of the OWNER to assess the defect and identify payment adjustment is final.

#### 1.07 NON-PAYMENT FOR REJECTED PRODUCTS

- A. Payment will not be made for any of the following:
  - 1. Products wasted or disposed of in a manner that is not acceptable.
  - 2. Products determined as unacceptable before or after placement.
  - 3. Products not completely unloaded from the transporting vehicle.
  - 4. Products placed beyond the lines and levels of the required Work.
  - 5. Products remaining on hand after completion of the Work.
  - 6. Loading, hauling and disposing of rejected Products.

#### 1.08 STANDARDS FOR COMPUTING PAY ITEMS

- A. The intent of Pay Items is to address all items shown, specified, required, reasonably implied, or otherwise necessary for the completion of the Work

indicated in the Contract Documents. No separate payment will be made for costs (including, but not necessarily limited to labor, equipment, materials, or other CONTRACTOR expenses) arising from the completion of the Work which was indicated in the Contract Documents, whether or not a Pay Item expressly includes such costs. Should the Work include costs not expressly included in any Pay Item, CONTRACTOR is presumed to have included such costs in his bid under related pay items.

1. Other Pay Items not specifically listed in the Pay Item Descriptions below, which are for specific work (such as decommissioning or demolition of an existing facility), may be identified in the Bid Form. These items are provided in order to establish a basis for payment upon completion of work including and related to that described for the Pay Item in the Bid Form.
  2. For items necessary to complete the project which are not specifically listed in the bid schedule shall be considered subsidiary to other items.
- B. Excavation is unclassified, and construction requiring excavation is paid under the appropriate Pay Item value regardless of the character of ground encountered during Construction.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 01025



## SECTION 01039 – COORDINATION AND MEETINGS

## PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Coordination.
- B. Preconstruction Conference.
- C. Site Mobilization Meeting.
- D. Progress Meetings.
- E. Preinstallation Conference.
- F. Field Engineering.

## 1.02 COORDINATION

- A. Inform OWNER and ENGINEER of the address for sending to which official correspondence and the address and telephone number of CONTRACTOR's representative who will be Project Manager for the Contract and responsible and available outside of normal working hours for emergency repairs and maintenance of safety devices.
- B. During periods of construction and testing keep OWNER and ENGINEER informed in writing with name, address, and telephone number of CONTRACTOR's representative who will be responsible and available outside of normal working hours for emergency repairs and the maintenance of safety devices.
- C. Identify correspondence, drawings, data and materials, packing slips or other items associated with this Contract as that identified on the Cover.
- D. Coordinate scheduling, submittals, and Work for the various Sections of Specifications to effectuate an efficient and orderly sequence for installing interdependent construction elements, with provisions for accommodating items installed later.
- E. Coordinate Work of various Sections with interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.
- F. Coordinate space requirements and installation of mechanical and electrical work, which are indicated by diagram on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, maintenance, and repairs.

- G. In finished areas (except as otherwise indicated), conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- H. Coordinate completion and clean up of Work of separate sections in preparation for Substantial Completion and for portions of Work designated for OWNER's partial occupancy.
- I. After OWNER occupancy of premises, coordinate access to site for correction of defective Work and/or incomplete Work to minimize disruption of OWNER's activities.
- J. Provide coordination in accordance with Article 7 of the General Conditions.

### 1.03 PRECONSTRUCTION CONFERENCE

- A. OWNER to schedule a preconstruction conference.
- B. Agenda:
  - 1. Distribute Contract Documents.
  - 2. Finalize preliminary Progress Schedule, submittal schedule and schedule of values.
  - 3. Designate personnel representing each party.
  - 4. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, testing, Change Orders and Contract closeout procedures.
  - 5. Scheduling.
  - 6. Use of premises by OWNER and CONTRACTOR.
  - 7. OWNER's requirements
  - 8. Temporary utilities provided by OWNER.
  - 9. Survey.
  - 10. Security and housekeeping procedures.
  - 11. Procedures for testing.
  - 12. Procedures for maintaining record documents.
  - 13. Requirements for start-up of equipment.

14. Inspection and acceptance of equipment put into service during construction period.

#### 1.04 PROGRESS MEETINGS

- A. OWNER to schedule a progress meeting no later than 60 days after the Preconstruction Conference and monthly, or as necessary, as agreed upon by OWNER and CONTRACTOR, throughout progress of the Work. Make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
- B. Attendance: CONTRACTOR, major Subcontractors and Suppliers, OWNER, ENGINEER, as appropriate to agenda topics for each meeting.
- C. Agenda:
  1. Review minutes of previous meetings.
  2. Unresolved issues.
  3. Review Work progress.
  4. Observations, problems, and decisions.
  5. Identification of problems that impede planned progress.
  6. Review of submittals schedule and status of submittals.
  7. Review of off-site fabrication and delivery schedules.
  8. Maintenance of progress schedule.
  9. Corrective measures to regain projected schedules.
  10. Planned progress during succeeding Work period.
  11. Coordination of projected progress.
  12. Maintenance of quality and work standards.
  13. Effect of proposed changes on progress schedule and coordination.
  14. Other business relating to Work.

## PART 2 – PRODUCTS – NOT USED

## PART 3 - EXECUTION

## 3.01 FIELD ENGINEERING

- A. Surveying: All surveying shall be performed Land Surveyor registered in the State of Texas.
1. Existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other utilities and construction. Use “One-Call,” 1-800-DIG-TESS or (800) 344-8377.
  2. The Engineer will provide project reference points and benchmarks, as shown on the design plans. The Contractor shall notify the Engineer at least 48 hours prior to working in an area needing marking of such control points. The Contractor will provide all construction staking (cut stakes, blue topping, intermediate string line control, cut sheet calculations, etc.) required to verify grades, depths, thickness, and alignment of the various items of construction.
  3. Furnish all surveys necessary to perform the Work. Maintain surveyor’s log of control and other survey work. Keep log available for reference.
  4. Verify layout information shown on the Drawings in relation to existing benchmarks before laying out of the Work. Locate and protect existing benchmarks and control points. Preserve permanent reference points during construction.
  5. Promptly report lost or destroyed reference points, benchmarks, or control points. Promptly report requirements relocate reference and control points due to changes in grades. Promptly replace lost or destroyed control points based on the original survey control points.

END OF SECTION 01039

## Section 01300 - SUBMITTAL PROCEDURES

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

1. Submittal procedures for:
  1. Schedule of Values.
  2. Construction Schedules.
  3. Shop Drawings, Product Data, and Sampler.
  4. Operations and Maintenance Data.
  5. Manufacturer's Certificates.
  6. Construction Photographs.
  7. Project Record Documents.
  8. Video Tapes.
  9. Design Mixes.

#### 1.2 SUBMITTAL PROCEDURES

1. Scheduling and Handling:
  1. Schedule submittals well in advance of the need for the material or equipment for construction. Allow time to make delivery of material or equipment after submittal is approved.
  2. Develop a submittal schedule that allows sufficient time for initial review, correction, resubmission and final review of all submittals. The Owner will review and return submittals to the Contractor as expeditiously as possible but the amount of time required for review will vary depending on the complexity and quantity of data submitted. In no case will a submittal schedule be acceptable which allows less than 10 days for initial review by the Owner. This time for review shall in no way be justification for delays or additional compensation to the Contractor.
  3. The Owner's review of submittals covers only general conformity to the Drawings, Specifications and dimensions which affect the layout. The Contractor is responsible for quantity determination. No quantities will be verified by the Owner. The Contractor is responsible for any errors, omissions or deviations from the Contract

requirements; review of submittals in no way relieves the Contractor from his obligation to furnish required items according to the Drawings and Specifications.

4. Submit 4 copies of documents unless otherwise specified in the following paragraphs or in the Specifications.
  5. Revise and resubmit submittals as required. Identify all changes made since previous submittal.
  6. The Contractor shall assume the risk for material or equipment which is fabricated or delivered prior to approval. No material or equipment shall be incorporated into the Work or included in periodic progress payments until approval has been obtained in the specified manner.
2. Transmittal Form and Numbering:
    1. Transmit each submittal to the Owner with a Transmittal Form.
    2. Sequentially number each transmittal form beginning with the number 1. Resubmittals shall use the original number with an alphabetic suffix (i.e., 2A for first resubmittal of Submittal 2 or 15C for third resubmittal of Submittal 15). Each submittal shall only contain one type of work, material, or equipment. Mixed submittals will not be accepted.
    3. Identify variations from requirements of Contract Documents and identify product or system limitations.
    4. For submittal numbering of video tapes, see paragraph 1.10 Video.
  3. Contractor's Stamp:
    1. Apply Contractor's stamp, certifying that the items have been reviewed in detail and are correct and in accordance with Contract Documents, except as noted by any requested variance.
    2. As a minimum, Contractor's Stamp shall include:
      1. Contractor's name.
      2. Job number.
      3. Submittal number.
      4. Certification statement that the Contractor has reviewed the submittal and it is in compliance with the Contract Documents.
      5. Signature line for Contractor.

1.3 MANUFACTURER'S CERTIFICATES

1. When specified in Specification sections, submit manufacturers' certificate of compliance for review by the Owner.
2. Contractor's Stamp, as described in paragraph 3.2, shall be placed on front page of the certification.
3. Submit supporting reference data, affidavits, and certifications as appropriate.
4. Certificates may be recent or previous test results on material or product, but must be acceptable to the Owner.

1.4 DESIGN MIXES

1. When specified in Specifications, submit design mixes for review.
2. Contractor's Stamp, as described in paragraph 3.2, shall be placed on front page of each design mix.
3. Mark each design mix to identify proportions, gradations, and additives for each class and type of design mix submitted. Include applicable test results on samples for each mix.
4. Maintain a copy of approved design mixes at mixing plant.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

SECTION 01380 - CONSTRUCTION PHOTOGRAPHS and VIDEO

PART 1 - GENERAL

1.01 PHOTOGRAPHY

- A. CONTRACTOR shall be responsible for the production of pre-construction, during-construction (construction progress) and post-construction photographs as provided herein. OWNER's Representative may also designate additional subjects for photographs in addition to the general guidelines identified below.
- B. All photographs must be produced by a competent photographer and shall be digital color photography of commercial quality. All CONTRACTOR-generated photographs must be stored in a .jpeg file format. The prints shall be accompanied by digital photographs in CD disc format. Each photograph shall be submitted in duplicate as two 3-inch by 5-inch prints of professional quality enclosed in clear plastic binders (as required by the Owner or Engineer). Each print shall be marked with the name and number of Contract, name of CONTRACTOR, description and location of view and identity of photographer.
- C. Each photograph submittal must include a Photo Log that includes the name and number of Contract, name of CONTRACTOR, the name of the photographer, company of the photographer, photograph number, the date of the photograph and the filename that the camera assigns to the photo (e.g. MVC-001.jpg). In addition, appropriate descriptive information to properly identify the location of view must be entered into the Photo Log to assist in maintaining a concise project record (e.g. location of MH 5 - Line A or Sta. 2+00 - Line A or location of Sedimentation Basin 5, sludge pump A).
- D. All pre-construction photographs must be submitted prior to the CONTRACTOR beginning any Work that may cause site disturbance. All construction progress photographs shall be submitted with the monthly progress payment. All post-construction photographs shall be submitted prior to release of final payment to the CONTRACTOR.
  - 1. Pre-construction photographs must be taken at sufficient intervals to be able to fully document the pre-construction conditions of the Work, but in no case less than 100 feet along the street, right-of-way or water/wastewater line route before commencement of Work. Each photograph location shall be taken from a minimum of two (2) views (one forward station view and one backward station view along the street or pipeline route) within the limits of construction. Particular attention must be devoted to pre-existing damage to streets, curbs,



sidewalks, driveways, signs, mailboxes, etc. for which the CONTRACTOR could be blamed following construction. An identification marker such as houses, businesses, signs, property numbers, mail boxes, landscaping, etc. must be included in each view to properly confirm its location for ease of later identification. At a minimum, photographs must be taken of the following views:

- the entire street (full width and length)
  - all curbs (both sides of street) – all pre-existing curb damage not called for replacement within the Work must be documented, including major cracks
  - all driveways, steps, and curbs (both sides of street)
  - fence and gate conditions
  - trees, ornamental shrubs, plantings/planter boxes and evidence of irrigation features
  - other privately owned features that might be disturbed by the construction
  - Prominent utility features, such as: guy wires, poles, signs, valves, meters, pull boxes, etc.
  - streams and stream banks within the limits of construction
  - Other significant or prominent features in order to protect the OWNER and CONTRACTOR following construction (e.g. close up photographs of pre-existing broken curbs, cracked/failed pavement, damaged adjacent retaining walls, etc.)
  - views of structures in areas where CONTRACTOR will be working within five (5) feet of said structure
  - other views as requested by the OWNER
2. For street, right-of-way and/or pipeline alignment documentation, construction progress photographs shall be taken from a minimum of two (2) views (one forward station view and one backward station view along the street and/or pipeline route, and one front view and one side view for fittings and appurtenances of pipeline projects) within the limits of construction. Additional photographs shall be taken at stations of significant features and, for pipeline projects at dead ends, tees, bends, valves, manholes, connections, at locations of concrete placement, at stations which will potentially affect adjacent property owners, and at other such times and locations as requested by the OWNER.
- E. Construction progress photographs of the same views taken during pre-construction photography must be taken during the progress of the Work and shall be submitted monthly with the CONTRACTOR's monthly progress payments. Post-construction photographs must be taken of the same views taken during pre-construction photography to fully document the completed project. Post-

construction photographs must be taken after cleanup and site restoration, and must be submitted prior to release of final payment.

1.02 PRE-CONSTRUCTION VIDEO

- A. For all horizontal projects (streets and water & wastewater lines) the CONTRACTOR shall also document by video, within the limits of construction, all pre-existing site conditions / elements as documented in above.
- B. The video documentation shall provide a clear and continuous view of the project alignment and everything within the limits of construction.
- C. The video shall not be taken from inside a vehicle that is moving. The video shall be taken standing within the limits of construction, as applicable.
- D. The pre-construction video shall be digital and submitted to the OWNER in CD disc format prior to the occurrence of any site disturbance.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 01380

SECTION 01400 – QUALITY CONTROL

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Quality Assurance and Control of Installation.
- B. Tolerances.
- C. References.
- D. Field Samples and Mockups.
- E. Inspection and Testing Services.
- F. Manufacturers' Field Services and Reports.

1.02 QUALITY ASSURANCE AND CONTROL OF INSTALLATION

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

1.03 TOLERANCES

- A. Monitor tolerance of installed material and equipment in order to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Request clarification from ENGINEER before proceeding, should manufacturers' tolerances conflict with Contract Documents.
- C. Adjust material and equipment to appropriate dimensions. Position before securing material and equipment in place.

#### 1.04 REFERENCES

- A. Reference to standards, specifications, manuals or codes of any technical society, organization or association, or Laws or Regulations of any governmental authority are used in accordance with the General Conditions.

#### 1.05 FIELD SAMPLES AND MOCKUPS

- A. Install field samples and mockups at the site as required by individual Specifications Sections for review.
- B. Acceptable samples and mockups represent a quality level for the Work.
- C. Where field sample or mockup is specified in individual Specification Sections to be removed, clear area after field sample or mockup has been accepted by ENGINEER or after Work is complete when mockup is to serve as a control reference.

#### 1.06 INSPECTION AND MATERIALS TESTING SERVICES

- A. OWNER shall provide inspection and materials testing services.
- B. Reports will be submitted by the independent firm to ENGINEER, in duplicate indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
- C. Inspection, testing, and source quality control may occur on or off the project site. Perform off-site inspecting or testing as required by ENGINEER or OWNER.
- D. Cooperate with independent firm. Furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.
  - 1. Notify ENGINEER and independent firm 24 hours before expected time for operations requiring services.
  - 2. Make arrangements with independent firm and pay for additional samples and tests required for CONTRACTOR's use.
- E. Retesting required because of non-conformance to specified requirements will be performed by the same independent firm if instructed by ENGINEER. Payment for retesting will be charged to CONTRACTOR by deducting inspection or testing charges from the Contract Price.
- F. Testing or inspecting does not relieve CONTRACTOR from performing Work in accordance with requirements of the Contract Documents.

#### 1.07 MANUFACTURERS' FIELD SERVICES AND REPORTS

- A. When specified in individual Specification Sections, arrange and pay for material or equipment Suppliers or manufacturers to provide qualified staff personnel (field representative) to perform the following services.

1. Observe site conditions, conditions of surfaces and installation, quality of workmanship.
2. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
3. Assist with field assembly as required.
4. Supply required test equipment.
5. Perform and record results of manufacturer recommended inspections and tests, and tests specified for material and equipment.
6. Be responsible for protection of material and equipment and safety of all personnel during testing.
7. Perform any other services normally provided by field representative's company.
8. Instruct operating personnel in proper use of material and equipment.
9. Instruct and supervise field repairs before acceptance by OWNER.
10. Submit reports of activities, actions taken and test results to ENGINEER within 30 days of completion.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION 01400

Section 01450 - TESTING LABORATORY SERVICES

PART 1 GENERAL

1.1 SECTION INCLUDES

1. Testing laboratory services and Contractor responsibilities related to those services.

1.2 REFERENCES

1. ASTM C 1077 - Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.
2. ASTM D 3666 - Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials.
3. ASTM D 3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
4. ASTM E 329 - Specification for Minimum Requirements for Agencies Engaged the Testing and/or Inspection of Materials Used in Construction.
5. ISO/TEC Guide 25 - General Requirements for the Competence of Calibration and Testing Laboratories.

1.3 SELECTION AND PAYMENT

1. The Owner will select, employ, and pay for services of an independent testing laboratory to perform inspection and testing.
2. Employment of a testing laboratory by the Owner shall not relieve Contractor of obligation to perform work in accordance with requirements of Contract Documents.
3. The Contractor will have the cost of retesting deducted from the estimate for payment whenever failed work must be removed and replaced and retested.

1.4 QUALIFICATION OF LABORATORY

1. Meet laboratory requirements of ASTM E 329 and applicable requirements of ASTM C 1077, ASTM D 3666, and ASTM D 3740.
2. Meet the ISO/TEC Guide 25 conditions for accreditation by the American Association for Laboratory Accreditation (A2LA) in specific fields of testing required in individual Specification sections.

3. Where a laboratory subcontracts any part of the testing services, such work shall be placed with a laboratory complying with the requirements of this Section.

#### 1.5 LABORATORY REPORTS

1. The testing laboratory shall provide and distribute copies of laboratory reports to the following: the Owner, the Engineer, and the Contractor. Other copies of the reports may be required to be submitted to other parties. The testing laboratory will be informed of any other persons that required laboratory reports.
2. Before close of business on the working day following test completion and review, reports which indicate failing test results shall be transmitted immediately via fax from the testing laboratory to the Owner, Contractor, and Engineer.

#### 1.6 LIMITS ON TESTING LABORATORY AUTHORITY

1. Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
2. Laboratory may not approve or accept any portion of the Work.
3. Laboratory may not assume any duties of the Contractor.
4. Laboratory has no authority to stop the Work. The laboratory's representative shall immediately inform the Engineer and the Owner of any conflicts with the Contractor or Contractor's construction methods.

#### 1.7 CONTRACTOR RESPONSIBILITIES

1. Provide safe access to the Work and to manufacturer's facilities for the Owner, Engineer, and testing laboratory personnel.
2. Provide to the testing laboratory a copy of the construction schedule and a copy of each update to the construction schedule.
3. Notify the Engineer and the testing laboratory during normal working hours of the day previous, but not less than 24 hours prior notice, to the expected time for operations requiring inspection and testing services. If the Contractor fails to make timely prior notification, then the Contractor shall not proceed with the operations requiring inspection and testing services.
4. Notify the Engineer 24 hours in advance if the Specification requires the presence of the Engineer for sampling or testing.

5. Request and monitor testing as required to provide timely results and to avoid delay to the Work. Provide samples to the laboratory in sufficient time to allow the required test to be performed in accordance with specified test methods before the intended use of the material.
6. Cooperate with laboratory personnel in collecting samples on site. Provide incidental labor and facilities for safe access to the Work to be tested; to obtain and handle samples at the site or at source of products to be tested; and to facilitate tests and inspections including storage and curing of test samples.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION

3.01.1 CONDUCTING TESTING

- 1 Laboratory sampling and testing specified in individual Specification sections shall conform to the latest issues of ASTM standards, TxDOT methods, or other recognized test standards as approved by the Engineer.
2. The requirements of this section shall also apply to those tests for approval of materials, for mix designs, and for quality control of materials as performed by the testing laboratories employed by the Contractor.
3. The Contractor may not influence any field testing conducted by the Laboratory.

END OF SECTION



Section 01550 - TRAFFIC CONTROL AND REGULATION

PART 1 G E N E R A L

1.01 SECTION INCLUDES

1. Requirements for signs, signals, control devices, flares, lights and traffic signals, as well as construction parking control, designated haul routes and bridging of trenches and excavations.
2. Requirement for and qualifications of flagmen.

1.02 SUBMITTALS

1. The contractor shall submit for approval by the City and prior to the beginning of work a Traffic Control Plan responsive to the Texas Manual on Uniform Traffic Control Devices (TMUTCD) and sealed by a Registered Professional Engineer.
2. For both the traffic control plan and flagmen use, submit schedules of values within 30 days following the Notice to Proceed.
3. Make submittals in accordance with Section 01300 - Submittal Procedures.

PART 2 P R O D U C T S

2.01 SIGNS, SIGNALS, AND DEVICES

1. Comply with Texas State Manual on Uniform Traffic Control Devices.
2. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.

PART 3 E X E C U T I O N

3.01 PUBLIC ROADS

1. Abide by laws and regulations of governing authorities when using public roads. If the Contractor's work requires that public roads be temporarily impeded or closed, approvals shall be obtained from governing authorities and permits paid for before starting any work. Coordinate activities with the City.
2. Contractor shall maintain at all times a 10-foot-wide all-weather lane adjacent to work areas which shall be kept free of construction equipment and debris and shall be for the use of emergency vehicles, or as otherwise provided in the traffic control plan.
3. Contractor shall not obstruct the normal flow of traffic from 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. on designated major arterials or as directed by the City.

4. Contractor shall maintain local driveway access to residential and commercial properties adjacent to work areas at all times.

5. Cleanliness of Surrounding Streets: Keep streets used for entering or leaving the job area free of excavated material, debris, and any foreign material resulting from construction operations.

### 3.02 CONSTRUCTION PARKING CONTROL

1. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and City's operations.

2. Monitor parking of construction personnel's vehicles in existing facilities. Maintain vehicular access to and through parking areas.

3. Prevent parking on or adjacent to access roads or in non-designated areas.

### 3.03 FLARES AND LIGHTS

1. Provide flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

### 3.04 HAUL ROUTES

1. Utilize haul routes designated by authorities or shown on the Drawings for construction traffic.

2. Confine construction traffic to designated haul routes.

3. Provide traffic control at critical areas of haul routes to regulate traffic and minimize interference with public traffic.

### 3.05 TRAFFIC SIGNS AND SIGNALS

1. Install traffic control devices at approaches to the site and on site, at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.

2. Install and operate traffic control signals to direct and maintain orderly flow of traffic in areas under Contractor's control and areas affected by Contractor's operations.

3. Relocate traffic signs and signals as Work progresses to maintain effective traffic control.

### 3.06 BRIDGING TRENCHES AND EXCAVATIONS

1. Whenever necessary, bridge trenches and excavation to permit an unobstructed flow of traffic.
2. Secure bridging against displacement by using adjustable cleats, angles, bolts or other devices whenever bridge is installed:
  1. On an existing bus route;
  2. When more than five percent of daily traffic is comprised of commercial or truck traffic;
  3. When more than two separate plates are used for the bridge; or
  4. When bridge is to be used for more than five consecutive days.
3. Install bridging to operate with minimum noise.
4. Adequately shore the trench or excavation to support bridge and traffic.
5. Extend steel plates used for bridging a minimum of one foot beyond edges of trench or excavation. Use temporary paving materials (premix) to feather edges of plates to minimize wheel impact on secured bridging.
6. Use steel plates of sufficient thickness to support H-20 loading truck or lane that produces maximum stress.

### 3.07 REMOVAL

1. Remove equipment and devices when no longer required.
2. Repair damage caused by installation.
3. Remove post settings to a depth of 2 feet.

## PART 4 PAYMENT

### 4.01 UNIT PRICES

- A. Unless indicated in the Unit Price Schedule as a pay item, no separate payment will be made for work performed under this Section. Include cost of work performed under this Section in pay items of which this work is a component.

END OF SECTION

Section 01571 - TPDES REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. This Section describes the required documentation to be prepared and signed by the Contractor before conducting construction operations, in accordance with the terms and conditions of the General Permit Number TXR150000 for discharges of storm water runoff from small construction sites.
- B. The Contractor shall be responsible for providing and implementing a Storm Water Pollution Prevention Plan, prepared by and sealed by a registered professional engineer, for this project.
- C. Contractor shall review implementation of the Storm Water Pollution Prevention Plan (SWPPP) in a meeting with the Owner and Engineer prior to start of construction.

1.02 UNIT PRICES

- A. Unless indicated in the Unit Price Schedule as a pay item, no separate payment will be made for work performed under this Section. Include cost of work performed under this Section in pay items of which this work is a component.

1.03 REFERENCES

- A. Part II.E.2. of TCEQ General Permit Number TXR150000.
- B. Part II.F.3 of TCEQ General Permit Number TXR150000 (notification of MS4 operator)

PART 2 PRODUCTS - As required by Storm Water Pollution Prevention Plan.

PART 3 EXECUTION

3.01 SMALL CONSTRUCTION SITE NOTICE

- A. The Contractor shall complete and sign the attached Small Construction Site Notice. Copies of the signed notice shall be submitted to TCEQ, the Owner, Engineer, City of Brownsville and Cameron County Drainage District No. 1. Copy of the signed notice shall also be posted at the construction site, as specified.

3.02 STORM WATER POLLUTION PREVENTION PLAN

- A. Prior to start of construction activities, the Contractor shall provide a Storm Water Pollution Prevention Plan, prepared by and sealed by a registered professional engineer, for this project.
- B. Contractor shall be responsible for implementation, maintenance, and inspection of storm water pollution prevention control measures including, but not limited to, erosion and sediment controls, storm water management plans, waste collection and disposal, off-site vehicle tracking, and other practices shown on the Storm Water Pollution Prevention Plan, or as specified by TCEQ or elsewhere in this or other Specifications.

### 3.03 RETENTION OF RECORDS

- A. The Contractor shall keep a copy of the Storm Water Pollution Prevention Plan at the construction site or at the Contractor's office from the date that it became effective to the date of project completion.
- B. At project closeout, the Contractor shall submit to Owner all TPDES forms and certifications, as well as a copy of the SWPPP. Storm water pollution prevention records and data will be retained by Owner for a period of 3 years from the date of project completion.

### 3.04 REQUIRED NOTICES

- A. The following notices shall be posted from the date that this SWPPP goes into effect until the date of final site stabilization:
  - 1. Copies of the Small Construction Site Notice completed, signed and submitted by Contractor shall be posted at the construction site or at Contractor's office in a prominent place for public viewing. Also, see Paragraph 3.01 A. above.
  - 2. Notice to drivers of equipment and vehicles, instructing them to stop, check, and clean tires of debris and mud before driving onto traffic lanes. Post such notices at every stabilized construction exit area.
  - 3. In an easily visible location on site, post a notice of waste disposal procedures.
  - 4. If applicable, notice of hazardous material handling and emergency procedures shall be posted on site. Keep copies of Material Safety Data Sheets at a location on site that is known to all personnel.
  - 5. Keep a copy of each signed certification at the construction site or at Contractor's office.

END OF SECTION



# SMALL CONSTRUCTION SITE NOTICE

FOR THE  
Texas Commission on Environmental Quality (TCEQ)  
Stormwater Program  
**TPDES GENERAL PERMIT TXR150000**

The following information is posted in compliance with **Part II.E.2.** of the TCEQ General Permit Number TXR150000 for discharges of stormwater runoff from small construction sites. Additional information regarding the TCEQ stormwater permit program may be found on the internet at:

[http://www.tceq.state.tx.us/nav/permits/wq\\_construction.html](http://www.tceq.state.tx.us/nav/permits/wq_construction.html)

Operator Name:	
Contact Name and Phone Number:	
Project Description: <i>Physical address or description of the site's location, estimated start date and projected end date, or date that disturbed soils will be stabilized</i>	
Location of Stormwater Pollution Prevention Plan:	

For Small Construction Activities Authorized Under Part II.E.2. (Obtaining Authorization to Discharge) the following certification must be completed:

I \_\_\_\_\_ (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part II.E.2. of TPDES General Permit TXR150000 and agree to comply with the terms of this permit. A stormwater pollution prevention plan has been developed and will be implemented prior to construction, according to permit requirements. A copy of this signed notice is supplied to the operator of the MS4 if discharges enter an MS4. I am aware there are significant penalties for providing false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_ *Date Notice Removed*

\_\_\_\_\_ *MS4 operator notified per Part II.F.3.*

Section 02050 - ADJUSTING MANHOLES, INLETS, AND VALVE BOXES TO GRADE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Adjusting elevation of manholes, inlets, and valve boxes to new grades.

1.02 REFERENCE

- A. ASTM C 270 - Specification for Mortar for Unit Masonry.

PART 2 PRODUCTS

2.01 CONCRETE MATERIALS

- A. For cast in place concrete, conform to requirements to Section 03315 - Concrete for Utility Construction.
- B. For mortar mix, conform to requirements of ASTM C 270, Type S, using Portland Cement.

2.02 CAST-IRON ADJUSTING RINGS

- A. For cast-iron adjusting rings, refer to Section 02536 - Frames, Grates, Rings, and Covers.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine existing structure, valve box, frame and cover or inlet box, frame and cover or inlet, and piping and connections for damage or defects that would affect adjustment to grade. Report such damage or defects to the Engineer.

3.02 ESTABLISHING GRADE

- A. Coordinate grade related items with existing grade and finished grade or paving, and relate to established bench mark or reference line.

3.03 ADJUSTING MANHOLES AND INLETS

- A. Elevation of manhole or inlet can be raised using plastic or precast concrete rings, metal adjusting rings, use of brick for adjustment of sanitary sewer manhole to grade is prohibited. Elevation of manhole or inlet can be lowered by removing masonry, adjusting rings or the top section of the barrel below the new elevation and then rebuilding or raising the elevation to the proper height.

- B. Salvage and reuse cast-iron frame and cover or grate.
- C. Protect or block off manhole or inlet bottom using wood forms shaped to fit so that no debris or soil falls to the bottom during adjustment.
- D. Install a cast-in-place slab at the top of the manhole barrel to receive the cast-iron frame and cover. Form concrete slabs to the thickness specified in the design plans but no less than 6 inches.
- E. Set the cast-iron frame for the manhole cover or grate in a full mortar bed and adjust to the established elevation. In streets, adjust covers to be flush with pavement.
- F. Verify that manholes and inlets are free of visible leaks as a result of reconstruction. Repair leaks in a manner subject to Owner's approval.

#### 3.04 ADJUSTING VALVE BOXES

- A. Salvage and reuse valve box and surrounding concrete block.
- B. Remove and replace 6-inch ductile iron riser pipe with suitable length for depth of cover required to establish the adjusted elevation to accommodate actual finish grade.
- C. Reinstall valve box and riser piping plumbed in vertical position. Provide minimum 6 inches telescoping freeboard space between riser pipe top butt end and interior contact flange of valve box for vertical movement damping.
- D. After valve box has been set, aligned, and adjusted so that top lid is level with final grade, pour 24-inch by 24-inch by 6-inch-thick concrete pad around valve box. Center valve box horizontally within concrete slab.

#### 3.05 BACKFILL AND GRADING

- A. Backfill the area of excavation surrounding each adjusted manhole, inlet, and valve box and compact according to requirements of Section 02317 - Excavation and Backfill for Utilities.
- B. Grade the ground surface to drain away from each manhole and valve box. Place earth fill around manholes to the level of the upper rim of the manhole frame. Place earth fill around the valve box concrete slab.
- C. In unpaved areas, grade surface at a uniform slope of 1 to 5 from the manhole frame to natural grade. Provide a minimum of 4 inches of topsoil.



PART 4 P A Y M E N T

4.01 MEASUREMENT & PAYMENT

Unless indicated in the Unit Price Schedule as a pay item, no separate payment will be made for work performed under this Section. Include cost of work performed under this Section in pay items of which this work is a component.

END OF SECTION

Section 02200 - REMOVING EXISTING PAVEMENTS AND STRUCTURES

PART 1 G E N E R A L

1.01 SECTION INCLUDES

- A. Removing concrete paving, asphaltic concrete pavement, and base courses.
- B. Removing concrete curbs, concrete curbs and gutters, sidewalks and driveways.
- C. Removing pipe culverts and sewers.
- D. Removing existing inlets and manholes.
- E. Removing miscellaneous structures of concrete or masonry and all debris.

1.02 REGULATORY REQUIREMENTS

- A. Conform to applicable codes for disposal of debris.
- B. Coordinate removal work with utility companies.

PART 2 P R O D U C T S - Not Used

PART 3 E X E C U T I O N

3.01 PREPARATION

- A. Obtain advance approval from Engineer for dimensions and limits of removal work.
- B. Identify known utilities below grade. Stake and flag locations.

3.02 PROTECTION

- A. Protect the following from damage or displacement:
  - 1. Adjacent public and private property.
  - 2. All trees, plants, and other landscape features unless designated to be removed.
  - 3. All utilities unless designated to be removed.
  - 4. All pavement and utility structures unless designated to be removed.

5. Bench marks, monuments, and existing structures designated to remain.

### 3.03 REMOVAL

- A. Remove pavements and structures by methods that will not damage underground utilities. Do not use a drop hammer near existing underground utilities.
- B. Minimize amount of earth loaded during removal operations.
- C. Where existing pavement is to remain, make straight saw cuts in existing pavement to provide clean breaks prior to removal. Do not break concrete pavement or base with drop hammer unless concrete or base has been saw cut to a minimum depth of 2 inches.
- D. Where street and driveway saw cut locations coincide or fall within 3 feet of existing construction or expansion joints, break out to existing joint.
- E. Remove sidewalks and curbs to nearest existing dummy, expansion, or construction joint.
- F. Where existing end of pipe culvert or end of sewer is to remain, install an 8-inch-thick masonry plug in pipe end prior to backfill.

### 3.04 BACKFILL

- A. Backfill of removal areas shall be in accordance with requirements of Section 02316 - Excavation and Backfill for Structures.

### 3.05 DISPOSAL

- A. Inlet frames, grates, and plates; and manhole frames and covers, may remain Owner's property. Disposal shall be in accordance with local and state laws and the responsibility of the Contractor.
- B. Remove from the site debris resulting from work under this section in accordance with local and state laws and the responsibility of the Contractor.

## PART 4 P A Y M E N T

### 4.01 MEASUREMENT & PAYMENT

Unless indicated in the Unit Price Schedule as a pay item, no separate payment will be made for work performed under this Section. Include cost of work performed under this Section in pay items of which this work is a component.

END OF SECTION

Section 02316 - EXCAVATION AND BACKFILL FOR STRUCTURES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Excavation, backfilling, and compaction of backfill for structures.

1.02 MEASUREMENT AND PAYMENT

- A. Unit Prices.

- 1. Unless indicated in the Unit Price Schedule as a pay item, no separate payment will be made for work performed under this Section. Include cost of work performed under this Section in pay items of which this work is a component.

1.03 DEFINITIONS

- A. Unsuitable Material: Unsuitable soil materials are the following:

- 1. Materials that are classified as ML, CL-ML, MH, PT, OH, and OL according to ASTM D 2487.
- 2. Materials that cannot be compacted to the required density due to either gradation, plasticity, or moisture content.
- 3. Materials that contain large clods, aggregates, stones greater than 4 inches in any dimension, debris, vegetation, waste or any other deleterious materials.
- 4. Materials that are contaminated with hydrocarbons or other chemical contaminants.

- B. Suitable Material: Suitable soil materials are those meeting specification requirements. Unsuitable soils meeting specification requirements for suitable soils after treatment with lime or cement shall be considered suitable, unless otherwise indicated.

- C. Select Material: Material as defined in Section 02320 - Utility Backfill Materials.

- D. Backfill: Select material meeting specified quality requirements, placed and compacted under controlled conditions around structures.

- E. Foundation Backfill Materials: Natural soil or manufactured aggregate meeting Class I requirements and geotextile filter fabrics as required, to control drainage and material separation. Foundation backfill material is placed and compacted as backfill where needed to

provide stable support for the structure foundation base. Foundation backfill materials may include concrete fill and seal slabs.

- F. Foundation Base: For foundation base material, use crushed stone aggregate with filter fabric as required, cement stabilized sand, or concrete seal slab. The foundation base provides a smooth, level working surface for the construction of the concrete foundation.
- G. Foundation Subgrade: Foundation subgrade is the surface of the natural soil which has been excavated and prepared to support the foundation base or foundation backfill, where needed.
- H. Ground Water Control Systems: Installations external to the excavation such as well points, eductors, or deep wells. Ground water control includes dewatering to lower the ground water, intercepting seepage which would otherwise emerge from the side or bottom of the excavation, and depressurization to prevent failure or heaving of the excavation bottom. Refer to Section 01578 - Control of Ground Water and Surface Water.
- I. Surface Water Control: Diversion and drainage of surface water runoff and rain water away from the excavation. Remove rain water and surface water which accidentally enters the excavation as a part of excavation drainage.
- J. Excavation Drainage: Removal of surface and seepage water in the excavation by sump pumping and using French drains surrounding the foundation to intercept the water.
- K. Over-Excavation and Backfill: Excavation of subgrade soils with unsatisfactory bearing capacity or composed of otherwise unsuitable materials below the foundation as shown on Drawings, and backfilled with foundation backfill material.
- L. Shoring System: A structure that supports the sides of an excavation to maintain stable soil conditions and prevent cave-ins.

#### 1.04 REFERENCES

- A. ASTM D 558 - Test Methods for Moisture-Density Relations of Soil Cement Mixtures.
- B. ASTM D 698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5-lb (2.49-kg) Rammer and 12-in. (304.88-mm) Drop.
- C. ASTM D 1556 - Density of Soil in Place by the Sand-Cone Method.
- D. ASTM D 2487 - Classification of Soils for Engineering Purposes.
- E. ASTM D 2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- F. ASTM D 3017 - Test Method for Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depths).

- G. ASTM D 4318 - Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- H. TxDOT Tex-101-E - Preparation of Soil and Flexible Base Materials for Testing.
- I. TxDOT Tex-110-E - Determination of Particle Size Analysis of Soils.
- J. Federal Regulations, 29 CFR, Part 1926, Standards - Excavation, Occupational Safety and Health Administration (OSHA).

1.05 SUBMITTALS

- A. Conform to requirements of Section 01300 - Submittal Procedures.
- B. Submit a work plan for excavation and backfill for each structure with complete written description which identifies details of the proposed method of construction and the sequence of operations for construction relative to excavation and backfill activities. The descriptions, with supporting illustrations, shall be sufficiently detailed to demonstrate to the Entity that the procedures meet the requirements of the Specifications and Drawings.
- C. Submit excavation safety system plan.
  - 1. The excavation safety system plan shall be in accordance with applicable OSHA requirements for all excavations.
  - 2. The excavation safety system plan shall be in accordance with the requirements of Section 01561 - Trench Safety System, for all excavations that fall under State and Federal trench safety laws.
- D. Submit a ground and surface water control plan in accordance with requirements in this Section and Section 01578 - Control of Ground Water and Surface Water.
- E. Submit backfill material sources and product quality information in accordance with requirements of Section 02320 - Utility Backfill Materials.

1.06 TESTS

- A. Testing and analysis of backfill materials for soil classification and compaction during construction will be performed by an independent laboratory provided by the City in accordance with requirements of Section 01450 - Testing Laboratory Services and as specified in this Section.
- B. Contractor shall perform embedment and backfill material source qualification testing in accordance with requirements of Section 02320- Utility Backfill Materials.

## PART 2 PRODUCTS

### 2.01 EQUIPMENT

- A. Perform excavation with equipment suitable for achieving the requirements of this Specification.
- B. Use equipment which will produce the degree of compaction specified. Backfill within 3 feet of walls shall be compacted with hand operated equipment. Do not use equipment weighing more than 10,000 pounds closer to walls than a horizontal distance equal to the depth of the fill at that time. Use hand operated power compaction equipment where use of heavier equipment is impractical or restricted due to weight limitations.

### 2.02 MATERIAL CLASSIFICATIONS

- A. Backfill materials shall conform to the classifications and product descriptions of Section 02320 - Utility Backfill Materials. The classification or product description for backfill applications shall be as shown on the Drawings and as specified.

## PART 3 EXECUTION

### 3.01 PREPARATION

- A. Conduct an inspection to determine condition of existing structures and other permanent installations.
- B. Set up necessary street detours and barricades in preparation for excavation if construction will affect traffic. Conform to State and local government requirements. Maintain barricades and warning devices at all times for streets and intersections where work is in progress, or where affected by the Work, and is considered hazardous to traffic movements.
- C. Perform work in accordance with OSHA standards. Employ an excavation safety system as specified in Section 01561 - Trench Safety Systems.
- D. Remove existing pavements and structures, including sidewalks and driveways, in accordance with requirements of Section 02200 - Removing Existing Pavements and Structures.
- E. Install and operate necessary dewatering and surface water control measures in accordance with requirements of Section 01578 - Control of Ground Water and Surface Water.

### 3.02 PROTECTION

- A. Protect trees, shrubs, lawns, existing structures, and other permanent objects outside of grading limits and within the grading limits as designated on the Drawings.
- B. Protect and support above-grade and below-grade utilities which are to remain.
- C. Restore damaged permanent facilities to pre-construction conditions unless replacement or abandonment of facilities are indicated on the Drawings.
- D. Prevent erosion of excavations and backfill. Do not allow water to pond in excavations.
- E. Maintain excavation and backfill areas until start of subsequent work. Repair and recompact slides, washouts, settlements, or areas with loss of density at no additional cost to the City.

### 3.03 EXCAVATION

- A. Perform excavation work so that the underground structure can be installed to depths and alignments shown on Drawings. Use caution during excavation work to avoid disturbing surrounding ground and existing facilities and improvements. Keep excavation to the absolute minimum necessary. No additional payment will be made for excess excavation not authorized by Entity.
- B. Upon discovery of unknown utilities, badly deteriorated utilities not designated for removal, or concealed conditions, discontinue work at that location. Notify Entity and obtain instructions before proceeding in such areas.
- C. Immediately notify the agency or company owning any line which is damaged, broken or disturbed. Obtain approval from Entity and agency for any repairs or relocations, either temporary or permanent.
- D. Avoid settlement of surrounding soil due to equipment operations, excavation procedures, vibration, dewatering, or other construction methods.
- E. Provide surface drainage during construction to protect work and to avoid nuisance to adjoining property. Where required, provide proper dewatering and piezometric pressure control during construction.
- F. Conduct hauling operations so that trucks and other vehicles do not create a dirt nuisance in streets. Verify that truck beds are sufficiently tight and loaded in such a manner that objectionable materials will not spill onto streets. Promptly clear away any dirt, mud, or other materials that spill onto streets or are deposited onto streets by vehicle tires.
- G. Maintain permanent benchmarks, monumentation, and other reference points. Unless otherwise directed, replace those which are damaged or destroyed by the Work.



- H. Provide sheeting, shoring, and bracing where required to safely complete the Work, to prevent excavation from extending beyond limits indicated on Drawings, and to protect the Work and adjacent structures or improvements. Sheeting, shoring, and bracing used to protect workmen and the public shall conform to requirements of Section 01561 - Trench Safety Systems.
- I. Prevent voids from forming outside of sheeting. Immediately fill voids with grout, concrete fill, cement stabilized sand, or other material approved by Entity.
- J. After completion of the structure, remove sheeting, shoring, and bracing unless shown on Drawings to remain in place or directed by Entity in writing that such temporary structures may remain. Remove sheeting, shoring and bracing in such a manner as to maintain safety during backfilling operations and to prevent damage to the Work and adjacent structures or improvements.
- K. Immediately fill and compact voids left or caused by removal of sheeting with cement stabilized sand or material approved by Entity.

#### 3.04 HANDLING EXCAVATED MATERIALS

- A. Classify excavated materials. Place material which is suitable for use as backfill in orderly piles at a sufficient distance from excavation to prevent slides or cave-ins.
- B. Provide additional backfill material if adequate quantities of suitable material are not available from excavation and trenching operations at the site.

#### 3.05 DEWATERING

- A. Provide ground water control per Section 01578 - Control of Ground Water and Surface Water.
- B. Keep ground water surface elevation a minimum of 2 feet below the bottom of the foundation base.
- C. Maintain ground water control as directed by Section 01578 - Control of Ground Water and Surface Water and until the structure is sufficiently complete to provide the required weight to resist hydrostatic uplift with a minimum safety factor of 1.2.

#### 3.06 FOUNDATION EXCAVATION

- A. Notify Entity at least 48 hours prior to planned completion of foundation excavations. Do not place the foundation base until the excavation is accepted by the Entity.
- B. Excavate to elevations shown on Drawings, as needed to provide space for the foundation base, forming a level undisturbed surface, free of mud or soft material. Remove pockets of soft or otherwise unstable soils and replace with foundation backfill material or a material as

directed by the Entity. Prior to placing material over it, recompact the subgrade where indicated on the Drawings, scarifying as needed, to 95 percent of the maximum Standard Dry Density according to ASTM D 698. If the specified level of compaction cannot be achieved, moisture condition the subgrade and recompact until 95 percent is achieved, over-excavate to provide a minimum layer of 24 inches of foundation backfill material, or other means acceptable to the Entity.

- C. Fill unauthorized excessive excavation with foundation backfill material or other material as directed by the Entity.
- D. Protect open excavations from rainfall, runoff, freezing groundwater, or excessive drying so as to maintain foundation subgrade in a satisfactory, undisturbed condition. Keep excavations free of standing water and completely free of water during concrete placement.
- E. Soils which become unsuitable due to inadequate dewatering or other causes, after initial excavation to the required subgrade, shall be removed and replaced with foundation backfill material, as directed by Entity, at no additional cost to the City.
- F. Place foundation base, or foundation backfill material where needed, over the subgrade on same day that excavation is completed to final grade. Where base of excavations are left open for longer periods, protect them with a seal slab or cement-stabilized sand.
- G. Crushed aggregate, and other free draining Class I materials, shall have a filter fabric separating it from native soils or select material backfill. The fabric shall overlap a minimum of 12 inches beyond where another material stops contact with the soil.
- H. Crushed aggregate, and other Class I materials, shall be placed in uniform layers of 8-inch maximum thickness. Compaction shall be by means of at least two passes of a vibratory compactor.

### 3.07 FOUNDATION BASE

- A. After the subgrade is properly prepared, including the placement of foundation backfill where needed, the foundation base shall be placed. The foundation base shall consist of a 12-inch layer of crushed stone aggregate or cement stabilized sand. Alternately, a seal slab with a minimum thickness of 4 inches may be placed. The foundation base shall extend a minimum of 12 inches beyond the edge of the structure foundation, unless shown otherwise on the Drawings.
- B. Where the foundation base and foundation backfill are of the same material, both can be placed in one operation.

### 3.08 BACKFILL

- A. Complete backfill to surface of natural ground or to lines and grades shown on Drawings. Use existing material that qualifies as select material, unless indicated otherwise. Deposit backfill in uniform layers and compact each layer as specified.
- B. Do not place backfill against concrete walls or similar structures until laboratory test breaks indicate that the concrete has reached a minimum of 85 percent of the specified compressive strength. Where walls are supported by slabs or intermediate walls, do not begin backfill operations until the slab or intermediate walls have been placed and concrete has attained sufficient strength.
- C. Remove concrete forms before starting backfill and remove shoring and bracing as work progresses.
- D. Maintain fill material at no less than 2 percent below nor more than 2 percent above optimum moisture content. Place fill material in uniform 8-inch maximum loose layers. Compaction of fill shall be to at least 95 percent of the maximum Standard Dry Density according to ASTM D 698 under paved areas. Compact to at least 90 percent around structures below unpaved areas.
- E. Where backfill is placed against a sloped excavation surface, run compaction equipment across the boundary of the cut slope and backfill to form a compacted slope surface for placement of the next layer of backfill.
- F. Place backfill using cement stabilized sand in accordance with Section 02321 - Cement Stabilized Sand.

### 3.09 FIELD QUALITY CONTROL

- A. Testing will be performed under provisions of Section 01450 - Testing Laboratory Services.
- B. Tests will be performed initially on minimum of one different sample of each material type for plasticity characteristics, in accordance with ASTM D 4318, and for gradation characteristics, in accordance with Tex-101-E and Tex-110-E. Additional classification tests will be performed whenever there is a noticeable change in material gradation or plasticity.
- C. In-place density tests of compacted subgrade and backfill will be performed according to ASTM D 1556, or ASTM D 2922 and ASTM D 3017, and at the following frequencies and conditions:
  - 1. A minimum of one test for every 100 cubic yards of compacted backfill material.
  - 2. A minimum of three density tests for each full work shift.
  - 3. Density tests will be performed in all placement areas.

4. The number of tests will be increased if inspection determines that soil types or moisture contents are not uniform or if compacting effort is variable and not considered sufficient to attain uniform density.

D. At least one test for moisture-density relationships will be initially performed for each type of backfill material in accordance with ASTM D 698. Additional moisture-density relationship tests will be performed whenever there is a noticeable change in material gradation or plasticity.

E. If tests indicate work does not meet specified compaction requirements, recondition, recompact, and retest at Contractor's expense.

### 3.10 DISPOSAL OF EXCESS MATERIAL

Remove from the site debris resulting from work under this section in accordance with local and state laws and the responsibility of the Contractor.

END OF SECTION

Section 02710 - HOT MIX ASPHALTIC CONCRETE PAVEMENT

PART 1 GENERAL

1.01 DESCRIPTION

This item shall consist of a base course, a leveling-up course, a surface course, or any combination of these courses as shown on the plans, each to be composed of a compacted mixture of mineral aggregate and asphaltic material.

The pavement shall be constructed on the previously completed and approved subgrade, base, existing pavement, bituminous surface or in the case of a bridge, on the prepared floor slab, as herein specified and in accordance with the details shown on the plans.

1.02 MATERIAL

Hot Mix Asphaltic Concrete, Type "D" (Fine graded surface course) (Modified). The hot mix asphaltic concrete shall conform to the requirements of the Texas State Department of Highway & Special Provisions 340-115, with anti-stripping agent in accordance with Special Specifications Item 3373. The successful bidder shall submit an asphalt mix design within thirty (30) days prior to installation from a geotechnical laboratory demonstrating that the hot mix asphaltic concrete to be used meets these specifications. The asphalt to be used shall be A.C. 20. Special Modifications to Standard Specification Item 2\340, for this project are as follows:

1. Asphalt Content. Asphaltic Material (AC-20) shall form from 5.0 to 8.0 percent of the mixture by weight.
2. Retained Stability. The paving mixture shall have a retained stability of not less than 70 percent when tested in accordance with ASTM Standard Procedure D1075.
3. Hveem Stability. Hveem stability shall not be less than 30.
4. Aggregate retained on No. 10 Sieve shall be 100% Crushed Limestone.

Tack Coat. "Tack Coat" shall consist of an application of asphaltic material on the existing pavement in accordance with these specifications as directed by the Inspector. The asphalt material for tack coat shall meet the requirement for Cut-Back Asphalt, RC-250, Item 300, "Asphalt, Oils, and Emulsions" of the Texas Highway Department Standard Specifications 2004 Edition.

"Prime Coat" shall consist of an application of asphaltic material on the completed base course and/or other approved areas in accordance with these specifications as directed by the Inspector.

The asphalt material for prime coat shall meet the requirement for Cut-Back Asphalt, MC-30, Item 300, "Asphalt, Oils, and Emulsions" of the Texas Highway Department Standard Specifications 2004 Edition.

### 1.03 CONSTRUCTION METHODS

For Hot Mix Asphaltic Concrete Pavement being placed on Flexible Base Material: When the area and/or base is satisfactory to receive the prime coat, the surface shall be cleaned by sweeping or other approved methods as directed by the Inspector. If directed by the Inspector, the surface shall be lightly sprinkled with water just prior to application of the asphaltic material. The asphaltic material shall be applied on the clean surface by an approved distributor at a rate of 0.2 gallons per square yard of surface, evenly, and smoothly, under a pressure necessary for proper distribution.

For Hot Mix Asphaltic Concrete Pavement being placed on Existing HMAC Material: When the existing pavement is satisfactory to receive the tack coat, the surface shall be cleaned by sweeping or other approved methods as directed by the Inspector. The asphaltic material shall be applied on the clean surface by an approved distributor at a rate not to exceed 0.11 or below 0.05 gallons per square yard of surface, evenly, and smoothly, under a pressure necessary for proper distribution.

During the application of Prime and Tack coat, care shall be taken to prevent splattering of adjacent curb and gutter or structures. Prime and Tack coat shall not be applied when the air temperature is below 60°F and falling, but may be applied when the air temperature is about 50°F and is rising; the air temperature being taken in the shade and away from artificial heat. Asphaltic material shall not be placed when general weather conditions, in the opinion of the Inspector, are not suitable.

Construction methods used in Hot Mix Asphaltic Concrete Pavement shall meet the requirements as set forth in Item 340 "Hot Mix Asphaltic Concrete Pavement" of the DHPT Standard Specification, with the following additions:

If the temperature of the asphaltic mixture of a load of any part of a load becomes less than 225°F or more than 350°F after being dumped from the mixer and prior to passing through the lay-down machine, all or any part of the load may be rejected.

1. Transporting Asphaltic Concrete. The asphaltic mixture, prepared as specified above, shall be hauled to the work in tight vehicles previously cleaned of all foreign material. The dispatching of the vehicles shall be arranged so that all material delivered may be places, and all rolling shall be completed during daylight hours. In cool weather or for long hauls, canvas covers and insulating of the truck bodies may be required. The inside of the truck body may be given a light coating of oil, lime slurry, or other material satisfactory to the Engineer, if necessary, to prevent mixture from adhering to the body.

2. Placing

- a. Generally, the asphaltic mixture shall be dumped and spread on the approved prepared surface with specified spreading and finishing machine, in such manner that when properly compact the finished pavement will be smooth, of uniform density and will meet the requirements of the typical cross sections and the surface tests. During the application of asphaltic material, care shall be taken to prevent splattering of adjacent pavement, curb, gutter and structures.
  - b. In placing a level-up course with the spreading and finishing machine, binder twine or cord shall be set to line and grade established by the Engineer. If approved by the Engineer, level-up courses may be spread with a motor grader.
  - c. When the asphaltic mixture is placed in a narrow strip along the edge of an existing pavement, or used to level up small areas of an existing pavement or placed in small irregular areas where the use of a finishing machine is not practical, the finishing machine may be eliminated when authorized by the Engineer, provided a satisfactory surface can be obtained by other approved methods.
  - d. Flush Structures. Adjacent to flush curbs, gutters, liners, and structures, the surface shall be finished uniformly high so that when compacted it will be slightly above the edge of the curb or flush structure.
3. Conditions for Placement. The asphaltic mixture when placed with a spreading and finishing machine, shall not be placed when the air temperature is below 50°F and is falling, but it may be when the air temperature is above 50°F and is rising. The air temperature shall be taken in the shade away from artificial heat. It is further provided that the asphaltic mixture shall be placed only when the humidity, general weather conditions, and temperature and moisture conditions of the base, in the opinion of the Engineer, are suitable.

4. Compacting

- a. Rolling with the three wheel and tandem rollers shall start longitudinally at the sides and proceed toward the center of the pavement, overlapping on successive trips by at least half the width of the rear wheel unless otherwise directed by the Engineer. Alternative trips of the roller shall be slightly different in length. On super-elevated curves, rolling shall begin at the low side and progress toward the high side unless otherwise directed by the Engineer. Rolling with pneumatic-tire roller shall be done as needed. Rolling shall be continued until no further compression can be obtained and all roller makers are eliminated. One tandem roller, one pneumatic-tire roller and at least one three wheel roller as specified above shall be provided for each job.

If the Contractor elects, he may substitute the three axle tandem roller for the two axle tandem roller and/or the three when roller; but in no case shall less than three rollers be in use on each job. Additional rollers shall be provided if needed. The motion of the roller shall be slow enough at all times to avoid displacement of the mixture. If any displacement occurs, it shall be corrected at once by the use of rakes and of fresh mixtures when required. The roller shall not be allowed to stand on pavement which has not been fully compacted. To prevent adhesion of the surface mixture to the roller, the wheels shall be kept thoroughly moistened with water, but an excess of water will not be permitted. All rollers must be in good mechanical condition. Necessary precautions shall be taken to prevent the dropping of gasoline, oil, grease, or other foreign matter on the pavement, either when the rollers are in operation or when standing.

In lieu of the rolling equipment specified, the Contractor may, upon written permission from the Engineer, operate other compacting equipment that will produce equivalent relative compaction as the specified equipment. If the substituted compaction equipment fails to produce the desired compaction as would be expected of the specified equipment, as determined by the Engineer, its use shall be discontinued.

- b. Hand Tamping. The edges of the pavement along curbs, headers, and similar structures, and all places not accessible to the roller, or in such positions as will not allow thorough compaction may be compacted using lightly oiled tamps.
5. Opening to Traffic. The pavement shall be opened to traffic when directed by the Engineer. The Contractor's attention is directed to the fact that all construction traffic allowed on pavement open to public will be subject to the laws governing traffic on Public Roads and Streets.

If the surface ravels or presents a rough appearance, it will be the Contractor's responsibility to correct this condition at his expense. A fog seal and/or sand seal will be applied.

6. Density Test. Acceptance Sampling and Testing of Hot Mix Asphaltic Concrete (Compaction):

Hot Mix Asphaltic Concrete will be accepted for density on a lot basis. A lot will consist of 500 feet of one paving street. One test shall be made for each lot.

Each lot of pavement will be accepted, with respect to density, when the average field density is equal to or greater than 92% of the average maximum theoretical density as



determined in accordance with ASTM D2725, and when no individual determination is less than 90% of the average maximum theoretical density. Four field density determinations will be made for each lot. The number of tests will be determined by this specification or by request of the engineer. An asphalt sample specimen shall be provided to the testing laboratory for determining the maximum theoretical density. If heating is necessary, the specimen shall be heated to the lowest temperatures required for proper preparation of the sample.

## PART 2 P A Y M E N T

### 2.01 MEASUREMENT & PAYMENT

Unless prescribed elsewhere in the Contract documents, Unit Prices as follows:

The work covered under this section shall be measured and paid for as specified at the contract unit price per square yard, in accordance with detail shown on Exhibit I – HMAC Pavement Repair Detail.

**TABLE 8**  
**SLIDING SCALE PAY FACTORS**  
**(DENSITY BASED ON PERCENT OF MAXIMUM THEORETICAL)**

AVERAGE PERCENT DENSITY	RECOMMENDED PERCENT PAYMENT
92% or Above	100
90.0 - 91.9	90 **
Below 90.0	Reject ***

\* Average of 4 samples

\*\* If the Owner agrees to accept densities between 90.0-91.9% a seal coat will be required at the costs of the contractor.

\*\*\* If the Owner agrees to accept densities below 90.0%, the pay factor for density shall be 50%.

7. Surface Tests. Tests for conformity with the specified crowns and grade shall be made by the Contractor immediately after final rolling. Any variation exceeding the specified tolerances shall immediately be corrected by removing the defective work and replacing with new material, as directed by the Engineer. Any correction required shall be at the sole expense of the Contractor.

For surface course, the finished surface shall not vary more than 1/4 inch (6.3mm), when tested with a 16 foot straightedge applied parallel with, or at right angles to, the centerline.

The finished surfaces of hot mix asphaltic concrete shall not vary from the gradeline, elevations and cross sections shown on the plans by more than 1/2 inch (12.7 mm). The Contractor shall correct pavement areas varying in excess of this amount by removing and replacing the defective work. Skin patching shall not be permitted for correction of low areas nor shall be permitted for correction of high areas.

8. Sampling Pavement. Samples for determination of thickness and density of completed pavements shall be obtained by the Owner. The size, number, and locations of the samples will be as directed by the Engineer.

All tests necessary to determine conformance with the specified requirements will be performed without cost to the Contractor; however, any required retests shall be performed at the Contractor's cost.

Upon delivery of the Hot Mix Asphaltic Concrete to the site, the Owner will hire a reputable commercial testing laboratory to sample the material and run laboratory tests to verify that the mixture conforms to project specifications (Gradation, Extraction, Hveem Stability and Retained Stability).

END OF SECTION

Section 02740 - CRUSHED LIMESTONE FLEXIBLE BASE

PART 1 GENERAL

1.01 DESCRIPTION

This item shall govern the materials, placement compaction of Crushed Limestone Base to the lines and grades that are shown on the construction drawings. Crushed Limestone Base thickness for various pavement types are shown on the plans.

1.02 MATERIAL

1. The flexible base shall be Type A Grade 1 by the Texas Department of Transportation "Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges 2004", Item 247. Meeting in the following requirement:
2. Triaxial Class 1: Min. compressive strength, 45 at 0 psi lateral pressure and 175 at 15 psi lateral pressure.

<u>RETAINED ON SQUARE SIEVE NUMBER</u>	<u>PERCENT RETAINED</u>
1-3/4" (44 mm)	0
7/8" (22.23 mm)	10-35
3/8" (9.5 mm)	30-50
NUMBER 4 (4.75 mm)	45-65
NUMBER 40 (0.425mm)	70-85

Material passing the Number 40 Sieve shall be known as "Binder Materials" and shall meet the following requirements:

Maximum Liquid Limits (L.L)	=	35
Maximum Plasticity Index (P.I.)	=	10
Wet Ball Mill (max)	=	40
California Bearing Ratio (min.)	=	100

All aggregate retained on the Number 10 Sieve shall be comprised of only crushed limestone.

The Contractor shall not place crushed limestone on the road bed until the Engineer has accepted the shaped and compacted subgrade.

The Contractor must maintain the roadbed free of holes, ruts and depressions and in condition to receive the crushed limestone.

The Contractor upon request shall provide certification that the material supplied meets the above requirements prior to delivery to the job site. Samples for testing of the material must be taken prior to the compaction operations.

### 1.03 CONSTRUCTION METHODS

The flexible base material shall be placed on the approved subgrade in courses not to exceed six (6) inches compacted depth. It shall be the responsibility of the contractor that the required amount of material be delivered and uniformly spread and shaped. All materials has been cut into the windrows, it shall be sprinkled, spread, shaped, and rolled in proper sequence to prevent segregation and as necessary for required compaction.

The surface on completion shall be smooth and in conformity with typical sections and to the established lines and grades. Any deviation in excess of 1/4 inch in cross-section and in length of 16 feet measured longitudinally shall be corrected.

Flexible base shall be compacted to an apparent dry density of not less than 98 percent of the maximum dry density as determined in accordance with A.S.T.M. Test method D698 (Standard Proctor). Tests for density will be made within 24 hours after compaction operations are completed. If the material fails to meet the density specified, it shall be reworked as necessary to meet the density required. Prior to placing any succeeding course of flexible base or surfacing on a previously completed course the density and moisture of the top three (3) inches of flexible base shall be checked and if the tests show the density to be more than 2 percent below the specified compaction and moisture content, it shall be reworked as necessary the density and moisture required.

The first density and depth test at a specific location will be made by commercial testing laboratory designated by the Owner and said tests shall be paid for the Owner. If the test fails, all other tests at the location shall be paid for by the Contractor, by deducting from the final payment.

## PART 2 P A Y M E N T

### 2.01 MEASUREMENT & PAYMENT

Unless indicated in the Unit Price Schedule as a pay item, no separate payment will be made for work performed under this Section. Include cost of work performed under this Section in pay items of which this work is a component.

END OF SECTION

Section 02950 – RESTORATION OF SITE IMPROVEMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

1. Restoration of the Work site in public rights-of-way or easements and adjacent public or private property affected by construction operations, including pavement, esplanades, sidewalks, driveways, fences, lawns and landscaping.

1.02 DEFINITIONS

1. Site Restoration. Replacement or reconstruction of site improvements to rights-of-way, easements, public property, and private property that are affected or altered by construction operations, with the improvements restored to a condition which is equal to, or better than, that which existed prior to construction operations.
2. Site Improvements. Includes but is not limited to pavement, curb and gutter, esplanades, sidewalks, driveways, fences, lawns, irrigation systems, and landscaping.
3. Line Segment. The length of sewer from centerline to centerline of manholes, inline junction structure, and bends as designated on the Drawings, and to the end of stubs or the termination of the pipe.
4. Maximum Trench Width. The allowable trench width for a corresponding pipe outside diameter as defined in the design plans or in Section 02317 - Excavation and Backfill for Utilities.

1.03 SUBMITTALS

1. Make submittals in conformance with Section 01300 - Submittal Procedures.

1.04 SCHEDULING

1. After paving or utility work is completed on a line segment and the segment is submitted on the monthly estimate for payment, complete site restoration for that segment before the next monthly estimate for payment is submitted, unless extended in writing by the Owner or Engineer.
2. For utility work requiring testing or post-installation TV inspection, completion of the segment is not considered to include testing or TV inspection. The schedule for completion of site restoration is not determined by completion of testing or TV inspection.

PART 2 P R O D U C T S

2.01 MATERIALS

1. Pavement, Sidewalks and Driveways. Use materials as specified in Section 02965 - Pavement Repair and Resurfacing and Section 03305 - Concrete Curb and Gutter, Driveways, and Sidewalks.

PART 3 E X E C U T I O N

3.01 EXAMINATION

1. Construction Site Photographs. Document pre-existing conditions on and adjacent to the construction site with construction photographs and /or video recordings.

3.02 PREPARATION

1. Removing Pavements and Structures.
  1. Remove the minimum pavement, curb and gutter, and other structures as required to perform the Work. Perform removals in accordance with Section 02200 - Removing Existing Pavements and Structures.
  2. Remove concrete and asphaltic concrete material by saw cutting the existing pavement with methods approved by the Owner and Engineer.
2. Remove or relocate existing fencing, if required, for construction operations. Maintain the integrity of the private property owner's fencing if needed for protection of children, pets or property. Notify the property owner 72 hours in advance before removing fencing and coordinate security needs.

3.03 INSTALLATION

1. Pavement, Sidewalk, and Driveway Restoration.
  1. Replace pavement, curb and gutter, sidewalks, and driveways removed or damaged as the result of construction operations. Reconstruct in accordance with Section 02965 - Pavement Repair and Resurfacing and Section 03305 - Concrete Curb and Gutter, Driveways, and Sidewalks.
  2. Where replacement sidewalks terminate at a street curb radius, construct a wheelchair ramp according standard detail drawing or as directed by the Engineer.

2. Fence Removal and Replacement.

1. Replace fencing removed or damaged, including, but not limited to, posts, caps, concrete footings, concrete curb under fence, wire mesh, wood panels, top and bottom railing.
2. Reconstruct any portion of the fence disturbed by construction which is not equal to or better than that which existed prior to construction operations as evidenced by pre-construction photographs or videos.
3. Remove and dispose of damaged or substandard material.

3.04 CLEANING

1. Remove debris and trash which is the result of the Contractor's operation to maintain a clean and orderly site.

PART 4 P A Y M E N T

4.01 MEASUREMENT & PAYMENT

Unless indicated in the Unit Price Schedule as a pay item, no separate payment will be made for work performed under this Section. Include cost of work performed under this Section in pay items of which this work is a component.

END OF SECTION

Section 02965 - PAVEMENT REPAIR AND RESURFACING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Repairing and resurfacing streets, highways, driveways, sidewalks, and other pavements that have been cut, broken, or otherwise damaged during construction.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Subgrade:
  - 1. Provide backfill material as required by applicable excavation and fill sections 02316-Excavation & Backfill for Structures.
- B. Base: Provide base material as required by applicable portions of Section 02740 - Crushed Limestone Flexible Base.
- C. Pavement: Provide paving materials as required by applicable portions of Section 02710 - Hot Mix Asphaltic Concrete and 03310 - Concrete Pavement.
- D. Temporary Pavement Repair: Pre-Mixed Cold Mix Asphalt meeting the Texas Department of Transportation Standard Specification for Highway Construction item No. 334.
- E. Steel Plating: Minimum of 1-inch thick and large enough to allow a minimum of 2-foot of bearing on 3 sides of the excavation.

PART 3 EXECUTION

3.01 PREPARATION

- A. Conform to requirement of Section 02200 - Removing Existing Pavements and Structures, for removals.
  - 1) Steel Plating: Whenever steel plating is required or used during construction within paved roadway:
    - a. Notify the Project Engineer and Owner at least 48 hours in advance of placing steel plates in roadway.
    - b. Dimensions: At least 1-inch thick and large enough to allow minimum of 2-feet of bearing on three sides of the excavation.



- c. Placement: Pin plates to prevent movement. Recess plates at Engineer's direction.
  - d. Taper cold mix asphalt on all edges of steel plate from height of steel plate extending minimum of 1-foot to existing road surface.
  - e. Unless otherwise approved by the Engineer, remove steel plates in not more than 7 days.
- 2) Temporary Pavement: Place temporary pavement as specified herein.
- a. Saw cut pavement 18 inches wider than width of trench needed to install utilities unless otherwise indicated on Drawings.
  - b. Place and compact cold mix asphalt minimum thickness of 3-inches and at the same grade as surrounding surface on trench backfill areas in existing pavement. Stockpiling of cold mix asphalt will be permitted provided it is stored in a manner that prevents infiltration of deleterious material and not longer than 1 month from the date of mixing.
  - c. Provide cold mix asphalt for temporary curb and gutter, walks, and driveways.
  - d. Temporary pavement shall be in place within 48 hours of closing of the trench.
  - e. Maintain temporary pavement in good condition acceptable to the Engineer and until permanent pavement repair is completed.
- 3) Permanent Pavement:
- a. Saw cut pavement 18 inches wider than the existing temporary pavement repair unless otherwise indicated on Drawings.
  - b. Protect edges of existing pavement to remain from damage during removals, utility placement, backfill, and paving operations. For concrete pavement, leave and protect minimum of 18 inches of undisturbed subgrade on each side of trench to support replacement slab.
  - c. Repair State Highway crossings in accordance with TxDOT permit.

### 3.02 INSTALLATION

- A. Parking Areas, Service Drives, Driveways, and Sidewalks: Replace with material equal to or better than existing or as indicated on Drawings. Conform to applicable requirements of sections referenced in Paragraph 2.01, Materials.
- B. Street Pavements and Curbs, Curbs and Gutters: Replace subgrade, base, and surface course with like-for-like materials or as indicated on Drawings. Curbs and curbs and gutters shall match existing. Pavements shall conform to requirements of sections referenced in Paragraph 2.01, Materials.
- C. For concrete pavement, install size and length of reinforcing steel and pavement thickness indicated on Drawings. Place types and spacing of joints to match existing or as indicated on Drawings.

- D. Where existing pavement consists of concrete pavement with asphaltic surfacing, resurface with minimum 2-inch depth asphaltic pavement.
- E. Repair State Highway crossings in accordance with TxDOT permit.

3.03 WASTE MATERIAL DISPOSAL

- A. Dispose of waste material in accordance with local and state laws and the responsibility of the Contractor.

PART 4 P A Y M E N T

4.01 MEASUREMENT & PAYMENT

Unless indicated in the Unit Price Schedule as a pay item, no separate payment will be made for work performed under this Section. Include cost of work performed under this Section in pay items of which this work is a component.

END OF SECTION

Section 03305 - VALLEY GUTTER

PART 1 GENERAL

1.01 DESCRIPTION

This guide specification covers the requirements for concrete valley gutters. Concrete shall be composed of portland cement concrete in accordance with the lines and grades established by the Engineer and in conformance with the details shown on the plans.

1.02 PRODUCTS

**CONCRETE:** Concrete shall conform to the details in the plans except as otherwise specified. Concrete shall have a minimum compressive strength of 3000 psi at 28 days or as specified on the design plans. Maximum size of aggregate shall be 1-1/2 inches. In climates where freezing is not a factor but where air entrainment is used in local commercial practice to improve the workability and place ability of concrete, concrete having air content percent of 4-1/2 plus or minus 1-1/2 percent may be specified as Contractor's option to non air-entrained concrete. Mixtures may have air content by volume of concrete of 5 to 7 percent, based on measurements made immediately after discharge from the mixer. The desired slump will be inserted. Suggested limits are 3 inches plus or minus 1 inch for hand placed concrete or for slip formed concrete. The concrete slump shall be 3 inches where determined in accordance with ASTM C 143. All concrete used in concrete curb and gutter, sidewalks, valley gutters, and concrete pavement shall contain 1.5 lbs of fiber mesh per cubic yard.

**JOINT FILLER STRIPS & SEALANTS:** Contraction joint filler for curb and gutter shall consist of hard-pressed fiberboard. Joint sealant, cold-applied shall be a rubberized asphalt sealant or equal approved by the engineer.

1.03 CONSTRUCTION METHODS

**Placing During Warm Weather:** The temperature of the concrete as placed shall not exceed 100 degrees F except where an approved retarder is used. The mixing water and/or aggregates shall be cooled, if necessary, to maintain a satisfactory placing temperature. In no case shall the placing air temperature exceed 103 degrees F.

**FORM WORK:** Form work shall be designed and constructed to insure that the finished concrete will conform accurately to the indicated dimensions, lines, and elevations, and within the tolerances specified. Forms shall be of straight wood or steel of sufficient strength to resist springing during depositing and consolidating concrete. Wood forms shall be surfaced plank, 2-inch nominal thickness, straight and free from warp, twist, loose knots, splits or other defects.

Wood forms shall have a nominal length of 10 -12 feet. Radius bends may be formed with 3/4-inch boards, laminated to the required thickness. Steel forms shall be channel-formed sections with a flat top surface and with welded braces at each end and at not less than two intermediate points. Ends of steel forms shall be interlocking and self-aligning. Steel forms shall include flexible forms for radius forming, corner forms, form spreaders, and fillers. Steel forms shall have a nominal length of 10 feet with a minimum of two welded stake pockets per form. Stake pins shall be solid steel rods with chamfered heads and pointed tips designed for use with steel forms.

**FORM SETTING:** Forms shall be carefully set to the indicated alignment, grade and dimensions. Forms shall be held rigidly in place by a minimum of three stakes per form placed at intervals not to exceed 4 feet. Corners, deep sections, and radius bends shall have additional stakes and braces, as required. Clamps, spreaders, and braces shall be used where required to insure rigidity in the forms. Forms shall be removed without injuring the concrete. Bars or heavy tools shall not be used against the concrete in removing the forms. Any concrete found defective after form removal shall be promptly and satisfactorily repaired. Forms shall be cleaned and coated with form oil each time before concrete is placed. Wood forms may, instead, be thoroughly wetted with water before concrete is placed, except that with probable freezing temperatures, oiling is mandatory. Forms for sidewalks shall be set with the upper edge true to line and grade with an allowable tolerance of 1/8 inch in any 10-foot long section. After forms are set, grade and alignment shall be checked with a 10-foot straightedge. Forms shall have a transverse slope [as indicated] 1/4-inch per foot with the low side adjacent to the roadway. Side forms shall not be removed for 18 hours after finishing has been completed.

**CONCRETE PLACEMENT AND FINISHING:** Concrete shall be placed in the forms in one layer of such thickness that when consolidated and finished the sidewalks will be of the thickness indicated. After concrete has been placed in the forms, a strike-off guided by side forms shall be used to bring the surface to proper section to be compacted. The concrete shall be consolidated with an approved vibrator, and the surface shall be finished to grade with a wood float, bull float, or darby, edged and broom finished. After straight edging, when most of the water sheen has disappeared, and just before the concrete hardens, the surface shall be finished to a smooth and uniformly fine granular or sandy texture free of waves, irregularities, or tool marks. A scored surface shall be produced by brooming with a fiber-bristle brush in a direction transverse to that of the traffic. All slab edges, including those at formed joints, shall be finished carefully with an edger having a radius of 1/8 inch. Transverse joint shall be edged before brooming, and the brooming shall eliminate the flat surface left by the surface face of the edger. Corners and edges which have crumbled and areas which lack sufficient mortar for proper finishing shall be cleaned and filled solidly with a properly proportioned mortar mixture and then finished. **All slab edges, including those at formed joints, shall be sealed with a rubberized asphalt sealant to control water damage to the subgrade and control of weed and grass growth in the edges and joints.**

Tolerances: Finished surfaces shall not vary more than 1/4 inch from the testing edge of a 10-foot straightedge. Permissible deficiency in section thickness will be up to 1/4 inch.

Expansion Joints: The Expansion joints shall be formed in the fresh concrete by cutting a groove in the top portion of the slab to a depth of at least one-fourth of the sidewalk slab thickness, using a jointer to cut the groove, or by sawing a groove in the hardened concrete with a power-driven saw, unless otherwise approved. Sawed joints shall be constructed by sawing a groove in the concrete with a 1/8-inch blade to the depth indicated. Isolation-joint filler will be required between curbs that abut the sidewalk longitudinally. Joint filler in expansion joints surrounding structures and features within the sidewalk may consist of performed filler material conforming to ASTM D 1752 or building paper. Isolation joints shall be formed with 3/4 inch fiber board with 3/4 inch joint tack strips. At the end of the curing period, expansion joints shall be carefully cleaned and filled with joint sealer.

CURING AND PROTECTION: Concrete shall be protected against loss of moisture and rapid temperature changes for at least 7 days from the beginning of the curing operation. Unhardened concrete shall be protected from rain and flowing water. All equipment needed for adequate curing and protection of the concrete shall be on hand and ready for use before actual concrete placement begins. Protection shall be provided as necessary to prevent cracking of the pavement due to temperature changes during the curing period.

Protection: Completed concrete shall be protected from damage until accepted. The Contractor shall repair damaged concrete and clean concrete discolored during construction. Concrete that is damaged shall be removed and reconstructed for the entire length between regularly scheduled joints. Refinishing the damaged portion will not be acceptable. Removed damaged portions shall be disposed of as directed.

FIELD QUALITY CONTROL: The Contractor shall perform the inspection and tests described and meet the specified requirements for inspection details and frequency of testing. Based upon the results of these inspections and tests, the Contractor shall take the action and submit reports as required below, and any additional tests to insure that the requirements of these specifications are met.

Strength Testing: The Contractor shall coordinate with the Owner's Testing Laboratory to conduct field concrete testing procedures and molded concrete specimens for strength tests. Samples of concrete placed each day shall be taken not less than once a day nor less than once for every 150 cubic yards of concrete or as specified in the design plans or by the Engineer. The samples for strength tests shall be taken in accordance with ASTM C 172. Cylinders for acceptance shall be molded in conformance with ASTM C 31 by an approved testing laboratory. Each strength test result shall be the average of two test cylinders from the same concrete sample tested at 28 days, unless otherwise specified or approved. Two concrete cylinder should be made to determine an early 7 day strength so further construction can be conducted. Concrete specified

on the basis of compressive strength will be considered satisfactory if the averages of all sets of three consecutive strength test results equal or exceed the specified strength, and no individual strength test result falls below the specified strength by more than 500 psi.

Slump Test: One slump tests shall be made on randomly selected batches of each class of concrete for every 150 cubic yards or fraction thereof. All slump tests are to be done on the middle third of the concrete within the concrete truck. Additional tests will be performed when excessive variation in the workability of the concrete is noted or when excessive crumbling or slumping is noticed along the edges of slip-formed concrete. Additional tests can be requested by the engineer or the testing laboratory at any time of the concrete job.

Surface Evaluation: The finished surface of each category of the completed work shall be uniform in color and free of blemishes and form or tool marks. Exposed surfaces of the finished work will be inspected by the Engineer and any deficiencies in appearance will be identified. Areas which exhibit excessive cracking, discoloration, form marks, or tool marks or which are otherwise inconsistent with the overall appearances of the work shall be removed and replaced.

## PART 2 P A Y M E N T

### 2.01 MEASUREMENT & PAYMENT

Unless prescribed elsewhere in the Contract documents, Unit Prices as follows:

The work covered under this section shall be measured and paid for as specified at the contract unit price per square yard, in accordance with detail shown on Exhibit II – Valley Gutter Detail.

END OF SECTION

Section 03310 - CONCRETE PAVEMENT

PART 1 GENERAL

1.01 DESCRIPTION

This specification covers the requirements for concrete pavement. Concrete shall be composed of portland cement concrete and shall be placed in accordance with the lines and grades established by the Engineer and in conformance with the details shown on the plans.

1.02 PRODUCTS

- a. SAND BEDDING: Bedding material shall be placed over approved, limed subgrade, as specified in the drawing details. Sand shall be Bank Run Sand or River Sand, as follows: Durable bank run sand classified as SP, SW, or SM by the Unified Soil Classification System (ASTM D 2487) meeting the following requirements:

1. Less than 15 percent passing the number 200 sieve when tested in accordance with ASTM D 1140. The amount of clay lumps or balls not exceeding 2 percent.
2. Material passing the number 40 sieve shall meet the following requirements when tested in accordance with ASTM D 4318:
  - a. Liquid limit: not exceeding 25 percent.
  - b. Plasticity index: not exceeding 7.

Contractor shall provide reports to the Owner and the Engineer from an independent testing laboratory that backfill materials to be placed in the Work meet applicable specification requirements. Contractor shall assist Owner, Owner's representative and Testing Lab in obtaining samples, from the delivered materials, for verification testing.

- b. CONCRETE: Concrete shall conform to the details in the plans except as otherwise specified. Concrete shall have a minimum compressive strength of 4000 psi at 28 days. Maximum size of aggregate shall be 1-1/2 inches. In climates where freezing is not a factor but where air entrainment is used in local commercial practice to improve the workability and place ability of concrete, concrete having air content percent of 4-1/2 plus or minus 1-1/2 percent may be specified as Contractor's option to non air-entrained concrete. Mixtures may have air content by volume of concrete of 5 to 7 percent, based on measurements made immediately after discharge from the mixer. The desired slump will be inserted. Suggested limits are 3 inches plus or minus 1 inch for hand placed concrete or for slip formed concrete. The concrete slump shall be 3 inches where determined in accordance with ASTM C 143.

- c. **REINFORCING STEEL:** Provide Grade 60 deformed steel for bar reinforcement in accordance with TXDOT Item 440, "Reinforcing Steel." Provide approved positioning and supporting devices (baskets and chairs) capable of securing and holding the reinforcing steel in proper position before and during paving. Provide corrosion protection when shown on the plans.

**DOWELS:** Provide smooth, straight dowels of the size shown on the plans, free of burrs, and conforming to the requirements of Item 440, "Reinforcing Steel." Coat dowels with a thin film of grease or other approved de-bonding material. Provide dowel caps on the lubricated end of each dowel bar used in an expansion joint. Provide dowel caps filled with a soft compressible material with enough range of movement to allow complete closure of the expansion joint.

**Tie Bars.** Provide straight deformed steel tie bars. Provide either multiple-piece tie bars or single-piece tie bars as shown on the plans. Provide multiple-piece tie bars composed of 2 pieces of deformed reinforcing steel with a coupling capable of developing a minimum tensile strength of 125% of the design yield strength of the deformed steel when tensile-tested in the assembled configuration. Provide a minimum length of 33 diameters of the deformed steel in each piece. Use multiple-piece tie bars from the list of "Prequalified Multiple Piece Tie Bar Producers" maintained by the Construction Division, or submit samples for testing in accordance with Tex-711-I

- d. **JOINT FILLER STRIPS & SEALANTS:** Expansion Joints at maximum 40 foot spacing. Expansion joint filler shall consist of hard-pressed fiberboard. Joint sealant, cold-applied shall be a rubberized asphalt sealant or equal approved by the engineer.

### 1.03 CONSTRUCTION METHODS

**Placing During Warm Weather:** The temperature of the concrete as placed shall not exceed 100 degrees F except where an approved retarder is used. The mixing water and/or aggregates shall be cooled, if necessary, to maintain a satisfactory placing temperature. In no case shall the placing air temperature exceed 103 degrees F.

**FORM WORK:** Form work shall be designed and constructed to insure that the finished concrete will conform accurately to the indicated dimensions, lines, and elevations, and within the tolerances specified. Forms shall be of wood or steel, straight, of sufficient strength to resist springing during depositing and consolidating concrete. Wood forms shall be surfaced plank, 2-inch nominal thickness, straight and free from warp, twist, loose knots, splits or other defects. Wood forms shall have a nominal length of 10 -12 feet. Radius bends may be formed with 3/4-inch boards, laminated to the required thickness. Steel forms shall be channel-formed sections with a flat top surface and with welded braces at each end and at not less than two intermediate points. Ends of steel forms shall be interlocking and self-aligning. Steel



forms shall include flexible forms for radius forming, corner forms, form spreaders, and fillers. Steel forms shall have a nominal length of 10 feet with a minimum of two welded stake pockets per form. Stake pins shall be solid steel rods with chamfered heads and pointed tips designed for use with steel forms.

**FORM SETTING:** Forms shall be carefully set to the indicated alignment, grade and dimensions. Forms shall be held rigidly in place by a minimum of three stakes per form placed at intervals not to exceed 4 feet. Corners, deep sections, and radius bends shall have additional stakes and braces, as required. Clamps, spreaders, and braces shall be used where required to insure rigidity in the forms. Forms shall be removed without injuring the concrete. Bars or heavy tools shall not be used against the concrete in removing the forms. Any concrete found defective after form removal shall be promptly and satisfactorily repaired. Forms shall be cleaned and coated with form oil each time before concrete is placed. Wood forms may, instead, be thoroughly wetted with water before concrete is placed, except that with probable freezing temperatures, oiling is mandatory. Forms for sidewalks shall be set with the upper edge true to line and grade with an allowable tolerance of 1/8 inch in any 10-foot long section. After forms are set, grade and alignment shall be checked with a 10-foot straightedge. Forms shall have a transverse slope [as indicated] 1/4-inch per foot with the low side adjacent to the roadway. Side forms shall not be removed for 18 hours after finishing has been completed.

**CONCRETE PLACEMENT AND FINISHING:** Concrete shall be placed in the forms in one layer of such thickness that when consolidated and finished the sidewalks will be of the thickness indicated. After concrete has been placed in the forms, a strike-off guided by side forms shall be used to bring the surface to proper section to be compacted. The concrete shall be consolidated with an approved vibrator, and the surface shall be finished to grade with a wood float, bull float, or darby, edged and broom finished. After straight edging, when most of the water sheen has disappeared, and just before the concrete hardens, the surface shall be finished to a smooth and uniformly fine granular or sandy texture free of waves, irregularities, or tool marks. A scored surface shall be produced by brooming with a fiber-bristle brush in a direction transverse to that of the traffic. All slab edges, including those at formed joints, shall be finished carefully with an edger having a radius of 1/8 inch. Transverse joint shall be edged before brooming, and the brooming shall eliminate the flat surface left by the surface face of the edger. Corners and edges which have crumbled and areas which lack sufficient mortar for proper finishing shall be cleaned and filled solidly with a properly proportioned mortar mixture and then finished. **All slab edges, including those at formed joints, shall be sealed with a rubberized asphalt sealant to control water damage to the subgrade and control of weed and grass growth in the edges and joints.**

Tolerances: Finished surfaces shall not vary more than 1/4 inch from the testing edge of a 10-foot straightedge. Permissible deficiency in section thickness will be up to 1/4 inch.

Contraction Joints: Maximum 10' spacing. The contraction joints (dummy joints) shall be formed in the fresh concrete by cutting a groove in the top portion of the slab to a depth of at least one-fourth of the sidewalk slab thickness, using a jointer to cut the groove, or by sawing a groove in the hardened concrete with a power-driven saw, unless otherwise approved. Sawed joints shall be constructed by sawing a groove in the concrete with a 1/8-inch blade to the depth indicated. Isolation-joint filler will be required between curbs that abut the sidewalk longitudinally. Joint filler in contraction joints surrounding structures and features within the pavement may consist of preformed filler material conforming to ASTM D 1752 or building paper. Isolation joints shall be formed with 3/4 inch fiber board with 3/4 inch joint tack strips. At the end of the curing period, contraction joints shall be carefully cleaned and filled with rubberized asphalt sealant or equal approved by the engineer.

CURING AND PROTECTION: Concrete shall be protected against loss of moisture and rapid temperature changes for at least 7 days from the beginning of the curing operation. Unhardened concrete shall be protected from rain and flowing water. All equipment needed for adequate curing and protection of the concrete shall be on hand and ready for use before actual concrete placement begins. Protection shall be provided as necessary to prevent cracking of the pavement due to temperature changes during the curing period.

Protection: Completed concrete shall be protected from damage until accepted. The Contractor shall repair damaged concrete and clean concrete discolored during construction. Concrete that is damaged shall be removed and reconstructed for the entire length between regularly scheduled joints. Refinishing the damaged portion will not be acceptable. Removed damaged portions shall be disposed of as directed.

FIELD QUALITY CONTROL: The Contractor shall perform the inspection and tests described and meet the specified requirements for inspection details and frequency of testing. Based upon the results of these inspections and tests, the Contractor shall take the action and submit reports as required below, and any additional tests to insure that the requirements of these specifications are met.

**Strength Testing:** The Contractor shall provide molded concrete specimens for strength tests. Samples of concrete placed each day shall be taken not less than once a day nor less than once for every 150 cubic yards of concrete. The samples for strength tests shall be taken in accordance with ASTM C 172. Cylinders for acceptance shall be molded in conformance with ASTM C 31 by an approved testing laboratory. Each strength test result shall be the average of two test cylinders from the same concrete sample tested at 28 days, unless otherwise specified or approved. At least one concrete cylinder should be made to determine an early 7 day strength so further construction can be conducted. Concrete specified on the basis of compressive strength will be considered satisfactory if the averages of all sets of three consecutive strength test results equal or exceed the specified strength, and no individual strength test result falls below the specified strength by more than 500 psi.

**Slump Test:** One slump tests shall be made on randomly selected batches of each class of concrete for every 150 cubic yards, or fraction thereof, of concrete placed during each shift. All slump tests are to be done on the middle third of the concrete within the concrete truck. Additional tests will be performed when excessive variation in the workability of the concrete is noted or when excessive crumbling or slumping is noticed along the edges of slip-formed concrete. Additional tests can be requested by the engineer or the testing laboratory at any time of the concrete job.

**Surface Evaluation:** The finished surface of each category of the completed work shall be uniform in color and free of blemishes and form or tool marks. Exposed surfaces of the finished work will be inspected by the Engineer and any deficiencies in appearance will be identified. Areas which exhibit excessive cracking, discoloration, form marks, or tool marks or which are otherwise inconsistent with the overall appearances of the work shall be removed and replaced.

## PART 2 P A Y M E N T

### 2.01 MEASUREMENT & PAYMENT

Unless prescribed elsewhere in the Contract documents, Unit Prices as follows:

The work covered under this section shall be measured and paid for as specified at the contract unit price per square yard, in accordance with detail shown on Exhibit III – Concrete Pavement Repair Detail.

END OF SECTION

Section 04103 - PRIME COAT

PART 1 GENERAL

1.01 DESCRIPTION

"Prime Coat" shall consist of an application of asphaltic material on the completed base course and/or other approved areas in accordance with these specifications as directed by the Inspector.

1.02 MATERIALS

The asphalt material for prime coat shall meet the requirement for Cut-Back Asphalt, MC-30, Item 300, "Asphalt, Oils, and Emulsions" of the Texas Highway Department Standard Specifications 2014 Edition.

1.03 CONSTRUCTION METHODS

When, in the opinion of the Inspector, the area and/or base is satisfactory to receive the prime coat, the surface shall be cleaned by sweeping or other approved methods as directed by the Inspector. If directed by the Inspector, the surface shall be lightly sprinkled with water just prior to application of the asphaltic material. The asphaltic material shall be applied on the clean surface by an approved distributor at a rate of 0.2 gallons per square yard of surface, evenly, and smoothly, under a pressure necessary for proper distribution. During the application of prime coat, care shall be taken to prevent splattering of adjacent pavement, curb and gutter or structures.

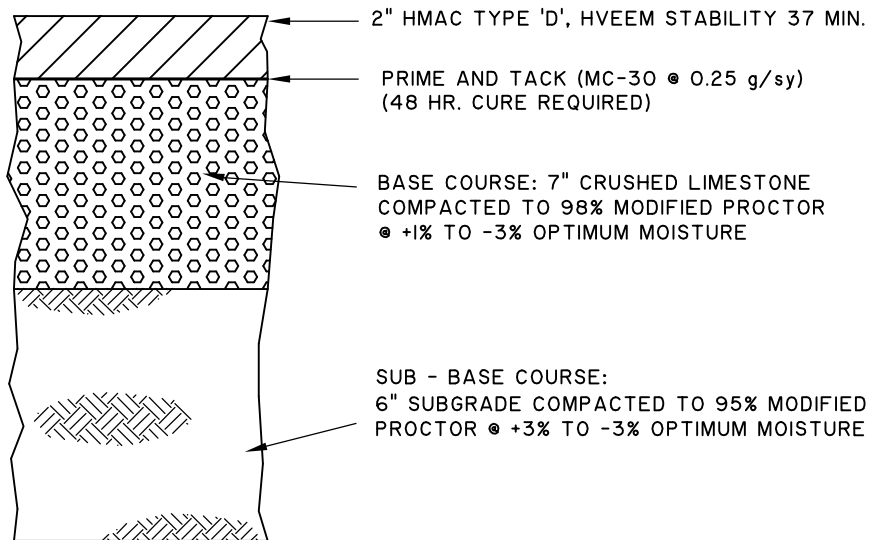
Prime coat shall not be applied when the air temperature is below 60°F and falling, but may be applied when the air temperature is about 50°F and is rising; the air temperature being taken in the shade and away from artificial heat. Asphaltic material shall not be placed when general weather conditions, in the opinion of the Inspector, are not suitable.

PART 2 PAYMENT

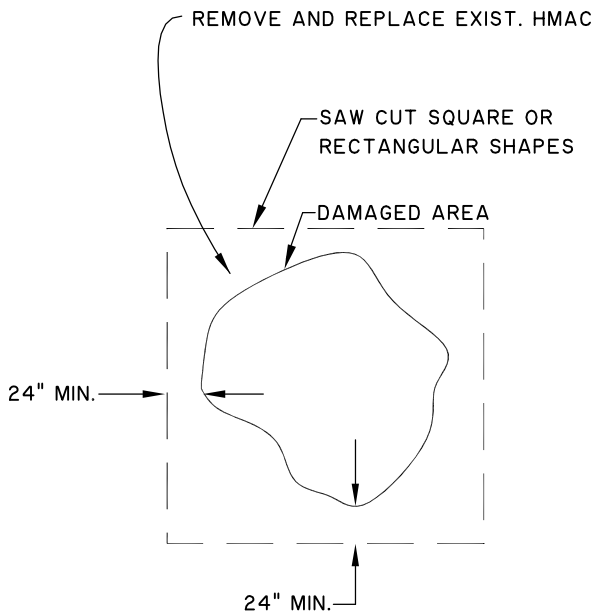
2.01 MEASUREMENT & PAYMENT

Unless indicated in the Unit Price Schedule as a pay item, no separate payment will be made for work performed under this Section. Include cost of work performed under this Section in pay items of which this work is a component.

END OF SECTION



NOTE : I. OIL CONTENT OF HMAC SHALL BE 5% BY WEIGHT MIN.



**PLAN VIEW**  
NOT TO SCALE

**EXHIBIT I**

**TEXAS SOUTHMOST COLLEGE**

**HMAC PAVEMENT REPAIR DETAIL**

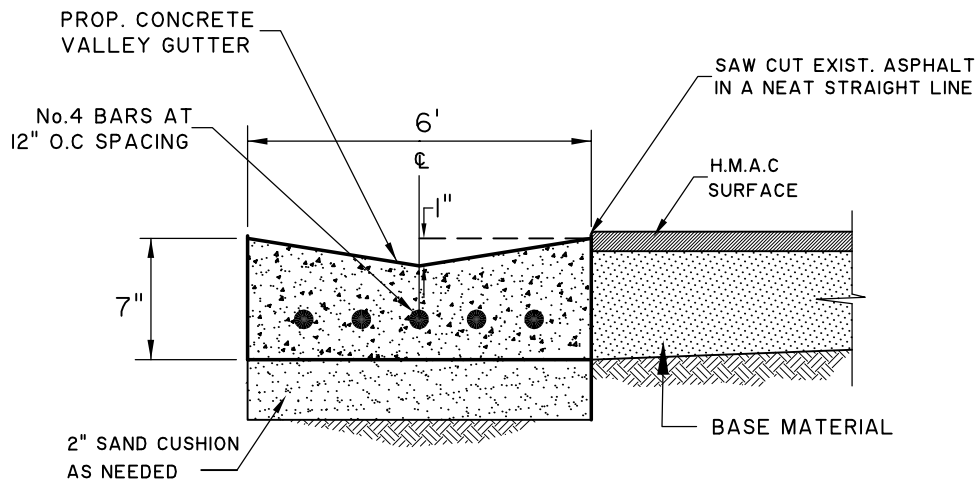
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**AMBIOTEC**  
CIVIL ENGINEERING GROUP, INC.

5420 Paredes Line Road  
Brownsville, Texas 78526 Fax (956)548-9399  
(956)548-9333

TBPE FIRM No. F-4126  
TBPLS REG No. 10005300



**VALLEY GUTTER**  
NOT TO SCALE

- SEE EXHIBIT III - CONCRETE PAVEMENT DETAIL FOR CONSTRUCTION JOINT AND EXPANSION JOINT DETAILS.

**NOTES:**

1. CONCRETE SHALL BE CLASS "A" WITH A COMPRESSIVE STRENGTH OF 3500 PSI @ 28 DAYS WITH 1.5 LBS/CY "FIBERMESH".
2. CONSTRUCTION JOINTS SHALL BE PLACED EVERY 10'.
3. EXPANSION JOINTS SHALL BE PLACED EVERY 40'.

**EXHIBIT II**

**TEXAS SOUTHMOST COLLEGE**

**VALEY GUTTER DETAIL**  
NOT TO SCALE



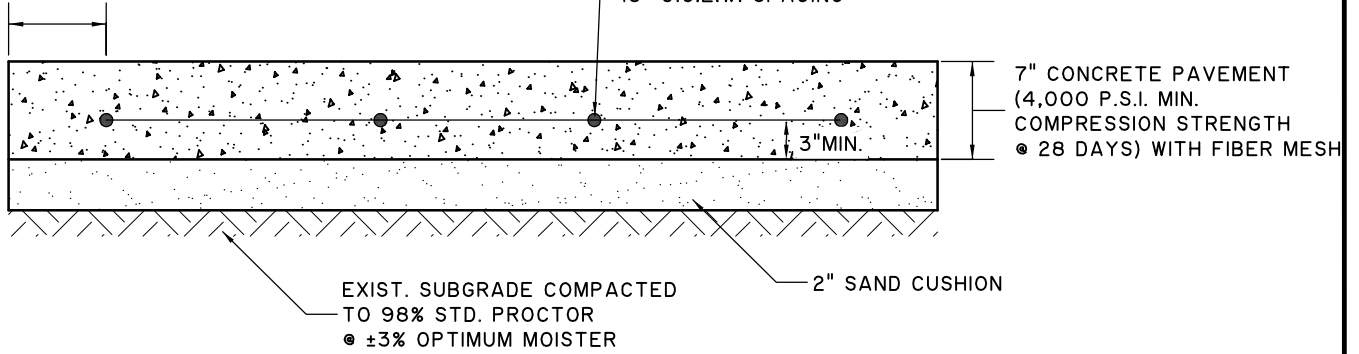
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CIVIL ENGINEERING GROUP, INC.

5420 Paredes Line Road  
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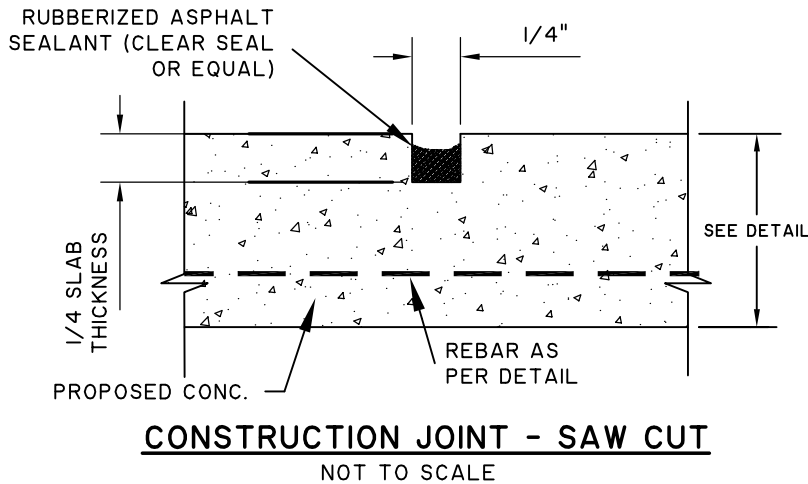
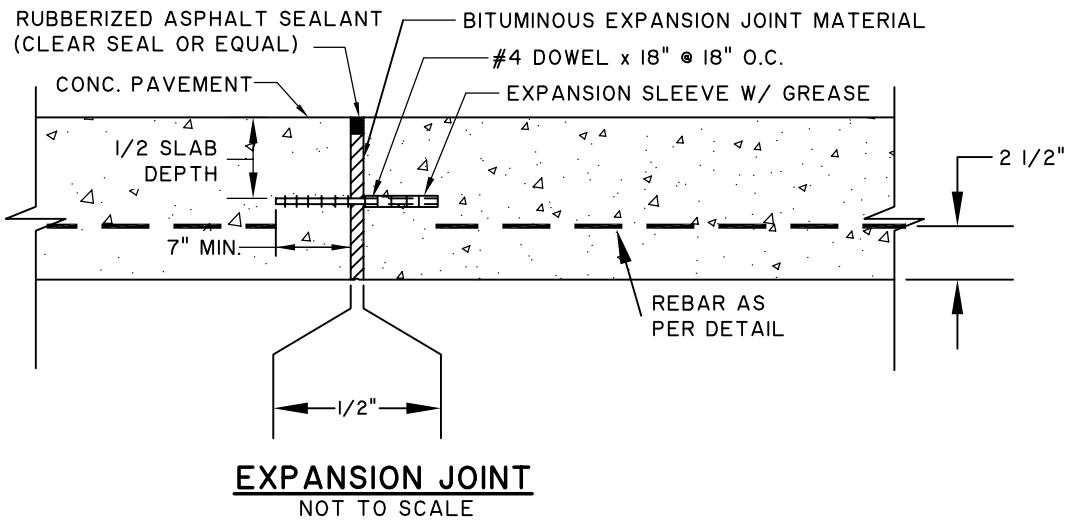
3" MIN. FROM EDGE  
OF CONCRETE

NO. 4 BARS AT  
18" O.C.E.W. SPACING



**NOTE:**

1. WHERE PROPOSED STREET AND DRIVEWAY SAW CUT LOCATIONS COINCIDE OR FALL WITHIN 3 FEET OF EXISTING CONSTRUCTION OR EXPANSION JOINTS, BREAK OUT TO EXISTING JOINT.
2. CONSTRUCTION JOINTS SHALL BE CONSTRUCTED EVERY 10' WITH EXPANSION JOINTS EVERY 40'.
3. CONTRACTOR SHALL MATCH EXISTING ELEVATIONS



**EXHIBIT III**

**TEXAS SOUTHMOST COLLEGE**

**CONCRETE PAVEMENT REPAIR DETAIL**

NOT TO SCALE

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