This addendum shall be considered part of the Contract Documents and is issued to change, amplify, or delete from or otherwise explain the documents where provisions of this addendum differ from those of the original contract documents. This addendum shall have precedence over the original contract documents and shall govern.

Bidders are hereby notified that they shall incorporate this addendum in their bid, and it shall be construed that the Contractor's Bid shall reflect with full knowledge, all items, changes and modifications to the contract documents herein specified.

Bidders are advised to check for updates, addenda issuance, and bid opening date changes at the TPWD Infrastructure Division Website:

http://www.tpwd.state.tx.us/business/bidops/current_bid_opportunities/construction/

DUE TO CONTINUATION OF FLOODING AT THE PARK SITE, THIS ADDENDUM FOUR (4) ADDRESSES CHANGES TO THE BID DOCUMENTS:

1. CONTRACTOR'S BID FORM: REPLACE ORIGINAL CONTRACTOR'S BID FORM ISSUED 9/21/18 WITH THE ATTACHED REVISED CONTRACTORS BID FORM DATED 12/20/18.

2. PLANS AND SPECIFICATIONS SHEETS:

REPLACE ORIGINAL PLANS AND SPECIFICATION SHEETS FOR SECTION 312002 ISSUED 9/21/18 WITH THE ATTACHED CRUSHED LIMESTONE SURFACING-TOP COURSE WITH THE REVISED ATTACHED SHEETS.

BID DATE REMAINS UNCHANGED

BIDS OPEN THURSDAY, JANUARY 10, 2019; 2:00PM

Bidders shall acknowledge receipt of this addendum in the space provided on the Contractor's Bid form located above the signature block. WARNING: BIDDER'S FAILURE TO ACKNOWLEDGE RECEIPT OF ADDENDA MAY RESULT IN REJECTION OF BID.

END OF ADDENDUM NUMBER FOUR (04)

Sincerely,

Rose Esparza, CTPM, CTCM
Contract Manager
Infrastructure Division

To manage and conserve the natural and cultural resources of Texas and to provide hunting, fishing and outdoor recreation opportunities for the use and enjoyment of present and future generations.
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

Having carefully examined the Invitation for Bids and Contract Documents. 128302, Ray Roberts Lake State Pilot Point, Denton County for the Texas Parks and Wildlife Department, as well as the premises and conditions affecting this work, and all other contract documents, the undersigned proposes to furnish all labor, equipment and materials necessary to complete the work for the sum of:

<table>
<thead>
<tr>
<th>BASE BID ITEMS</th>
<th>LUMP SUM PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furnish all labor, equipment, materials, and incidentals necessary to repairs to playground area, park picnic area (sheet 4) Trail areas #1, #2, and #3 (sheets 5-7) and repairs to Greenbelt Trail from the Mile Marker 7.5 to Mile 9.4, and low water crossings at Mile 7.1, 7.2, 7.3, and 7.4 in accordance with the Invitation for Bids and Contract Documents.</td>
<td>$</td>
</tr>
</tbody>
</table>

| TOTAL LUMP SUM BASE BID                                                                 | $              |
| (Total Base Bid Price written in words)                                                                 |                |

<table>
<thead>
<tr>
<th>ALTERNATE BID ITEM NO. 1</th>
<th>LUMP SUM PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furnish all labor, equipment, materials, and incidentals necessary for repairs to Greenbelt Trail from the FM 428 Bridge to Mile 7.5, excluding low water crossings at Mile 7.1, 7.2, 7.3, and 7.4 in accordance with the Bid and Contract Documents.</td>
<td>$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNIT PRICE ITEM for ALTERNATE NO. 1</th>
<th>UNIT OF MEASURE</th>
<th>UNIT PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide a price per cubic yard to furnish all labor, equipment, materials and incidentals necessary to remove silt/debris from Greenbelt trail.</td>
<td>Cubic Yard</td>
<td>$</td>
</tr>
</tbody>
</table>
Total Base Bid and Alternate 1 Bid Items written in words

EACH BID ITEM INCLUDES ANY AND ALL APPURTEAN WORK AND ITEMS NECESSARY FOR FULLY FUNCTIONAL AND OPERATIONAL SYSTEMS, COMPLETE AND IN PLACE, IN ACCORDANCE WITH THE INVITATION FOR BIDS AND CONTRACT DOCUMENTS.

BASE BID and ALTERNATE 1 will be evaluated and determination of the low bidder will be based on responsiveness and responsibility of the bidder and on the total lump sum base bid and Alternate No. 1. HOWEVER, THE OWNER RESERVES THE RIGHT TO AWARD TO THE LOW BIDDER ANY COMBINATION OF BID ITEMS OR TO REJECT ALL BIDS.

UNIT PRICE as stated in the Bid Schedule is the price per unit of measure for materials and services to be added to the Contract Sum by appropriate change order in the event it is determined by Owner that the materials and services are necessary.

BIDDER UNDERSTANDS AND ACKNOWLEDGES THAT BIDDER MUST MEET THE MINIMUM QUALIFICATION AND/OR EXPERIENCE REQUIREMENTS SET FORTH IN PARAGRAPH 1.32 OF DIVISION 1, GENERAL REQUIREMENTS, SECTION 01000, SPECIAL CONDITIONS TO BE ELIGIBLE FOR AWARD OF THIS CONTRACT. BIDDER, BY SIGNING THIS BID, AFFIRMS THAT BIDDER MEETS SUCH MINIMUM REQUIREMENTS. FAILURE TO MEET ANY OF THE MINIMUM QUALIFICATIONS SHALL RESULT IN REJECTION OF THE BID.

BIDDER UNDERSTANDS AND ACKNOWLEDGES THAT THIS IS A FEDERALLY ASSISTED PROJECT AND THAT CERTAIN AFFIRMATIONS ARE REQUIRED TO BE ELIGIBLE FOR AWARD. SEE SPECIAL CONDITIONS PARAGRAPH 1.37

The undersigned further agrees that, if awarded the Contract, the work will be completed within 210 calendar days commencing on the date specified in the Notice to Proceed.

The undersigned agrees that when written notice of bid acceptance is furnished by the Owner within sixty (60) calendar days after the bid opening date, the undersigned will, within the stipulated time, execute and deliver the contract and all required bonds, certificates of insurance, and PR-1 and PR-2 submittals and Form 1295 to the Owner. Failure to timely provide the insurance certificate, bonds, and submittals shall be grounds for disqualification of bid and forfeiture of bid security. In such circumstances, TPWD shall be authorized to proceed with award to the next lowest, responsive and responsible bidder.

If the above bid amount exceeds $25,000.00, the undersigned shall include herewith security in the form of a bid bond, certified check, or cashier's check for an amount not less than five percent (5%) of the total amount of the bid to be awarded by Owner, unless otherwise stipulated under Special Conditions. To ensure adequate bid security, bidders should calculate bid security based on the total amount of all base bids plus all additive alternate bids (if any). The bid security will be returned to or forfeited by the undersigned in accordance with the Bid Security provision in the Instructions to Bidders. The undersigned further agrees that this bid security is the appropriate measure of liquidated damages which the Owner will sustain by the failure of the undersigned to
execute and deliver said contract and required documents.

The undersigned agrees that this bid will not be withdrawn for a period of sixty (60) calendar days from the date set for the bid opening, and the undersigned further agrees that the bid security will be forfeited in the event this bid is withdrawn before expiration of said sixty (60) calendar days.

Pursuant to 2252.908 of the Government Code, the awarded Contractor(s) must use the Texas Ethics Commissions Application to enter the required information on Form 1295. Awarded Contractor(s) shall print a copy of the completed form, which will include a certification of filing that will contain a unique certification number. An authorized agent of the business entity must sign the printed copy of the form and have the form notarized. The completed Form 1295 with the certification of filing must be filed at the time of execution of the contract.

Additional information can be found at: https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

By the signature hereon affixed, the bidder hereby certifies that neither the bidder, nor the firm, corporation, partnership, or institution represented by the bidder, or anyone acting for such firm, corporation, or institution 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, nor communicated directly or indirectly the bid made to any competitor or any other person engaged in such line of business.

Pursuant to Texas Government Code, Title 10, Subchapter A, §2155.004 (a), Bidder acknowledges that Bidder has not received compensation for participation in the preparation of the specifications for this project.

Pursuant to Texas Government Code, Title 10, Subchapter A, §2155.004 (b), §2155.006 (c), and Subchapter B, §2261.053 (c), Bidder certifies that the individual or business entity named in this bid is not ineligible to receive the specified contract and acknowledges that this contract may be terminated and payment withheld if this certification is inaccurate.

By signing this bid, Bidder certifies that if a Texas address is shown as the address of the Bidder, Bidder qualifies as a Texas Resident bidder as defined in Texas Administrative Code, Title 1, Part 5, Chapter 111, Subchapter A, §111.2 (10).

By signature hereon, the bidder hereby certifies that he/she is not currently delinquent in the payment of any franchise taxes owed the State of Texas under Chapter 171, Tax Code. Making a false statement as to corporate tax status is a material breach of contract.

Bidder certifies that the bidding entity and its principals are eligible to participate in this transaction and have not been subjected to suspension, debarment, or similar ineligibility determined by any federal, state or local governmental entity and that bidder is in compliance with the State of Texas Statutes and Rules relating to procurement and that bidder is not listed on the Federal Government’s Terrorism Watch List as described in Executive Order 13224. Entities ineligible for federal procurement are listed at http://www.sam.gov.

By signing this bid, a bidder affirms that he has not given, offered to give, nor intends 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.

Bidder agrees that any payments due under this contract will be applied towards any debt, including but not limited to delinquent taxes and child support, which is owed to the State of Texas.

Bidder agrees to comply with Texas Government Code, Title 10, Subtitle D, §2155.4441, relating to use of services
contracts for products produced in the State of Texas.

Bidder certifies that if a Texas address is shown as the address of the Bidder on this bid, Bidder qualifies as a Texas Bidder as defined in Section 2155.444(c) of the Texas Government Code.

Pursuant to Texas Government Code, Title 10, Subchapter F, §§ 2270.001-2270.002, TPWD may not enter into a contract with a company (as defined by Texas Government Code, Title 8, Subchapter A, § 808.001) that boycotts Israel. By signing this bid, Bidder verifies that in accordance with Texas Government Code, Title 10, Subchapter F, §§ 2270.001-2270.002, Bidder:

1. Does not boycott Israel; and
2. Will not boycott Israel during the term of the contract.

Pursuant to Texas Government Code, Title 10, Subchapter F, §§ 2252.151-2252.154, TPWD may not enter into a contract with a company (as defined by Texas Government Code, Title 8, Subchapter A, § 806.051) that is identified on a list prepared and maintained by the Texas Comptroller of Public Accounts under Texas Government Code, §§ 806.001, 807.051 or 2252.153. By signing this bid, Bidder certifies that it is not a company identified on a list as prepared and maintained by the Texas Comptroller of Public Accounts pursuant to Texas Government Code, §§ 806.001, 807.051 or 2252.153.

By signature hereon, the bidder acknowledges that Texas Government Code, Title 10, Subchapter F, §§ 2252.201-2252.205 requires that all iron or steel products produced through a manufacturing process used in this project must be produced in the United States. By signing this bid, Bidder certifies that its bid price represents full compensation for compliance with the requirements of Texas Government Code, Title 10, Subchapter F, §§ 2252.201-2252.205.

By signing this bid, Bidder acknowledges and understands that the acceptance of funds by the Bidder or any other entity or person directly under this Contract, or indirectly through a subcontract under this Contract, shall constitute acceptance of the authority of the State Auditor’s Office, Comptroller or other agency of the State of Texas, TPWD or any successor agency, to conduct an audit or investigation in connection with those funds. The Bidder further agrees to cooperate fully with the above parties in the conduct of the audit or investigation, including providing access to any information the state auditor considers relevant to the investigation or audit. The Bidder shall ensure that this paragraph concerning the State’s authority to audit funds received indirectly by subcontractors through the Bidder and the requirement to cooperate is included in any subcontract it awards.

Bidder represents and warrants that the provision of goods and services or other performance under the contract will not constitute an actual or potential conflict of interest or reasonably create an appearance of impropriety.

If applicable, pursuant to Texas Family Code, Title 5, Subtitle D, §231.006(d), regarding child support, the Bidder certifies that the individual or business entity named in this bid is not ineligible to receive the specified payment and acknowledges that this contract may be terminated and payment may be withheld if this certification is inaccurate. Furthermore, Bidder must provide, in the spaces(s) below, the name and Social Security number of an individual owner, a sole proprietor and all partners, shareholders, or owners with an ownership interest of at least 25% of the business entity prior to award of contract.

<table>
<thead>
<tr>
<th>Name</th>
<th>SSN</th>
<th>%</th>
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Contractor’s Bid – Bid Schedule (091718)
Bidder certifies that they are in compliance with Texas Government Code, Title 6, §669.003, relating to contracting with executive head of a State agency. If §669.003 applies, Bidder will complete the following information in order for the bid to be evaluated:

Name of former executive: ________________________________
Name of State agency: ________________________________
Date of separation from State agency: __________________
Position with Bidder: ________________________________
Date of employment with Bidder: ________________________

THE REST OF THIS PAGE INTENTIONALLY LEFT BLANK
RECEIPT IS HEREBY ACKNOWLEDGED OF THE FOLLOWING ADDENDA TO THIS IFB (INITIAL IF APPLICABLE)

No. 01 ____ No. 02 ____ No. 03 ____ No. 04 ____ No. 05 ____ No. 06 ____ No. 07 ____

WARNING: BIDDER’S FAILURE TO ACKNOWLEDGE RECEIPT OF ADDENDA MAY RESULT IN REJECTION OF BID.

BIDDER’S AFFIRMATION: SIGNING THIS BID WITH A FALSE STATEMENT IS A MATERIAL BREACH OF CONTRACT AND SHALL VOID THE SUBMITTED BID OR ANY RESULTING CONTRACTS, AND THE BIDDER SHALL BE REMOVED FROM ALL BID LISTS.

<table>
<thead>
<tr>
<th>Name of Contracting Firm</th>
<th>By</th>
<th>Authorized Signature</th>
<th>Date</th>
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<tbody>
<tr>
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<table>
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<tr>
<th>Address</th>
<th>Printed Name</th>
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<tr>
<th>City</th>
<th>State</th>
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<table>
<thead>
<tr>
<th>Email address</th>
<th>(Area Code) FAX Number</th>
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<table>
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<tr>
<th>Texas Identification Number</th>
<th>(Area Code) Cell Number</th>
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</table>
Ray Roberts Lake State Park  
Isle Du Bois – Flood Damage Repairs  
Texas Parks and Wildlife  
Project Number 128302  

SECTION 312002 – CRUSHED LIMESTONE SURFACING – TOP COURSE  

PART 1 - GENERAL  

1.1 SUMMARY  

A. Section Includes:  

1. Supplying and placing crushed limestone surfacing over a prepared base course as shown on the drawings or as directed by a Parks Representative.  

1.2 INFORMATIONAL SUBMITTALS  

A. Material test reports and sieve analysis to be submitted prior to pre-installation meeting.  

PART 2 - PRODUCTS  

2.1 MATERIALS  

A. Crushed limestone surfacing shall consist of ¼” minus crushed limestone with cement stabilization to a compacted depth of 4”.  

B. Crushed limestone surfacing shall be “dense grade” limestone. The material shall be uniform in quality and substantially free from extraneous material.  

C. Grouted Crushed Limestone Low Water Crossings shall consist of ¼” minus crushed limestone with sand-portland cement grout, composed of white or gray cement, unfading mineral pigments, and white or colored sand to match existing color.  

PART 3 - EXECUTION  

3.1 PLACEMENT  

A. All areas shall be graded to within 0.1 foot, plus or minus of the proposed elevations. In addition, Contractor shall meet all specified cross slopes, running slopes, and positive drainage requirements as shown in the plans.  

B. Limestone shall be placed with a method that provides a finished surface of evenly mixed material free from large pockets of separated rock. Large pockets are defined as areas with loose rock lacking fines (any surface thickness) in areas larger than 2 square feet measured at the trail surface. The frequency of such pockets of loose aggregates shall not exceed 10% of any
given 100-foot segment of new trail section selected by the owner. Loose top course shall be removed in its entirety and replaced by the contractor at no additional cost to the owner.

C. Optimal moisture content shall range between 5% and 7% before limestone is placed. The remedy for dry limestone placed at a moisture content less than specified shall be as follows:

1. Loosen compacted limestone.
2. Apply water until limestone is saturated.
3. Back-blade surface smooth
4. Ensure limestone layer is consistently moist, full depth. Add water to dry sections as directed.
5. Compact to 95% Standard Proctor.
6. Loose rock shall be remedied as specified in this section.
7. These tasks shall be incidental to the bid price. No additional compensation shall be permitted. Any task completed to achieve optimum moisture content is at the sole responsibility of the contractor and shall be provided at no additional cost to the owner.

D. Limestone surfacing shall be compacted after final grading as directed by a Parks Representative.

E. Limestone shall be compacted by mechanical methods to 95% density.

1. Trail shoulders shall be compacted to 95% density.

3.2 FIELD QUALITY CONTROL

A. The Contractor will be required to submit a sieve analysis from the manufacturer that is dated no more than one year prior to the contract award date for all material.

B. At the owner’s option, the owner may order a sieve analysis of the material stock piled on the site at any time to ensure that it is in compliance with specifications.

C. At the owner’s option, the Contractor may be required to build a test trail to show the level of quality of acceptable trail work before proceeding with the actual trail. The size and location of the test trail shall be determined at the pre-construction meeting. The Contractor shall not proceed with work until the owner has approved the test trail.

D. The Owner expects that the Work shall be executed in a way to match the existing trail example or test panel.

E. Contractor shall clean base course, or other specified base of debris, organic or deleterious material before placement of limestone

F. The Contractor shall place the crushed limestone surfacing immediately at optimum moisture content.

G. The Contractor shall compact placed material to specified density immediately after placement.
H. The Contractor shall take special care to not disaggregate the Crushed Limestone Surfacing mixture.

I. Contractor shall obtain Owner's approval to stock pile Crushed Limestone Surfacing before it is brought to the site. Stockpiled material shall not be contaminated at the site so as to change the moisture content or gradation. Stock piled material shall not be allowed to dry out. The Contractor shall cover all stock piled material to maintain the material's moisture content. Material shall not be stock piled at the project site for an extended period of time, as determined by the Owner.

3.3 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Contractor shall remove surplus soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Park's property.

END OF SECTION 312002
TYPICAL SILT REMOVAL PLAN

TYPICAL EXISTING CONDITIONS CROSS SECTION

TYPICAL PROPOSED CONDITIONS CROSS SECTION

TYPICAL BRIDGE CROSS SECTION

1. REMOVE ANY LARGE TREE STumps FROM PROPOSED WORK AREA.
2. REMOVE EXISTING 6" AGGREGATE BASE COURSE AND EXISTING COMPACTED CRUSHED LIMESTONE TRAIL TO BE REMOVED.
3. COMPACT EXISTING 6" COMPACTED SUBGRADE PRIOR TO INSTALLING PROPOSED COMPACTED CRUSHED LIMESTONE.

TEMPORARY Silt MATERIAL

STOLOGY LOCATION:

*NOTE: SEE #1 AND #3 OF 'LOCATIONS' ON THIS SHEET

BID OPTION:

1. **MILE 13.1 - CONTRACTOR SHALL REMOVE 8' AND EXISTING CRUSHED LIMESTONE TRAIL, AND INSTALL TWO COMPACTED CRUSHED LIMESTONE BASE COURSE LAYERS, AND INSTALL TWO COMPACTED CRUSHED LIMESTONE LAYERS AS SHOWN ABOVE THE TYPICAL PROPOSED CROSS SECTION AS AGGREGATE PAVER MIX.""
CONCRETE LOW WATER CROSSING PLAN

PLAN VIEW:
N.T.S.

PROPPOSED 4" COMPACTED CRUSHED LIMESTONE AS NEEDED

PROPOSED CONCRETE LOW WATER CROSSING

INSTALL 11.5' BY 12' NON-GROUNDED ROCK RIP RAP ON FILTER FABRIC

EXISTING GROUND

EXISTING 6" COMPACTED SUBGRADE

EXISTING 6" AGGREGATE BASE COURSE

EXISTING GROUND

EXISTING 6" COMPACTED SUBGRADE

CROSS SECTION 'A':
N.T.S.

REPAIR CRUSHED LIMESTONE TRAIL AS NEEDED WITH CONSTRUCTION OF LOW WATER CROSSING PER STEPS AND TYPICAL PROPOSED CROSS SECTION SHEET & TYPICAL SILT REMOVAL PLAN.

EXISTING 6" AGGREGATE BASE COURSE

EXISTING 6" COMPACTED SUBGRADE

EXISTING GROUND

3500 PSI CONCRETE WITH #3 REBAR AT 18" C.C.E.W. PLACED ON COMPACTED SUBGRADE RANGING FROM 1 TO 12 OPTIMUM MOISTURE CONTENT, PER GEOTECH REPORT.

MIN. 4" COVER

LOCATIONS:

BASE BID:

1. INSTALL 11.5' BY 12' NON-GROUNDED ROCK RIP RAP ON FILTER FABRIC

PASSING OR RETAINED ON SITE

PERVIOUS BY WEIGHT

CURRENTLY IN INVENTORY

IN STOREROOM ON SITE
GENERAL TRAIL RESURFACING
TYPICAL CRUSHED LIMESTONE REPAIR PLAN

TYPICAL EXISTING CONDITIONS CROSS SECTION

- EXISTING DAMAGED COMPACTED CRUSHED LIMESTONE TRAIL (MAX DEPTH = 4"

- EXISTING 6" AGGREGATE BASE COURSE

- EXISTING 6" COMPACTED SUBGRADE

- EXISTING GROUND

VERTICAL & HORIZONTAL SCALE

- STEPS:
  1. REMOVE ALL LARGE DEBRIS FROM PROPOSED WORK AREA. LARGE DEBRIS INCLUDES TRUNKS, UMBRELLAS, LOOSE ROCKS, AND OTHER DEBRIS THAT WOULD CAUSE A HASSLE TO TRAVELERS OR VEHICULAR TRAVEL. (SEE DRAWING:::::ACTIONS
  2. REMOVE EXISTING DAMAGED CRUSHED LIMESTONE OFF OF 10 WIDE TRAIL, TO A MAXIMUM DEPTH OF 4"
  3. COMPACT EXISTING AGGREGATE BASE COURSE PRIOR TO INSTALLING COMPACTED CRUSHED LIMESTONE CONDITIONS
  4. PLACE AND COMPACT NEW CRUSHED LIMESTONE ALONG 10 WIDE TRAIL, TO A MAXIMUM DEPTH OF 4"
  5. REMOVE EXISTING LIMESTONE SHALL BE LEGALLY DISPOSED OF BY CONTRACTOR OFF OF PARK PROPERTY.

TYPICAL PROPOSED CONDITIONS CROSS SECTION

- PROPOSED WORK AREA

- PROPOSED 4" COMPACTED CRUSHED LIMESTONE TRAIL

- EARTH EMBANKMENT AS NEEDED, NOT A SEPARATE PAY ITEM

- EXISTING 6" AGGREGATE BASE COURSE

- EXISTING 6" COMPACTED SUBGRADE

- EXISTING GROUND

VERTICAL & HORIZONTAL SCALE

- LOCATIONS:

- BID OPTION:
  1. BID SUITE — UNLESS OTHERWISE NOTED ON DRAWINGS, TRAIL REPAIR PLAN SECTIONS, TRUE PROPORTIONS SHALL BE SHOWN ACCORDING TO PROPOSED CROSS SECTION AND STOPS ON THIS SHEET.

RAY ROBERTS LAKE STATE PARK
ISLE DU BOIS - FLOOD REPAIRS

PROJECT NUMBER: 12302
GENERAL TRAIL RESURFACING
TYPICAL CONCRETE TRAIL PLAN

TYPICAL EXISTING CONDITIONS CROSS SECTION

EXISTING 6" AGGREGATE BASE COURSE
EXISTING 6" COMPACTED SUBGRADE
EXISTING SANDSTONE LIMESTONE TRAIL

VERTICAL & HORIZONTAL SCALE

SILT TO BE REMOVED (DEPTH VARIES)

LOCATIONS:

BASE BID:
1. PLACE NEW CONCRETE TRAIL ACCORDING TO PROPOSED THICKNESS AND STEPS ON THIS SHEET

STEPS:
1. REMOVE ANY LARGE DEBRIS FROM PROPOSED WORK AREA. LARGE DEBRIS INCLUDES TRASH CANS, LARGE LOSE ROCKS, AND OTHER ITEMS THAT COULD CAUSE A HARMFUL TO PEDESTRIAN OR VEHICLE TRAFFIC.
2. REMOVE EXISTING 6" (Thick) OF EARTH EMBANKMENT AS NEEDED, NOT A SEPARATE PAY ITEM
3. COMPACT EXISTING EMBANKMENT BASE COURSE (TOP 2" REMOVED) TO LAY STANDARD FRICTION FACTORS AT OR ABOVE CENTERLINE MOISTURE CONTENT, PRIOR TO INSTALLING PROPOSED CONCRETE TRAIL.
4. PLACE NEW CONCRETE ALONG 2-WAY TRAIL, TO DEPTH OF 6".
5. REMOVE ALL MATERIALS AND DEBRIS ON SITE. 10" TO 2" LAYER OF EMBANKMENT BASE COURSE SHALL BE LEGALLY DISPOSED OF BY CONTRACTOR OFF OF PARK PROPERTY.

NOTES:
1. ALL MATERIALS AND WORKMANSHIP FOR CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS SECTION 102.
2. JOINTS SHALL BE AS INDICATED.
3.成本 FOR INSTALLATION OF ALL JOINTS SHALL BE BIDDABLE TO CONCRETE PAVEMENT CONSTRUCTION. JOINTS SHALL BE BACKED AS SOON AS PRACTICAL AFTER CONCRETE IS PLACED. COMPRESSION JOINTS SHALL BE DESTROYED ABOUT 7 TO 10 DAYS AFTER CONCRETE HARDENS AND CONTRACTOR SHALL BACKED JOINTS IN ACCORDANCE PATTERN ASSIGNED WHERE APPLICABLE.
4. NOT POLYMER RUBBER NOT PERMITTED AS BID OF SILICATE JOINT SEALANT.
5. CONCRETE PAVEMENT SHALL BE 6" THICK. 3000 PSI CONCRETE WITH 4% BARS, 10" TOL THROUGH JOINT.
6. COMPARE AND CONFORM EXISTING AGGREGATE BASE COURSE TO 9% THREAD PREDICTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE CONTENT.
7. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING CONCRETE TRAIL AT MEETING AND PARAPET STRUCTURES ALONG THE TRAIL BETWEEN BAS E- AND R.

TYPICAL PROPOSED CONDITIONS CROSS SECTION (A-A)

PROPOSED WORK AREA

EARTH EMBANKMENT AS NEEDED, NOT A SEPARATE PAY ITEM

VERTICAL & HORIZONTAL SCALE

EXISTING 6" AGGREGATE BASE COURSE (TOP 2" REMOVED)

EXISTING SANDSTONE LIMESTONE TRAIL

TRAIL HEADER AT EXISTING PAVEMENT (T=17)

PAVEMENT BAR
HOW TO EMBANKMENT
FORMED GROOVE EMBANKMENT TO HIGH EMBANKMENT
EXISTING PAVEMENT FORMED GROOVE EMBANKMENT TO HIGH EMBANKMENT, SHEET METAL STABILIZATION TREATMENT, SHEET METAL STABILIZATION TREATMENT, SHEET METAL STABILIZATION TREATMENT

CONCRETE TRAIL ACCESS LOCATION

PROJECT NUMBER: 120302
FM 428 BRIDGE AND RED BRIDGE SILT REMOVAL PLAN

TYPICAL EXISTING CONDITIONS CROSS SECTION

TYPICAL PROPOSED CONDITIONS CROSS SECTION

STEPS:
1. THE CONTRACTOR MUST COMPLETE A THOROUGH MAINTENANCE WORK FORM (SECTION 3901 - TECHNICAL SPECIFICATIONS) AND SUBMIT TO TOYO FOR APPROVAL. AFTER APPROVAL, THE CONTRACTOR MUST GIVE TOYO 48 HOURS NOTICE PRIOR TO CONSTRUCTION.
2. REMOVE ANY LARGE DEBRIS FROM PROPOSED WORK AREA. LARGE DEBRIS INCLUDES TREES, LARGE LOGS, HOODS, AND OTHER ITEMS THAT WOULD CAUSE A HAZARDOUS OR SERIOUS OBSTRUCTION TO TRAFFIC.
3. REMOVE EXISTING SILT BUILDUP UNDERNEATH FM 428 BRIDGE AND RED BRIDGE WITHIN PROPOSED WORK AREA. SHOWN ABOVE.
4. REMOVE EXISTING SILT BUILDUP UP NORTH AND UP SOUTH OF FM 428 BRIDGE AND RED BRIDGE ALONG WIDTH OF TRAIL AND MINIMUM 100 FEET OF TRAIL.
5. EXCESS SILT MATERIAL SHALL BE DEPOSITED OF ODP PARK PROPERTY BY CONTRACTOR.

LOCATIONS:

BID OPTION:
1. CONTRACTOR SHALL REMOVE Silt FROM BRIDGES LOCATED AT THE INTERSECTION OF THE GREENBELT TRAIL AND FM 428, ACCORDING TO STEPS OR THE SHEET.
TYPICAL GROUTED CRUSHED LIMESTONE LOW WATER CROSSING REPAIR PLAN

TYPICAL EXISTING CONDITIONS CROSS SECTION

1. Close debris from low water crossing as needed and remove all rip rap on either side.
2. Remove 2' 6'' damaged gROUTED CRUSHED LIMESTONE along edge of low water crossing.
3. Place and replace gROUTED CRUSHED LIMESTONE with new gROUTED CRUSHED LIMESTONE up to base of existing filter fabric.
4. Add new gROUTED CRUSHED LIMESTONE to base of compacted crushed limestone low water crossing.
5. Place 12'' nonwoven rock rip rap fabric along edge of compacted crushed limestone low water crossing, up to back edge of existing headwall.
6. Excavate damaged limestone shall be legally disposed of off park property by contractor.

LOCATIONS:

1. 3.B.1.1. - Repair gROUTED CRUSHED LIMESTONE trail as shown above in the typical proposed cross section and adjusted in steps on this sheet.

BASE BID:

1. 3.B.1.1. - Repair gROUTED CRUSHED LIMESTONE trail as shown above in the typical proposed cross section and adjusted in steps on this sheet.
TYPICAL CONCRETE LOW WATER CROSSING REPAIR PLAN

TYPICAL EXISTING CONDITIONS CROSS SECTION

TYPICAL PROPOSED CONDITIONS CROSS SECTION

STEPS:

1. REMOVE BILY LAY LAY-UP PRIOR TO CONCRETE LOW WATER CROSSING, AS NEEDED.

2. PLACE 1-2 INCHES ROCK RIP RAP TO A MAXIMUM OF 6' IN HEIGHT FROM LOW WATER CROSSING SECTION ABOVE AND ALIGNED IN STEPS ON THIS SHEET.

LOCATIONS:

BID OPTION:

1. Item 1: REPAIR CONCRETE LOW WATER CROSSING (X) (REPLACED RIP RAP AS SHOWN ABOVE IN THE TYPICAL) SECTION ABOVE AND ALIGNED IN STEPS ON THIS SHEET.

BASE BID:

2. Item 2: REMOVE CONCRETE LOW WATER CROSSING (X) (REPLACED RIP RAP AS SHOWN ABOVE IN THE TYPICAL) SECTION ABOVE AND ALIGNED IN STEPS ON THIS SHEET.

3. Item 3: REPAIR CONCRETE LOW WATER CROSSING (X) (REPLACED RIP RAP AS SHOWN ABOVE IN THE TYPICAL) SECTION ABOVE AND ALIGNED IN STEPS ON THIS SHEET.