**Purchasing Services**
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Waco, Texas 76702-2570
Phone: 254-750-8405
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**CITY OF WACO**

**Date:** **09/14/2020**

RFB No: **2020-051**
Commodity: Street Improvements – 2019 Reclamation Phase 1
Purchasing Agent: **Mr. Kasey Gamblin**

**Closing Time: 2:00 P.M. CST, Thursday, October 1, 2020**
**Opening Time: 2:01 P.M. CST, Thursday, October 1, 2020**

RFB Opening Location: Operations Center, Purchasing Services Office, 1415 N. 4th St., Waco, TX 76707

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# Addendum No: 1

**Questions and Answers**
**Changes to Specifications and Drawings**
**Updated Bid Form**

The above-mentioned RFB invitation has been changed in the following manner. **Sign and return addendum to the Purchasing Office by the closing time and date with your RFB response**. Returning this page signed by your authorized agent will serve to acknowledge this change. All other requirements of the invitation remain unchanged. If you have any questions, please call or stop by the Purchasing Office at the above address.

Firm:_____

Address_____

Signature of Person
Authorized to Sign Bid:_____

Signor's Name and Title
(print or type):_____

E-mail Address:_____

Date:_____ Telephone:_____ Fax:_____

**BID PROPOSAL FOR**
**STREET IMPROVEMENTS 2019 RECLAMATION PHASE 1 (18ST2003C)**

| ITEM NO | DESCRIPTION | EST QTY | UNIT | UNIT PRICE | ITEM AMOUNT |
|---|---|---|---|---|---|
| 1 | MOBILIZATION | 1 | LS | | |
| 2 | SWPP PLAN AND IMPLEMENTATION | 1 | EA | | |
| 3 | TRAFFIC CONTROL PLAN AND IMPLEMENTATION | 1 | EA | | |
| 4 | BETTER STREETS WACO SIGN ASSEMBLY AND INSTALLATION | 2 | EA | | |
| 5 | MILLING (2") | 694 | SY | | |
| 6 | 2" D-GR HMAC TY-C SAC-B PG 64-22 (OVERLAY) | 694 | SY | | |
| 7 | CEMENT TREAT (EXIST MATL) (CTRB), 8" DEPTH (NOT INCLUDING CEMENT) | 14,937 | SY | | |
| 8 | CEMENT SLURRY (58 LBS/SY FOR 8" DEPTH) | 433 | TN | | |
| 9 | CEMENT TREATED BASE (PLANT MIX) | 430 | CY | | |
| 10 | LIME TREAT (SUBGRADE)(6") | 2,678 | SY | | |
| 11 | LIME (HYDRATED LIME (SLURRY)) (EST. @ 35 LB LIME/SY FOR 6" DEPTH) | 47 | TN | | |
| 12 | MATERIAL HAUL OFF | 1,053 | CY | | |
| 13 | 2" D-GR HMA TY-C SAC B PG 64-22 FOR RECLAMATION | 17,620 | SY | | |
| 14 | 3" D-GR HMA TY-B PG64-22 FOR RECLAMATION | 2,683 | SY | | |
| 15 | REMOVE EXISTING REINFORCED CONCRETE DRIVE APPROACH | 770 | SF | | |
| 16 | REMOVE EXISTING CURB AND GUTTER | 1,366 | LF | | |
| 17 | REMOVE EXISTING GUTTER | 4 | LF | | |
| 18 | REMOVE EXISTING SIDEWALK | 1,174 | SF | | |
| 19 | REMOVE EXISTING SIDEWALK RAMP | 52 | SF | | |
| 20 | REMOVE EXISTING SOD | 3,452 | SF | | |
| 21 | PROPOSED REINFORCED CONCRETE DRIVE APPROACH | 1,370 | SF | | |
| 22 | PROPOSED GRAVEL DRIVE - CRUSHED ROCK (D=6") | 88 | SY | | |
| 23 | PROPOSED CURB AND GUTTER | 1,496 | LF | | |
| 24 | PROPOSED GUTTER | 4 | LF | | |
| 25 | PROPOSED CONCRETE VALLEY GUTTER AND/OR CONCRETE FILLET | 1,522 | SF | | |
| 26 | SIDEWALK TIE-IN | 320 | SF | | |
| 27 | PROPSED 6" TOPSOIL & SOD | 2,409 | SF | | |
| 28 | ADJUST MANHOLE COVER TO GRADE & INSTALL CONCRETE DIAMOND | 19 | EA | | |
| 29 | ADJUST WATER VALVE COVER TO GRADE & INSTALL CONCRETE DIAMOND | 11 | EA | | |
| 30 | REPLACE OLD WATER VALVE COVER, ADJUST TO GRADE & INSTALL CONCRETE DIAMOND | 7 | EA | | |
| 31 | MOVE FIRE HYDRANT | 1 | EA | | |
| 32 | TXDOT TYPE 2 RAMP (REINFORCED) | 2 | EA | | |

ALL PAGES OF THE BID PROPOSAL SHOULD BE RETURNED

BID PROPOSAL FOR 2019 RECLAMATION PH 1

| | | | | | |
|---|---|---|---|---|---|
| 33 | TXDOT TYPE 5 RAMP (REINFORCED) | 1 | EA | | |
| 34 | TXDOT TYPE 7 RAMP (REINFORCED) | 14 | EA | | |
| 35 | TXDOT TYPE 10 RAMP (REINFORCED) | 2 | EA | | |
| 36 | REFL PAV MRK TY 1 (W)24"(SLD)(100MIL) | 180 | LF | | |
| 37 | REFL PAV MRKR TY II-B-B | 15 | EA | | |
| 38 | MOVE TRAFFIC SIGN | 3 | EA | | |
| 39 | REMOVE TREES | 6 | EA | | |
| 40 | REMOVE DRIFT AT BRIDGE CULVERT INLET | 1 | LS | | |
| 41 | PAINT STEEL BRIDGE RAILS (INCLUDING POSTS AND BASE PLATES) | 1 | LS | | |
| 42 | BRIDGE MARKERS AND DELINEATORS | 5 | EA | | |
| 43 | RIP RAP BEDDING MATERIAL (TXDOT ITEM 432) | 12 | CY | | |
| 44 | 18" GROUTED RIP RAP (TXDOT ITEM 432) | 124 | CY | | |
| 45 | 18" RCP (CLASS III) INCLUDING EXCAVATION & BACKFILL | 82 | LF | | |
| 46 | 24" RCP (CLASS III) INCLUDING EXCAVATION & BACKFILL | 172 | LF | | |
| 47 | 10' STANDARD CURB INLET (COMPLETE-IN-PLACE) | 2 | EA | | |
| 48 | 15' STANDARD INLET | 2 | EA | | |
| 49 | 6' STANDARD INLET | 1 | EA | | |
| 50 | C900 PVC 6" | 40 | LF | | |
| 51 | 45 DEG BENDS (6" WATER LINE) | 4 | EA | | |
| | | | | **TOTAL AMOUNT BID:** | |

BID PROPOSAL FOR 2019 RECLAMATION PH 1

I WILL USE THE FOLLOWING SUBCONTRACTORS FOR THIS WORK:

| SUBCONTRACTOR | TYPE OF WORK |
|---|---|

FIRM NAME: _____

BY (SIGNED): _____

TITLE: _____

ADDRESS: _____

**Contractor acknowledges and agrees that the official TOTAL AMOUNT OF BID is determined by multiplying the unit bid prices by the respective estimated quantities shown in this bid proposal and then totaling all of the extended amounts. Extended amounts SHOULD NOT be rounded up or down. All dollar amounts should be either written legibly or typed. Any mistakes should be rewritten and initialed by the Contractor.**

ALL PAGES OF THE BID PROPOSAL SHOULD BE RETURNED 3 OF 3

## 2019 Street Preservation Phase 1 – Contractor Questions

1. There is a bid item - 9 CEMENT TREATED BASE (PLANT MIX) = 430 CY - I cannot tell what this is used for. Please advise.
2. On sheet C200, there are multiple call-outs for the 4' strip in front of the curb, which is labeled "PAVEMENT TRANSITION (NOTE 5)". Note 5 on the same sheet doesn't make sense with this item. Please clarify the intent of the note.
3. For the same PAVEMENT TRANSITION on Sheet C200, is the typical section for this pavement transition the one shown on C801?
4. For the same PAVEMENT TRANSITION on Sheet C200, how is this item paid for?
5. Schedule of Summary Sheet C004 shows 203 SY of 2" D-GR TY C for overlay and reclamation (Items 6 and 13) on Parrott Ave. Is this a double up?
6. The typical street sections on C418 for N 38th, Parrott, N 40th and N 43rd Streets show 8" CEMENT TREATED RECYCLED BASE IN PLACE from the front of existing curb, to what looks like 1'-0" behind back of new curb. The pay quantity for CEM TREAT RECY BASE is the same as the 2" TY-C quantity which is face of curb to face of curb for each street.
    a. Shouldn't the pay quantity for CEM TREAT BASE be higher, to encompass the CEM TREAT BASE under new curb areas?
    b. If the new CEM TREAT BASE extends beyond the proposed curb, will there be enough existing roadway material to do this?
    c. How would the excavation and haul off for the CEM TRT BASE under new curbs be paid for?
7. Sheet C801 has two notes that state Curb and Gutter to be paid for separately from the concrete valley gutter at the contractor unit price for curb and gutter. The various plan sheets have notes that state that CONCRETE CURB IS SUBSIDIARY TO VALLEY GUTTER AND FILLET BID ITEM. Please clarify the contradicting notes.

## City of Waco Responses:

Please see below for responses to contractor questions. Changes have been incorporated in the revised drawings of Addendum No.1.

1. Bid Item 9 is imported cement treated base required to fill the deficit remaining after the existing pavement and base material are utilized. On N 38th St., N 40th St., and N 43rd St., there is not enough existing material available to create and 8" thick section of cement treated base throughout. Sheets C007 and C418 have been revised to clarify.
2. Label shall be revised to "PAVEMENT TRANSITION (NOTE 8)". Note 8 shall be revised to say "CONTRACTOR SHALL USE 4-FOOT WIDE SECTION TO REMOVE AND REPLACE PAVEMENT AS NEEDED TO TRANSITION BEWTEEN EXISTING PAVEMENT AND LIP OF GUTTER OR DRIVE APPROACH. THIS ITEM IS SUBSIDIARY TO THE PROPOSED CURB AND GUTTER AND PROPOSED REINFORCED CONCRETE DRIVE APPROACH BID ITEMS." Sheet C200 has been revised to clarify.

3. Detail ST-11 on Sheet C801 shall be used for the PAVEMENT TRANSITION. Detail on C 801 has been revised to show that pavement transition shall be done using Type “C” HMAC with a depth of 2” minimum.
4. See response to Question 2.
5. Yes. Item 6 for Parrot Ave shall have a 0 quantity. Sheet C004 has been revised to clarify.
6. See responses to questions:
    a. The cement treated base required under and 1’-0” behind the proposed curb and gutter as shown on Sheet C418 shall be considered subsidiary to the PROPOSED CURB AND GUTTER bid item.
    b. There will not be enough existing material to use for cement treated base under and behind proposed curb and gutter. Contractor shall import cement treated base material.
    c. Excavation and haul off in preparation for the cement treated base under and behind the proposed curb and gutter shall be considered subsidiary to the PROPOSED CURB AND GUTTER bid item.

    Sheet C418 has been revised to clarify.
7. The concrete curb shall be subsidiary to the valley gutter and fillet bid items. Details ST-11 and ST-12 on C801 have been revised to remove the contradiction.

# STREET IMPROVEMENTS 2019 RECLAMATION PHASE 1 - SCHEDULE OF QUANTITIES

## GENERAL CONDITIONS

| ITEM NO | UNIT | DESCRIPTION | TOTAL QTY |
|---|---|---|---|
| 1 | LS | MOBILIZATION | 1 |
| 2 | EA | SWPP PLAN AND IMPLEMENTATION | 1 |
| 3 | EA | TRAFFIC CONTROL PLAN AND IMPLEMENTATION | 1 |
| 4 | EA | BETTER STREETS WACO SIGN ASSEMBLY AND INSTALLATION | 2 |

| ITEM NO | UNIT | DESCRIPTION | N 38TH ST | PARROTT AVE | N 40TH ST | N 43RD ST | CHERRY ST | TOTAL QTY |
|---|---|---|---|---|---|---|---|---|
| 5 | SY | MILLING (2") | - | - | 114 | 218 | 362 | 694 |
| 6 | SY | 2" D-GR HMAC TY-C SAC-B PG 64-22 (OVERLAY) | - | 1 ~~0~~ ~~203~~ | 114 | 218 | 362 | 1 ~~694~~ ~~897~~ |
| 7 | SY | CEMENT TREAT (EXIST MATL) (CTRB), 8" DEPTH (NOT INCLUDING CEMENT) | 4,723 | 203 | 5,896 | 4,115 | - | 14,937 |
| 8 | TN | CEMENT SLURRY (58 LBS/SY FOR 8" DEPTH) | 137 | 6 | 171 | 119 | - | 433 |
| 9 | CY | CEMENT TREATED BASE (PLANT MIX) | 121 | | 293 | 16 | - | 430 |
| 10 | SY | LIME TREAT (SUBGRADE)(6") | - | - | - | - | 2,678 | 2,678 |
| 11 | TN | LIME (HYDRATED LIME (SLURRY)) (EST. @ 35 LB LIME/SY FOR 6" DEPTH) | - | - | - | - | 47 | 47 |
| 12 | CY | MATERIAL HAUL OFF | 262 | 11 | 328 | 229 | 223 | 1,053 |
| 13 | SY | 2" D-GR HMA TY-C SAC B PG 64-22 FOR RECLAMATION | 4,723 | 203 | 5,896 | 4,115 | 2,683 | 17,620 |
| 14 | SY | 3" D-GR HMA TY-B PG64-22 FOR RECLAMATION | - | - | - | - | 2,683 | 2,683 |
| 15 | SF | REMOVE EXISTING REINFORCED CONCRETE DRIVE APPROACH | 551 | 140 | - | 79 | - | 770 |
| 16 | LF | REMOVE EXISTING CURB AND GUTTER | 698 | - | 543 | 125 | - | 1,366 |
| 17 | LF | REMOVE EXISTING GUTTER | - | - | 4 | - | - | 4 |
| 18 | SF | REMOVE EXISTING SIDEWALK | 530 | - | 482 | 162 | - | 1,174 |
| 19 | SF | REMOVE EXISTING SIDEWALK RAMP | 52 | - | - | - | - | 52 |
| 20 | SF | REMOVE EXISTING SOD | 1,362 | - | 1,258 | 832 | - | 3,452 |
| 21 | SF | PROPOSED REINFORCED CONCRETE DRIVE APPROACH | 799 | 492 | - | 79 | - | 1,370 |
| 22 | SY | PROPOSED GRAVEL DRIVE - CRUSHED ROCK (D=6") | 14 | - | - | - | 74 | 88 |
| 23 | LF | PROPOSED CURB AND GUTTER | 869 | 236 | 300 | 91 | - | 1,496 |
| 24 | LF | PROPOSED GUTTER | - | | 4 | - | - | 4 |
| 25 | SF | PROPOSED CONCRETE VALLEY GUTTER AND/OR CONCRETE FILLET | 655 | - | 867 | - | - | 1,522 |
| 26 | SF | SIDEWALK TIE-IN | 135 | - | 136 | 49 | - | 320 |
| 27 | SF | PROPSED 6" TOPSOIL & SOD | 1,022 | - | 829 | 558 | - | 2,409 |
| 28 | EA | ADJUST MANHOLE COVER TO GRADE & INSTALL CONCRETE DIAMOND | 7 | 1 | 3 | 3 | 5 | 19 |
| 29 | EA | ADJUST WATER VALVE COVER TO GRADE & INSTALL CONCRETE DIAMOND | 2 | 2 | 4 | - | 3 | 11 |
| 30 | EA | REPLACE OLD WATER VALVE COVER, ADJUST TO GRADE & INSTALL CONCRETE DIAMOND | 2 | - | - | 4 | 1 | 7 |
| 31 | EA | MOVE FIRE HYDRANT | | 1 | | | | 1 |
| 32 | EA | TXDOT TYPE 2 RAMP (REINFORCED) | 2 | - | - | - | - | 2 |
| 33 | EA | TXDOT TYPE 5 RAMP (REINFORCED) | 1 | - | - | - | - | 1 |
| 34 | EA | TXDOT TYPE  7 RAMP (REINFORCED) | 4 | - | 6 | 4 | - | 14 |
| 35 | EA | TXDOT TYPE  10 RAMP (REINFORCED) | 1 | - | 1 | - | - | 2 |
| 36 | LF | REFL PAV MRK TY 1 (W)24"(SLD)(100MIL) | 20 | - | 120 | 40 | - | 180 |

PUBLIC WORKS

ENGINEERING DIVISION

STREET IMPROVEMENTS
2019 RECLAMATION PHASE 1

SCHEDULE OF QUANTITIES - 1 OF 2

| NO. | REVISION | DATE |
|---|---|---|
| 1 | ADDENDUM NO. 1 | 09/10 |

STATE OF TEXAS
JACOB S. HOLDEN
133166
LICENSED
PROFESSIONAL ENGINEER

NAME

09/10/2020
DATE

Design: MLZ  Approved: JSH
Checked: JSH  Project Mgr.: JSH

Project No: 18ST2003C

Sheet No. C004

Issue Date: AUGUST 2020

# SPECIAL PROJECT PROVISIONS

removal and replacement in front of curb and gutter, drive approaches, and concrete fillets required to provide a smooth transition between the existing pavement elevation and the new edge of gutter/drive approach/fillet elevation.

11.4. The following shall be used to clarify the Curb and Gutter notes shown in the City of Waco Details with regards to new curb and gutter:

11.4.1. Contractor shall extend the depth of the curb or curb and gutter if the extension required is less than 4".

11.4.2. If the extension required is greater than 4", Contractor may either extend the depth of the concrete or use compacted road gravel.

11.4.3. In all cases for new curb and gutter, the Contractor shall stabilize the subgrade to a depth of 6" with a lime application rate of 30 lb/SY. Reference the City of Waco Standard Specifications for Construction for additional requirements.

11.5. The EI and Contractor will walk lanes to receive surface treatment and determine where curb and gutter replacement is required, and the specific locations/elevations given in the plans may chance. The final decision will be the City's. The unit price as bid will be used regardless of the quantity.

11.6. Where vegetation is to be established in an area where concrete or asphalt is being removed, Contractor will be paid per square foot for the work. This pay item includes watering and all required care until project acceptance. Either cool weather or warm weather seed/sod shall be used (depending on the season), and quantities have been estimated based on a two-foot-wide strip behind sidewalk and/or curb and gutter. For erosion control in the cool season, temporary seed must be placed and then followed by either permanent seed or block sodding. Sod will be required for developed properties.

11.7. All earthwork (cut and fill) required for the work of this contract, unless otherwise specified, is subsidiary to payment for the sidewalk, retaining wall, etc.

11.8. At all pedestrian ramp locations, the change in elevation between the curb and gutter and beginning of the ramp rise shall not exceed 1/4-inch.

11.9. The maximum cross slope in any direction on the new sidewalk shall be 2% and graded to drain with a minimum slope of 0.5%, unless otherwise noted on plans.

11.10. The maximum slope in any direction across a landing shall be 2%. Landings shall be graded to drain with a minimum slope of 0.5%, unless otherwise noted on plans.

11.11. The Contractor may scale the length of ramps, dimensions of landings, etc. from the plans for estimating purposes, but these lengths and dimensions are approximate. The Contractor will be responsible for construction of all ramps and landings, sidewalk, vegetated areas, driveways and other tie-ins to comply with maximum and minimum slopes and widths and to meet existing grades as shown in the plans and described in all details and notes.

11.12. Each ramp will be bid as a unit price item. The unit price bid will be full compensation for materials, tools, labor and incidentals to construct the ramp, upper and lower landings, detectable warning surface, and flares as shown on the plans.

11.13. Each ramp will be bid as a unit price item. The unit price bid will be full compensation for materials, tools, labor and incidentals to construct the ramp, upper and lower landings, detectable warning surface, curbs, and flares as shown on the plans.

## 12. STREET WORK

12.1. The Contractor may pave any time (during working hours established in Section 7) the roadway has no standing water on the roadway surface, the roadway surface temperature is at least 60°F and the ambient temperature is at least 50°F and rising. Place mixtures only when the EI determines the roadway surface weather and moisture conditions are suitable. The EI may restrict the Contractor from paving if the ambient temperature is below 60°F and falling. Cease placement twenty-four (24) hours before the National Weather Service forecast predicts temperatures below 32°F unless otherwise approved.

12.2. No asphalt treatments will be applied just prior to a rain event that could result in chemical asphalt or any asphalt by-product pollutant being washed into a stream or stormwater collection system.

12.3. No AC or Emulsion for surface treatment items will be placed between October 1 and April 1 unless approved in writing by the Project Engineer.

12.4. Installation of new curb and gutter, concrete fillets and valley gutters; completion of base failure repair; and HMAC grinding and level up work **shall all be completed prior to the HMAC work**.

12.5. All aggregate for each project will come from the same source or blended sources approved by the Project Engineer.

12.6. Remove all dirt and debris accumulated in the curb and gutter sections prior to beginning paving. Likewise, remove all vegetation from pavement edges prior to operations. This work will be subsidiary to bid items.

12.7. The Contractor shall submit phasing plans for each roadway including request(s) for night work for approval prior to construction.

12.8. Surfacing required as repair due to unsatisfactory workmanship by the Contractor will not be paid for directly but shall be deem the cost responsibility of the Contractor.

12.9. Any tracking of asphalt material will be the responsibility of the Contractor to mitigate at no additional expense to the City.

12.10. Any conflicts between City of Waco specifications and Texas Department of Transportation specifications will be directed to the Project Engineer to provide clarification.

12.11. The elevation adjustment of any "SWB Manholes" shall be coordinated through Calvin Pewitt of AT&T who can be contacted at (254)757-7810 (office), (254)715-7869 (mobile) or at cp8237@att.com.

12.12. Any signs removed shall be replaced the same day.

## 13. MILL AND OVERLAY

13.1. **General Process** - The mill and overlay process generally consists of milling to a depth of 2" where HMAC is to be placed (unless otherwise specified), base failure repair if needed, cleaning, and applying a bonding course (either Tracking-Resistant Asphalt Interlayer of product type Hot Asphalt or placing Spray-Applied Underseal Membrane), and placement of 2" of HMAC, Type C.

13.2. Adjustments to mill depth shall be made based on the geotechnical boring information provided in the contract book, plans, and/or varying site conditions. The following table shall be used to determine mill and overlay depth based on existing pavement thickness:

| EXISTING PAVEMENT THICKNESS | MILL DEPTH | HMAC OVERLAY DEPTH |
|---|---|---|
| < 2" | TO BASE | 2" |
| ≥ 2" | 2" | 2" |

Mill depth transitions shall occur over a distance of 100 ft (minimum).

13.3. The minimum thickness of the HMAC overlay in all locations shall be 2 inches. HMAC milling shall be adjusted over a 4-foot width (min) at edges of pavement to ensure final surface course matches the elevation of the gutter lip. Edge milling to depths exceeding those in the table above (i.e. milling into the base if the existing asphalt is less than 2" thick) will be allowed to ensure the new 2" pavement surface matches the existing or proposed gutter lip.

13.4. **Exposed base shall receive a prime coat the same day it is exposed**.

13.5. Overlay must occur within 7 days of milling.

13.6. Do not mill or overlay concrete pavement.

13.7. Milling shall be done to match the grade of new and existing surfaces at concrete aprons and valleys, utility vaults (transition so that utility vaults do not need adjustment and a smooth ride is achieved), concrete street intersections, and along intersecting streets identified in the plans.

13.8. Where, due to milling, there is a transverse joint greater than ½" in depth in a travel way a temporary ramp acceptable to the EI shall be placed prior to opening to traffic.

13.9. Millings shall become the property of the Contractor and removed from site. This removal is subsidiary to the unit price for milling.

13.10. **Prime Coat**

13.10.1. The Contractor shall utilize a prime coat asphalt applied as a solid and uniform coat over any base material that will receive new HMAC. Prime coat material shall be AE-P, MC-30, or approved equal. Before the prime coat is applied, the surface shall be cleaned thoroughly to the satisfaction of the EI. The rate of application shall be 0.16 gal/SY of residual asphalt and shall provide complete and uniform coverage of the repair surface. The EI must approve proper coverage and may suspend paving operations until satisfactory prime coat has been applied. This item shall be subsidiary to the unit price for base failure repair.

13.10.2. If base material is exposed, the Contractor shall apply a prime coat of the same material and application rate above within the same day of exposure. Base material shall not be left without a prime coat overnight or if rain is forecasted within 8 hours. This item shall be subsidiary to the mill and overlay work.

13.11. **Bonding Course**

13.11.1. **General** - For the mill and overlay bonding course, the Contractor has the option of using either Spray Applied Underseal Membrane (per TxDOT Special Specifications 3002 and 3042) or Tracking-Resistant Asphalt Interlayer (TRAIL), product type Hot Asphalt (per TxDOT Special Specification 3042).

13.11.2. **Spray Applied Underseal Membrane** - City specifications call for RC-2, but for this project, spray applied underseal membrane shall be used (see TxDOT Special Specification 3002, "Spray Applied Underseal Membrane"), with a solid and uniform coat of oil which shall be a consistently dark color over the entire area. Before the bonding course is applied the surface shall be cleaned thoroughly to the satisfaction of the EI or designated representative. This membrane shall be applied at the rate of 0.19 GAL/SY (residual asphalt) to provide complete and uniform coverage of the underlying milled material. The Contractor shall also apply a uniform coat to all contact surfaces including curbs, castings, structures and joints to provide a closely bonded, watertight joint. The EI or designated representative must approve proper coverage and may suspend paving operations until satisfactory underseal membrane has been applied. This item shall be subsidiary to the unit price for milling.

13.11.3. **TRAIL, product type Hot Asphalt** - Tracking-Resistant Asphalt Interlayer (TRAIL) of the product type Hot Asphalt shall be used per TxDOT Special Specification 3042. The following TRAIL product manufacturers are acceptable for use, without exception:

- *UltraFuse - Trackless Hot Applied* by Blacklidge
- *Underseal* by Jebro
- *eTac-HB* by Ergon Asphalt and Emulsions
- *DOT-C-LT* by Texas Materials Group

Before the bonding course is applied the surface shall be cleaned thoroughly to the satisfaction of the EI or designated representative. This product shall be applied at a minimum rate of 0.19 GAL/SY to provide complete and uniform coverage of the underlying milled material. The Contractor shall also apply a uniform coat to all contact surfaces including curbs, castings, structures and joints to provide a closely bonded, watertight joint. The Engineer or designated representative must approve proper coverage and may suspend paving operations until satisfactory coverage has been achieved. This item shall be subsidiary to the unit price for milling.

## 14. HOT-MIX ASPHALT CONCRETE (HMAC)

14.1. The Contractor may not place the pavement course until approval is requested and written approval is received by the Contractor from the Engineer.

14.2. HMAC utilized on this project shall be either TxDOT Special Specification 3076 Dense-Graded Hot-Mix Asphalt Type C or Type B (as shown on the plans) performance graded asphalt 64-22 and shall be applied at a rate of 110 lbs/SY/in of compacted pavement.

14.3. The Contractor shall provide results from the mix prior to construction.

14.4. A City of Waco representative shall inspect the stockpile prior to construction.

## 15. RECLAMATION MATERIALS

15.1. **General** - The reclamation process consists of the following: break up and process surfacing, base and cement; compact & sweep base; moisten (no standing water); keep moist; prime coat; sub-surface course (if included) with bonding course, and final surface course. See section 2.3.D of the City of Waco Standard Specifications for additional requirements.

15.2. When reclaiming more than one section of continuous street, the Engineer or designated representative will have the final decision whether to reclaim cross streets.

15.3. In locations where the lip of the gutter is displaced along the street and matching at these points proves difficult, it shall be the Contractor's primary responsibility to maintain a "smooth ride" and secondarily to attempt to follow the lip of the gutter while still maintaining a 2" minimum depth of asphalt along the lip.

15.4. At various locations, hot-mix that currently exists in the gutter shall be milled to the gutter level. Payment for this work shall be subsidiary to various bid items in the contract.

15.5. Hot-mix Asphalt Concrete (HMAC) shall be TxDOT Special Specification 3076 Dense-Graded Hot-Mix Asphalt Type C performance graded asphalt 64-22 (final surface) and TxDOT Special Specification 3076 Dense-Graded Hot-Mix Asphalt Type B performance graded asphalt 64-22.

15.5.1. Contractor shall use a laydown machine for all HMAC placement. "Balding in" HMAC Type B is prohibited.

15.5.2. Contractor shall allow sufficient time for each HMAC lift to cool prior to placing next lift or surface course.

15.6. The Contractor shall provide results from the mix prior to construction.

15.7. The Engineer or designated representative shall inspect the stockpile prior to construction.

15.8. The Contractor shall windrow the mixed base to the side and excess subgrade will be excavated and hauled off. Excess material shall become the property of the Contractor and removed from the site.

15.9. For this reclamation work RC-250 or AE-P shall be considered an approved equal to RC-2, using the same procedure within Section 2.5 of the Standard Specifications for Construction (2013).

15.10. The prime coat must be solid and uniform, with a consistently dark color over the entire area. The street shall be clean of any sediment or debris prior to paving. The oil may need to be reapplied as required to ensure a solid, uniform, and complete coat prior to paving.

15.11. Application rates for the oils utilized shall be discussed and approved by the Project Engineer or designated representative.

15.12. Any haul off required to meet grade in plans shall be taken from subgrade material.

15.13. Cement Treated Base (Plant Mix) - The volume of the existing pavement and base material is not sufficient to provide an 8-inch depth of cement treated base across the entire road. Imported cement treated base conforming to Section 2.3.D of the City of Waco Standard Specitications shall be brought in and mixed with the existing material to fill the deficit. Portland cement rate shall be the same as that specified in Section 16.1 of these Special Project Provisions. Measurement and payment for this item shall be by the cubic yard (CY) of cement treated base delivered and compacted in place.

## 16. RECLAMATION PROCESS - CEMENT STABILIZATION

16.1. Portland Cement shall be placed at a rate of 58 lbs/SY for an 8-inch depth on average. The Contractor shall work with the testing laboratory hired by the City to determine the appropriate amount of cement required as the subgrade is exposed. Variations in cement quantities may occur based on soil characteristics. **Slurry Portland Cement is required.**

16.2. After the mixing has occurred, not sooner than twenty-four (24) hours nor after seventy-two (72) hours, roll the finished course with a vibratory roller to induce microcracking. The vibratory roller shall be performed in accordance with TXDOT Item 270, "Rolling," with a static weight equal to or more than 12 tons and the vibratory drum must be not less than 20 in. wide. The roller must travel at a speed of 2 mph, vibrating at maximum amplitude, and make 2 to 4 passes with 100% coverage exclusive of the outside 1 ft. of the surface crown, unless otherwise directed by the Project Engineer. Additional passes may be required to achieve the desired crack pattern as directed. Notify the Project Engineer 24 hours before the microcracking begins. Maintain in a thorough and continuously moist condition by sprinkling until prime coat is applied.

16.3. **Protection and Cover**: After the cement treated course has been finished, the surface shall be protected against rapid drying by the following curing method. The protection method shall be continued: (a) for the specified period, but in no case less than 7 days or (b) until the surface course is placed.

16.3.1. Maintain in a thorough and continuously moist condition by sprinkling until prime coat is applied.

16.4. **Prime Coat**

16.4.1. Before prime coat is applied the surface shall be cleaned thoroughly to the satisfaction of the Engineer or designated representative. Immediately prior to application of the curing seal, the section shall be wetted so that voids in the surface are filled with water, but without free water standing on the surface.

16.4.2. **RC-2, RC-250, or AE-P**: Apply an approved asphaltic material to the treated course. The application rate shall provide complete coverage and seal the total surface of the base and fill all voids. This work will be paid for by the gallon of residual asphalt. For bidding purposes, this residual rate is estimated at 0.16 gallon per square yard. The Project Engineer or designated representative reserves the right to increase this residual rate during construction with no adjustment to the unit cost. If the base will be opened to traffic before surface coat applied, it shall be the Contractor's responsibility to sand the surface in order to protect the membrane from being picked up by traffic. Prior to the HMAC subsurface or surface course, surface shall be swept clean and free of sand before applying tack coat. This additional layer of tack coat is subsidiary to the base work.

PUBLIC WORKS

ENGINEERING DIVISION

STREET IMPROVEMENTS
2019 RECLAMATION PHASE 1

SPECIAL PROJECT PROVISIONS - 2 OF 3

| NO. | REVISION | DATE |
|---|---|---|
| 1 | ADDENDUM NO. 1 | 09/10 |

STATE OF TEXAS
JACOB S. HOLDEN
133166
LICENSED PROFESSIONAL ENGINEER

NAME 09/10/2020 DATE

Design: MLZ Approved: JSH
Checked: JSH Project Mgr.: JSH

Project No: 18ST2003C
Sheet No. C007
Issue Date: AUGUST 2020

# SPECIAL PROJECT PROVISIONS

16.5. **Tack Coat**

16.5.1. For the reclamation area shall be the same as the prime coat. Before hot-mix surface course is applied the surface shall be cleaned thoroughly to the satisfaction of the Engineer or designated representative. The Contractor shall also apply a uniform coat to all contact surfaces including curbs and gutters, castings, structures and joints to provide a closely bonded, watertight joint. The Project Engineer or designated representative must approve proper coverage and may suspend paving operations until satisfactory tack has been applied. This work will be paid for by the gallon of residual asphalt. For bidding purposes this residual rate is estimated at 0.06 gallons per square yard and is subsidiary to the base work.

16.5.2. The Project Engineer or designated representative may require the use of additional tack coat where insufficient adhesion is provided by the prime coat.

16.6. Pavement edge blading shall be subsidiary to the various pay items.

16.7. The tack coat shall not be placed within 300 feet of approaches to signalized intersections.

**17. LIME STABILIZATION OF SUBGRADE**

17.1. Lime stabilization of the existing subgrade shall meet the requirements in Section 2.4 of the City of Waco Standard Specifications for Construction.

17.2. Lime treatment shall include all portions of the work except the lime material and shall be measured and paid for by the square yard.

17.3. The lime material shall be measured and paid for by the ton.

17.4. **Hydrated lime slurry shall be used.**

**18. PAVEMENT THICKNESS TESTING**

18.1. Any pavement placed on this project shall be subject to the following testing and deficiency requirements, which supersede those provided in the City of Waco Standard Specifications for Construction.

18.2. During and upon completion of the work and before final acceptance and final payment shall be made, pavement thickness tests shall be made by the City or its authorized representative unless otherwise specified in these special project provisions or in the plans. The number and location of tests shall be at the discretion of the City, but will typically be not more than every 2,000 LF and in each lane. In the event a deficiency in thickness of pavement is revealed during normal testing operations, subsequent tests necessary to isolate the deficiency to the satisfactory of the City shall be made at the Contractor's expense and shall be completed by a City-approved laboratory. The cost for the additional coring tests shall be at the same rate charged by commercial laboratories.

18.3. **Pavement Thickness, Deficiencies, any Payment**

18.3.1. Any area of pavement with a specified depth of 2 inches or greater shall be removed and replaced at the Contractor's expense if the tested depth of the new pavement is less than 2 inches. Depending on the deficiency, the Project Engineer may give the Contractor the option to leave the material in place and forfeit payment for that material.

18.3.2. If the specified new pavement depth is greater than 2 inches, the following table shall be used to determine payment for deficiency in thickness:

| Deficiency In Thickness Determined by Cores (inches) | Proportional Part of Contract Price Allowed |
|---|---|
| 0.00 - 0.20 | 80 percent |
| 0.21 - 0.30 | 70 percent |
| 0.41 - 0.50 | 60 percent |

If the pavement thickness deficiency is less than 0.50 inches, the Contractor shall remove and replace the deficient pavement at their own expense.

This table shall not be used once the deficient pavement depth drops below 2 inches, in which case the preceding section will govern.

18.3.3. No additional payment over the contract unit price shall be made for any pavement of a thickness exceeding that required by the plans.

**19. PAVEMENT MARKINGS**

19.1. Temporary Markings shall be placed before lanes are open to traffic.

19.2. Place temporary traffic markings that meet the Texas Manual on Uniform Traffic Control Devices on all streets currently marked.

19.3. Placement of permanent markings on all streets shall be done as existing, unless indicated in plans. Markings shall meet the requirements of TxDOT Item 666, “Retroreflectorized Pavement Markings.” This shall include any non-overlaid concrete sections within the street limits.

19.3.1. Type 1 markings must meet the following minimum retroreflectivity values for edgeline markings, centerline or no passing barrier-line, and lane lines when measured any time after 3 days, but not later than 10 days after application:

- White markings: 250 millicandelas per square meter per lux (mcd/m2/lx)
- Yellow markings: 175 mcd/m2/lx

19.0.1. Contractor shall complete the retroreflectivity testing in accordance with TxDOT Item 666 and shall provide written report with test results confirming conformance the required retroreflectivity values.

19.1. Placement of Raised Pavement Markers shall be done in accordance with TxDOT Item 672, “Raised Pavement Markers.”

19.2. The Contactor will supply and install the blue raised reflective markers utilized for all fire hydrants within the work limits. This item shall be subsidiary to the various bid items.

19.3. Two-way left-turn use arrow pavement markings are to be placed, with 16 feet typical spacing, at or just downstream from the beginning of the two-way left-turn lane, as indicated in plans, per the Texas Manual on Uniform Traffic Control Devices, Section 3B.20.

19.4. Pedestrian Crossings are to have 10 feet long by 2 feet wide white bars with 2 feet spacing.

19.5. Reflective pavement markings of the break type shall be measured and paid for by the linear feet of pavement marking applied. Contractor shall note that the length and spacing of the yellow and white break lines shown on the plans may not be to scale. The length of the lines shall be 10' and the length of the spacing shall be 30'.

19.6. Contractor shall arrange construction operations to prevent the hauling of materials through the completed pavement sections unless otherwise approved by the EI or City Engineer.

19.7. The Contractor shall open the pavement to traffic each night.

19.8. When work is within 400 feet of a signalized intersection, Contractor shall call for utility locates (811) to identify location of loop detectors, conduits, etc. Any damage to these facilities done by the Contractor shall be repaired by the Contractor to the City of Waco standards and shall be subsidiary to the work.

19.9. Removal of raised pavement markers as work progresses shall be subsidiary to the various bid items.

**20. WATER VALVE BOXES AND MANHOLE LIDS**

20.1. Manhole and water valve lids shall be adjusted in accordance with the details provided in the plans.

20.2. Adjustment of manholes and valves shall be made to within ¼” of adjacent proposed grade. Manhole and water valve lids shall be adjusted in accordance with COW Standard Details, and all shall include a concrete pad as shown in the “Manhole Lid Height Adjustment” detail and “Valve Box Height Adjustment” detail. Note that abandoned valves may exist and will be addressed by the EI during construction. If old style valve boxes are encountered during the raising process, the Contractor shall replace them with boxes meeting the new details. The boxes will be either raised or replaced and paid for by the appropriate bid item. **Contractor will not be paid for both**. Salvage all water valve covers and deliver to the City's Utilities Department at 200 Colcord Avenue.

**21. CHERRY STREET BRIDGE REQUIREMENTS**

21.1. Contractor shall paint all exposed metal surfaces (rail, posts, base plates) in accordance with TxDOT Item 446, “Field Cleaning and Painting Steel”.

21.2. Contractor shall use paint System II.

21.3. Per TxDOT Item 446, Contractor shall provide a plan with details on how painting application will be contained from adversely affecting the waterway below the bridge. This containment plan and implementation shall be subsidiary to the painting work.

**22. TXDOT WACO DISTRICT, GENERAL NOTES**

22.1. The following TxDOT Waco District General Notes shall be included as part of the contract documents:

**ITEM GENERAL NOTES**

**164 SEEDING FOR EROSION CONTROL**

a) Temporary seeding mixtures (cool and warm) will also include three (3) lbs of Bermuda grass seed per acre, with all seeds being planted concurrently.

b) Contractor will mow or disc wheat and or oats in spring prior to vegetation going to seed.

c) Permanent seed mixes for both urban and rural projects including sand or clay soils in the Waco District will be bid and installed to include a minimum of one & one-half (1.5) pounds per acre Green Sprangletop seed and four (4) pounds per acre Bermudagrass seed, with other seed types also being included and quantities remaining unchanged.

**658 DELINEATOR AND OBJECT MARKER ASSEMBLIES**

a) All flexible and GF2 delineators will have a tubular body.

b) The delineator assembly BRF Class A (D-SW) and (D-SY) are to be single delineators (Class I) attached to a flat, plastic bracket to facilitate the mounting of the delineator on top of the bridge rail at the locations shown on the plans. Submit a sample for approval before ordering materials.



PUBLIC WORKS

ENGINEERING DIVISION

STREET IMPROVEMENTS
2019 RECLAMATION PHASE 1

SPECIAL PROJECT PROVISIONS - 3 OF 3

| NO. | REVISION | DATE |
|---|---|---|
| 1 | ADDENDUM NO. 1 | 09/10 |

STATE OF TEXAS
JACOB S. HOLDEN
133166
LICENSED
PROFESSIONAL ENGINEER

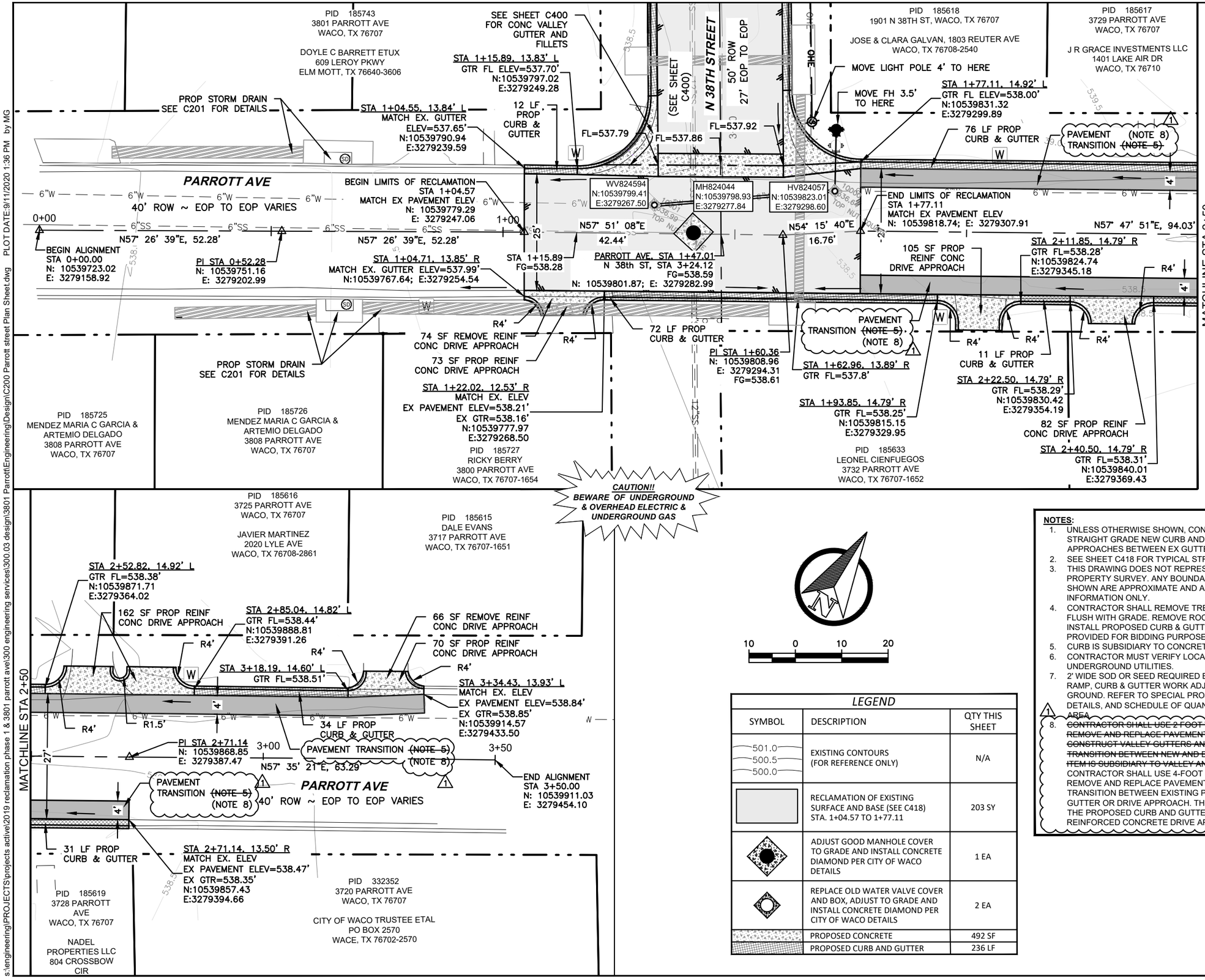
NAME 09/10/2020 DATE

Design: MLZ Approved: JSH
Checked: JSH Project Mgr.: JSH

Project No: 18ST2003C

Sheet No. C008

Issue Date: AUGUST 2020




| LEGEND | | |
|---|---|---|
| SYMBOL | DESCRIPTION | QTY THIS SHEET |
| 501.0 / 500.5 / 500.0 | EXISTING CONTOURS (FOR REFERENCE ONLY) | N/A |
| | RECLAMATION OF EXISTING SURFACE AND BASE (SEE C418) STA. 1+04.57 TO 1+77.11 | 203 SY |
| | ADJUST GOOD MANHOLE COVER TO GRADE AND INSTALL CONCRETE DIAMOND PER CITY OF WACO DETAILS | 1 EA |
| | REPLACE OLD WATER VALVE COVER AND BOX, ADJUST TO GRADE AND INSTALL CONCRETE DIAMOND PER CITY OF WACO DETAILS | 2 EA |
| | PROPOSED CONCRETE | 492 SF |
| | PROPOSED CURB AND GUTTER | 236 LF |

**NOTES:**

1. UNLESS OTHERWISE SHOWN, CONTRACTOR SHALL STRAIGHT GRADE NEW CURB AND GUTTER AND DRIVE APPROACHES BETWEEN EX GUTTER ELEVATIONS.
2. SEE SHEET C418 FOR TYPICAL STREET DETAILS.
3. THIS DRAWING DOES NOT REPRESENT A BOUNDARY OR PROPERTY SURVEY. ANY BOUNDARY OR PROPERTY LINES SHOWN ARE APPROXIMATE AND ARE FOR GENERAL INFORMATION ONLY.
4. CONTRACTOR SHALL REMOVE TREES AND GRIND STUMP FLUSH WITH GRADE. REMOVE ROOTS AS NEEDED TO INSTALL PROPOSED CURB & GUTTER. TRUNK DIAMETER PROVIDED FOR BIDDING PURPOSES.
5. CURB IS SUBSIDIARY TO CONCRETE FILLET BID ITEM.
6. CONTRACTOR MUST VERIFY LOCATION OF ALL UNDERGROUND UTILITIES.
7. 2' WIDE SOD OR SEED REQUIRED BEHIND ALL SIDEWALK, RAMP, CURB & GUTTER WORK ADJACENT TO NATURAL GROUND. REFER TO SPECIAL PROJECT PROVISIONS FOR DETAILS, AND SCHEDULE OF QUANTITIES FOR ESTIMATED AREA.

1 8. ~~CONTRACTOR SHALL USE 2 FOOT WIDE SECTION TO REMOVE AND REPLACE PAVEMENT AS NEEDED TO CONSTRUCT VALLEY GUTTERS AND FILLETS AND TRANSITION BETWEEN NEW AND EXISTING PAVEMENT. THIS ITEM IS SUBSIDIARY TO VALLEY AND FILLET BID ITEM.~~ CONTRACTOR SHALL USE 4-FOOT WIDE SECTION TO REMOVE AND REPLACE PAVEMENT AS NEEDED TO TRANSITION BETWEEN EXISTING PAVEMENT AND LIP OF GUTTER OR DRIVE APPROACH. THIS ITEM IS SUBSIDIARY TO THE PROPOSED CURB AND GUTTER AND PROPOSED REINFORCED CONCRETE DRIVE APPROACH BID ITEMS.

Know what's below. Call before you dig. 811

PUBLIC WORKS
ENGINEERING DIVISION

STREET IMPROVEMENTS
2019 RECLAMATION PHASE 1
RECLAMATION MAP
PARROTT AVE
STA 0+00 TO 3+50

| NO. | REVISION | DATE |
|---|---|---|
| 1 | ADDENDUM NO. 1 | 09/10 |

STATE OF TEXAS
JACOB S. HOLDEN
133166
LICENSED PROFESSIONAL ENGINEER
NAME
09/10/2020
DATE

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Checked: JSH Project Mgr.: JSH

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Sheet No. C200
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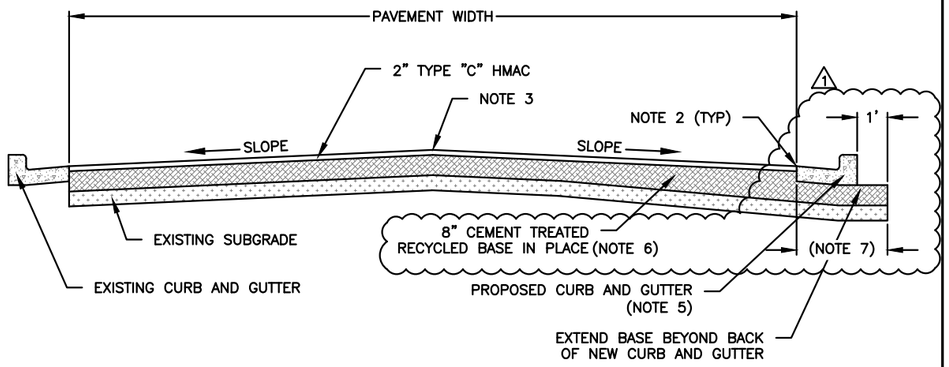
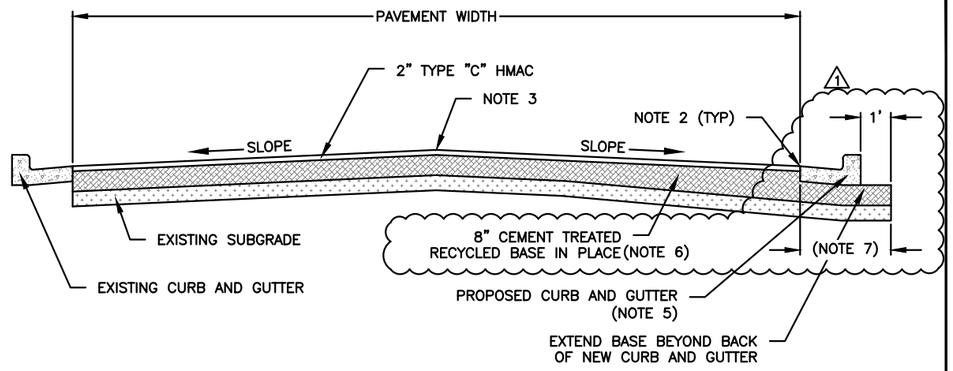


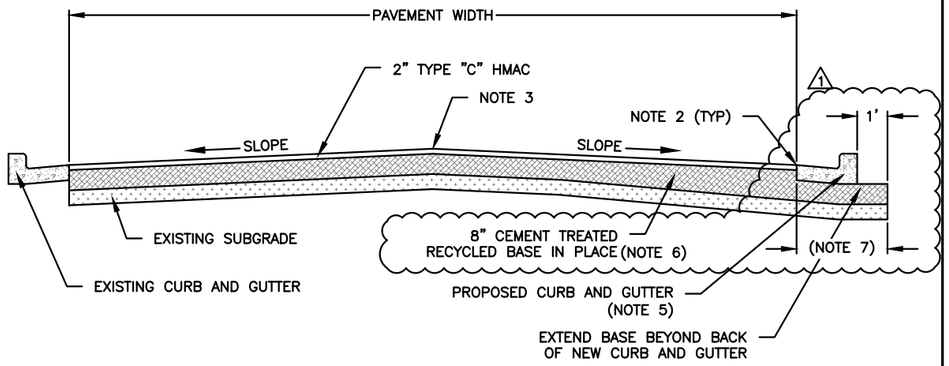

N 38TH STREET & PARROTT STREET TYPICAL SECTION

NOT TO SCALE



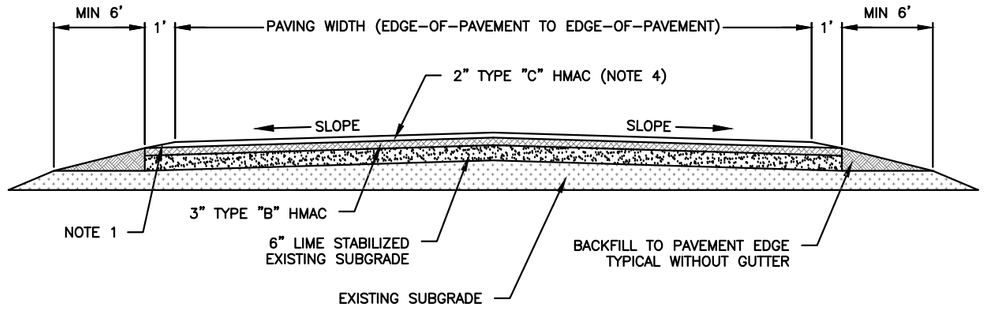

N 40TH STREET TYPICAL SECTION

NOT TO SCALE




N 43RD STREET TYPICAL SECTION

NOT TO SCALE




CHERRY STREET TYPICAL SECTION

NOT TO SCALE

NOTES (CONT'D):

6. IMPORTED CEMENT TREATED BASE (PLANT MIX) WILL BE REQUIRED IN ADDITION TO THE CEMENT TREATED RECYCLED BASE IN PLACE TO PROVIDE AN 8-INCH THICKNESS. SEE SPECIAL PROJECT PROVISIONS FOR ADDITIONAL REQUIREMENTS.
7. GRADING, EXCAVATION, AND HAUL OFF OF EXISTING MATERIAL AND INSTALLATION OF NEW CEMENT TREATED BASE SHALL BE CONSIDERED SUBSIDIARY TO THE PROPOSED CURB AND GUTTER BID ITEM. CONTRACTOR SHALL ASSUME THAT THE EXISTING BASE IS NOT SUITABLE FOR RECYCLING IN PLACE AND THAT THERE WILL NOT BE EXCESS MATERIAL FROM THE EXISTING ROADWAY. IMPORTED CEMENT TREATED BASE (PLANT MIX) , AS SPECIFIED IN THE SPECIAL PROJECT PROVISIONS, WILL BE REQUIRED.

NOTES:

1. ANY EXISTING PAVEMENT BEYOND THE EXTENTS OF THE PROPOSED PAVEMENT SHALL BE REMOVED.
2. TOP OF PROPOSED PAVEMENT SHALL MATCH EXISTING OR PROPOSED EDGE OF GUTTER ELEVATION.
3. SEE PLANS FOR CENTERLINE ALIGNMENT AND FINISHED GRADE ELEVATIONS. IN GENERAL, THE PROPOSED CENTERLINE FINISHED GRADE ELEVATIONS SHALL MATCH EXISTING ELEVATIONS.
4. IN GENERAL, FOR CHERRY STREET, PROPOSED FINISHED GRADE ELEVATIONS OF 2 INCHES TYPE C LAYER ARE 2 INCHES HIGHER THAN EXISTING FINISHED GRADE ELEVATIONS. SEE PLANS FOR DETAILS.
5. SEE CITY OF WACO DETAILS FOR PROPOSED CURB AND GUTTER REQUIREMENTS.

PUBLIC WORKS

ENGINEERING DIVISION

STREET IMPROVEMENTS
2019 RECLAMATION PHASE 1

TYPICAL STREET SECTIONS

| NO. | REVISION | DATE |
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| 1 | ADDENDUM NO. 1 | 09/10 |

STATE OF TEXAS
JACOB S. HOLDEN
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LICENSED
PROFESSIONAL ENGINEER

09/10/2020
NAME DATE

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Project No: 18ST2003C

Sheet No. C418

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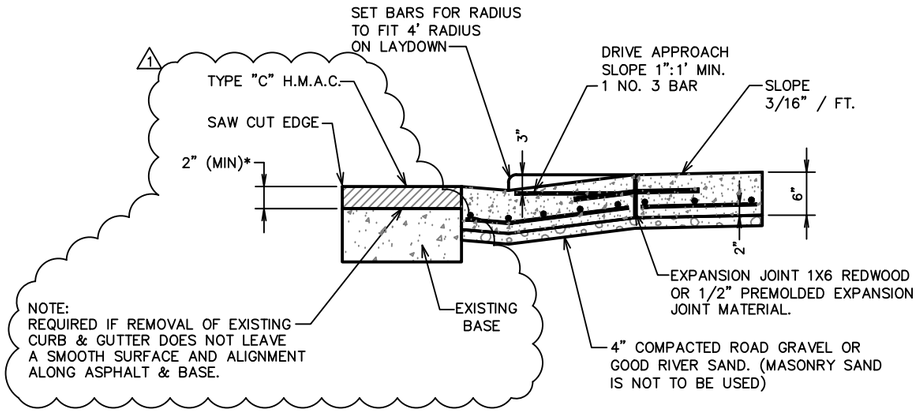



***STREET TIE-IN***

1 *TYPE "C" HMAC TIE IN SHALL ALSO BE USED FOR NEW VALLEY, FILLET, OR GUTTER ON EXISTING ASPHALT STREET

1 DETAIL REMOVED FROM PROJECT

NOTE:

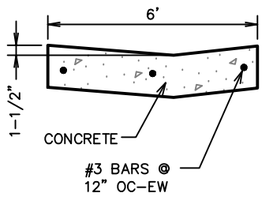
1 ~~1. CURB & GUTTER TO BE PAID FOR SEPARATELY FROM CONCRETE VALLEY AT THE CONTRACTOR UNIT PRICE FOR CURB & GUTTER.~~ NOT USED

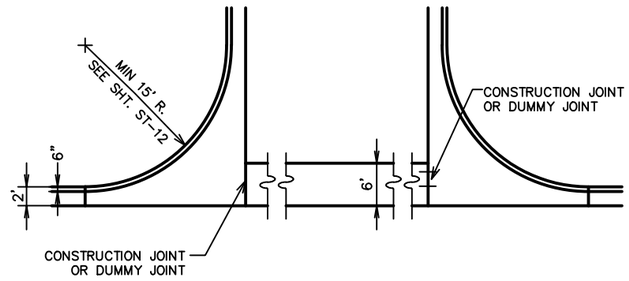
2. IF CURB RETURNS ARE NOT EXISTING VALLEY AND RETURNS SHALL BE MONOLITHIC WHEN CURB & GUTTER IS CALLED FOR.

3. UPSTREAM RETURN IN VALLEY SHALL BE CONSTRUCTED SO WATER WILL NOT POND.

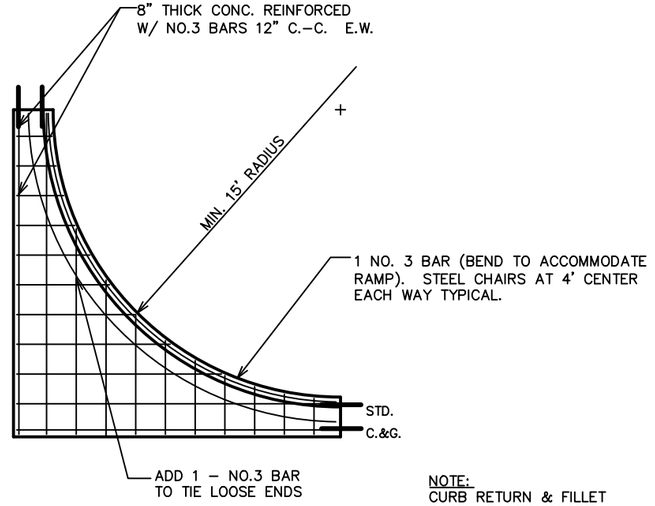
4. VALLEY MAY BE PLACED IN TWO 1/2 SECTIONS.

5. DEPTH OF CONCRETE VALLEY SHALL MATCH DEPTH OF PAVEMENT STRUCTURE INCLUDING THE SURFACING.




***STANDARD VALLEY***




NOTE:
CURB RETURN & FILLET
SHALL BE MONOLITHIC

***CONCRETE CURB & GUTTER FILLET***



WACO ENGINEERING DIVISION

| REVISIONS | | | |
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| NO. | COMMENTS | BY | DATE |
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WACO ENGINEERING SERVICES

| REVISIONS | | | |
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| NO. | COMMENTS | BY | DATE |
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| | | | |
| | | | |
| 03 | STANDARD VALLEY ADDED FROM ST-11; UPDATED | AG | 07/28/2017 |
| 02 | REMOVE SEAL | DG | 09/03/2014 |
| 01 | UPDATED | DG | 10/01/2010 |

DATE 07/28/2017

ST-12

PUBLIC WORKS
ENGINEERING DIVISION

STREET IMPROVEMENTS
2019 RECLAMATION PHASE 1
CITY OF WACO STANDARD DETAILS
STREET TIE-IN
STANDARD VALLEY
CONCRETE CURB & GUTTER FILLET ST-12
1

| NO. | REVISION | DATE |
|---|---|---|
| | | |
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| | | |
| 1 | ADDENDUM NO. 1 | 09/10 |

STATE OF TEXAS
JACOB S. HOLDEN
133166
LICENSED
PROFESSIONAL ENGINEER

NAME 09/10/2020 DATE

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