

The City of Edinburg is soliciting sealed bids to be received by the City Secretary's Office located at 415 W. University Drive, Edinburg, Texas 78541. City of Edinburg normal business days are Monday through Friday between the hours of 8:00 a.m. to 5:00 p.m. and shall be closed on recognized holidays.

Bids will be received until 3:00 p.m. Central Time, on Tuesday, November 2, 2021, shortly thereafter all submitted bids will be gathered and taken to the Edinburg City Hall Community Room, 1st Floor, to be publicly opened and read aloud. The bid opening shall be conducted via Zoom. Zoom meeting information may be obtained by request via email to <a href="mailto:lfuentes@cityofedinburg.com">lfuentes@cityofedinburg.com</a>. Any bid received after the closing time will not be accepted and will be returned to the bidder unopened. It is the responsibility of the bidder to see that any bid submitted shall have sufficient time to be received by the City Secretary's Office prior to the bid opening date and time. The receiving time in the City Secretary's Office will be the governing time for acceptability of the bids. Bids will not be accepted by telephone or facsimile machine. All bids must bear original signatures and figures. The Bid shall be for:

# BID NO. 2022-16 INSTALLATION OF ASPHALT WALKING TRAIL AT DOOLITTLE MUNICIPAL PARK

A pre-bid meeting will be conducted by the Owner /Engineer on Monday October 18, 2021 at 2:00 p.m. The pre-bid conference shall be conducted at the City of Doolittle Municipal Park: located at 714 Raul Longoria Rd. Edinburg, Texas 78539. Prospective Bidders are encouraged to attend.

If you have any questions or require additional information regarding this bid, please contact Mr. Tomas D. Reyna Assistant City Manager at (956) 388-8207 or by email at <a href="mailto:treyna@cityofedinburg.com">treyna@cityofedinburg.com</a>.

If Hand-delivering Bids: 415 West University Drive,

c/o City Secretary Department (1st Floor)

If using Land Courier (i.e., FedEx, UPS): City of Edinburg

c/o City Secretary 415 West University Drive Edinburg, Texas 78541

If Mailing Bids: City of Edinburg

c/o City Secretary P.O. Box 1079

Edinburg, TX 78540-1079

The City of Edinburg reserves the right to refuse and reject any or all bids and to waive any or all formalities or technicalities and to accept the bid deemed most advantageous to the City, and hold the bids for a period of <u>60</u> days without taking action.

Bids must be submitted in an envelope sealed with tape and prominently marked on the lower left hand corner of the bid envelope with corresponding bid number and title.

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# CITY OF EDINBURG INSTRUCTIONS TO BIDDERS

## **DEVIATION FROM SPECIFICATION**

Please read your specifications/requirements thoroughly and be sure that the <u>SERVICES</u> offered comply with all specifications/requirements. Any variation from the specifications/requirements must be clearly indicated by letter attached to your bid referencing variations on a point-by-point basis. If no exceptions are noted, and you are the successful bidder, it will be required that the SERVICES be provided as specified.

## **PURPOSE**

- 1. The purpose of these specifications/requirements and bidding documents is for the service of **INSTALLATION OF ASPHALT WALKING TRAIL AT DOOLITTLE MUNICIPAL PARK** for the City of Edinburg.
- 2. The <u>SERVICES</u> to be furnished under this bid shall be as specified in these bid documents. All specifications/requirements shown are minimum. There is no intention to disqualify any bidder who can meet these specifications/requirements.

## **SUBMITTAL OF BID**

Bids will be submitted in sealed envelopes upon the blank bid form attached hereto. Submit two (2) complete sets of the bid, one (1) original marked "ORIGINAL," and one (1) copy marked "COPY". Each bid must be completely filled out and SUBMITTED IN ORIGINAL FORM, complete with all supporting documentation. Bids submitted by facsimile (fax) or electronically will NOT be accepted. Submittal of a bid in response to this solicitation for Bids constitutes an offer by the Bidder. Bids which do not comply with these specifications/requirements may be rejected at the option of the City. Bids must be filled with the City of Edinburg, before opening day and hour. No late Bids will be accepted. They will be returned to Bidder unopened (if properly identified).

If Hand-delivering Bids: 415 West University Drive, c/o City Secretary Department (1st Floor)

If using Land Courier (i.e., FedEx, UPS): 415 West University Drive, c/o City Secretary Department (1st Floor), Edinburg,

Texas 78541

If Mailing Bids: P.O. Box 1079, Edinburg, TX 78540-1079

## PREPARATION OF BID

Bids MUST give full firm name and address of bidder, and be manually signed. Failure to do so will disqualify your bid. Person signing bid must show title or AUTHORITY TO BIND HIS/HER FIRM IN A CONTRACT.

Firm name and authorized signature must appear on each page that calls for this information. The legal status of the Respondent/Bidder whether corporation, partnership, or individual, shall also be stated in the bid. A corporation shall execute the bid by its duly authorized officers in accordance with its corporate by-laws and shall also list the state in which it is incorporated. A partnership Respondent/Bidder shall give full names and addresses of all partners. All partners shall execute the bid. Partnership and Individual Respondent/Bidder shall state in the bid the names and addresses of all persons with a vested interest therein. The place of residence of each Respondent/Bidder, or the office address in the case of a firm or company, with county and state and telephone number, shall be given after the signature.

## **QUESTIONS AND CLARIFICATIONS**

Questions and clarifications that change or substantially clarify the Request for Proposals will be affirmed in writing and copies will be provided to all firms on record responding to RFP. Any inquiries to this Bid must be submitted to Ms. Lorena Fuentes, Purchasing Agent, at (956) 388-1895 or at the following e-mail address: Ifuentes@cityofedinburg.com no later than March 29, 2021 at 5:00 p.m.

## **ALTERATIONS/AMENDMENTS TO BID**

Bids **CANNOT** be altered or amended after opening time. Alterations made before opening time must be initialed by

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bidder guaranteeing authenticity. No bid may be withdrawn after opening time without acceptable reason in writing and only after approval by the City of Edinburg.

### SALES TAX

State sales tax must not be included in the bid.

## **SUBSTITUTIONS**

No substitutions or cancellations will be permitted without written approval of City of Edinburg.

## **NO BID RESPONSE**

If unable to submit a bid, bidder should return inquiry giving reasons.

## **EXCEPTIONS**

Any additions, deletions, or variations from the following specifications/requirements must be noted. The bidder shall attach to his/her bid sheet a list of any exceptions to the specifications/requirements if unable to do so, on specification sheet.

## **BRAND OR MANUFACTURER REFERENCE**

Unless otherwise specified, any catalog or manufacturer's reference or brand name used in describing an item is merely descriptive, and not restrictive, and is used only to indicate type and style of product desired. Bids on alternate brands will be considered if they meet specification requirements. If a bidder quotes on equipment other than the one(s) specified in the bid, sufficient specifications and descriptive (pictured literature) data must accompany same to permit thorough evaluation. In the absence of these qualifications, he/she will be expected to furnish the product called for.

## **DELIVERY**

Number of days required to deliver <u>SERVICES</u> after receiving order must be stated in the bid. Failure to so state will obligate bidder to complete service delivery within <u>ONE</u> day.

## **DELAY IN SERVICE DELIVERY**

When delay can be foreseen, Bidder shall give prior notice to City of Edinburg. Bidder must keep City of Edinburg advised at all times of status of order. Default in promised service delivery (without acceptable reasons) or failure to meet specifications/requirements, authorizes the City of Edinburg to purchase such <u>SERVICES</u> elsewhere and charge increase in cost to defaulting <u>vendor</u>. Acceptable reasons for delayed delivery are as follows: Acts of God (floods, tornadoes, hurricanes, etc.), acts of government, fire, strikes, war; Actions beyond the control of the successful bidder.

## SERVICE DELIVERED PRICING

Bids in units of quantity specified - extend and show total. In the event of discrepancies in extension, unit prices will govern. Bids subject to unlimited price increase will not be considered.

## **VALID BID TIME FRAME**

The City may hold bids <u>60</u> days after bid opening without taking action. BIDDERS shall be required to hold their Bids firm for the same period of time.

## RIGHT TO REJECT/AWARD

The City of Edinburg reserves the right to refuse and reject any or all Bids, and to waive any or all formalities or technicalities, and to make such awards of contract as may be deemed to be the best and most advantageous to the City of Edinburg.

## **MULTIPLE VENDOR CONTRACTS**

Bidders are advised that the City of Edinburg may award Service Contracts to multiple vendors based on low bid per

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item basis. All items specified on the "Bid Form" <u>must</u> reflect the individual unit prices. The City of Edinburg reserves the right to award all items individually or in any combination thereof. The City reserves the right to award each item separately or individually, award to one or multiple vendors, and accept the proposal deemed most advantageous to the City.

## INDEMNIFICATION CLAUSE

The Bidder agrees to indemnify and save harmless the City, from all suits and actions of every nature and description brought against them or any of them, for or on account of the use of patented appliances, products or processes, and he shall pay all royalties and charges which are legal and equitable. Evidence of such payment or satisfaction shall be submitted upon request of the Purchasing Agent, as a necessary requirement in connection with the final estimate for payment in which such patented appliance, products or processes are used.

## **ADDENDA**

Bidder shall carefully examine the bid forms, specifications/requirements, and instructions to Bidders. Should the bidder find discrepancies in, or omissions from bid forms, specifications/requirements, or other documents, or should he/she be in doubt as to their meaning, he/she should at once notify the Purchasing Agent at 956-388-1895 and obtain clarification by addendum prior to submitting any bid. Explanations, interpretations, and supplemental instructions shall be in the form of written Addenda which shall become a part of the Contract documents. Said Addenda shall be mailed, e-mailed, hand delivered and/or faxed, to all prospective Bidders. All Addenda issued in respect to this project shall be considered official changes to the original bid documents. Verbal statements in response to inquiries and/or requests for explanations shall not be authoritative nor binding. It shall be the Bidder(s) responsibility to ensure that they have received all Addenda in respect to this project. Furthermore, Bidders are advised that they must recognize, comply with, and attach a signed copy of each Addendum which shall be made part of their Bid Submittal. Bidder(s) signature on Addenda shall be interpreted as the bidder's "recognition and compliance to" official changes as outlined by the City of Edinburg and as such are made part of the original solicitation documents. Failure of any bidder to receive any such addendum or interpretation shall not relieve such Bidder from its terms and requirements. The City may issue a written addendum no later than five calendar days prior to the date bids must be received. Addendums are available online at <a href="https://www.cityofedinburg.com">www.cityofedinburg.com</a>.

## **PAYMENT**

The City of Edinburg will execute payment by mail in accordance with the State of Texas Pay Law after <u>SERVICES</u> have been provided and invoiced. No other method of payment will be considered.

## **SYNONYM**

Where in this bid package <u>ITEMS</u> OR <u>SERVICES</u> is used its meaning shall refer to the service of **INSTALLATION OF ASPHALT WALKING TRAIL AT DOOLITTLE MUNICIPAL PARK** as specified.

## **ASSIGNMENT**

Neither the Bidder's contract nor payment due to an awarded vendor may be assigned to a third party without the written approval of the Purchasing Department for the City of Edinburg.

### INTERPRETATIONS

Any questions concerning the conditions and/or specifications/requirements with regards to this solicitation for Bids shall be directed to the designated individuals as outlined in the Request for Bids. Such interpretations, which may affect the eventual outcome of this request for Bids, shall be furnished in writing to all prospective Bidders via Addendum. No interpretation shall be considered binding unless provided in writing by the City of Edinburg in accordance with paragraph entitled "Addenda".

## STATUTORY REQUIREMENTS

It shall be the responsibility of the successful Bidder to comply with all applicable State & Federal laws, Executive Orders and Municipal Ordinances, and the Rules and Regulations of all authorities having jurisdiction over the work to

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be performed hereunder and such shall apply to the contract throughout, and that they will be deemed to be included in the contract as though written out in full in the contract documents. (To include issues related to health, environmental, and safety to name a few.)

## **BIDDER'S EMPLOYEES**

Neither the Bidder nor his/her employees engaged in fulfilling the terms and conditions of this Purchase Contract shall be considered employees of the City. The method and manner of performance of such undertakings shall be under the exclusive control of the vendor on contract. The City shall have the right of inspection of said undertakings at any time.

## **RIGHT TO WAIVE**

City of Edinburg reserves the right to waive or take exception to any part of these specifications/requirements when in the best interest of the City of Edinburg.

## **COOPERATIVE PRICING**

Bidders are advised that in addition to responding to our "local" solicitation for bids/Bids with Dealer pricing, vendors/contractors are encouraged to provide pricing on the below referenced items/products/services based on BuyBoard, TX-MAS, H-GAC and/or any other State of Texas recognized and approved cooperative which has complied with the bidding requirements for the State of Texas. If bidding other than or in addition to "dealer" pricing, kindly duplicate the bid forms for each bid being provided from a cooperative contract. Any and all applicable fees must be included. All cooperative pricing must be submitted on or before bid opening date and hour.

## TIME ALLOWED FOR ACTION TAKEN

The City of Edinburg may hold bids <u>60</u> days after the opening of Bids without taking action. Bidders are required to hold their Bids firm for same period of time.

## PREPARATION OF BID

The City of Edinburg shall not be held liable for any costs incurred by any bidder for work performed in the preparation of and production of a bid or for any work performed prior to execution of contract.

## **CONFIDENTIAL INFORMATION**

Any information deemed to be confidential by the bidder should be clearly noted on the pages where confidential information is contained; however, the City cannot guarantee that it will not be compelled to disclose all or part of any public record under Texas Public Information Act, since information deemed to be confidential by the bidder may not be considered confidential under Texas Law, or pursuant to a Court order.

## **VERBAL THREATS**

Any threats made to any employee of the City, be it verbal or written, to discontinue the providing of item/material/services for whatever reason and/or reasons shall be considered a breach of contract and the City will immediately sever the contract with the Vendor on contract.

#### MATHEMATICAL ERRORS

In the event that mathematical errors exist in any bid, unit prices/rates -v- totals, unit prices/rates will govern.

#### AUDIT

The City of Edinburg reserves the right to audit the vendor's books and records relating to the performance of this contract. The City of Edinburg, at its own expense, shall have the right at all reasonable times during normal business hours and upon at least twenty-four (24) hours' advance notice, to audit, to examine, and to make copies of or extracts from the books of account and records maintained by the vendor(s) with respect to the Supply/Service and/or Purchase Contract. If such audit shall disclose overpayment by City to vendor, written notice of such overpayment

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shall be provided to the vendor and the amount of overpayment shall be promptly reimbursed by vendor to the City. In the event any such overpayment is not paid within ten (10) business days after receipt of such notice, the unpaid amount of such overpayment shall bear interest at the rate of one percent (1%) per month from the date of such notice until paid.

## **PAST PERFORMANCE**

Vendor's past performance shall be taken into consideration in the evaluation and award of Service Contract for the Purchase of SERVICES.

## **JURISDICTION**

Contract(s) executed as part of this solicitation shall be subject to and governed under the laws of the State of Texas. Any and all obligations and payments are due and performable and payable in Hidalgo County, Texas.

## **VENUE**

The parties agree that venue for purposes of any and all lawsuits, cause of action, arbitration, and/or any other dispute(s) shall be in Hidalgo County, Texas.

IF YOU HAVE ANY QUESTIONS ABOUT COMPLIANCE, PLEASE CONSULT YOUR OWN LEGAL COUNSEL. COMPLIANCE IS THE INDIVIDUAL RESPONSIBILITY OF EACH PERSON OR AGENT OF A PERSON WHO IS SUBJECT TO THE FILING REQUIREMENT. AN OFFENSE UNDER CHAPTER 176 IS A CLASS "C" MISDEMEANOR.

## **CONFLICT OF INTEREST**

CHAPTER 176 OF THE TEXAS LOCAL GOVERNMENT CODE

Effective January 1, 2006, Chapter 176 of the Texas Local Government Code requires that any vendor or person considering doing business with a local government entity disclose in the Questionnaire Form CIQ, the vendor or person's affiliation or business relationship that might cause a conflict of interest with a local government entity. By law, this questionnaire must be filed with the records administrator of the City of Edinburg not later than the 7<sup>th</sup> business day after the date the person becomes aware of facts that require the statement be filed. See Section 176.006, Local Government Code. A person commits an offense if the person violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor. For more information or to obtain Questionnaire CIQ go to the Texas Ethics Commission web page at <a href="https://www.ethics.state.tx.us/forms/CIQ.pdf">www.ethics.state.tx.us/forms/CIQ.pdf</a>.

## **CERTIFICATE OF INTERESTED PARTIES (Form 1295)**

In 2015, the Texas Legislature adopted <u>House Bill 1295</u>, which added section 2252.908 of the Government Code. The law states that a governmental entity or state agency may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties to the governmental entity or state agency at the time the business entity submits the signed contract to the governmental entity or state agency. The law applies only to a contract of a governmental entity or state agency that either (1) requires an action or vote by the governing body of the entity or agency before the contract may be signed or (2) has a value of at least \$1 million. The disclosure requirement applies to a contract entered into on or after January 1, 2016. For more information go to the Texas Ethics Commissionweb page at <a href="https://www.ethics.state.tx.us/forms/CIQ.pdf">www.ethics.state.tx.us/forms/CIQ.pdf</a>.

## **HB 89**

The 85th Texas Legislature approved new legislation, effective Sept. 1, 2017, which amends Texas Local Government Code Section 1. Subtitle F, Title 10, Government Code by adding Chapter 2270 which states that a governmental entity may not enter into a contract with a company for goods or services unless the contract contains a written verification from the company that it:

- 1) does not boycott Israel; and
- 2) will not boycott Israel during the term of the contract

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## **AWARD**

For purposes of this project, award will be contingent on approval of budget.

## CONSIDERATION OF LOCATION OF BIDDER'S PRINCIPAL PLACE OF BUSINESS

The City may give local vendors, whose principal place of business is located within the City of Edinburg, and whose bid is within five percent (5%) of the lowest bid price preference as allowed by Section 271.9051 of the Local Government Code

## SPECIAL CIRCUMSTANCES

In the event that the City of Edinburg has an immediate need for a particular service(s) that is/are on contract and the successful vendor on contract is not able to meet the special service delivery needs of the City of Edinburg, the City of Edinburg reserves the right to purchase such services elsewhere to fulfill its' immediate need.

## TERMINATION OF CONTRACT

The City of Edinburg reserves the right to terminate the contract if, in the opinion of the City of Edinburg, the successful vendor's performance is not acceptable, if the City is being repeatedly over charged, improperly charged, no funds are available, or if the City wishes, without cause, to discontinue this contract. Termination will be in written form allowing a 30-day notice. The bidder shall be afforded the same right to terminate this contract in the same manner.

## STANDARD INSURANCE REQUIREMENTS

Staff may waive insurance requirements for contracts \$0 - \$4,999.99, including but not limited to contracts for food, materials, supplies, and construction. Workers' Compensation in amounts which satisfy statutory coverage shall be required for construction projects.

The following insurance requirements will be included in all City contracts of \$5,000 - \$14,999.99. In contracts not involving building and construction projects, as that activity is defined in TEX. LABOR CODE §406.096, contractors may obtain alternative form of worker accident insurance with minimum limits of liability of \$100,000 per claim.

Minimum Insurance Requirements			
Type of Coverage	Limits of Liability		
Worker's Compensation	Statutory Coverage		
Comprehensive General Liability (City named as additional insured) Bodily Injury Property Damage	\$250,000 each person/\$500,000 each occurrence \$100,000 each occurrence/\$100,000 aggregate or \$500,000 combined single limits		

The following insurance requirements will be included in all City contracts of \$15,000 or more.

- (1) The successful bidder will be required to carry the following insurance coverage and limits of coverage, as well as list the City as an additional insured to liability coverage as requested by the City. In addition, the successful bidder shall provide the City with evidence of coverage and furnish acceptable proof of payment of insurance premiums.
- (2) The successful bidder will be required to secure and/or have insurance coverage in force with an admitted property and casualty insurance company licensed by the State of Texas to conduct business in the State of Texas.
- (3) In contracts not involving building and construction projects, as that activity is defined in TEX. LABOR CODE §406.096, contractors may obtain alternative form of worker accident insurance with minimum limits of liability of \$100,000 per claim.

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Minimum Insurance Requirements			
Type of Coverage	Limits of Liability		
Worker's Compensation	Statutory Coverage		
Employer's Liability	Bodily Injury by Accident: \$100,000 each accident		
	Bodily Injury by Disease: \$100,000 each employee/\$500,000 policy limit		
Comprehensive General Liability Bodily Injury	\$250,000 each person/\$500,000 each occurrence		
Property Damage	\$100,000 each occurrence/\$100,000 aggregate or \$500,000 combined single limits		
Comprehensive Auto Liability Bodily Injury	\$100,000 each person/\$500,000 each occurrence		
Property Damage	\$100,000 each occurrence/\$100,000 aggregate or \$500,000 combined single limits		
City's Protective Liability Bodily Injury	\$250,000 each person/\$500,000 each occurrence		
Property Damage	\$100,000 each occurrence/\$100,000 aggregate or \$500,000 combined single limits		

Policies must name the City of Edinburg as an Additional Insured.

Certificates of insurance naming the CITY as an additional insured shall be submitted to the CITY for approval prior to any services being performed by Contractor. Each policy of insurance required hereunder shall extend for a period equivalent to, or longer than the term of the Contract, and any insurer hereunder shall be required to give at least thirty (30) days written notice to the CITY prior to the cancellation of any such coverage on the termination date, or otherwise. This Contract shall be automatically suspended upon the cancellation, or other termination, of any required policy of insurance hereunder, and such suspension shall continue until evidence that adequate replacement coverage is provided to the CITY. If replacement coverage is not provided within thirty (30) days following suspension of the Contract, the Contract shall automatically terminate.

## BID BOND REQUIREMENTS - CONSTRUCTION PROJECTS ONLY

If the contract amount is over twenty-five-thousand dollars (\$25,000) for construction of the project, the successful bidder shall provide a bid guarantee, give a good and sufficient bond in the full amount of the contract price for the faithful performance of such contract, executed by a surety company authorized to do business in the State of Texas, in accordance with Article 5160, Vernon's Texas Civil Statutes, and amendments thereto. A payment bond in the full amount of the contract price to assure payment shall be required by law of all persons supplying labor and material in the execution of the project provided for in the contract documents.

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A bid guarantee equivalent to five percent (5%) of the bid price will be required from each bidder. The "bid guarantee" shall consist of a firm commitment, such as a bid bond, certified check or other negotiable instrument accompanying a

bid as assurance that the bidder will upon acceptance of his/her bid, execute such contractual documents as may be required within the time specified.

A performance bond on the part of the contractor for one-hundred percent (100%) of the contract price will be required. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

A payment bond on the part of the contractor for one-hundred percent (100%) of the contract price will be required. A "payment bond" is one executed in connection with a contract to assure payment, as required by law, of all persons supplying labor and material in execution of the work provided for in the contract documents.

Bidders are expressly advised to review the contract documents fully and insurance requirements of the proposed contract as to their legal requirements and the causes which may lead to the disqualification of a bidder and/or rejection of a bid proposal. No bid may be withdrawn within a period of sixty (60) days after the dated fixed for opening the bids. Unless all bids are rejected, the Owner will give Notice of Award of Contract to the successful bidder as soon as possible consistent with the time for a thorough analysis of bids submitted. Bidders are expected to inspect the site of work and to inform themselves regarding all local conditions which may affect their bid.

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## **HOUSE BILL 89 VERIFICATION**

I,, the u	undersigned representative of
to as company) being an adult over the age of eighteen (18) years above, under the provisions of Subtitle F, Title 10, Government Coefficients	
1. Does not boycott Israel currently; and	
2. Will not boycott Israel during the term of the contract.	
3) Is not currently listed on the State of Texas Comptrolle located at <a href="https://comptroller.texas.gov/purchasing/publica">https://comptroller.texas.gov/purchasing/publica</a>	
Pursuant to Section 2270.001, Texas Government Code:	
1. "Boycott Israel" means refusing to deal with, terminating business activis intended to penalize, inflict economic harm on, or limit commercial relation entity doing business in Israel or in an Israeli-controlled territory, but dibusiness purposes; and	tions specifically with Israel, or with a person
2. "Company" means a for-profit sole proprietorship, organization, associal limited partnership, limited liability partnership, or any limited liability commajority-owned subsidiary, parent company or affiliate of those entities of profit.	npany, including a wholly owned subsidiary,
SIGNATURE OF COMPANY REPRESENTATIVE:	
TYPE/PRINT NAME AND TITLE:	
DATE:	

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## **BID PROPOSAL FORM**

BID NO. 2022-16
INSTALLATION OF NEW WALKING TRAIL
FOR DOOLITTLE MUNICIPAL PARK
EDINBURG, TEXAS
2021

MR. TOMAS D. REYNA ASSISTANT CITY MANAGER CITY OF EDINBURG 415 W. University Dr. EDINBURG, TEXAS 78541

The undersigned, as bidder(s), declares that the only person or parties interested in this proposal as principals are those named herein, that this proposal is made without collusion with any other person, firm or corporation; that he has carefully examined the Form of Contract, Notice to Bidders, thereon referred to, and has carefully examined the locations, and conditions and classes of materials of the proposed work; and agrees that he will provide all the necessary labor, machinery, tools, and apparatus, and other items incidental to construction, and will do all the work and furnish all the materials called for in the contract and specifications in the manner prescribed therein and according to the requirements of the Engineer/Architect as therein set forth.

It is understood that the following quantities of work to be done at unit prices are approximate only and are intended principally to serve as a guide in evaluating bids.

It is further agreed that the quantities of work to be done at unit price and materials to be furnished, may be increased or diminished as may be considered necessary, in the opinion of the Engineer, to complete the work fully as planned and contemplated, and that all quantities of the work, whether increased or decreased, are to be performed at the unit prices set forth below except as provided for in the specifications.

It is further agreed that lump sum prices may be increased to cover additional work ordered by the Engineer, but not shown on the plans or required by the specifications, in accordance with the provisions of the General Conditions. Similarly, they may be decreased to cover deletion of work so ordered.

The 5% bid security accompanying this proposal shall be returned to the bidder, unless in case of the acceptance of the proposal the bidder shall fail to execute a contract and file a performance bond and payment bond within the ten (15) days after its acceptance, in which case the bid security shall become the property of the OWNER, and shall be considered as payment for damages due to delay and other inconveniences suffered by the Owner on account of such failure of the bidder. It is understood that the Owner reserves the right to reject any or all bids.

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# ORIGINAL BID PROPOSAL FORM MUST BE SUBMITTED ALONG WITH THE BID AND CONTRACT DOCUMENTS BOOKLET

	RS BOND in		ount of \$,(5%) of the greate DERS.	est amount bid	in compliance with
the eve			or Bidder's Bond is to become the property contract (when offered by the Owner) and b		
			IMPORTANT NOTE: g the method UNIT ITEMS are to be MEASI T AND BASIS OF PAYMENT" Section atta Proposal.		
ESTIM	IATED QUAN	ITITIES:			
1.	INSTALLAT	ION OF	ASPHALT WALKING TRAIL:		
Item No.	Estimated Quantity	Unit	Item Description	Unit Price	Total
1.	2,220	LF	PREPARATION OF TRAIL AND PAVING Clearing, Demolition, grubbing, trees and shrub removal, removal of existing subgrade, trail excavation, trail filling, fine grading, including compaction, all necessary additional fills and cuts, hauling and spreading of select material and asphalt paving at the areas indicated in the exhibit and from ROW line to ROW line or to the limits shown on the exhibit.	\$	\$
		TION O	F ASPHALT WALKING TRAIL	\$	
(ITEMS	S 1)				
GRAND TOTAL: IMPROVEMENTS \$					
			WARDED ON A UNIT PRICE. ABOVE QU EASE OR DECREASE ACCORDING TO FU		
coi ad	nsider each it	em subr	s the right to accept or reject bids submitted mitted as a separate bid, award all or individuy, and to hold the bids for a period of sixty (6)	ually, whicheve	r may be more
Th	e Number of	Calenda	r days to complete contract 45.		
Th	e undersiane	d agree	s. unless hereinafter stated otherwise to fu	ırnish all mate	rials as shown

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Bidder hereby agrees to commence work under this contract within <u>10</u> days after "NOTICE TO PROCEED" is issued, and to complete all the work in the Contract within <u>90</u> Calendar Days,

and specified in the Plans and Specifications.

except Saturdays, Sundays and City recognized holidays.

The undersigned bidder acknowledges the receipt of the following addenda:

ADDENDUM NO.	DATE	BY
ADDENDUM No. 1		
ADDENDUM No. 2		
ADDENDUM No. 3		
ADDENDUM No. 4		

ADDENDUM No. 4	
Respectfully Submitted:	
DATE:	-
BY:(Signature)	-
(Type or Print Name)	-
(Title)	-
(Company)	-
(Address)	-
(City, State, Zip)	-
(Phone Number)	-
(E-Mail)	-
(Seal – If Bidder is a Corporation)	

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Edinburg

# EDINBURG MUNICIPAL PARK EAST POND TRAIL



CITY OF EDINBURG POP. 100,243

**VICINITY** N.T.S.

## **EDINBURG CITY COMMISSION**

**RICHARD MOLINA JORGE SALINAS JOHNNY GARCIA DAVID WHITE RON GARZA** 

**MAYOR MAYOR PRO-TEM COUNCIL MEMBER COUNCIL MEMBER CITY MANAGER** 

## **SHEET INDEX**

SHEET 1 **COVER SHEET** 

SHEET 2 ASPHALT TRAIL LAYOUT **AND DETAIL** 



LOCATION

N.T.S.



## **Map Disclaimer:**

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## Legend:



## **EDINBURG MUNICIPAL PARK EAST POND TRIAL**

**COVER SHEET** 

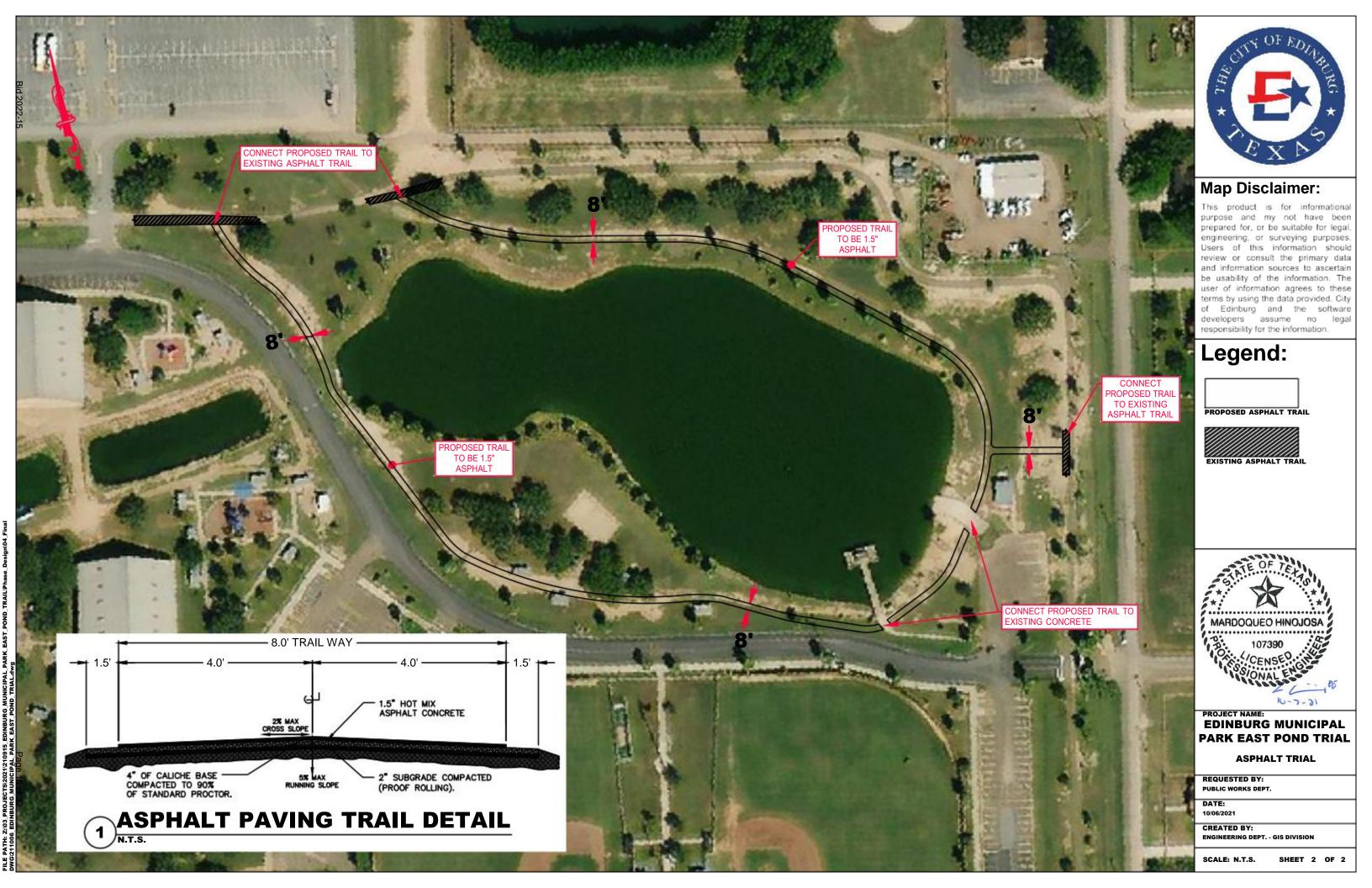
REQUESTED BY: PUBLIC WORKS DEPT.

DATE: 10/06/2021

CREATED BY:

**ENGINEERING DEPT. - GIS DIVISION** 

SCALE: N.T.S. SHEET 1 OF 2



#### Section 02047

#### **FLEXIBLE BASE**

#### PART 1 GENERAL

## 1.01 SECTION INCLUDES

This work shall consist of furnishing and placing a foundation course for surface courses or for other base courses.

## 1.02 MEASUREMENT AND PAYMENT

#### A. Unit Prices.

- 1. Flexible base will be measured by the square yard of surface area of completed, placed thickness and accepted work based on the width of flexible base as shown on the plans. However, for this project it will be subsidiary to the only line item.
- 2. The accepted quantities of flexible base of the type, grade, and compaction method specified will be paid at the contract unit price per square yard, complete in place.
- 3. All sprinkling, rolling, and manipulation required will not be paid for directly, but will be considered incidental work.
- 4. Passing "Density Control" tests shall be paid by the OWNER. Failing "Density Control" tests shall be paid by the CONTRACTOR.
- 5. The unit prices bid shall each be full compensation for shaping and fine grading the roadbed; for securing and furnishing all materials, including all royalty and freight involved; for furnishing scales and labor involved in weighing the material when required; for loosening, blasting, excavating, screening, crushing and temporary stockpiling when required; for loading all materials for all hauling and delivering. on the road; for spreading, mixing, blading, dragging, shaping and finishing and for all manipulation, labor, tools and incidentals necessary to complete the work.
- 6. Refer to Section 01270 Measurement and Payment for unit price procedures.
- B. Stipulated Price (Lump Sum). If Contract is Stipulated Price Contract, payment for work in this Section is included in total Stipulated Price.

#### 1.03 SUBMITTALS

- A. Conform to requirements of Section 01330 Submittal Procedures.
- B. Submit material and details of following items for approval:

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- 1. Proposed material source location
- 2. Proctor of the material
- 3. Liquid Limit of the material
- 4. Plasticity Index of the material
- 5. Wet Ball Mill of the material
- 6. Gradation of the material

#### PART 2 PRODUCTS

## 2.01 MATERIALS

- A. Flexible base shall be composed of either caliche (argillaceous limestone, calcareous or calcareous clay particles, with or without stone, conglomerate, gravel, sand or other granular materials), crushed stone, or gravel.
- B. When lime stabilization of the sub-grade is specified, the flexible base is to be added in accordance with Section 260, Lime stabilization.
- C. Materials for flexible base shall be crushed as necessary to comply with the requirements hereinafter specified.
- D. Materials shall consist of durable course aggregate particles mixed with approved binding materials.

### 2.02 FLEXIBLE BASE LIME STABILIZATION

Where shown on the plans, or directed by the ENGINEER, material for flexible base shall be lime stabilized in accordance with the provisions of Section 020XX – Lime Stabilization.

## 2.03 FLEXIBLE BASE TYPES

**Material Types**. Do not use fillers or binders unless approved. Furnish the type specified on the plans in accordance with the following:

- **Type A**. Crushed stone produced and graded from oversize quarried aggregate that originates from a single, naturally occurring source. Do not use gravel or multiple sources.
- **Type B**. Crushed or uncrushed gravel. Blending of 2 or more sources is allowed.
- **Type C**. Crushed gravel with a minimum of 60% of the particles retained on a No. 4 sieve with 2 or more crushed faces as determined by Tex-460-A, Part I. Blending of 2 or more sources is allowed.

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**Type D**. Type A material or crushed concrete. Crushed concrete containing gravel will be considered Type D material. Crushed concrete must meet the requirements in Section 247.2.1.3.2., "Recycled Material (Including Crushed Concrete) Requirements," and be managed in a way to provide for uniform quality. The Engineer may require separate dedicated stockpiles in order to verify compliance.

**Type E**. Caliche, iron ore or as otherwise shown on the plans.

## TABLE 1

Property	Test Method	Grade 1–2	Grade 3	Grade 4 <sup>2</sup>	Grade 5
Sampling	Tex-400-A				
Master gradation sieve size (cumulative % retained)					
2-1/2"		0	0		0
1-3/4"	Tex-110-F	0–10	0–10		0–5
7/8"	Tex-110-E	10-35	_	As shown on	10-35
3/8"		30-65	_	the plans	35-65
#4		45–75	45–75		45–75
#40		65-90	50-85		70–90
Liquid Limit, % Max	Tex-104-E	40	40	As shown on the plans	35
Plasticity Index, Max <sup>1</sup>	Tex-106-E	10	12	As shown on the plans	10
Plasticity index, Min <sup>1</sup>	1 ex-100-E	As shown on the plans	As shown on the plans	As shown on the plans	As shown on the plans
Wet ball mill, % Max	Tex-116-E	40	_	As shown on the plans	40
Wet ball mill, % Max increase passing the #40 sieve	Tex-110-⊑	20	_	As shown on the plans	20
Min compressive strength, psi					
lateral pressure 0 psi	Toy 117 E	35	_	As shown on	_
lateral pressure 3 psi	16Y-11/-F		_	the plans	90
lateral pressure 15 psi		175	_		175

## 2.04 PHYSICAL REQUIREMENTS

A. All flexible bases shall, when tested in accordance with standard laboratory test procedures, meet the physical requirements set forth in Table 1.

B. Testing of flexible base materials shall be in accordance with the following test procedures:

TEST	TESTING PROCEDURE
Preparation for soil constants and sieve analysis	TEX-101-E
Liquid Limit	TEX-104-E
Plastic Limit	TEX-105-E

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Plasticity Limit TEX-106-E

Sieve Analysis TEX-110-E

Wet Ball Mill TEX-116-E

Triaxial Test TEX-117-E (Part I or II)

C. Unless otherwise specified on the plans, samples for testing the material for Soil Constants, Gradation and Wet Ball Mill shall be taken prior to the compaction operations.

D. Unless otherwise specified on the plans, samples for triaxial tests shall be taken from the stockpile or from production, as directed by the ENGINEER, where stockpiling is required and from production where stockpiling is not required.

## 2.05 MATERIAL TOLERANCES

- A. The limits establishing reasonable close conformity with the specified gradation and plasticity index are defined by the following:
  - 1. The ENGINEER may accept the material, providing not more than 2 of 10 consecutive gradation tests performed are outside the specified limits on any individual or combination of sieves by no more than 5% and where no two consecutive tests are outside the specified limits.
  - 2. The ENGINEER may accept the material providing not more than 2 of 10 consecutive plasticity index samples tested are outside the specified limit by no more than two points and where no two consecutive tests are outside the specified limit.

## 2.05 STOCKPILING:

- A. When specified on the plans, the material shall be stockpiled prior to delivery on the road. The stockpile shall be not less than the height indicated and shall be made up of layers of material not to exceed the depth shown on the plans.
- B. After a sufficient stockpile has been constructed as specified on the plans, the CONTRACTOR may proceed with loading from the stockpile for delivery to the road.
- C. In loading from the stockpile for delivery to the road, the material shall be loaded by making successive vertical cuts through the entire depth of the stockpile.
- D. If the CONTRACTOR elects to produce the Type "A" material from more than one material or more than one source, each material shall be crushed separately and placed in separate stockpiles so that at least 75 percent of the material in the course aggregate stockpiles will be retained on the No. 4 sieve and at least 70 percent of the material in the fine aggregate

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stockpile will pass the No. 4 sieve.

- E. The materials shall be combined in a central mixing plant in the proportions determined by the ENGINEER to produce a uniform mixture which meets all of the requirements of the specification. In the event that combinations of the materials produced fail to meet all of the specification requirements, the CONTRACTOR will be required to secure other materials which will meet specifications requirements.
- F. The central mixing plant shall be either the batch or continuous flow type, and shall be equipped with feeding and metering devices which will add the materials into the mixer in the specified quantities.
- G. Mixing shall continue until a uniform mixture is obtained.

## **PART 3 - EXECUTION**

#### 3.01 PREPARATION OF SUBGRADE:

- A. Flexible base shall be constructed as specified herein in one or more courses in conformance with details, lines and grades shown on the plans, and as established by the ENGINEER.
- B. Type roadbed shall be excavated and shaped in conformity with the typical sections shown on the plans and to the lines and grades as established by the ENGINEER.
- C. All unstable or otherwise objectionable material shall be removed from the subgrade and replaced with approved material.
- D. All holes, ruts and depressions shall be filled with approved material and, if required, the subgrade shall be thoroughly wetted with water and reshaped and rolled to the extent directed in order to place the subgrade in an acceptable condition to receive the base material.
- E. The surface of the subgrade shall be finished to line and grade as established and in conformity with the typical section shown on plans, and any deviation in excess of 1/2 inch in cross section and in a length of 16-feet measured longitudinally shall be corrected by loosening, adding or removing material, reshaping and recompacting by sprinkling and rolling.
- F. Sufficient subgrade shall be prepared in advance to insure satisfactory prosecution of the work.
- G. Material excavated in the preparation of the subgrade shall be utilized in the construction of adjacent shoulders and slopes or otherwise disposed on as directed, and any additional material required for the completion of the shoulders and slopes shall be secured from sources indicated on plans or as directed by the Engineer.

## 3.02 PLACEMENT OF FIRST COURSE - ALL MATERIAL TYPES

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- A. Immediately before placing the base material, the subgrade shall be checked as to conformity with grade and section.
- B. The material shall be delivered in approved vehicles of a uniform capacity, and it shall be the charge of the CONTRACTOR that the required amount of specified material shall be delivered in each 100- foot station.
- C. Material deposited upon the subgrade shall be spread and shaped the same day.
- D. In the event inclement weather or other unforeseen circumstances render impractical the spreading of the material during the first 24-hour period, the materials shall be scarified and spread as directed by the Engineer.
- E. The material shall be sprinkled, if directed, and shall then be bladed, dragged and shaped to conform to typical sections as shown on plans.
- F. All areas and "nests" of segregated coarse or fine material shall be corrected to removed and replaced with well graded material, as directed by the ENGINEER.
- G. If additional binder is considered desirable or necessary after the material is spread and shaped, it shall be furnished and supplies in the amount directed by the ENGINEER. Such binder material shall be carefully and evenly incorporated with the material in place by scarifying, harrowing, brooming or by other approved methods.
- H. The course shall be compacted by method of compaction hereinafter specified as the "Ordinary Compaction" method or the "Density Control" method of compaction as indicated on the plans, or as directed by the ENGINEER.
  - 1. When the "Ordinary Compaction" method is to be used, the following provisions shall apply:
    - a. The course shall be sprinkled as required and rolled as directed until a uniform compaction is secured. Throughout this entire operation, the shape of the course shall be maintained by blading and the surface upon completion shall be smooth and in conformity with the typical sections shown on plans and to the established lines and grades.
    - b. In that area on which pavement is to be placed, any deviation in excess of 1/4 inch in cross section in a length of 16 feet measured longitudinally shall be corrected by loosening, adding or removing material, reshaping and recompacting by sprinkling and rolling.
    - c. All irregularities, depressions or weak spots which develop shall be corrected immediately by scarifying the areas affected, adding suitable material as required, reshaping and recompacting by sprinkling and rolling.

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- 2. When the "Density Control" method of compaction is to be used, the following provisions shall apply:
  - a. The course shall be sprinkled as required and compacted to the extent necessary to provide not less than the percent density as hereinafter specified under "Density".
  - b. In addition to the requirements specified for density, the full depth of the flexible base shown on the plans shall be compacted to the extent necessary to remain firm and stable under construction equipment.
  - c. After each section of flexible base is completed, density tests shall be performed as required by the ENGINEER. If the material fails to meet the density requirements, it shall be reworked as necessary to meet the density requirements.
  - d. Throughout this entire operation, the shape of the course shall be maintained by blading, and the surface upon completion shall be smooth and in conformity with the typical sections shown on the plans and to the established lines and grades.
  - e. In that area on which pavement is to be placed, any deviation in excess of 1/4 inch in cross section in a length of 16 feet measured longitudinally shall be corrected by loosening, adding or removing material, reshaping and recompacting by sprinkling and rolling.
  - f. All irregularities, depressions or weak spots which develop shall be corrected immediately by scarifying the areas affected, adding suitable material as required, reshaping and recompacting by sprinkling and rolling.
- I. Should the base course, due to any reason or cause, lose the required stability, density or finish before the surfacing is complete, it shall be recompacted and refinished at the sole expense of the CONTRACTOR.

#### 3.05 PLACEMENT OF SUCCEEDING COURSES - ALL MATERIAL TYPES

- A. Construction methods shall be the same as prescribed for the first course.
- B. Prior to placing the surfacing on the completed base, the base shall be "dry cured" to the extent directed by the ENGINEER.

#### 3.06 DENSITY CONTROL

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- A. When the "Density Control" method of compaction is indicated on the plans, each course of flexible base shall be compacted to the percent density shown on the plans.
- B. The testing will be as outlined in TX DOT Test Method Tex-114-E.
- C. It is the intent of this specification to provide the base material below the finished surface of the roadway not less than 98 percent of the density as determined by the compaction ratio method.
- D. Field density determination shall be made in accordance with TX DOT Test Method Tex-115-E.

#### 3.07 TOLERANCES

- A. When tolerances are permitted by the plans, the limits establishing reasonable close conformity with percent density specified are defined by the following:
  - 1. The ENGINEER may accept the work providing not more than 25 percent of the density tests performed each day are outside the specified density by no more than three pounds per cubic foot and where no two consecutive tests on continuous work are outside the specified limits.

## **END OF SECTION**

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#### 02210 - SUBGRADE PREPARATION

#### PART 1 – GENERAL

**Description.** Mix and compact water and sub-grade or base (with or without asphaltic concrete pavement) in the roadway.

#### PART 2 – MATERIALS

**Materials.** Furnish uncontaminated materials of uniform quality that meet the requirements of the plans and specifications. Notify the Engineer of the proposed material sources and of changes to material sources. Obtain verification from the Engineer that the specification requirements are met before using the sources. The Engineer may sample and test project materials at any time before compaction. Use Tex-100-E for material definitions.

- **A. Flexible Base**. Furnish base material that meets the requirements of Section 02047, "Flexible Base," for the type and grade shown on the plans, before the addition of lime.
- **B.** Water. Furnish water free of industrial wastes and other objectionable material.
- **C. Asphalt.** When asphalt or emulsion is permitted for curing purposes, furnish materials that meet the requirements of Section 02741, "Asphaltic Concrete Pavement" as shown on the plans or as directed.

## **PART 3 – EQUIPMENT**

**Equipment.** Provide machinery, tools, and equipment necessary for proper execution of the work. Provide rollers in accordance with Section 00210, "Rolling." Provide proof rollers in accordance with Section 00216, "Proof Rolling," when required.

**Pulverization Equipment.** Provide pulverization equipment that:

- cuts and pulverizes material uniformly to the proper depth with cutters that plane to a uniform surface over the entire width of the cut,
- provides a visible indication of the depth of cut at all times, and
- uniformly mixes the materials.

#### **PART 4 - CONSTRUCTION**

**Construction.** Construct each layer uniformly, free of loose or segregated areas, and with the required density and moisture content. Provide a smooth surface that conforms to the typical sections, lines, and grades shown on the plans or as directed.

**A.** Preparation of Subgrade or Existing Base for Treatment. Before treating, remove existing asphalt concrete pavement when shown on the plans or as directed. Shape existing

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material in accordance with applicable bid items to conform to typical sections shown on the plans and as directed.

When shown on the plans or directed, proof roll the roadbed in accordance with Section 00216, "Proof Rolling," before pulverizing or scarifying existing material. Correct soft spots as directed.

When new base material is required to be mixed with existing base, deliver, place, and spread the new material in the required amount per station. Manipulate and thoroughly mix new base with existing material to provide a uniform mixture to the specified depth before shaping.

**B.** Compaction. Compact the mixture using density control, unless otherwise shown on the plans. Multiple lifts are permitted when shown on the plans or approved. Bring each layer to the moisture content directed. When necessary, sprinkle the treated material in accordance with Section 00204, "Sprinkling." Determine the moisture content of the mixture at the beginning and during compaction in accordance with Tex-103-E.

Begin rolling longitudinally at the sides and proceed toward the center, overlapping on successive trips by at least one-half the width of the roller unit. On super elevated curves, begin rolling at the low side and progress toward the high side. Offset alternate trips of the roller. Operate rollers at a speed between 2 and 6 MPH, as directed. Rework, re-compact, and refinish material that fails to meet or that loses required moisture, density, stability, or finish before the next course is placed or the project is accepted. Continue work until specification requirements are met. Rework in accordance with Section 260.4.F, "Reworking a Section." Perform the work at no additional expense to the Department.

- **1. Ordinary Compaction.** Roll with approved compaction equipment, as directed. Correct irregularities, depressions, and weak spots immediately by scarifying the areas affected, adding or removing treated material as required, reshaping, and re-compacting.
- 2. **Density Control.** The Engineer will determine roadway density of completed sections in accordance with Tex-115-E. The Engineer may accept the section if no more than 1 of the 5 most recent density tests is below the specified density and the failing test is no more than 3 pcf below the specified density.
  - **a. Subgrade.** Compact to at least 90% of the maximum density determined in accordance with Tex-121-E, unless otherwise shown on the plans.
  - **b. Base.** Compact the bottom course to at least 90% of the maximum density determined in accordance with Tex-121-E, unless otherwise shown on the plans. Compact subsequent courses treated under this Item to at least 90% of the maximum density determined in accordance with Tex-121-E, unless otherwise shown on the plans.
- C. Reworking a Section. When a section is reworked within 72 hours after completion of

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compaction, rework the section to provide the required density. When density control is specified, determine a new maximum density of the reworked material in accordance with Tex-121-E, and compact to at least 90% of this density or as shown on the plans.

**D. Finishing.** Immediately after completing compaction of the final course, clip, skin, or tight-blade the surface of the lime-treated material with a maintainer or sub-grade trimmer to a depth of approximately 1/4 in. Remove loosened material and dispose of at an approved location. Roll the clipped surface immediately with a pneumatic tire roller until a smooth surface is attained. Add small amounts of water as needed during rolling. Shape and maintain the course and surface in conformity with the typical sections, lines, and grades shown on the plans or as directed.

Finish grade of constructed sub-grade in accordance with Section 132.3.F.1, "Grade Tolerances." Finish grade of constructed base in accordance with Section 02601.4.D, "Finishing."

**H. Curing.** Cure for the minimum number of days shown in Table 2 by sprinkling in accordance with Section 00204, "Sprinkling," or by applying an asphalt material at a rate of 0.05 to 0.20 gal. per square yard as directed. Maintain moisture during curing. Upon completion of curing, maintain the moisture content in accordance with Article 132.3E, "Maintenance of Moisture and Reworking" for sub-grade and Article 247.4E, "Curing" for bases prior to placing subsequent courses. Do not allow equipment on the finished course during curing except as required for sprinkling, unless otherwise approved. Apply seals or additional courses within 14 calendar days of final compaction.

**Table 2 Minimum Curing Requirements Before Placing Subsequent Courses** 

Untreated Material	Curing (Days)
PI ≤ 35	2
PI > 35	5

#### PART 5 – MEASUREMENT AND PAYMENT

- A. When listed as a separate contract pay item, shall be measured in accordance with "Measurement and Basis of Payment" section or as shown on the Bid Proposal Form.
- B. When not listed as a separate contract pay item, shall be considered as incidental work, and the cost thereof shall be included in such contract pay item(s) as are provided in the proposal contract.
- C. Compensation, whether by contract pay item or incidental work will be for furnishing all materials, labor, equipment, tools and incidentals required for the work, all in accordance with the plans and these specifications.

## \* \* \* END OF SECTION \* \* \*

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## Section 02741

#### **ASPHALTIC CONCRETE PAVEMENT**

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. Surface courses of compacted mixture of coarse and fine aggregates and asphaltic material.

#### 1.02 MEASUREMENT AND PAYMENT

- A. Unit Prices.
  - 1. Payment for asphaltic concrete pavement is by linear feet. Separate pay items reused for each different required thickness of pavement.
  - 2. Payment for asphaltic concrete pavement includes payment for associated work performed in accordance with Section 02743 Tack Coat.
  - 3. No separate payment will be made under this section for asphaltic concrete provided for Section 02744-Payement Repair.
  - 4. Refer to Section 01270 Measurement and Payment for unit price procedures.
  - 5. Refer to Paragraph 3.08 for unit price adjustments.
- B. Stipulated Price (Lump Sum). If the Contract is a Stipulated Price Contract, payment for work in this Section is included in the total Stipulated Price.

#### 1.03 REFERENCES

- A. ASTM C 33 Standard Specification for Concrete Aggregates.
- B. ASTM C 131 Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
- C. ASTM C 136 Standard Method for Sieve Analysis of Fine and Coarse Aggregates.
- D. TxDOT Tex-126-E Molding, Testing, and Evaluation of Bituminous Black Base Material.
- E. TxDOT Tex-106-E Method of Calculating the Plasticity Index of Soils.
- F. TxDOT Tex-203-F Sand Equivalent Test.
- G. TxDOT Tex-204-F Design of Bituminous Mixtures.
- H. TxDOT Tex-207-F Determination of Density of Compacted Bituminous Mixtures.
- I. TxDOT Tex-208-F Test for Stabilometer Value of Bituminous Mixtures.
- J. TxDOT Tex-217-F Determination of Deleterious Material and Decantation Test for Coarse Aggregates.

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K. TxDOT Tex-227-F - Theoretical Maximum Specific Gravity of Bituminous Mixtures

## 1.04 SUBMITTALS

- A. Submittals shall conform to requirements of Section 01330 Submittal Procedures.
- B. Submit certificates that asphaltic materials and aggregates meet requirements of Article 2.01, Materials, of this Section.
- Submit proposed design mix and test data for each type and strength of surface course in Work.
- D. Submit manufacturer's description and characteristics of mixing plant for approval.
- D. Submit manufacturer's description and characteristics of spreading and finishing machine for approval.

#### PART 2 PRODUCTS

#### 2.01 MATERIALS

- A. Coarse Aggregate: Gravel or crushed stone, or combination thereof, that is retained on No. 10 sieve, uniform in quality throughout and free from dirt, organic or other injurious matter occurring either free or as coating on aggregate. Aggregate shall conform to ASTM C 33 except for gradation. Furnish rock or gravel with Los Angeles abrasion loss not to exceed 40 percent by weight when tested in accordance with ASTM C 131.
- B. Fine Aggregate: Sand or stone screenings or combination of both passing No. 10 sieve. Aggregate shall conform to ASTM C 33 except for gradation. Use sand composed of sound, durable stone particles free from loams or other injurious foreign matter. Furnish screenings of same or similar material as specified for coarse aggregate. Plasticity index of that part of fine aggregate passing No. 40 sieve shall be not more than 6 when tested by Tex-106-E. Sand equivalent shall have a minimum value of 45 when tested by Tex-203-F.
- Composite Aggregate: Conform to following limits when graded in accordance with ASTM C 136.

GRADUATION OF COMPOSITE AGGREGATE			
Sieve Size Percent Passir			
1/2"	100		
3/8"	85 to 100		
#4	50 to 70		
#10	32 to 42		
#40	11 to 26		
#80	4 to 14		
#200 1 to 6*			

<sup>\*2</sup> to 8 when Test Method Tex – 200 - F, Part II (Washed Sieve Analysis) is used

D. Asphaltic Material: Moisture-free homogeneous material which will not foam when heated to 347 degrees F, meeting following requirements:

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VISCOSITY GRADE				
	AC-10 AC-20			C-20
TEST	Min.	Max.	Min.	Max.
Viscosity, 140° F stokes	1000	<u>+</u> 200	2000	<u>+</u> 400
Viscosity, 275° F stokes	1.9	-	2.5	-
Penetration, 77° F, 100g, 5 sec.	85	-	55	-
Flash Point, C.O.C., F.	450	-	450	-
Solubility in trichloroethylene,	99.0 - 99.0 -			-
percent				
Tests on residues from thin film oven tests:				
Viscosity, 140° F stokes		3000	-	6000
Ductility, 77° F, 5 cms per min.,	100 - 70 -		-	
cms				
Spot tests	Negative for all grades			

1. Material shall not be cracked.

## 2.02 EQUIPMENT

- A. Mixing Plant: Weight-batching or drum mix plant with capacity for producing Continuously mixtures meeting specifications. Plant shall have satisfactory conveyors, power units, aggregate handling equipment, hot aggregate screens and bins, and dust collectors. Provide equipment to supply materials adequately in accordance with rated capacity of plant and produce finished material within specified tolerances. Following equipment is essential:
  - 1. Cold aggregate bins and proportioning device.
  - 2. Dryer.
  - Screens.
  - 4. Aggregate weight box and batching scales.
  - 5. Mixer.
  - 6. Asphalt storage and heating devices.
  - 7. Asphalt measuring devices.
  - 8. Truck scales.
- B. Bins: Separate aggregate into minimum of four bins to produce consistently uniform grading and asphalt content in completed mix.

## 2.03 MIXES

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- A. Employ a certified testing laboratory to prepare design mixes. Test in accordance with Tex-126-E or Tex-204-F and Tex-208-F.
- B. Density and Stability Requirements:

Percent	Density	Percent	HVEEM Stability Percent
Min.	Max.	<u>Optimum</u>	Not Less Than
94.5	97.5	96	35

C. Proportions for Asphaltic Material: Provide 4 to 8 percent of mixture by weight. Aggregate by weight shall not contain more than 1.0 percent by weight of fine dust, clay-like particles, or silt when tested in accordance with Tex-217-F, Part II.

#### PART3 EXECUTION

## 3.01 EXAMINATION

- A. Verify compacted base course is ready to support imposed loads.
- B. Verify lines and grades are correct.

#### 3.02 PREPARATION

- A. Prime Coat: If indicated on the Drawings, apply a prime coat conforming to requirements of Section 02742 Prime Coat. Do not apply a tack coat until primed base has cured to satisfaction of Resident Project Representative.
- B. Tack Coat: Conform to requirements of Section 02743 Tack Coat.
- C. Prepare subgrade in advance of asphaltic concrete paving operation.
- D. Do not use cutback asphalt during the period of April 16 to September 15.

#### 3.03 PLACEMENT

- A. Do not place asphaltic mixture when air temperature is below 50 degrees F and falling. Mixture may be placed when air temperature taken in shade and away from artificial heat is above 40 degrees F and rising.
- B. Haul prepared and heated asphaltic concrete mixture to the project in tight vehicles previously cleaned of foreign material. Mixture shall be at temperature between 250 degrees F and 325 degrees F when laid.
- C. Spread material into place with approved mechanical spreading and finishing machine of screening or tamping type.
- D. Surface Course Material: Surface course 2 inches or less in thickness may be spread in one lift. Spread lifts in such manner that, when compacted, finished course will be smooth, of uniform density, and will be to section, line and grade as shown. Place construction joints on surface courses to coincide with lane lines or as directed by Resident Project Representative.
- E. Place courses as nearly continuously as possible. Pass roller over unprotected ends of

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Freshly laid mixture only when mixture has cooled. When work is resumed, cut back laid material to produce slightly beveled edge for full thickness of course. Remove old material which has been cut away and lay new mix against fresh cut.

- F. When new asphalt is laid against existing or old asphalt, existing or old asphalt shall be saw cut full depth to provide straight smooth joint.
- G. In restricted areas where use of paver is impractical, spread and finish asphalt by Mechanical compactor. Use wood or steel forms, rigidly supported to assure correct grade and cross section. Carefully place materials to avoid segregation of mix. Do not broadcast material. Remove any lumps that do not break down readily. Place asphalt courses in same sequence as if placed by machine.

## 3.04 COMPACTION

- A. Begin rolling while pavement is still hot and as soon as it will bear roller without undue displacement or hair cracking. Keep wheels properly moistened with water to prevent adhesion of surface mixture. Do not use excessive water.
- B. Compress surface thoroughly and uniformly, first with power-driven, 3-wheel, or tandem rollers weighing from 8 to 10 tons. Obtain subsequent compression by starting at side and rolling longitudinally toward center of pavement, overlapping on successive trips by at least one-half width of rear wheels. Make alternate trips slightly different in length. Continue rolling until no further compression can be obtained and rolling marks are eliminated. Complete rolling before mixture temperature drops below 175 degrees F.
- C. Use tandem roller for final rolling. Double coverage with approved pneumatic roller on asphaltic concrete surface is acceptable after flat wheel and tandem rolling has been completed.
- D. Along walls, curbs, headers and similar structures, and in locations not accessible to rollers, compact mixture thoroughly with lightly oiled tamps.
- E. Compact binder course and surface course to density not less than 94 percent nor more than 98 percent of the maximum possible density of voidless mixture composed of same materials in like proportions.

## 3.05 TOLERANCES

- A. Furnish templates for checking surface in finished sections. Maximum deflection of templates, when supported at center, shall not exceed 1/8 inch.
- B. Completed surface, when tested with 10-foot straightedge laid parallel to center line of pavement, shall show no deviation in excess of 1/8 inch in 10 feet. Correct any surface not meeting this requirement.

#### 3.06 FIELD QUALITY CONTROL

- A. Testing will be performed under provisions of Section 01454 Testing Laboratory Services.
- B. Minimum of one core will be taken at random locations per 1000 feet per lane of roadway or 500 square yards of base to determine in-place depth and density.

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- C. In-place density will be determined in accordance with Tex-207-F and Tex-227-F from cores or sections. Other methods of determining in-place density, which correlate satisfactorily with results obtained from roadway specimens, may be used when approved by Engineer.
- D. Contractor may, at his own expense, request three additional cores in vicinity of cores indicating nonconforming in-place depths. In-place depth at these locations shall be average depth of four cores.
- E. Fill cores and density test sections with new compacted asphaltic concrete.

## 3.07 NONCONFORMING PAVEMENT

- A. Remove and replace any non conforming pavement.
- B. Remove and replace areas of asphalt found deficient in thickness by more than 10 percent. Use new asphaltic base of thickness shown on Drawings.
- C. Replace nonconforming pavement sections.

#### 3.08 UNIT PRICE ADJUSTMENT

- A. Unit price adjustments shall be made for in-place depth determined by cores as follows:
  - 1. Adjusted Unit Price shall be ratio of average thickness as determined by cores to thickness bid upon, times unit price bid.
  - 2. Adjustment shall apply to lower limit of 90 percent and upper limit of 105 percent of unit price.
  - 3. Average depth below 90 percent may be rejected by Engineer.

#### 3.09 PROTECTION

- A. Do not open pavement to traffic until 12 hours after completion of rolling, or as shown on Drawings.
- B. Maintain asphaltic concrete pavement in good condition until completion of Work.
- C. Repair defects immediately by replacing asphaltic concrete pavement to full depth.

## **END OF SECTION**

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