| Control | 6462-28-001     |
|---------|-----------------|
| Project | RMC - 646228001 |
| Highway | IH0610          |
| County  | HARRIS          |

## ADDENDUM ACKNOWLEDGMENT

Each bidder is required to acknowledge receipt of an addendum issued for a specific project. This page is provided for the purpose of acknowledging an addendum.

FAILURE TO ACKNOWLEDGE RECEIPT OF AN ADDENDUM WILL RESULT IN THE BID NOT BEING READ.

In order to properly acknowledge an addendum place a mark in the box next to the respective addendum.

| ADDENDUM NO. 1 |  |
|----------------|--|
| ADDENDUM NO. 2 |  |
| ADDENDUM NO. 3 |  |
| ADDENDUM NO. 4 |  |
| ADDENDUM NO. 5 |  |

In addition, the bidder by affixing their signature to the signature page of the proposal is acknowledging that they have taken the addendum(s) into consideration when preparing their bid and that the information contained in the addendum will be included in the contract, if awarded by the Commission or other designees.



| 001      |
|----------|
| 46228001 |
|          |
| 3        |
|          |

## PROPOSAL TO THE TEXAS TRANSPORTATION COMMISSION

# 2014 SPECIFICATIONS WORK CONSISTING OF DRAINAGE IMPROVEMENT AND/OR REPAIRS HARRIS COUNTY, TEXAS

The quantities in the proposal are approximate. The quantities of work and materials may be increased or decreased as considered necessary to complete the work as planned and contemplated.

This project is to be completed in 45 working days and will be accepted when fully completed and finished to the satisfaction of the Executive Director or designee.

Provide a proposal guaranty in the form of a Cashier's Check, Teller's Check (including an Official Check) or Bank Money Order on a State or National Bank or Savings and Loan Association, or State or Federally chartered Credit Union made payable to the Texas Transportation Commission in the following amount:

#### FOURTEEN THOUSAND (Dollars) (\$14,000)

A bid bond may be used as the required proposal guaranty. The bond form may be detached from the proposal for completion. The proposal may not be disassembled to remove the bond form. The bond must be in accordance with Item 2 of the specifications.

Any addenda issued amending this proposal and/or the plans that have been acknowledged by the bidder, become part of this proposal.

By signing the proposal the bidder certifies:

- 1. the only persons or parties interested in this proposal are those named and the bidder has not directly or indirectly participated in collusion, entered into an agreement or otherwise taken any action in restraint of free competitive bidding in connection with the above captioned project.
- 2. in the event of the award of a contract, the organization represented will secure bonds for the full amount of the contract.
- 3. the signatory represents and warrants that they are an authorized signatory for the organization for which the bid is submitted and they have full and complete authority to submit this bid on behalf of their firm.
- 4. that the certifications and representations contained in the proposal are true and accurate and the bidder intends the proposal to be taken as a genuine government record.

| • Signed: **       |     |     |  |
|--------------------|-----|-----|--|
| (1)                | (2) | (3) |  |
| <b>Print Name:</b> |     |     |  |
| (1)                | (2) | (3) |  |
| <b>Title:</b> (1)  | (2) | (3) |  |
| Company: (1)       | (2) | (3) |  |

• Signatures to comply with Item 2 of the specifications.

<sup>\*\*</sup>Note: Complete (1) for single venture, through (2) for joint venture and through (3) for triple venture.

<sup>\*</sup> When the working days field contains an asterisk (\*) refer to the Special Provisions and General Notes.

## NOTICE TO CONTRACTORS

ANY CONTRACTORS INTENDING TO BID ON ANY WORK TO BE AWARDED BY THIS DEPARTMENT MUST SUBMIT A SATISFACTORY "AUDITED FINANCIAL STATEMENT" AND "EXPERIENCE QUESTIONNAIRE" AT LEAST TEN DAYS PRIOR TO THE LETTING DATE.

UNIT PRICES MUST BE SUBMITTED IN ACCORDANCE WITH ITEM 2 OF THE STANDARD SPECIFICATIONS OR SPECIAL PROVISION TO ITEM 2 FOR EACH ITEM LISTED IN THIS PROPOSAL.

## TEXAS DEPARTMENT OF TRANSPORTATION

|  |   | BID BOND   |  |
|--|---|--|--|
| KNOW ALL PE  | RSONS BY THESE P  | RESENTS,   |  |
| That we, (Contra   | actor Name)   |  |  |
| Hereinafter calle  | d the Principal, and (S   | urety Name)  |  |
| Surety, are held a<br>the sum of not le<br>thousand dollars,<br>displayed on the | and firmly bound unto<br>ss than two percent (29<br>, not to exceed one hur<br>cover of the proposal)<br>bind ourselves, our heir | o transact surety business in the State of the Texas Department of Transportatio %) of the department's engineer's estimated thousand dollars (\$100,000) as a , the payment of which sum will and trans, executors, administrators, successor | on, hereinafter called the Oblige<br>mate, rounded to the nearest one<br>proposal guaranty (amount<br>ruly be made, the said Principal |
| WHEREAS, the   | principal has submitte  | d a bid for the following project identi   | fied as:   |
|  | Control   | 6462-28-001  |  |
|  | Project   | RMC - 646228001  |  |
|  | Highway   | IH0610   |  |
|  | County  | HARRIS   |  |
| the Contract in w<br>void. If in the ev<br>this bond shall be                    | riting with the Obliged<br>ent of failure of the Pri  | tall award the Contract to the Principal e in accordance with the terms of such incipal to execute such Contract in acc the Obligee, without recourse of the P   | bid, then this bond shall be null<br>cordance with the terms of such   |
| Signed this  |   | Day of   | 20   |
| Ву:  |   | (Contractor/Principal Name)  |  |
|  | (Signature and  | d Title of Authorized Signatory for Contractor/  | Principal)   |
| *By:   |   | • •  |  |
|  | f attorney (Surety) for   | (Signature of Attorney-in-Fact)  | Impressed<br>Surety Seal<br>Only   |
|  |   |  |  |

1-1



## **BIDDER'S CHECK RETURN**

#### **IMPORTANT**

The space provided for the return address must be completed to facilitate the return of your bidder's check. Care must be taken to provide a legible, accurate, and <u>complete</u> return address, including zip code. A copy of this sheet should be used for each different return address.

#### **NOTE**

Successful bidders will receive their guaranty checks with the executed contract.

| RETURN BI                      | DDERS CHECK TO (                               | (PLEASE PRINT):   |                      |
|--------------------------------|--|---|----------------------|
|                                |  |   |                      |
|                                |  |   |                      |
|                                |  |   |                      |
|                                | Control  | 6462-28-001   |                      |
|                                | Project  | RMC - 646228001   |                      |
|                                | Highway  | IH0610  |                      |
|                                | County   | HARRIS  |                      |
|                                |  | IMPORTANT   |                      |
|                                | PLEASE RI                                      | ETURN THIS SHEET IN ITS ENTIRETY  |                      |
| Please acknown ink, and return | wledge receipt of this orning this acknowledge | check(s) at your earliest convenience by signing be<br>ement in the enclosed self addressed envelope. | elow in longhand, in |
| Check Receiv                   | ved By:  | Date:   |                      |
| Title:                         |  |   |                      |
| For (Contract                  | tor's Name):                                   |   |                      |
| Project                        |  | County  |                      |
|                                |  |   |                      |



## NOTICE TO THE BIDDER

In the space provided below, please enter your total bid amount for this project. Only this figure will be read publicly by the Department at the public bid opening.

It is understood and agreed by the bidder in signing this proposal that the total bid amount entered below is not binding on either the bidder or the Department. It is further agreed that **the official total bid amount** for this proposal will be determined by multiplying the unit bid prices for each pay item by the respective estimated quantities shown in this proposal and then totaling all of the extended amounts.

\$\_\_\_\_\_ Total Bid Amount

| ALT     | ITEM     | DESC     | SP           | Bid Item Description | Unit | Quantity         | Bid Price | Amount     | Seq |
|---------|----------|----------|--------------|----------------------|------|------------------|-----------|------------|-----|
|         | 104      | 509      | REM          | IOV CONC (SDWLK)     | SY   | 266.400          | \$10.000  | \$2,664.00 | 1   |
|         |          |          |              |                      |      | Total Bid Amount | \$2,6     | 664.00     | -   |
|         |          |          |              |                      |      |                  |           |            |     |
| Signed  |          |          |              |                      |      |                  |           |            |     |
| Γitle   |          |          |              |                      |      |                  |           |            |     |
| Date    |          |          |              |                      |      |                  |           |            |     |
| Additio | onal Sig | nature f | or Joint Ven | ture:                |      |                  |           |            |     |
| Signed  |          |          |              |                      |      |                  |           |            |     |
| Title   |          |          |              |                      |      |                  |           |            |     |
| Date    |          |          |              |                      |      |                  |           |            |     |

Control

Project

0001-03-030

STP 2000(938)HES

## **EXAMPLE OF BID PRICES SUBMITTED BY COMPUTER PRINTOUT**





|     | ITEM-CODE                  |      |     |  |                          |      |                      | DEPT        |
|-----|----------------------------|------|-----|--|--------------------------|------|----------------------|-------------|
| ALT | ITEM DESC S.P. NO CODE NO. |      |     | UNIT BID PRICE ONLY.<br>WRITTEN IN WORDS |                          | UNIT | APPROX<br>QUANTITIES | USE<br>ONLY |
|     | 104                        | 6044 |     | REMOVING CONC (FLUME)                    |                          | SY   | 5.000                | 1           |
|     |                            |      |     | and                                      | DOLLARS<br>CENTS         |      |                      |             |
|     | 110                        | 6002 |     | EXCAVATION (CHANNEL) and                 | DOLLARS<br>CENTS         | CY   | 87.000               | 2           |
|     | 162                        | 6002 |     | BLOCK SODDING and                        | DOLLARS<br>CENTS         | SY   | 1,870.000            | 3           |
|     | 166                        | 6001 |     | FERTILIZER and                           | DOLLARS<br>CENTS         | AC   | .400                 | 4           |
|     | 168                        | 6001 |     | VEGETATIVE WATERING and                  | DOLLARS<br>CENTS         | MG   | .050                 | 5           |
|     | 400                        | 6005 |     | CEM STABIL BKFL and                      | DOLLARS<br>CENTS         | CY   | 5,022.000            | 6           |
|     | 402                        | 6001 |     | TRENCH EXCAVATION PROTE and              | ECTION  DOLLARS  CENTS   | LF   | 8.000                | 7           |
|     | 403                        | 6006 |     | TEMPORARY SPL SHORING (C                 | COFFERDAM) DOLLARS CENTS | SF   | 720.000              | 8           |
|     | 420                        | 6011 | 001 | CL B CONC (FLUME) and                    | DOLLARS<br>CENTS         | CY   | 19.000               | 9           |
|     | 432                        | 6031 |     | RIPRAP (STONE PROTECTION and             | DOLLARS<br>CENTS         | CY   | 20.930               | 10          |
|     | 464                        | 6009 | 001 | RC PIPE (CL III)(42 IN) and              | DOLLARS<br>CENTS         | LF   | 16.000               | 11          |
|     | 466                        | 6010 |     | HEADWALL (CH - FW - 0) (DIA              | A= 42 IN) DOLLARS CENTS  | EA   | 2.000                | 12          |

|     | ITI        | EM-COI       | )E          |  |            |      |                      | DEPT        |
|-----|------------|--------------|-------------|--|------------|------|----------------------|-------------|
| ALT | ITEM<br>NO | DESC<br>CODE | S.P.<br>NO. | UNIT BID PRICE ONLY.<br>WRITTEN IN WORDS |            | UNIT | APPROX<br>QUANTITIES | USE<br>ONLY |
|     | 496        | 6006         |             | REMOV STR (HEADWALL)                     |            | EA   | 1.000                | 13          |
|     |            |              |             |  | DOLLARS    |      |                      |             |
|     |            |              |             | and                                      | CENTS      |      |                      |             |
|     | 496        | 6007         |             | REMOV STR (PIPE)                         |            | LF   | 40.000               | 14          |
|     |            |              |             |  | DOLLARS    |      |                      |             |
|     |            |              |             | and                                      | CENTS      |      |                      |             |
|     | 500        | 6001         |             | MOBILIZATION                             |            | LS   | 1.000                | 15          |
|     |            |              |             |  | DOLLARS    |      |                      |             |
|     |            |              |             | and                                      | CENTS      |      |                      |             |
|     | 502        | 6001         | 008         | BARRICADES, SIGNS AND TRA                | AFFIC HAN- | MO   | 2.000                | 16          |
|     |            |              |             | DLING                                    |            |      |                      |             |
|     |            |              |             |  | DOLLARS    |      |                      |             |
|     |            |              |             | and                                      | CENTS      |      |                      |             |
|     | 6185       | 6002         | 002         | TMA (STATIONARY)                         |            | DAY  | 45.000               | 17          |
|     |            |              |             |  | DOLLARS    |      |                      |             |
|     |            |              |             | and                                      | CENTS      |      |                      |             |

## CERTIFICATION OF INTEREST IN OTHER BID PROPOSALS FOR THIS WORK

By signing this proposal, the bidding firm and the signer certify that the following information, as indicated by checking "Yes" or "No" below, is true, accurate, and complete.

| A. | Quotation(s) have been issued in this firm's name to other firm(s) interested in this work for consideration for performing a portion of this work. |
|----|---|
|    | YES   |
|    | NO  |
|    |   |

- B. If this proposal is the low bid, the bidder agrees to provide the following information prior to award of the contract.
  - 1. Identify firms which bid as a prime contractor and from which the bidder received quotations for work on this project.
  - 2. Identify all the firms which bid as a prime contractor to which the bidder gave quotations for work on this project.

## **ENGINEER SEAL**

**Control** 6462-28-001

**Project** RMC - 646228001

Highway IH0610

**County HARRIS** 

The enclosed Texas Department of Transportation Specifications, Special Specifications, Special Provisions, General Notes and Specification Data in this document have been selected by me, or under my responsible supervision as being applicable to this project. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act.



The seal appearing on this document was authorized by Muhammad J Elahi, P.E. JANUARY 09, 2024

Highway: IH 610

#### **GENERAL NOTES**

#### **SUPERVISION:**

This project will be managed by, and requests for payment addressed to:

James Reed, Maintenance Supervisor Metro Houston Maintenance 7303 Mesa Drive (FM 527) Houston, TX 77028 (713) 636-7406

#### General:

Contractor questions on this project are to be addressed to the following individual(s):

James Reed, Maintenance Supervisor Phone: (713) 636-7406 James.R.Reed@txdot.gov

Eddy Chang, P.E. Phone: (713) 725-7937 Eddy.Chang@txdot.gov

Submit any questions about this project via the Letting Pre-Bid Q&A web page, located at:

https://tableau.txdot.gov/views/ProjectInformationDashboard/NoticetoContractors

The Letting Pre-Bid Q&A web page for each project can be accessed by scrolling or filtering the dashboard using the controls on the left side to navigate to the project. Hover over the blue hyperlink of the project to view the Q&A and click on the link in the window that pops up.

All relevant project documentation, including Contract Time Determinations and cross-sections will continue to be provided on the following FTP site:

Index of /pub/txdot-info/Pre-Letting Responses/Houston District (state.tx.us) or

https://ftp.dot.state.tx.us/pub/txdot-info/Pre-Letting%20Responses/Houston%20District/

This is a Routine Maintenance Site Specific contract.

Highway: IH 610

The following standard detail sheets are modified:

#### **Modified Standards**

Flume Details

References to manufacturer's trade name or catalog numbers are for the purpose of identification only. Similar materials from other manufacturers are permitted if they are of equal quality, comply with the specifications for this project, and are approved, except for roadway illumination, electrical, and traffic signal items.

Grade street intersections and median openings for surface drainage.

If a foundation is to be placed where a riprap surface or an asphalt concrete surface presently exists, use caution in breaking out the existing surface for placement. Break out no greater area than is required to place the foundation. After placing the foundation, wrap the periphery with 0.5 in. pre-molded mastic expansion joint. Then replace the remaining portion of the broken out surface with Class A or Class C concrete or cold mix asphalt concrete to the exact slope, pattern, and thickness of the existing riprap or asphalt. Payment for breaking out the existing surface, wrapping the foundation, and replacing the surface is subsidiary to the various bid items.

### **General: Site Management**

Mow the grass and weeds within the project limits a maximum of 3 times a year as directed. This work is subsidiary to the various bid items.

Do not mix or store materials, or store or repair equipment, on top of concrete pavement or bridge decks unless authorized by the Engineer. Permission will be granted to store materials on surfaces if no damage or discoloration will result.

Personal vehicles of employees are not permitted to park within the right of way, including sections closed to public traffic. Employees may park on the right of way at the Contractor's office, equipment, and materials storage yard sites. Assume ownership of debris and dispose of at an approved location. Do not dispose of debris on private property unless approved in writing by the District Engineer.

Assume ownership of debris and dispose of at an approved location. Do not dispose of debris on private property unless approved in writing by the District Engineer.

Control the dust caused by construction operations. For sweeping the base material in preparation for laying asphalt and for sweeping the finished concrete pavement, use one of the following types of sweepers or approved equal:

Highway: IH 610

**Tricycle Type** 

Truck Type - 4 Wheel

Wayne Series 900 Elgin White Wing Elgin Pelican M-B Cruiser II Wayne Model 945 Mobile TE-3 Mobile TE-4 Murphy 4042

#### **General: Traffic Control and Construction**

When design details are not shown on the plans, provide signs and arrows conforming to the latest "Standard Highway Sign Designs for Texas" manual.

Existing pavement markings removed or damaged by more than 20 ft. will be replaced with temporary striping. Temporary striping shall be paint based unless otherwise directed by the engineer. This work will be considered incidental to the item of work.

#### **General: Utilities**

Consider the locations of underground utilities depicted in the plans as approximate and employ responsible care to avoid damaging utility facilities. Depending upon scope and magnitude of planned construction activities, advanced field confirmation by the utility owner or operator may be prudent. Where possible, protect and preserve permanent signs, markers, and designations of underground facilities.

If the Contractor damages or causes damage (breaks, leaks, nicks, dents, gouges, etc.) to the utility, contact the utility facility owner or operator immediately.

Be aware that an operational Computerized Transportation Management System (CTMS) exists within the limits of this project and that the system must remain operational throughout construction. If the Contractor damages or causes damage to this system, repair such damage within 8 hours of occurrence at no cost to the Department. In the event of system damage, notify the Director of Traffic Management Systems at 713-881-3283 within one hour of occurrence. Failure of the Contractor to repair damage to the main fiber optic cable and CCTV cable trunk lines, which convey all corridor information to TranStar, will result in the Contractor being billed for the full cost of emergency repairs.

At least 72 hours before starting work, make arrangements for locating existing Department-owned above ground and underground fiber optic, communications, power, illumination, and traffic signal cabling and conduit. Do this by calling the Department's Houston District Traffic Signal Operations Office at 713-802-5662, or by e-mailing the Department's Houston District Traffic Signal Operations Office at HOU-LocateRequest@txdot.gov, to schedule marking of

Highway: IH 610

underground lines on the ground. Use caution if working in these areas to avoid damaging or interfering with existing facilities.

Notify the Engineer at least 48 hours before constructing junction boxes at storm drain and utility intersections.

Install or remove poles and luminaires located near overhead or underground electrical lines using established industry and utility safety practices. Consult the appropriate utility company before beginning such work.

If overhead or underground power lines need to be de-energized, contact the electrical service provider to perform this work. Costs associated with de-energizing the power lines or other protective measures required are at no expense to the Department.

If working near power lines, comply with the appropriate sections of Texas State Law and Federal Regulations relating to the type of work involved.

Perform electrical work in conformance with the National Electrical Code (NEC) and Department's standard sheets.

Before beginning any underground work, notify the City of Houston's Chief Inspector, Public Works and Engineering, to establish the locations of any existing electrical systems for lighting facilities within the limits of this project.

#### **Item 5: Control of Work**

Submit shop drawings electronically for the fabrication of items as documented in Table 1 below. Information and requirements for electronic submittals can be viewed in the "Guide to Electronic Shop Drawing Submittal" which can be accessed through the following web link, <a href="ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/bridge/e\_submit\_guide.pdf">ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/bridge/e\_submit\_guide.pdf</a>. References to 11 in. x 17 in. sheets in individual specifications for structural items imply electronic CAD sheets.

Table 1
2014 Construction Specification Required Shop/Working Drawing Submittals - TxDOT Generated Plans

| Spec<br>Item<br>No.'s | Product  | Submittal<br>Required | Approval<br>Required<br>(Y/N) | Contractor/<br>Fabricator<br>P.E. Seal<br>Required | Reviewing<br>Party | Shop or<br>Working<br>Drawing<br>(Note 1) |
|-----------------------|--|-----------------------|-------------------------------|--|--------------------|---|
| 7.16.1&.2             | Construction Load Analyses   | Υ                     | Υ                             | Υ  | В                  | WD  |
| 400                   | Excavation and Backfill for Structures (cofferdams)                | Υ                     | Ν                             | Υ  | Α                  | WD  |
| 403                   | Temporary Special Shoring  | Υ                     | N                             | Υ  | С                  | WD  |
| 420                   | Formwork/Falsework   | Υ                     | N                             | Υ  | Α                  | WD  |
| 426                   | Post Tension Details   | Υ                     | Υ                             | N  | В                  | SD  |
| 464                   | Reinforced Concrete Pipe (Jack and Bore only; ONLY when requested) | Υ                     | Υ                             | Υ  | Α                  | SD  |
| 466                   | Pre-cast Headwalls and Wingwalls                                   | Y                     | Υ                             | N  | Α                  | SD  |

Highway: IH 610

#### Notes:

1. Document flow for Working Drawings differs from Shop Drawings in that Working Drawings must be submitted to the Engineer rather than the Engineer of Record and they are for the information of the Engineer only; an approval stamp and distribution to all project offices is not required.

**Key to Reviewing Party** 

| A - Area Office                                |                              |          |
|--|------------------------------|----------|
| Area Office                                    | Email Address                |          |
| Brazoria Area Office                           | HOU-BRZAShpDrwgs@txdot.gov   |          |
| Fort Bend Area Office                          | HOU-FBAShpDrwgs@txdot.gov    |          |
| Galveston Area Office                          | HOU-GALVAShpDrwgs@txdot.gov  |          |
| Montgomery Area Office                         | HOU-MONTAShpDrwgs@txdot.gov  |          |
| North Harris Area Office                       | HOU-NHAShpDrwgs@txdot.gov    |          |
| Southeast Area Office                          | HOU-SEHAShpDrwgs@txdot.gov   |          |
| Traffic Systems Construction Office            | HOU-TSCShpDrwgs@txdot.gov    |          |
| West/Central Harris Area Office                | HOU-WWCHAOShpDrwgs@txdot.gov |          |
|  |                              |          |
| B - Houston Bridge Engineer                    |                              |          |
| Bridge Design (Houston TxDOT)                  | HOU-BrgShpDrwgs@txdot.gov    |          |
| BRG - Austin Bridge Division                   |                              |          |
| Bridge Design (Austin TxDOT)                   | BRG ShopPlanReview@txdot.gov |          |
| C - Construction Office                        | -                            | <u> </u> |
| Construction                                   | HOU-ConstrShpDrwgs@txdot.gov |          |
| Laboratory                                     | HOU-LabShpDrwgs@txdot.gov    |          |
| T - Traffic Engineer                           |                              |          |
| Traffic Operations                             | HOU-TrfShpDrwgs@txdot.gov    |          |
| TMS – Traffic Management System                |                              |          |
| Computerized Traffic Management Systems (CTMS) | HOU-CTMSShpDrwgs@txdot.gov   |          |

#### **Item 7: Legal Relations and Responsibilities**

Do not initiate activities in a Project Specific Location (PSL), associated with a U.S. Army Corps of Engineers (USACE) permit area, that have not been previously evaluated by the USACE as part of the permit review of this project. Such activities include those pertaining to, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Associated defined here means materials are delivered to or from the PSL. The permit area includes the waters of the U.S. or associated wetlands affected by activities associated with this project. Special restrictions may be required for such work. Assume responsibility for consultations with the USACE regarding activities, including PSLs that have not been previously evaluated by the USACE. Provide the Department with a copy of consultations or approvals from the USACE before initiating activities.

The Contractor may proceed with activities in PSLs that do not affect a USACE permit area if a self-determination has been made that the PSL is non-jurisdictional or if proper USACE clearances have been obtained in jurisdictional areas or have been previously evaluated by the

Highway: IH 610

USACE as part of the permit review of this project. The Contractor is solely responsible for documenting any determinations that their activities do not affect a USACE permit area. Maintain copies of their determinations for review by the Department or any regulatory agency.

Document and coordinate with the USACE, if required, before hauling any excavation from or hauling any embankment to a USACE permit area by either 1 or 2 below:

#### 1. Restricted Use of Materials for the Previously Evaluated Permit Areas.

Document both the Project Specific Locations (PSL) and their authorization. Maintain copies for review by the Department or any regulatory agency. When an area within the project limits has been evaluated by the USACE as part of the permit process for this project:

- a. Suitable excavation of required material in the areas shown on the plans and cross sections as specified in the Item, "Excavation" is used for permanent or temporary fill (under the Item, "Embankment") within a USACE permit area.
- b. Suitable embankment (under the Item, "Embankment") from within the USACE permit area is used as fill within a USACE evaluated area.
- c. Unsuitable excavation or excess excavation, "Waste" (under the Item, "Excavation"), that is disposed of at a location approved within a USACE evaluated area.

#### 2. Contractor Materials from Areas Other than Previously Evaluated Areas.

Provide the Department with a copy of USACE coordination or approvals before initiating any activities for an area within the project limits that has not been evaluated by the USACE or for any off right of way locations used for the following, but not limited to, haul roads, equipment staging areas, borrow and disposal sites:

- a. The Item, "Embankment" used for temporary or permanent fill within a USACE permit area.
- b. Unsuitable excavation or excess excavation, "Waste" (under the Item, "Excavation"), that is disposed of outside a USACE evaluated area.

Maintain the roadway slope stability. Maintaining slope stability is subsidiary to the various bid items.

During staging and construction operations, equipment is not allowed in the Waters of the United States.

This project does not require a U.S. Army Corps of Engineers (USACE) Section 404 Permit before letting, but if a permit is needed during construction, assume responsibility for preparing the permit application. Submit the permit application to the Department's District Environmental Section for approval. Once the permit application is approved, the Department will submit it to the USACE. Assume responsibility for the requested revisions, in coordination with the Department's District Environmental Section.

Highway: IH 610

This project is on a hurricane evacuation route. Provide at the pre-construction meeting a written plan outlining procedures to suspend work, secure the job site, and safely handle traffic through and across the project in the event of a hurricane evacuation.

During the hurricane season (June 1 through November 30), do not close any travel lanes except when the Contractor can demonstrate that he/she can provide labor, equipment, material, a work plan, and quality of work to satisfactorily return all lanes to an open, all-weather travel surface within 3 days of receiving written or verbal notice but no later than 3 days before the predicted hurricane landfall. Construction of temporary lanes to an all-weather surface will be paid for in accordance with Article 9.7, "Payment for Extra Work and Force Account Method."

In addition to lane closures, cease work 3 days before the predicted hurricane landfall on or near the roadway that adversely impacts the flow of traffic and reduces the capacity of the highway during an evacuation. Vehicles of the Contractor, subcontractors, or material suppliers will not be allowed to enter or exit the traffic stream, including those for the purpose of material hauling and delivery, and mobilization or demobilization of equipment. When directed, this prohibition will include a reasonable time period for the evacuees to return to their point of origin.

No significant traffic generator events have been identified.

#### **Item 8: Prosecution and Progress**

The Department will not adjust the number of days for the project, if any, due to differences in opinion regarding any assumptions made in the preparation of the schedule or for errors, omissions, or discrepancies found in the time determination schedule.

Working days will be computed and charged based on a *standard* workweek in accordance with Section 8.3.1.4.

Procure permits and licenses, which are to be issued by the City, County, or Municipal Utility District.

Unless otherwise shown on the plans or otherwise directed, commence work after sunrise and ensure construction equipment is off the road by sunset.

#### **Item 104: Removing Concrete (Flume)**

Do not permit debris resulting from the structure removal or construction activities to enter a natural or manmade waterway such as drainage channels, rivers, streams, bays, etc. Remove debris which falls into such waterways.

#### Item 110: Excavation

If manipulating the excavated material requires moving the same material more than once to accomplish the desired results, the excavation is measured and paid for only once regardless of the manipulation required.

Highway: IH 610

Transition the ditch grades and channel bottom widths at structure locations. Use only approved channel excavation in the embankment.

**Item 162: Sodding for Erosion Control** 

Item 166: Fertilizer

**Item 168: Vegetative Watering** 

Refer to the "Fertilizer, Seed, Sod, Straw, Compost, and Water" plan sheet for material specifications, application rates, and for watering requirements.

#### Item 400: Excavation and Backfill for Structures

Plugging existing pipe culverts is subsidiary to the various bid items.

If Recycled Cement Treatment (Type D) is included in the plans, the following additional requirements apply:

- 1. Use only approved sand, crushed concrete, or salvaged base free from deleterious matter, as aggregate for cement-stabilized backfill.
- 2. Provide crushed concrete or salvaged base backfill material in accordance with the Item, "Cement Treatment (Plant-Mixed) (Type D)" (base or crushed concrete), except the recycled Type D material must not contain Reclaimed Asphalt Pavement (RAP).
- 3. For backfill material below the spring line of pipes, use cement-stabilized sand rather than Recycled Type D backfill material.
- 4. For the cement-stabilized sand backfill, use a minimum of 7 percent of hydraulic cement based on the dry weight of backfill material. The cement content for the crushed concrete and salvaged base is specified in the Item, "Cement Treatment (Plant-Mixed) (Type D)."
- 5. Place and compact the stabilized backfill material using a gradation that provides a dense mass without segregating and is impervious to passing of water.

#### **Item 420: Concrete Substructures**

Use Class B concrete for flume, unless otherwise specified in the plans.

#### Item 432: Riprap

If stone riprap is shown on the plans, use common stone riprap in accordance with Section 432.2.3.3, placed dry in accordance with Section 432.3.2.3. Do not grout. Crushed concrete may also be used. **Item 464: Reinforced Concrete Pipe** 

#### Highway: IH 610

Rubber gaskets are required for concrete pipe joints except for connections of safety end treatments, driveway culverts, and joints between the existing pipes and extensions. Concrete collars may be used to connect new and existing concrete pipes.

Open, install, and backfill each section, or a portion of a section, in the same day at locations requiring pipe culverts under existing roadways.

Place the pipe drains across existing roadways half at a time to allow passage of traffic. No trenches may remain open overnight.

Known locations of existing stub-outs are shown on the plans, but these stub-outs may be in a different position or condition. Delays, inconveniences, or additional work required will not be a basis for additional compensation.

Provide leave-outs or holes in the proposed storm drain structures and pipes for drainage during interim construction. This work is subsidiary to the various bid items.

#### **Items 496: Removing Structures**

Do not permit debris resulting from the structure removal or construction activities to enter a natural or manmade waterway such as drainage channels, rivers, streams, bays, etc. Remove debris which falls into such waterways. This work is subsidiary to the Item, "Removing Structures."

#### **Item 500: Mobilization**

This contract consists of one (1) lump sum (LS) Mobilization.

#### Item 502: Barricades, Signs, and Traffic Handling

Use a traffic control plan for handling traffic through the various phases of construction. Follow the phasing sequence unless otherwise agreed upon by the Area Engineer and the Project Manager. Ensure this plan conforms to the latest "Texas Manual on Uniform Traffic Control Devices" and the latest Barricade and Construction (BC) Standard Sheets.

Submit changes to the traffic control plan to the Area Engineer. Provide a layout showing the construction phasing, signs, striping, and signalizations for changes to the original traffic control plan.

Furnish and maintain the barricades and warning signs, including the necessary temporary and portable traffic control devices, during the various phases of construction. Place and construct these barricades and warning signs in accordance with the latest "Texas Manual on Uniform Traffic Control Devices" for typical construction layouts.

Cover work zone signs when work related to the signs is not in progress, or when any hazard related to the signs no longer exists.

Highway: IH 610

Keep the delineation devices, signs, and pavement markings clean. This work is subsidiary to the Item, "Barricades, Signs, and Traffic Handling."

Do not reduce the existing number of lanes open to traffic except as shown on the following time schedule:

#### **One Lane Closure**

| Day      | Daytime Closure | Nighttime Closure | <b>Restricted Hours Subject</b> |
|----------|-----------------|-------------------|---------------------------------|
|          | Hours           | Hours             | to Lane Assessment Fee          |
| Monday - | 9AM – 3PM       | 9PM – 5AM         | 5AM-9AM and 3PM-9PM             |
| Sunday   |                 |                   |                                 |

Cover or remove the permanent signs and construction signs that are incorrect or that do not apply to the current situation for a particular phase. Do not mount signs on drums or barricades, except those listed in the latest Barricades and Construction standard sheets.

The above times are approved for the traffic control conditions listed. The Area Engineer may approve other closure times if traffic counts warrant. The Area Engineer may reduce the above times for special events.

Use Uneven Lane Signs (CW 8-11) during resurfacing operations for elevation differences between adjacent lanes of greater than 1 in.

The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

#### **Item 6185: Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)**

A shadow vehicle with Truck Mounted Attenuators (TMAs) or Trailer Attenuators (TAs) is required as shown on the appropriate Traffic Control Plan (TCP) sheets. TMAs/TAs must meet the requirements of the Compliant Work Zone Traffic Control Device List.

Level 3 Compliant TMAs/TAs are required for this project.

In addition to the shadow vehicles with TMAs/TAs that are specified as being required on the TCP layout sheets for this project, provide additional shadow vehicles with TMAs/TAs as shown on the TCP Standard sheets. The Contractor is responsible for determining if one or more of these operations will be ongoing at the same time to determine the total number of TMAs/TAs needed on the project.

Highway: IH 610

A total of one (1) shadow vehicle with a TMA/TA is required for the work with the exception of Pavement Marking Operations. The Contractor is responsible for determining if one or more of these operations will be ongoing at the same time to determine the total number of TMAs/TAs needed on the project.

CONTROL: 6462-28-001 PROJECT: RMC - 646228001

HIGHWAY : IH0610 COUNTY : HARRIS

#### TEXAS DEPARTMENT OF TRANSPORTATION

#### GOVERNING SPECIFICATIONS AND SPECIAL PROVISIONS

ALL SPECIFICATIONS AND SPECIAL PROVISIONS APPLICABLE TO THIS PROJECT ARE IDENTIFIED AS FOLLOWS:

STANDARD SPECIFICATIONS: ADOPTED BY THE TEXAS DEPARTMENT OF ----- TRANSPORTATION NOVEMBER 1, 2014.

STANDARD SPECIFICATIONS ARE INCORPORATED

INTO THE CONTRACT BY REFERENCE.

ITEMS 1 TO 9 INCL., GENERAL REQUIREMENTS AND COVENANTS

ITEM 104 REMOVING CONCRETE

ITEM 110 EXCAVATION (132)

ITEM 162 SODDING FOR EROSION CONTROL (166) (168)

ITEM 166 FERTILIZER (520)

ITEM 168 VEGETATIVE WATERING

ITEM 400 EXCAVATION AND BACKFILL FOR STRUCTURES (110)(132)(401) (402)(403)(416)(420)(421)(423)

ITEM 402 TRENCH EXCAVATION PROTECTION

ITEM 403 TEMPORARY SPECIAL SHORING (410)(411)(423)

ITEM 420 CONCRETE SUBSTRUCTURES (400) (404) (421) (422) <425> (426) (427) (440) (441) (448)

ITEM 432 RIPRAP (247) (420) (421) (431) (440)

ITEM 464 REINFORCED CONCRETE PIPE (400)(402)(403)(467)(476)

ITEM 466 HEADWALLS AND WINGWALLS (400) (420) (421) (432) (440) (464) <466>

ITEM 496 REMOVING STRUCTURES

ITEM 500 MOBILIZATION

ITEM 502 BARRICADES, SIGNS, AND TRAFFIC HANDLING

ITEM 506 TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL CONTROLS (161) (432) (556)

SPECIAL PROVISIONS: SPECIAL PROVISIONS WILL GOVERN AND TAKE

----- PRECEDENCE OVER THE SPECIFICATIONS ENUMERATED

HEREON WHEREVER IN CONFLICT THEREWITH.

SPECIAL PROVISION "NONDISCRIMINATION" (000---002)

SPECIAL PROVISION "CERTIFICATE OF INTERESTED PARTIES (FORM 1295)"

(000--1019)

SPECIAL PROVISION "SCHEDULE OF LIQUIDATED DAMAGES" (000--1243)

SPECIAL PROVISION "NOTICE OF CONTRACTOR PERFORMANCE EVALUATIONS"
(000---659)

SPECIAL PROVISIONS TO ITEM 2 (002---013)(002---014)(002---015)

SPECIAL PROVISIONS TO ITEM 3 (003---011)(003---013)

SPECIAL PROVISIONS TO ITEM 5 (005---002)(005---003)

SPECIAL PROVISIONS TO ITEM 6 (006---001)(006---012)

SPECIAL PROVISIONS TO ITEM 7 (007---004)(007---010)(007---011)

SPECIAL PROVISIONS TO ITEM SPECIAL PROVISIONS TO ITEM 7 (007---004)(007---010)(007---011) (007 - - - 013)SPECIAL PROVISIONS TO ITEM 8 (008---030)(008---033)(008---054) SPECIAL PROVISIONS TO ITEM 9 (009---010)(009---016) SPECIAL PROVISION TO ITEM 247 (247---005) SPECIAL PROVISION TO ITEM 420 (420 - - -001)SPECIAL PROVISION TO ITEM 421 (421---012) SPECIAL PROVISION TO ITEM 423 (423---005) SPECIAL PROVISION TO ITEM 426 (426---005) SPECIAL PROVISION TO ITEM 427 (427---003) SPECIAL PROVISION TO ITEM 440 (440---005) SPECIAL PROVISION TO ITEM 441 (441---004) SPECIAL PROVISION TO ITEM 448 (448---001) SPECIAL PROVISION TO ITEM 464 (464---001) SPECIAL PROVISION TO ITEM 502 (502---008) SPECIAL PROVISION TO ITEM 506 (506---002) SPECIAL PROVISION TO ITEM 520 (520---002) SPECIAL PROVISION TO SPECIAL SPECIFICATION ITEM 6185 (6185--002)

#### SPECIAL SPECIFICATIONS:

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ITEM 6185 TRUCK MOUNTED ATTENUATOR (TMA) AND TRAILER ATTENUATOR (TA)

GENERAL: THE ABOVE-LISTED SPECIFICATION ITEMS ARE THOSE UNDER WHICH
------ PAYMENT IS TO BE MADE. THESE, TOGETHER WITH SUCH OTHER
PERTINENT ITEMS, IF ANY, AS MAY BE REFERRED TO IN THE ABOVELISTED SPECIFICATION ITEMS, AND INCLUDING THE SPECIAL
PROVISIONS LISTED ABOVE, CONSTITUTE THE COMPLETE SPECIFICATIONS FOR THIS PROJECT.

## CHILD SUPPORT STATEMENT

Under Section 231.006, Family Code, the vendor or applicant certifies that the individual or business entity named in this contract, bid, or application is not ineligible to receive the specified grant, loan, or payment and acknowledges that this contract may be terminated and payment may be withheld if this certification is inaccurate.

### CONFLICT OF INTEREST CERTIFICATION

Pursuant to Texas Government Code Section 2261.252(b), the Department is prohibited from entering into contracts in which Department officers and employees have a financial interest.

By signing the Contract, the Contractor certifies that it is not prohibited from entering into a Contract with the Department as a result of a financial interest as defined under Texas Government Code Section 2261.252(b), and that it will exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict of interest with the Department.

The Contractor also certifies that none of the following individuals, nor any of their family members within the second degree of affinity or consanguinity, owns 1% or more interest or has a financial interest as defined under Texas Government Code Section 2261.252(b) in the Contractor:

- Any member of the Texas Transportation Commission; and
- The Department's Executive Director, General Counsel, Chief of Procurement and Field Support Operations, Director of Procurement, and Director of Contract Services.

### **E-VERIFY CERTIFICATION**

Pursuant to Texas Transportation Code §223.051, all TxDOT contracts for construction, maintenance, or improvement of a highway must include a provision requiring Contractors and subcontractors to use the U.S. Department of Homeland Security's E-Verify system to determine employment eligibility. By signing the contract, the Contractor certifies that prior to the award of the Contract:

- the Contractor has registered with and will, to the extent permitted by law, utilize the United States Department of Homeland Security's E-Verify system during the term of the Contract to determine the eligibility of all persons hired to perform duties within Texas during the term of the agreement; and
- the Contractor will require that all subcontractors also register with and, to the extent permitted by law, utilize the United States Department of Homeland Security's E-Verify system during the term of the subcontract to determine the eligibility of all persons hired to perform duties within Texas during the term of the agreement.

Violation of this requirement constitutes a material breach of the Contract, subjects a subcontractor to removal from the Contract, and subjects the Contractor or subcontractors to possible sanctions in accordance with Title 43, Texas Administrative Code, Chapter 10, Subchapter F, "Sanctions and Suspension for Ethical Violations by Entities Doing Business with the Department."

## **Certification Regarding Disclosure of Public Information**

Pursuant to Subchapter J, Chapter 552, Texas Government Code, contractors executing a contract with a governmental body that results in the expenditure of at least \$1 million in public funds must:

- 1) preserve all contracting information\* as provided by the records retention requirements applicable to Texas Department of Transportation (TxDOT) for the duration of the contract,
- 2) on request of TxDOT, promptly provide any contracting information related to the contract that is in the custody or possession of the entity, and
- 3) on completion of the contract, either:
  - A. provide, at no cost to TxDOT, all contracting information related to the contract that is in the custody or possession of the entity, or
  - B. preserve the contracting information related to the contract as provided by the records retention requirements applicable to TxDOT

The requirements of Subchapter J, Chapter 552, Government Code, may apply to this contract, and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

By entering into Contract, the Contractor agrees to:

- provide, or make available, to TxDOT and any authorized governmental investigating or auditing agency all
  records, including electronic and payment records related to the contract, for the same period provided by the
  records retention schedule applicable to TxDOT, and
- ensure that all subcontracts include a clause requiring the same.
- \* As defined in Government Code §552.003, "Contracting information" means the following information maintained by a governmental body or sent between a governmental body and a vendor, contractor, potential vendor, or potential contractor:
  - 1) information in a voucher or contract relating to the receipt or expenditure of public funds by a governmental body;
  - 2) solicitation or bid documents relating to a contract with a governmental body;
  - 3) communications sent between a governmental body and a vendor, contractor, potential vendor, or potential contractor during the solicitation, evaluation, or negotiation of a contract;
  - 4) documents, including bid tabulations, showing the criteria by which a governmental body evaluates each vendor, contractor, potential vendor, or potential contractor responding to a solicitation and, if applicable, an explanation of why the vendor or contractor was selected; and
  - 5) communications and other information sent between a governmental body and a vendor or contractor related to the performance of a final contract with the governmental body or work performed on behalf of the governmental body.

### CERTIFICATION TO NOT BOYCOTT ISRAEL

Pursuant to Texas Government Code §2271.002, the Department must include a provision requiring a written verification affirming that the Contractor does not boycott Israel, as defined in Government Code §808.001, and will not boycott Israel during the term of the contract. This provision applies to a contract that:

- 1) is with a Contractor that is not a sole proprietorship,
- 2) is with a Contractor with 10 or more full-time employees, and
- 3) has a value of \$100,000 or more.

By signing the contract, the Contractor certifies that it does not boycott Israel and will not boycott Israel during the term of this contract. "Boycott" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

## CERTIFICATION TO NOT BOYCOTT ENERGY COMPANIES

Pursuant to Texas Government Code §2274.002, the Department must include a provision requiring a written verification affirming that the Contractor does not boycott energy companies, as defined in Government Code §809.001, and will not boycott energy companies during the term of the contract. This provision applies to a contract that:

- 1) is with a Contractor that is not a sole proprietorship,
- 2) is with a Contractor with 10 or more full-time employees, and
- 3) has a value of \$100,000 or more.

By signing the contract, the Contractor certifies that it does not boycott energy companies and will not boycott energy companies during the term of this contract. "Boycott" means taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations with a company because the company: (1) engages in the exploration, production, utilization, transportation, sale, or manufacturing of fossil fuel-based energy and does not commit or pledge to meet environmental standards beyond applicable federal and state law; or (2) does business with a company described by (1).

## CERTIFICATION TO NOT DISCRIMINATE AGAINST FIREARM ENTITIES OR FIREARM TRADE ASSOCIATIONS

Pursuant to Texas Government Code §2274.002, the Department must include a provision requiring a written verification affirming that the Contractor:

- does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association, as defined in Government Code §2274.001, and
- 2) will not discriminate against a firearm entity or firearm trade association during the term of the contract.

This provision applies to a contract that:

- 1) is with a Contractor that is not a sole proprietorship,
- 2) is with a Contractor with 10 or more full-time employees, and
- 3) has a value of \$100,000 or more.

By signing the contract, the Contractor certifies that it does not discriminate against a firearm entity or firearm trade association as described and will not do so during the term of this contract. "Discriminate against a firearm entity or firearm trade association" means, with respect to the entity or association, to: (1) refuse to engage in the trade of any goods or services with the entity or association based solely on its status as a firearm entity or firearm trade association; (2) refrain from continuing an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association; or (3) terminate an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association. "Discriminate against a firearm entity or firearm trade association" does not include: (1) the established policies of a merchant, retail seller, or platform that restrict or prohibit the listing or selling of ammunition, firearms, or firearm accessories; (2) a company's refusal to engage in the trade of any goods or services, decision to refrain from continuing an existing business relationship, or decision to terminate an existing business relationship to comply with federal, state, or local law, policy, or regulations or a directive by a regulatory agency, or for any traditional business reason that is specific to the customer or potential customer and not based solely on an entity 's or association's status as a firearm entity or firearm trade association.

## Special Provision to Item 000 Nondiscrimination



### 1. DESCRIPTION

All recipients of federal financial assistance are required to comply with various nondiscrimination laws including Title VI of the Civil Rights Act of 1964, as amended, (Title VI). Title VI forbids discrimination against anyone in the United States on the grounds of race, color, or national origin by any agency receiving federal funds.

Texas Department of Transportation, as a recipient of Federal financial assistance, and under Title VI and related statutes, ensures that no person shall on the grounds of race, religion (where the primary objective of the financial assistance is to provide employment per 42 U.S.C. § 2000d-3), color, national origin, sex, age or disability be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any Department programs or activities.

### 2. DEFINITION OF TERMS

Where the term "contractor" appears in the following six nondiscrimination clauses, the term "contractor" is understood to include all parties to contracts or agreements with the Texas Department of Transportation.

### 3. NONDISCRIMINATION PROVISIONS

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

- 3.1. **Compliance with Regulations**. The Contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- 3.2. **Nondiscrimination**. The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- 3.3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- 3.4. Information and Reports: The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Texas Department of Transportation to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to the Recipient, or the Texas Department of Transportation as appropriate, and shall set forth what efforts it has made to obtain the information.

- 3.5. **Sanctions for Noncompliance**. In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the Recipient shall impose such contract sanctions as it or the Texas Department of Transportation may determine to be appropriate, including, but not limited to:
  - withholding of payments to the contractor under the contract until the contractor complies, and/or
  - cancellation, termination or suspension of the contract, in whole or in part.
- 3.6. Incorporation of Provisions. The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Recipient or the Texas Department of Transportation may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Recipient to enter into such litigation to protect the interests of the Recipient, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

2

09-14 Statewide

# **Special Provision 000 Certificate of Interested Parties (Form 1295)**



Submit a notarized Form 1295, "Certificate of Interested Parties," in the following instances:

- at Contract execution for Contracts awarded by the Commission;
- at Contract execution for Contracts awarded by the District Engineer or Chief Engineer with an award amount of \$1,000,000 or more; at any time an existing Contract awarded by the District Engineer or Chief Engineer increases in value to \$1,000,000 or more due to changes in the Contract; at any time there is an increase of \$1,000,000 or more to an existing Contract (change orders, extensions, and renewals); or
- at any time there is a change to the information in Form 1295, when the form was filed for an existing Contract.

Form 1295 and instructions on completing and filing the form are available on the Texas Ethics Commission website.

# **Special Provision 000 Important Notice to Contractors**



| For Dollar Amoun | t of Original Contract | Dollar Amount of Daily Contract<br>Administration Liquidated |  |  |
|------------------|------------------------|--|--|--|
| From More Than   | To and including       | Damages per Working Day                                      |  |  |
| 0                | 1,000,000              | 618  |  |  |
| 1,000,000        | 3,000,000              | 832  |  |  |
| 3,000,000        | 5,000,000              | 940  |  |  |
| 5,000,000        | 15,000,000             | 1317   |  |  |
| 15,000,000       | 25,000,000             | 1718   |  |  |
| 25,000,000       | 50,000,000             | 2411   |  |  |
| 50,000,000       | Over 50,000,000        | 4265   |  |  |

In addition to the amount shown in Table 1, the Liquidated Damages will be increased by the amount shown in Item 8 of the General Notes for Road User Cost (RUC), when applicable.

## Special Provision 000 Notice of Contractor Performance Evaluations



### 1. GENERAL

In accordance with Texas Transportation Code §223.012, the Engineer will evaluate Contractor performance based on quality, safety, and timeliness of the project.

### 2. DEFINITIONS

2.1. **Project Recovery Plan (PRP)**—a formal, enforceable plan developed by the Contractor, in consultation with the District, that documents the cause of noted quality, safety, and timeliness issues and specifies how the Contractor proposes to correct project-specific performance deficiencies.

In accordance with Title 43, Texas Administrative Code (TAC), §9.23, the District will request a PRP if the Contractor's performance on a project is below the Department's acceptable standards and will monitor the Contractor's compliance with the established plan.

2.2. **Corrective Action Plan (CAP)**—a formal, enforceable plan developed by the Contractor, and proposed for adoption by the Construction or Maintenance Division, that documents the cause of noted quality, safety, and timeliness issues and specifies how the Contractor proposes to correct statewide performance deficiencies.

In accordance with 43 TAC §9.23, the Division will request a CAP if the average of the Contractor's statewide final evaluation scores falls below the Department's acceptable standards for the review period and will monitor the Contractor's compliance with the established plan.

### 3. CONTRACTOR EVALUATIONS

In accordance with Title 43, Texas Administrative Code (TAC) §9.23, the Engineer will schedule evaluations at the following intervals, at minimum:

- Interim evaluations—at or within 30 days after the anniversary of the notice to proceed, for Contracts extending beyond 1 yr., and
- Final evaluation—upon project closeout.

In case of a takeover agreement, neither the Surety nor its performing Contractor will be evaluated.

In addition to regularly scheduled evaluations, the Engineer may schedule an interim evaluation at any time to formally communicate issues with quality, safety, or timeliness. Upon request, work with the Engineer to develop a PRP to document expectations for correcting deficiencies.

Comply with the PRP as directed. Failure to comply with the PRP may result in additional remedial actions available to the Engineer under Item 5, "Control of the Work." Failure to meet a PRP to the Engineer's satisfaction may result in immediate referral to the Performance Review Committee for consideration of further action against the Contractor.

The Engineer will consider and document any events outside the Contractor's control that contributed to the failure to meet performance standards or comply with a PRP, including consideration of sufficient time.

Follow the escalation ladder if there is a disagreement regarding an evaluation or disposition of a PRP. The Contractor may submit additional documentation pertaining to the dispute. The District Engineer's decision

on a Contractor's evaluation score and recommendation of action required in a PRP or follow up for non-compliance is final.

### 4. DIVISION OVERSIGHT

Upon request of the Construction or Maintenance Division, develop and submit for Division approval a proposed CAP to document expectations for correcting deficiencies in the performance of projects statewide.

Comply with the CAP as directed. The CAP may be modified at any time up to completion or resolution after written approval of the premise of change from the Division. Failure to meet an adopted or revised adopted CAP to the Division's satisfaction within 120 days will result in immediate referral to the Performance Review Committee for consideration of further action against the Contractor.

The Division will consider and document any events outside the Contractor's control that contributed to the failure to meet performance standards or comply with a CAP, including consideration of sufficient time and associated costs as appropriate.

### 5. PERFORMANCE REVIEW COMMITTEE

The Performance Review Committee, in accordance with 43 TAC §9.24, will review at minimum all final evaluations, history of compliance with PRPs, any adopted CAPs including agreed modifications, any information about events outside a Contractor's control contributing to the Contractor's performance, and any documentation submitted by the Contractor and may recommend one or more of the following actions:

- take no action.
- reduce the Contractor's bidding capacity,
- prohibit the Contractor from bidding on one or more projects,
- immediately suspend the Contractor from bidding for a specified period of time, by reducing the Contractor's bidding capacity to zero, or
- prohibit the Contractor from being awarded a Contract on which they are the apparent low bidder.

The Deputy Executive Director will determine any further action against the Contractor.

### 6. APPEALS PROCESS

In accordance with 43 TAC §9.25, the Contractor may appeal remedial actions determined by the Deputy Executive Director.

### **Special Provision to Item 2 Instructions to Bidders**



Item 2, "Instructions to Bidders" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 3., "Issuing Proposal Forms," is supplemented by the following:

The Electronic State Business Daily (ESBD), the Integrated Contractor Exchange (iCX) system, and the project proposal are the official sources of advertisement and bidding information for the State and Local Lettings. Bidders should bid the project using the information found therein, including any addenda. These sources take precedence over information from other sources, including TxDOT webpages, which are unofficial and intended for informational purposes only.

# **Special Provision to Item 2 Instructions to Bidders**



Item 2, "Instructions to Bidders," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Section 2.8.2., "Proposal Guaranty," third paragraph is replaced by the following.

It is the Bidder's responsibility to ensure the electronic bid bond is issued in the name or Department vendor identification numbers of the Bidder or Bidders.

### **Special Provision to Item 2** Instructions to Bidders



Item 2, "Instructions to Bidders," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

#### Article 2.3., "Issuing Proposal Forms," is supplemented by the following:

the Bidder or affiliate of the Bidder that was originally determined as the apparent low Bidder on a project but was deemed nonresponsive for failure to register or participate in the Department of Homeland Security's (DHS) E-Verify system as specified in Article 2.15., "Department of Homeland Security (DHS) E-Verify System," is prohibited from rebidding that specific project.

### Article 2.7., "Nonresponsive Bid," is supplemented by the following:

the Bidder failed to participate in the Department of Homeland Security's (DHS) as specified in Article 2.15., "Department of Homeland Security (DHS) E-Verify System."

### Article 2.15., "Department of Homeland Security (DHS) E-Verify System," is added.

The Department will not award a Contract to a Contractor that is not registered in the DHS E-Verify system. Remain active in E-Verify throughout the life of the Contract. In addition, in accordance with paragraph six of Article 8.2., "Subcontracting," include this requirement in all subcontracts and require that subcontractors remain active in E-Verify until their work is completed.

If the apparent low Bidder does not appear in the DHS E-Verify system before award, the Contractor must submit documentation showing that they are compliant within 5 calendar days after bid opening. A Contractor that fails to comply or respond within the deadline will be declared nonresponsive. The Bidder forfeiting the proposal guaranty will not be considered in future proposals for the same work unless there has been a substantial change in the scope of the work.

The Department may recommend that the Commission:

- reject all bids, or
- award the Contract to the new apparent low Bidder, if the Department is able to verify the Bidder's participation in the DHS E-Verify system.

If the Department is unable to verify the new apparent low Bidder's participation in the DHS E-Verify system:

- the new apparent low Bidder will not be deemed nonresponsive,
- the new apparent low Bidder's guaranty will not be forfeited,
- the Department will reject all bids,
- the new apparent low Bidder will remain eligible to receive future proposals for the same project, and
- the proposal guaranty of the original low bidder will become the property of the State, not as a penalty, but as liquidated damages.

# Special Provision to Item 3 Award and Execution Contract



Item 3, Award and Execution of Contract," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

**Section 4.3**, "**Insurance**." The first sentence is voided and replaced by the following:

For construction and building Contracts, submit a certificate of insurance showing coverages in accordance with Contract requirements. For routine maintenance Contracts, refer to Article 8, "Beginning of Work."

Article 8, "Beginning of Work." The first sentence is supplemented by the following:

For a routine maintenance Contract, do not begin work until a certificate of insurance showing coverages in accordance with the Contract requirements is provided and accepted.

# **Special Provision to Item 3 Award and Execution of Contract**



Item 3, "Award and Execution of Contract" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

### Section 4.3 "Insurance" is being amended by the following:

Table 2
Insurance Requirements

| moditance requirements                   |                                 |  |  |
|--|---------------------------------|--|--|
| Type of Insurance                        | Amount of Coverage              |  |  |
| Commercial General Liability Insurance   | Not Less Than:                  |  |  |
| •  | \$600,000 each occurrence       |  |  |
| Business Automobile Policy               | Not Less Than:                  |  |  |
| •  | \$600,000 combined single limit |  |  |
| Workers' Compensation                    | Not Less Than:                  |  |  |
| 7  | Statutory                       |  |  |
| All Risk Builder's Risk Insurance        | 100% of Contract Price          |  |  |
| (For building-facilities contracts only) |                                 |  |  |

### Special Provision to Item 5 Control of the Work



Item 5, "Control of the Work," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 5.1, "Authority of Engineer," is voided and replaced by the following.

The Engineer has the authority to observe, test, inspect, approve, and accept the work. The Engineer decides all guestions about the quality and acceptability of materials, work performed, work progress, Contract interpretations, and acceptable Contract fulfillment. The Engineer has the authority to enforce and make effective these decisions.

The Engineer acts as a referee in all questions arising under the terms of the Contract. The Engineer's decisions will be final and binding.

The Engineer will pursue and document actions against the Contractor as warranted to address Contract performance issues. Contract remedies include, but are not limited to, the following:

- conducting interim performance evaluations requiring a Project Recovery Plan, in accordance with Title 43, Texas Administrative Code (TAC) §9.23,
- requiring the Contractor to remove and replace defective work, or reducing payment for defective work,
- removing an individual from the project,
- suspending the work without suspending working day charges,
- assessing standard liquidated damages to recover the Department's administrative costs, including additional projectspecific liquidated damages when specified in the Contract in accordance with 43 TAC §9.22,
- withholding estimates,
- declaring the Contractor to be in default of the Contract, and
- in case of a Contractor's failure to meet a Project Recovery Plan, referring the issue directly to the Performance Review Committee for consideration of further action against the Contractor in accordance with 43 TAC §9.24.

The Engineer will consider and document any events outside the Contractor's control that contributed to the failure to meet performance standards, including consideration of sufficient time.

Follow the issue escalation ladder if there is disagreement regarding the application of Contract remedies.

## Special Provision to Item 5 Control of the Work



Item 5, "Control of the Work" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 5.4, "Coordination of Plans, Specifications, and Special Provisions," the last sentence of the last paragraph is replaced by the following:

Failure to promptly notify the Engineer will constitute a waiver of all contract claims against the Department for misunderstandings or ambiguities that result from the errors, omissions, or discrepancies.

## Special Provision to Item 6 Control of Materials



For this project, Item 6, "Control of Materials," of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Article 4., "Sampling, Testing, and Inspection," is supplemented by the following:

Meet with the Engineer and choose either the Department or a Department-selected Commercial Lab (CL) for conducting the subset of project-level sampling and testing shown in Table 1, "Select Guide Schedule Sampling and Testing." Selection may be made on a test by test basis. CLs will meet the testing turnaround times shown (includes test time and time for travel/sampling and reporting) and in all cases issue test reports as soon as possible.

If the Contractor chooses a Department-selected CL for any Table 1 sampling and testing:

- notify the Engineer, District Lab, and the CL of project scheduling that may require CL testing;
- provide the Engineer, District Lab, and CL at least 24 hours' notice by phone and e-mail;
- reimburse the Department for CL Table 1 testing using the contract fee schedule for the CL (including mileage and travel/standby time) at the minimum guide schedule testing frequencies;
- reimburse the Department for CL Table 1 testing above the minimum guide schedule frequencies for retesting when minimum frequency testing results in failures to meet specification limits;
- agree with the Engineer and CL upon a policy regarding notification for testing services;
- give any cancellation notice to the Engineer, District Lab, and CL by phone and e-mail;
- reimburse the Department a \$150 cancellation fee to cover technician time and mileage charges for previously scheduled work cancelled without adequate notice, which resulted in mobilization of technician and/or equipment by the CL; and
- all CL charges will be reimbursed to the Department by a deduction from the Contractor's monthly pay estimate.

If the CL does not meet the Table 1 turnaround times, testing charge to the Contractor will be reduced by 50% for the first late day and an additional 5% for each succeeding late day.

Approved CL project testing above the minimum testing frequencies in the Guide Schedule of Sampling and Testing, and not as the result of failing tests, will be paid by the Department.

Other project-level Guide Schedule sampling and testing not shown on Table 1 will be the responsibility of the Department.

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Table 1
Select Guide Schedule Sampling and Testing (Note 1)

| TxDOT Test  | Test Description   | Turn-<br>Around<br>Time<br>(Calendar days) |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| SOILS/BASE  |  |  |  |  |  |  |  |
| Tex-101-E   | Preparation of Soil and Flexible Base Materials for Testing (included in other tests)  |  |  |  |  |  |  |
| Tex-104-E   | Liquid Limit of Soils (included in 106-E)  |  |  |  |  |  |  |
| Tex-105-E   | Plastic Limit of Soils (included in 106-E)   |  |  |  |  |  |  |
| Tex-106-E   | Calculating the Plasticity Index of Soils  | 7  |  |  |  |  |  |
| Tex-110-E   | Particle Size Analysis of Soils  | 6  |  |  |  |  |  |
| Tex-113-E   | Moisture-Density Relationship of Base Materials  | 7  |  |  |  |  |  |
| Tex-114-E   | Moisture-Density Relationship of Subgrade and Embankment Soil  | 7  |  |  |  |  |  |
| Tex-115-E   | Field Method for In-Place Density of Soils and Base Materials  | 2  |  |  |  |  |  |
| Tex-116-E   | Ball Mill Method for the Disintegration of Flexible Base Material  | 5  |  |  |  |  |  |
| Tex-117-E, Part II                                  | Triaxial Compression Tests For Disturbed Soils and Base Materials (Part II)  | 6  |  |  |  |  |  |
| Tex-113-E<br><b>w</b> / Tex-117-E                   | Moisture-Density Relationship of Base Materials with Triaxial Compression Tests For Disturbed Soils and Base Materials (Part II)   | 10   |  |  |  |  |  |
| Tex-140-E   | Measuring Thickness of Pavement Layer  | 2  |  |  |  |  |  |
| Tex-145-E   | Determining Sulfate Content in Soils - Colorimetric Method   | 4  |  |  |  |  |  |
|   | HOT MIX ASPHALT  |  |  |  |  |  |  |
| Tex-200-F   | Sieve Analysis of Fine and Coarse Aggregate (dry, from ignition oven with known correction factors)  | 1<br>(Note 2)                              |  |  |  |  |  |
| Tex-203-F   | Sand Equivalent Test   | 3  |  |  |  |  |  |
| Tex-206-F,<br>w/ Tex-207-F, Part I,<br>w/ Tex-227-F | (Lab-Molded Density of Production Mixture – Texas Gyratory)  Method of Compacting Test Specimens of Bituminous Mixtures with Density of Compacted Bituminous Mixtures, Part I - Bulk Specific Gravity of Compacted Bituminous Mixtures, with Theoretical Maximum Specific Gravity of Bituminous Mixtures   | 1<br>(Note 2)                              |  |  |  |  |  |
| Tex-207-F, Part I<br><b>&amp;/or</b> Part VI        | (In-Place Air Voids of Roadway Cores)  Density of Compacted Bituminous Mixtures, Part I- Bulk Specific Gravity of Compacted Bituminous  Mixtures &/or Part VI - Bulk Specific Gravity of Compacted Bituminous Mixtures Using the Vacuum Method   |  |  |  |  |  |  |
| Tex-207-F, Part V                                   | Density of Compacted Bituminous Mixtures, Part V- Determining Mat Segregation using a Density-Testing Gauge  | 3  |  |  |  |  |  |
| Tex-207-F, Part VII                                 | Density of Compacted Bituminous Mixtures, Part VII - Determining Longitudinal Joint Density using a Density-Testing Gauge  | 4  |  |  |  |  |  |
| Tex-212-F   | Moisture Content of Bituminous Mixtures  | 3  |  |  |  |  |  |
| Tex-217-F   | Deleterious Material and Decantation Test for Coarse Aggregate   | 4  |  |  |  |  |  |
| Tex-221-F   | Sampling Aggregate for Bituminous Mixtures, Surface Treatments, and LRA (included in other tests)  |  |  |  |  |  |  |
| Tex-222-F   | Sampling Bituminous Mixtures (included in other tests)   |  |  |  |  |  |  |
| Tex-224-F   | Determination of Flakiness Index   | 3  |  |  |  |  |  |
| Tex-226-F   | Indirect Tensile Strength Test (production mix)  | 4  |  |  |  |  |  |
| Tex-235-F   | Determining Draindown Characteristics in Bituminous Materials  | 3  |  |  |  |  |  |
| Tex-236-F<br>(Correction Factors)                   | Asphalt Content from Asphalt Paving Mixtures by the Ignition Method (Determining Correction Factors)   | 4  |  |  |  |  |  |
| Tex-236-F   | Asphalt Content from Asphalt Paving Mixtures by the Ignition Method (Production Mixture)   | 1<br>(Note 2)                              |  |  |  |  |  |
| Tex-241-F<br>w/ Tex-207-F, Part I,<br>w/ Tex-227-F  | (Lab-Molded Density of Production Mixture – Superpave Gyratory) Superpave Gyratory Compacting of Specimens of Bituminous Mixtures (production mixture) with Density of Compacted Bituminous Mixtures, Part I - Part I - Bulk Specific Gravity of Compacted Bituminous Mixtures, with Theoretical Maximum Specific Gravity of Bituminous Mixtures | 1<br>(Note 2)                              |  |  |  |  |  |
| Tex-242-F   | Hamburg Wheel-Tracking Test (production mix, molded samples)   | 3  |  |  |  |  |  |
| Tex-244-F   | Thermal Profile of Hot Mix Asphalt   | 1  |  |  |  |  |  |
| Tex-246-F   | Permeability of Water Flow of Hot Mix Asphalt  | 3  |  |  |  |  |  |
| Tex-280-F   | Flat and Elongated Particles   | 3  |  |  |  |  |  |
| Tex-530-C   | Effect of Water on Bituminous Paving Mixtures (production mix)   | 4  |  |  |  |  |  |

| AGGREGATES  |  |  |  |  |  |
|---|--|--|--|--|--|
| 3   |  |  |  |  |  |
| 5   |  |  |  |  |  |
| 12  |  |  |  |  |  |
| 5   |  |  |  |  |  |
| CHEMICAL  |  |  |  |  |  |
| 4   |  |  |  |  |  |
|   |  |  |  |  |  |
|   |  |  |  |  |  |
|   |  |  |  |  |  |
|   |  |  |  |  |  |
|   |  |  |  |  |  |
|   |  |  |  |  |  |
| Tex-612-J Acid Insoluble Residue for Fine Aggregate  GENERAL  HMA Production Specialist [TxAPA – Level 1-A] (\$/hr)  HMA Roadway Specialist [TxAPA – Level 1-B] (\$/hr)  Technician Travel/Standby Time (\$/hr)  Per Diem (\$/day – meals and lodging)  Mileage Rate (\$/mile from closest CL location) |  |  |  |  |  |

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Note 1– Turn-Around Time includes test time and time for travel/sampling and reporting.

Note 2 – These tests require turn-around times meeting the governing specifications. Provide test results within the stated turn-around time.

CL is allowed one additional day to provide the signed and sealed report.

### Special Provision to Item 6 Control of Materials



Item 6, "Control of Materials" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 6.10., "Hazardous Materials," is voided and replaced by the following:

Comply with the requirements of Article 7.12., "Responsibility for Hazardous Materials."

Notify the Engineer immediately when a visual observation or odor indicates that materials on sites owned or controlled by the Department may contain hazardous materials. Except as noted herein, the Department is responsible for testing, removing, and disposing of hazardous materials not introduced by the Contractor. The Engineer may suspend work wholly or in part during the testing, removing, or disposing of hazardous materials, except in the case where hazardous materials are introduced by the Contractor.

Use materials that are free of hazardous materials. Notify the Engineer immediately if materials are suspected to contain hazardous materials. If materials delivered to the project by the Contractor are suspected to contain hazardous materials, have an approved commercial laboratory test the materials for the presence of hazardous materials as approved. Remove, remediate, and dispose of any of these materials found to contain hazardous materials. The work required to comply with this section will be at the Contractor's expense if materials are found to contain hazardous materials. Working day charges will not be suspended and extensions of working days will not be granted for activities related to handling hazardous material introduced by the Contractor. If suspected materials are not found to contain hazardous materials, the Department will reimburse the Contractor for hazardous materials testing and will adjust working day charges if the Contractor can show that this work impacted the critical path.

- 10.1. Painted Steel Requirements. Coatings on existing steel contain hazardous materials unless otherwise shown on the plans. Remove paint and dispose of steel coated with paint containing hazardous materials is in accordance with the following:
- 10.1.1. Removing Paint From Steel For contracts that are specifically for painting steel, Item 446, "Field Cleaning and Painting Steel" will be included as a pay item. Perform work in accordance with that item.

For projects where paint must be removed to allow for the dismantling of steel or to perform other work, the Department will provide for a separate contractor (third party) to remove paint containing hazardous materials prior to or during the Contract. Remove paint covering existing steel shown not to contain hazardous materials in accordance with Item 446, "Field Cleaning and Painting Steel."

10.1.2. Removal and Disposal of Painted Steel. For steel able to be dismantled by unbolting, paint removal will not be performed by the Department. The Department will remove paint, at locations shown on the plans or as agreed, for the Contractor's cutting and dismantling purposes. Utilize Department cleaned locations for dismantling when provided or provide own means of dismantling at other locations.

Painted steel to be retained by the Department will be shown on the plans. For painted steel that contains hazardous materials, dispose of the painted steel at a steel recycling or smelting facility unless otherwise shown on the plans. Maintain and make available to the Engineer invoices and other records obtained from the facility showing the received weight of the steel and the facility name. Dispose of steel that does not contain hazardous material coatings in accordance with federal, state and local regulations.

10.2. Asbestos Requirements. The plans will indicate locations or elements where asbestos containing materials (ACM) are known to be present. Where ACM is known to exist or where previously unknown ACM has been found, the Department will arrange for abatement by a separate contractor prior to or during the Contract. Notify the Engineer of proposed dates of demolition or removal of structural elements with ACM at least 60 days before beginning work to allow the Department sufficient time for abatement.

The Department of State Health Services (DSHS), Asbestos Programs Branch, is responsible for administering the requirements of the National Emissions Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart M and the Texas Asbestos Health Protection Rules (TAHPR). Based on EPA guidance and regulatory background information, bridges are considered to be a regulated "facility" under NESHAP. Therefore, federal standards for demolition and renovation apply.

The Department is required to notify the DSHS at least 10 working days (by postmarked date) before initiating demolition or renovation of each structure or load bearing member shown on the plans. If the actual demolition or renovation date is changed or delayed, notify the Engineer in writing of the revised dates in sufficient time to allow for the Department's notification to DSHS to be postmarked at least 10 days in advance of the actual work.

Failure to provide the above information may require the temporary suspension of work under Article 8.4., "Temporary Suspension of Work or Working Day Charges," due to reasons under the control of the Contractor. The Department retains the right to determine the actual advance notice needed for the change in date to address post office business days and staff availability.

**10.3. Lead Abatement.** Provide traffic control as shown on the plans, and coordinate and cooperate with the third party and the Department for managing or removing hazardous materials. Work for the traffic control shown on the plans and coordination work will not be paid for directly but will be subsidiary to pertinent Items.

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## **Special Provision to Item 7** Legal Relations and Responsibilities



Item 7, "Legal Relations and Responsibilities," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Section 7.7.2., "Texas Pollutant Discharge Elimination System (TPDES) Permits and Storm Water Pollution Prevention **Plans (SWP3),"** is voided and replaced by the following:

- 7.2. Texas Pollution Discharge Elimination System (TPDES) Permits and Storm Water Pollution Prevention Plans (SWP3).
- 7.2.1. Projects with less than one acre of soil disturbance including required associated project specific locations (PSL's) per TPDES GP TXR 150000.

No posting or filing will be required for soil disturbances within the right of way. Adhere to the requirements of the

7.2.2. Projects with one acre but less than five acres of soil disturbance including required associated PSL's per TPDES GP TXR 150000.

The Department will be considered a primary operator for Operational Control Over Plans and Specifications as defined in TPDES GP TXR 150000 for construction activity in the right of way. The Department will post a small site notice along with other requirements as defined in TPDES GP TXR 150000 as the entity of having operational control over plans and specifications for work shown on the plans in the right of way.

The Contractor will be considered a Primary Operator for Day-to-Day Operational Control as defined in TPDES GP TXR 150000 for construction activity in the right of way. In addition to the Department's actions, the Contractor will post a small site notice along with other requirements as defined in TPDES GP TXR 150000 as the entity of having day-to-day operational control of the work shown on the plans in the right of way. This is in addition to the Contractor being responsible for TPDES GP TXR 150000 requirements for on-right of way and off-right of way PSL's. Adhere to all requirements of the SWP3 as shown on the plans. The Contractor will be responsible for Implement the SWP3 for the project site in accordance with the plans and specifications, TPDES General Permit TXR150000, and as directed.

7.2.3. Projects with 5 acres or more of soil disturbance including required associated PSL's per TPDES GP TXR 150000.

The Department will be considered a primary operator for Operational Control Over Plans and Specifications as defined in TPDES GP TXR 150000 for construction activities in the right of way. The Department will post a large site notice, file a notice of intent (NOI), notice of change (NOC), if applicable, and a notice of termination (NOT) along with other requirements per TPDES GP TXR 150000 as the entity having operational control over plans and specifications for work shown on the plans in the right of way.

The Contractor will be considered a primary operator for <u>Day-to-Day Operational Control</u> as defined in TPDES GP TXR 150000 for construction activities in the right of way. In addition to the Department's actions, the Contractor shall file a NOI, NOC, if applicable, and NOT and post a large site notice along with other requirements as the entity of having day-to-day operational control of the work shown on the plans in the right of way. This is in addition to the Contractor

being responsible for TPDES GP TXR 150000 requirements for on- right of way and off- right of way PSL's. Adhere to all requirements of the SWP3 as shown on the plans.

# Special Provision to Item 7 Legal Relations and Responsibilities



Item 7, "Legal Relations and Responsibilities," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Section 7.2.4., "Public Safety and Convenience." The first paragraph is deleted and replaced by the following.

Ensure the safety and convenience of the public and property as provided in the Contract and as directed. Keep existing roadways open to traffic or construct and maintain detours and temporary structures for safe public travel. Manage construction to minimize disruption to traffic. Maintain the roadway in a good and passable condition, including proper drainage and provide for ingress and egress to adjacent property.

If the construction of the project requires the closing of a highway, as directed, coordinate the closure with the Engineer and work to ensure all lanes and ramps possible are available during peak traffic periods before, during, and after significant traffic generator events to avoid any adverse economic impact on the municipalities during:

- dates or events as shown on the plans, and
- other dates as directed.

## **Special Provision to Item 007** Legal Relations and Responsibilities



Item 7, "Legal Relations and Responsibilities," of the Standard Specifications is amended with respect to the clauses cited below.

Section 2.6., "Barricades, Signs, and Traffic Handling," the first paragraph is voided and replaced by the following:

2.6. Barricades, Signs, and Traffic Handling. Comply with the requirements of Item 502 "Barricades, Signs, and Traffic Handling," and as directed. Provide traffic control devices that conform to the details shown on the plans, the TMUTCD, and the Department's Compliant Work Zone Traffic Control Device List maintained by the Traffic Safety Division. When authorized or directed, provide additional signs or traffic control devices not required by the plans.

Section 2.6.1., "Contractor Responsible Person and Alternative," is voided and replaced by the following:

2.6.1. Contractor Responsible Person and Alternative. Designate in writing, a Contractor's Responsible Person (CRP) and an alternate to be the representative of the Contractor who is responsible for taking or directing corrective measures regarding the traffic control. The CRP or alternate must be accessible by phone 24 hr. per day and able to respond when notified. The CRP and alternate must comply with the requirements of Section 2.6.5., "Training."

Section 2.6.2, "Flaggers," the first paragraph is voided and replaced by the following:

2.6.2. Flaggers. Designate in writing, a flagger instructor who will serve as a flagging supervisor and is responsible for training and assuring that all flaggers are qualified to perform flagging duties. Certify to the Engineer that all flaggers will be trained and make available upon request a list of flaggers trained to perform flagging duties.

Section 2.6.5, "Training," is voided and replaced by the following:

2.6.5. Training. Train workers involved with the traffic control using Department-approved training as shown on the "Traffic Control Training" Material Producer List.

> Coordinate enrollment, pay associated fees, and successfully complete Department-approved training or Contractor-developed training. Training is valid for the period prescribed by the provider. Except for law enforcement personnel training, refresher training is required every 4 yr. from the date of completion unless otherwise specified by the course provider. The Engineer may require training at a frequency instead of the period prescribed based on the Department's needs. Training and associated fees will not be measured or paid for directly but are considered subsidiary to pertinent Items.

Certify to the Engineer that workers involved in traffic control and other work zone personnel have been trained and make available upon request a copy of the certification of completion to the Engineer. Ensure the following is included in the certification of completion:

- name of provider and course title,
- name of participant,
- date of completion, and
- date of expiration.

Where Contractor-developed training or a Department-approved training course does not produce a certification, maintain a log of attendees. Make the log available upon request. Ensure the log is legible and includes the following:

- printed name and signature of participant,
- name and title of trainer, and
- date of training.
- 2.6.5.1. Contractor-developed Training. Develop and deliver Contractor-developed training meeting the minimum requirements established by the Department. The outline for this training must be submitted to the Engineer for approval at the preconstruction meeting. The CRP or designated alternate may deliver the training instead of the Department-approved training. The work performed and materials furnished to develop and deliver the training will not be measured or paid for directly but will be considered subsidiary to pertinent Items.
- 2.6.5.1.1. **Flagger Training Minimum Requirements.** A Contractor's certified flagging instructor is permitted to train other flaggers.
- 2.6.5.1.2. **Optional Contractor-developed Training for Other Work Zone Personnel.** For other work zone personnel, the Contractor may provide training meeting the curriculum shown below instead of Department-approved training.

Minimum curriculum for Contractor-provided training is as follows:

Contractor-developed training must provide information on the use of personnel protection equipment, occupational hazards and health risks, and other pertinent topics related to traffic management. The type and amount of training will depend on the job duties and responsibilities. Develop training applicable to the work being performed. Develop training to include the following topics.

- The Life You Save May Be Your Own (or other similar company safety motto).
- Purpose of the training.
  - It's the Law.
  - To make work zones safer for workers and motorist.
  - To understand what is needed for traffic control.
  - To save lives including your own.
- Personal and Co-Worker Safety.
  - High Visibility Safety Apparel. Discuss compliant requirements; inspect regularly for fading and
    reduced reflective properties; if night operations are required, discuss the additional and
    appropriate required apparel in addition to special night work risks; if moving operations are
    underway, discuss appropriate safety measures specific to the situation and traffic control plan.
  - Blind Areas. A blind area is the area around a vehicle or piece of construction equipment not
    visible to the operators, either by line of sight or indirectly by mirrors. Discuss the "Circle of Safety"
    around equipment and vehicles; use of spotters; maintain eye contact with equipment operators;
    and use of hand signals.
  - Runovers and Backovers. Remain alert at all times; keep a safe distance from traffic; avoid turning your back to traffic and if you must then use a spotter; and stay behind protective barriers, whenever possible. Note: It is not safe to sit on or lean against a concrete barrier, these barriers can deflect four plus feet when struck by a vehicle.
  - Look out for each other, warn co-workers.
  - Be courteous to motorists.
  - Do not run across active roadways.
  - Workers must obey traffic laws and drive courteously while operating vehicles in the work zones.
  - Workers must be made aware of company distracted driving policies.
- Night Time Operations. Focus should be placed on projects with a nighttime element.

- Traffic Control Training. Basics of Traffic Control.
  - Identify work zone traffic control supervisor and other appropriate persons to report issues to when they arise.
  - Emphasize that work zone traffic control devices must be in clean and in undamaged condition. If devices have been hit but not damaged, put back in their correct place and report to traffic control supervisor. If devices have been damaged, replace with new one and report to traffic control supervisor. If devices are dirty, faded or have missing or damaged reflective tape clean or replace and report to traffic control supervisor. Show examples of non-acceptable device conditions. Discuss various types of traffic control devices to be used and where spacing requirements can be found.
  - Channelizing Devices and Barricades with Slanted Stripes. Stripes are to slant in the direction
    you want traffic to stay or move to; demonstrate this with a device.
  - Traffic Queuing. Workers must be made aware of traffic queuing and the dangers created by it.
     Workers must be instructed to immediately notify the traffic control supervisor and other supervisory personnel if traffic is queuing beyond advance warning sign and devices or construction limits.
  - Signs. Signs must be straight and not leaning. Report problems to the traffic control supervisor or other as designated for immediate repair. Covered signs must be fully covered. If covers are damaged or out of place, report to traffic control supervisor or other as designated.

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## **Special Provision to Item 7 Legal Relations and Responsibilities**



Item 7, "Legal Relations and Responsibilities" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

### Article 7.20., "Security Incidents," is added.

- 20.1. Reporting of Security Incidents. Immediately notify the Department's Cyber Security Operations Center (CSOC) via the Report Cybersecurity Incident Page on www.txdot.gov, of any potential cybersecurity incident or breach involving Department data. A breach of system security is the unauthorized acquisition of computerized data that compromises the security, confidentiality, or integrity of sensitive personal information maintained by a person, including data that is encrypted if the person accessing the data has the key required to decrypt the data.
- 20.2. Liability for costs incurred. The Department reserves the right to hold the Contractor liable for all costs incurred by the Department to resolve a security incident introduced by the Contractor, their Subcontractors, or their Suppliers.

# Special Provision to Item 8 Prosecution and Progress



Item 8, "Prosecution and Progress" of the Standard Specification is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 8.2., "Subcontracting," is supplemented by the following paragraph, which is added as paragraph six to this article:

The Contractor certifies by signing the Contract that the Contractor will not enter into any subcontract with a subcontractor that is not registered in the Department of Homeland Security's (DHS) E-Verify system. Require that all subcontractors working on the project register and require that all subcontractors remain active in the DHS E-Verify system until their work is complete on the project.

# **Special Provision to Item 8 Prosecution and Progress**



Item 8, "Prosecution and Progress" of the Standard Specifications is amended with respect to the clause cited below. No other clauses or requirements of this Item are waived or changed.

Article 8.7.2., "Wrongful Default," is revised and replaced by the following:

If it is determined after the Contractor is declared in default, that the Contractor was not in default, the rights and obligations of all parties will be the same as if termination had been issued for the convenience of the public as provided in Article 8.8 "Termination of Contract."

# **Special Provision to Item 8 Prosecution and Progress**



Item 8, "Prosecution and Progress" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 3., "Computation of Contract Time for Completion." The second paragraph is voided and replaced by the following:

The development of the conceptual time determination is intended to establish the number of working days on the Contract. Upon request, the Engineer will provide the conceptual time determination schedule to the Contractor for informational purposes only. The schedule assumes generic resources, production rates, sequences of construction, and average weather conditions based on historic data. Schedule labor, equipment, procurement of materials, subcontractor work, and all other necessary means to prosecute the work within the number of working days specified by the Contract.

## **Special Provision to Item 009 Measurement and Payment**



Item 009 "Measurement and Payment" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

### Article 9.5., "PROGRESS PAYMENTS" is supplemented with the following:

It is the Department's desire to pay a Contractor for work through the last working day of the month; however, the use of early cut-off dates for monthly estimates and MOH is a project management practice to manage workload at the Area Office level. Approval for using early cut-off dates is at the District's discretion. The earliest cut-off date for estimates is the 25th of the month.

### Article 9.6., "PAYMENT FOR MATERIAL ON HAND (MOH)" first paragraph is amended as follows:

If payment for MOH is desired, request compensation for the invoice cost of acceptable nonperishable materials that have not been used in the work before the request, and that have been delivered to the work location or are in acceptable storage places. Nonperishable materials are those that do not have a shelf life or whose characteristics do not materially change when exposed to the elements. Include only materials that have been sampled, tested, approved, or certified, and are ready for incorporation into the work. Only materials which are completely constructed or fabricated on the Contractor's order for a specific Contract and are so marked and on which an approved test report has been issued are eligible. Payment for MOH may include the following types of items: concrete traffic barrier, precast concrete box culverts, concrete piling, reinforced concrete pipe, and illumination poles. Any repairs required after fabricated materials have been approved for storage will require approval of the Engineer before being made and will be made at the Contractor's expense. Include only those materials and products, when cumulated under an individual item or similar bid items, that have an invoice cost of at least \$1,000 in the request for MOH payment (e.g. For MOH eligibility, various sizes of conductor are considered similar bid items and may be cumulated to meet the threshold; for small roadside signs, the sign supports, mounting bolts, and the sign face is considered one bid item or similar bid items for more than one pay item for sign supports.) Requests for MOH are to be submitted at least two days before but not later than the estimate cutoff date unless otherwise agreed. If there is a need to request MOH after the established cut-off date, the district can make accommodation as the need arises. This needed accommodation is to be the exception, though, and not the rule.

## **Special Provision to Item 9 Measurement and Payment**



Item 9, "Measurement and Payment" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Section 7.1.4.3., "Standby Equipment Costs," is voided and replaced by the following:

7.1.4.3. Standby Equipment Costs. Payment for standby equipment will be made in accordance with Section 9.7.1.4., "Equipment." The 15% markup will be paid when standby is associated with extra work but will not be paid when standby is associated with damages.

Section 7.1.4.3.1., "Contractor-Owned Equipment," is voided and replaced by the following:

- 7.1.4.3.1. **Contractor-Owned Equipment**. For Contractor-owned equipment:
  - Standby will be paid at 50% of the monthly Rental Rate Blue Book rate after the regional and age adjustment factors have been applied. Operating costs will not be allowed. Calculate the standby rate as follows.

Standby rate = (FHWA hourly rate - operating costs) × 50%

- If an hourly rate is needed, divide the monthly Rental Rate Blue Book rate by 176.
- No more than 8 hr. of standby will be paid during a 24-hr. day period, nor more than 40 hr. per week.
- Standby costs will not be allowed during periods when the equipment would have otherwise been idle.

### **Special Provision to Item 247** Flexible Base



Item 247, "Flexible Base," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Section 247.2.1., "Aggregate." This Section is voided and replaced by the following.

Furnish aggregate of the type and grade shown on the plans and meeting the requirements shown in Table 1. Each source must meet Table 1 requirements for liquid limit, plasticity index, and wet ball mill for the grade specified. Do not use additives, such as but not limited to cement, emulsion, foamed asphalt, or lime, to modify aggregates to meet the requirements of Table 1, unless otherwise shown on the plans.

Unless otherwise shown on the plans, the unconfined compressive strength is waived when the flexible base material meets the #200 sieve requirement.

Table 1 **Material Requirements** 

| Property  | Test Method      | Grade 1–2 <sup>3</sup> | Grade 3                  | Grade 4     | Grade 5 <sup>3</sup>  |
|---|------------------|------------------------|--------------------------|-------------|-----------------------|
| Master gradation sieve size (cumulative % retained) |                  | -                      | -                        |             | -                     |
| 2-1/2"  | <u>Tex-110-E</u> | 0                      | 0                        |             | 0                     |
| 1-3/4"  |                  | 0–10                   | 0–10                     |             | 0–5                   |
| 7/8"  |                  | 10–35                  | ı                        |             | 10–35                 |
| 3/8"  |                  | 30–65                  | ı                        |             | 35–65                 |
| #4  |                  | 45–75                  | 45–75                    |             | 45–75                 |
| #40   |                  | 65–90                  | 50-85                    |             | 70–90                 |
| #200 <sup>1, 2</sup>                                |                  | 85–95                  | ı                        |             | _                     |
| Liquid limit, % Max                                 | <u>Tex-104-E</u> | 40                     | 40                       | As shown on | 35                    |
| Plasticity index, Max                               |                  | 10                     | 12                       | the plans   | 10                    |
| Plasticity index, Min                               | <u>Tex-106-E</u> | As shown on the plans  | As shown on<br>the plans |             | As shown on the plans |
| Wet ball mill, % Max                                |                  | 40                     | ı                        |             | 40                    |
| Wet ball mill, % Max increase passing the #40 sieve | <u>Tex-116-E</u> | 20                     | -                        |             | 20                    |
| Min compressive strength2, psi                      |                  | _                      | _                        |             | -                     |
| lateral pressure 0 psi                              | Toy 117 E        | 35                     | -                        |             | _                     |
| lateral pressure 3 psi                              | <u>Tex-117-E</u> | _                      | -                        |             | 90                    |
| lateral pressure 15 psi                             |                  | 175                    | -                        |             | 175                   |

- The #200 sieve test is only required to meet the waiver of the unconfined compressive strength. The #200 sieve test requirement is only applicable to stockpile samples from Section 247.2.4.
- Compressive strength and #200 sieve test requirements are waived when the flexible base is mixed with or without existing material and treated with cement, emulsion, foamed asphalt, or lime, unless otherwise shown on the
- Grade 3 may be substituted for Grade 1–2 or Grade 5 when the flexible base is mixed with or without existing material and treated with cement, emulsion, foamed asphalt, or lime, as approved. The Grade 3 flexible base must meet the wet ball mill requirements of Grade 1-2 or Grade 5.

Section 247.2.1.2.4., "Type D." The third sentence is voided and replaced by the following.

Crushed concrete must meet the requirements in Section 247.2.1.3., "Recycled Material," and be managed in a way to provide for uniform quality.

Section 247.2.1.3., "Recycled Material." This Section is voided and replaced by the following.

1 - 3 11-23 Reclaimed asphalt pavement (RAP) and other recycled materials may be used as shown on the plans. Request approval to blend two or more sources of recycled materials. When RAP is allowed, do not exceed 20% RAP by weight, unless otherwise shown on the plans. The percentage limitations for other recycled materials are as shown on the plans.

Provide recycled materials, other than RAP, that have a maximum sulfate content of 3,000 ppm when tested in accordance with Tex-145-E. Certify accordance with DMS-11000, "Evaluating and Using Nonhazardous Recyclable Materials Guidelines." In addition, recycled materials must be free of reinforcing steel and other objectionable material and have at most 1.5% deleterious material when tested in accordance with Tex-413-A. The liquid limit, plasticity index, wet ball mill, and compressive strength for all recycled materials are waived. When using RAP, crush RAP so that 100% passes the 2-in. sieve and does not exceed a maximum percent loss from decantation of 5.0% when tested in accordance with Tex-406-A. Test RAP without removing the asphalt. The final product must meet the requirements shown in Table 1 for the grade specified, except when the Department requires a specific amount of Department-furnished RAP be added to the blend, unless otherwise shown on the plans.

The Contractor is responsible for uniformly blending the recycled material with the flexible base material to build a stockpile to meet the percentages required. Any Contractor-furnished surplus of recycled materials must remain the property of the Contractor. Remove Contractor-owned recycled materials from the project, and dispose of them in conformance with federal, state, and local regulations before project acceptance.

**Section 247.2.4., "Stockpile Approval."** This Section is added.

Stockpile is approved when the Engineer's test results meet the material requirements shown in Table 1.

Section 247.2.4.1., "Sampling." This Section is added.

The Contractor and the Engineer will sample flexible base from completed stockpiles in accordance with Tex-100-A. Personnel conducting sampling must be certified by the Department-approved soils and base certification program.

Sampling stockpiles may be located at the production site or at the project location. The Contractor must witness the Engineer's sampling and sample the stockpile for their own testing, and label as deemed necessary.

Sample the stockpile for the Engineer as shown on the plans. When the Contractor samples the stockpile for the Engineer, the Engineer will witness the sampling of material designated for the Engineer and the Materials and Tests Division (MTD). The Engineer will label their sampling containers as "Engineer" and "MTD," or as deemed necessary.

The Engineer will take immediate possession of the sample containers for the Engineer and MTD. The Engineer will maintain custody of the samples until all testing and reporting are completed.

Section 247.2.4.2., "Referee Testing." This Section is added.

Referee testing is applicable for stockpile testing only. MTD is the referee laboratory. MTD may designate a laboratory from the Department's MPL for Commercial Laboratories Approved for Flexible Base Referee Requests as the referee laboratory as deemed necessary. The designated laboratory must not perform any testing under this Item for the Engineer or Contractor.

The Contractor may request referee testing when the Engineer's test results fail to meet any of the material requirements shown in Table 1 and when the Contractor's sample from Section 247.2.4.1., "Sampling," for the same failing Department test passes. The tests must be performed by a laboratory on the Department's MPL for Commercial Laboratories Approved for Flexible Base Referee Requests. Submit the request by email within 5 working days after receiving failing test results from the Engineer. Include completed test reports passing the applicable requirements shown in Table 1 in the email.

Record and submit completed test reports electronically on Department-provided templates in their original format meeting the applicable material requirements shown in Table 1. Use Department-provided templates to record and calculate all test data. The Engineer and the Contractor will provide any available test results to the other party when requested.

**Section 247.4.3., "Compaction."** The first paragraph is voided and replaced by the following.

Compact using density control unless otherwise shown on the plans. Multiple lifts are permitted as shown on the plans or approved. Bring each layer to the moisture content directed. When necessary, sprinkle the material in accordance with Item 204, "Sprinkling." Maintain moisture during compaction within ±2.0% of the optimum moisture content as determined in accordance with Tex-113-E.

#### Section 247.4.3.2., "Density Control." This Section is voided and replaced by the following.

Compact to at least 100% of the maximum dry density and within ±2.0% of the optimum moisture content as determined in accordance with Tex-113-E, unless otherwise shown on the plans. Provide the Engineer with the beginning and ending station numbers of the area completed for testing. The Engineer will determine roadway density and moisture content of completed sections in accordance with Tex-115-E, Part I. The Engineer will determine random locations for testing in accordance with Tex-115-E, Part IV. Do not achieve density by drying the material after compaction.

When the density is less than 100% of the maximum dry density, the Engineer may perform additional testing to determine the extent of the area to correct. The Engineer may accept the section if no more than one of the five most recent density tests is below the specified density and the failing test is no more than 3 pcf below the specified density.

#### Section 247.4.3.3., "Miscellaneous and Small Areas." This Section is added.

Miscellaneous areas are those that typically involve handwork or discontinuous paving operations, such as temporary detours, driveways, mailbox turnouts, crossovers, gores, spot level-up areas, and other similar areas. Miscellaneous and small areas are not subject to random sampling procedure but may be tested as directed.

#### **Section 247.4.6., "Ride Quality."** This Section is voided and replaced by the following.

Measurement of ride quality only applies to the final travel lanes that receive a one- or two-course surface treatment for the final riding surface, unless otherwise shown on the plans. Measure the ride quality of the base course either before or after the application of the prime coat, as directed, and before placement of the surface treatment. Use a certified profiler operator on the Department's MPL. When requested, furnish the Engineer with documentation for the person certified to operate the profiler.

Provide all profile data to the Engineer in electronic data files within 3 days of measuring the ride quality using the format specified in Tex-1001-S. The Engineer will use Department software to evaluate longitudinal profiles to determine areas requiring corrective action. Correct 0.1-mi. sections with an average international roughness index (IRI) value greater than 100 in. per mile to an IRI value of 100 in, per mile or less, unless otherwise shown on the plans. Re-profile and correct sections that fail to maintain ride quality before the placement of the surface treatment, as directed. Unless ride deterioration is due to environmental impact, traffic, or other incidents outside the Contractor's control, perform this work at no additional expense to the Department, as approved.

## Special Provision to Item 420 Concrete Substructure



Item 420, "Concrete Substructures" of the Standard Specifications is amended with respect to the clause cited below. No other clauses or requirements of this Item are waived or changed.

Article 420.6., "Payment." The first paragraph is replaced by the following:

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for the class of concrete and element identified and by the special designation when appropriate. This price is full compensation for furnishing, hauling, and mixing concrete materials; furnishing, bending, fabricating, splicing, welding and placing the required reinforcement; clips, blocks, metal spacers, ties, wire, or other materials used for fastening reinforcement in place; placing, finishing, and curing concrete; mass placement controls; applying ordinary surface finish; furnishing and placing drains, metal flashing strips, and expansion-joint material; excavation, subgrade preparation; and forms and falsework, equipment, labor, tools, and incidentals.

## **Special Provision to Item 421 Hydraulic Cement Concrete**



Item 421, "Hydraulic Cement Concrete" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 421.2., "Materials," the second sentence of the first paragraph is voided and replaced by the following.

Provide aggregates from sources listed in the Department's Concrete Rated Source Quality Catalog (CRSQC).

Article 421.2.2., Supplementary Cementing Materials (SCM), is voided and replaced with the following.

Supplementary Cementitious Materials (SCM).

- Coal Ash. Furnish sources of fly ash, , Modified fly ash (MFA), harvested coal ash, and Ground Bottom Ash (GBA) conforming to DMS-4610, "Coal Ash."
- Slag Cement. Furnish Slag Cement in accordance with <a href="DMS-4620">DMS-4620</a>, "Slag Cement."
- Silica Fume. Furnish silica fume in accordance with DMS-4630, "Silica Fume."
- Natural Pozzolans. Furnish Natural Pozzolans in accordance with DMS-4635, "Natural Pozzolans."

Article 421.3.1.3., "Agitators and Truck and Stationary Mixers," the first paragraph is voided and replaced by the following.

Provide stationary and truck mixers capable of combining the ingredients of the concrete into a thoroughly mixed and uniform mass and capable of discharging the concrete so that the requirements of Tex-472-A are met.

Article 421.3.1.3., "Agitators and Truck and Stationary Mixers," is supplemented with the following.

Truck mixers with automated water and chemical admixture measurement and slump and slump flow monitoring equipment meeting the requirement of ASTM C94 will be allowed. Provide data every 6 mo. substantiating the accuracy of slump, slump flow, temperature, water, and chemical admixture measurements. The slump measured by the automated system must be within 1 in. of the slump measured in accordance with Tex-415-A. The concrete temperature measured by the automated system must be within 1°F of concrete temperature measured in accordance with Tex-422-A. The Engineer will not use the automated measurements for acceptance.

Article 421.4.2., "Mix Design Proportioning," Table 8 is voided and replaced by the following.

Table 8 Concrete Classes

|                      | Concrete Classes                      |                      |  |   |                          |   |  |
|----------------------|---------------------------------------|----------------------|--|---|--------------------------|---|--|
| Class of<br>Concrete | Design<br>Strength,¹<br>Min f'c (psi) | Max<br>w/cm<br>Ratio | Coarse<br>Aggregate<br>Grades <sup>2,3,4</sup> | Cement<br>Types                           | Mix<br>Design<br>Options | Exceptions to<br>Mix Design Options   | General Usage <sup>5</sup>   |
| А                    | 3,000                                 | 0.60                 | 1–4, 8   | I, II, I/II, IL,                          | 1, 2, 4, & 7             | When the cementitious material content does not exceed 520 lb./cu. yd., any coal ash or natural pozzolan listed in the MPL may be used at a cement  | Curb, gutter, curb & gutter, conc. retards, sidewalks, driveways, back-up walls, anchors, non-reinforced drilled shafts  |
| В                    | 2,000                                 | 0.60                 | 2–7  | IP, IS, IT, V                             |                          | replacement of 20% to 50%.  | Riprap, traffic signal controller foundations, small roadside signs, and anchors   |
| C <sub>6</sub>       | 3,600                                 | 0.45                 | 1–6  | I, II, I/II, IP,<br>IL, IS, IT, V         | 1–8                      |   | Drilled shafts, bridge<br>substructure, traffic rail, culverts<br>except top slab of direct traffic<br>culverts, headwalls, wing walls,<br>inlets, manholes, traffic barrier |
| E                    | 3,000                                 | 0.50                 | 2–5  | I, II, I/II,<br>IL, IP, IS, IT,<br>V      | 1–8                      | When the cementitious material content does not exceed 520 lb./cu. yd., any coal ash or natural pozzolan listed in the MPL may be used at a cement replacement of 20% to 50%.   | Seal concrete  |
| F <sup>6</sup>       | Note <sup>7</sup>                     | 0.45                 | 2–5  | I, II, I/II, IP,<br>IL, IS, IT, V         |                          |   | Railroad structures; occasionally for bridge piers, columns, bents, post-tension members   |
| He                   | Note <sup>7</sup>                     | 0.45                 | 3–6  | I, II, I/II, III,<br>IP, IL, IS, IT,<br>V | 1–4, 8                   | Mix design options 1-8 allowed for cast-in-place concrete and the following precast elements unless otherwise stated in the plans:  ■ Bridge Deck Panels, ■ Retaining Wall Systems, ■ Coping, ■ Sound Walls, ■ Wall Columns, ■ Traffic Rail, ■ Traffic Rail, ■ Traffic Rail, ■ Traffic Barrier, ■ Long/Arch Span Culverts, and ■ precast concrete products included in Item 462, "Concrete Box Culverts and Drains, Item 464, "Reinforced Concrete Pipe," and Item 465, "Junction Boxes, Manholes, and Inlets."  Do not use Type III cement in mass placement concrete. Up to 20% of blended cement may be replaced with listed SCMs when Option 4 is used for precast concrete. Options 6, & 7 allowed for cast-in-place Class H concrete. | Precast concrete, post-tension members   |
| S <sup>6</sup>       | 4,000                                 | 0.45                 | 2–5  | I, II, I/II, IP,<br>IL, IS, IT, V         | 1–8                      |   | Bridge slabs, top slabs of direct traffic culverts, approach slabs   |

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| Class of<br>Concrete   | Design<br>Strength, <sup>1</sup><br>Min f <sup>c</sup> (psi) | Max<br>w/cm<br>Ratio | Coarse<br>Aggregate<br>Grades <sup>2,3,4</sup> | Cement<br>Types  | Mix<br>Design<br>Options | Exceptions to<br>Mix Design Options  | General Usage <sup>5</sup>                            |
|------------------------|--|----------------------|--|--|--------------------------|--|---|
| Р                      | See<br>Item 360,<br>"Concrete<br>Pavement."                  | 0.50                 | 2–3  | I, II, I/II, IL,<br>IP, IS, IT, V                          | 1–8                      | When the cementitious material content does not exceed 520 lb./cu. yd., any coal ash or natural pozzolan listed in the MPL's may be used at a cement replacement of 20% to 50%.  | Concrete pavement                                     |
| CO <sub>6</sub>        | 4,600  | 0.40                 | 6  |  | 4.0                      |  | Bridge deck concrete overlay                          |
| LMC <sup>6</sup>       | 4,000  | 0.40                 | 6–8  |  | 1–8                      |  | Latex-modified concrete overlay                       |
| SS <sup>6</sup>        | 3,600  | 0.45                 | 4–6  | I, II, I/II, IP,<br>IL, IS, IT, V                          | 1-8                      | Use a Min cementitious material content of 658 lb./cu. yd. of concrete. Limit the alkali loading to 4.0 lbs./cu. yd. or less when using Option 7.  | Slurry displacement shafts, underwater drilled shafts |
| K <sup>6</sup>         | Note <sup>7</sup>  | 0.40                 | Note <sup>7</sup>                              | I, II, I/II, III<br>IP, IL, IS, IT,<br>V                   | 1-8                      |  | Note <sup>7</sup>                                     |
| HES                    | Note <sup>7</sup>  | 0.45                 | Note <sup>7</sup>                              | I, IL, II, I/II,<br>III                                    |                          | Mix design options do not apply. 700 lb. of cementitious material per cubic yard limit does not apply.   | Concrete pavement, concrete pavement repair           |
| "X"<br>(HPC)<br>6,8, 9 | Note <sup>10</sup>   | 0.45                 | Note <sup>10</sup>                             | I, II, I/II, III<br>IP, IL, IS, IT,<br>V                   | 1–4, & 8                 | Max coal ash replacement for Option 3 may be increased to 50%. Up to 20% of a blended cement may be replaced with listed SCMs for Option 4. Do not use Option 8 for precast concrete.  |   |
| "X"<br>(SRC)<br>6,8, 9 | Note <sup>10</sup>   | 0.45                 | Note <sup>10</sup>                             | I/II, II, IP, IL<br>(MS or HS),<br>IS, IT (MS or<br>HS), V | 1–4, & 7                 | When using coal ash, only use coal ashes allowed for SRC as listed in the Coal Ash MPL.  Type III-MS may be used where allowed.  Type I, Type IL, and Type III cements may be used when natural pozzolans are used or when coal ashes allowed for SRC as listed in the Coal Ash MPL are used, and with a Max w/cm of 0.40.  Up to 20% of blended cement may be replaced with listed SCMs when Option 4 is used for precast concrete.  Use Option 7 for precast concrete where allowed. |   |

- 1. Design strength must be attained within 56 days.
- 2. Do not use Grade 1 coarse aggregate except in massive foundations with 4 in. Min clear spacing between reinforcing steel bars, unless otherwise permitted. Do not use Grade 1 aggregate in drilled shafts.
- 3. Use Grade 8 aggregate in extruded curbs unless otherwise approved.
- 4. Other grades of coarse aggregate maybe used in non-structural concrete classes when allowed by the Engineer.
- For information only.
- Structural concrete classes.
- 7. As shown on the plans or specified.
- 8. "X" denotes class of concrete shown on the plans or specified.
- 9. (HPC): High Performance Concrete, (SRC): Sulfate Resistant Concrete.
- 10. Same as class of concrete shown on the plans.

#### Article 421.4.2.2., "Aggregates," is supplemented by the following.

Use the following equation to determine if the aggregate combination meets the sand equivalency requirement when blending fine aggregate or using an intermediate aggregate:

$$\frac{(SE_1 \times P_1) + (SE_2 \times P_2) + (SE_{ia} \times P_{ia})}{100} \ge 80\%$$

#### where:

 $SE_1$  = sand equivalency (%) of fine aggregate 1

 $SE_2$  = sand equivalency (%) of fine aggregate 2

 $SE_{ia}$  = sand equivalency (%) of intermediate aggregate passing the 3/8 in. sieve

 $P_1$  = percent by weight of fine aggregate 1 of the fine aggregate blend

 $P_2$  = percent by weight of fine aggregate 2 of the fine aggregate blend

 $P_{ia}$  = percent by weight of intermediate aggregate passing the 3/8 in. sieve

#### Article 421.4.2.3., Chemical Admixtures," the second paragraph is voided and replaced with the following.

Use a 30% calcium nitrite solution when a corrosion-inhibiting admixture is required. Dose the admixture at the rate of gallons of admixture per cubic yard of concrete shown on the plans. Use set retarding admixtures, as needed, to control setting time to ensure concrete containing corrosion inhibiting admixtures remain workable for the entire duration of the concrete placement. Perform setting time testing and slump loss testing during trial batch testing.

Article 421.4.2.5., "Slump," the second paragraph is voided and not replaced. Table 9 is voided and replaced with below:

Table 9
Placement Slump Requirements

| General Usage  | Placement Slump<br>Range, <sup>1,2</sup> in.     |
|--|--|
| Walls (over 9 in. thick), caps, columns, piers   | 3 – 7  |
| Bridge slabs, top slabs of direct traffic culverts, approach slabs, concrete overlays, latex-<br>modified concrete for bridge deck overlays                                      | 3 – 6  |
| Inlets, manholes, walls (less than 9 in. thick), bridge railing, culverts, concrete traffic barrier, concrete pavement (formed)  | 4 – 6  |
| Precast concrete   | 4 – 9  |
| Underwater concrete placements   | 6 – 8-1/2  |
| Drilled shafts, slurry displaced and underwater drilled shafts   | See Item 416,<br>"Drilled Shaft<br>Foundations." |
| Curb, gutter, curb and gutter, concrete retards, sidewalk, driveways, seal concrete, anchors, riprap, small roadside sign foundations, concrete pavement repair, concrete repair | As approved                                      |

Max slump values may be increase above these values shown using chemical admixtures, provided the
admixture treated concrete has the same or lower water-to-cementitious ratio and does not exhibit segregation
or excessive bleeding. Request approval to increase slump limits in advance for proper evaluation by the
Engineer.

2. For fiber reinforced concrete, perform slump before addition of fibers.

#### Article 421.4.2.6., "Mix Design Options," is voided and replaced with the following.

**Option 1.** Replace cement with at least the minimum dosage listed in the MPL for the coal ash or natural pozzolan used in the mixture. Do not replace more than 50% of the cement. Conduct Option 8 testing as listed on the MPL.

Option 2. Replace 35% to 50% of the cement with slag cement.

**Option 3.** Replace 35% to 50% of the cement with a combination of coal ash, slag cement, natural pozzolan, or at least 3% silica fume: however, no more than 10% may be silica fume.

**Option 4.** Use Type IP, Type IS, or Type IT cement as allowed in Table 8 for each class of concrete. When replacing blended cements with additional SCM's, the replacement limits in Option 3 will apply to the final cementitious mixture. When using coal

ash or natural pozzolans not having a minimum dosage listed in the MPL in the final cementitious mixture, perform Option 8 testing.

**Option 5.** Option 5 is left intentionally blank.

**Option 6.** Use a lithium nitrate admixture at a minimum dosage determined by testing conducted in accordance with <u>Tex-471-A</u>. Before use of the mix, provide an annual certified test report signed and sealed by a licensed professional engineer, from a laboratory listed on the MPL, certified by the Materials and Tests Division as being capable of testing according to <u>Tex-471-A</u>.

**Option 7.** Ensure the total alkali contribution from the cement in the concrete does not exceed 3.5 lb. per cubic yard of concrete when using hydraulic cement not containing SCMs calculated as follows:

lb. alkali per cu. yd. = 
$$\frac{\left(\text{lb. cement per cu. yd.}\right) \times \left(\% \text{ Na}_{2} \text{O equivalent in cement}\right)}{100}$$

In the above calculation, use the maximum cement alkali content reported on the cement mill certificate.

**Option 8.** Use Table 10 when deviating from Options 1–3 or when required by the Coal Ash MPL. Perform required testing annually and submit results to the Engineer. Laboratories performing ASTM C1260, ASTM C1567, and ASTM C1293 testing must be listed on the MPL. Before use of the mix, provide a certified test report signed and sealed by a licensed professional engineer demonstrating the proposed mixture in accordance with the requirements of Table 10.

Provide a certified test report signed and sealed by a licensed professional engineer, when HPC is required, and less than 20% of the cement is replaced with SCMs, demonstrating ASTM C1876 test results indicate the uniaxial resistivity of the concrete is greater than 15.6 k $\Omega$ -cm tested immediately after either of the following curing schedules:

- Moisture cure specimens 56 days at 73°F.
- Moisture cure specimens 7 days at 73°F followed by 21 days at 100°F.

Table 10 **Option 8 Testing and Mix Design Requirements** 

| Scenario | ASTM C                       | 1260 Result                           | Testing Requirements for Mix Design Materials  |  |  |
|----------|------------------------------|---------------------------------------|--|--|--|
| Scer     | Mix Design<br>Fine Aggregate | Mix Design<br>Coarse Aggregate        | or Prescriptive Mix Design Options   |  |  |
| Α        | > 0.10%                      | > 0.10%                               | Determine the dosage of SCMs needed to limit the 14-day expansion of each aggregate 1 to 0.10% when tested individually in accordance with ASTM C1567.   |  |  |
| В        | ≤ 0.10%                      | ≤ 0.10%                               | Use the Min replacement listed in the Coal Ash MPL, or when Option 8 is listed on the MPL, use a Min of 40% coal ash with a Max CaO <sup>2</sup> content of 25%, or use any ternary combination which replaces 35% to 50% of cement. |  |  |
|          | ≤ 0.10%                      | ASTM C1293 1 yr.<br>Expansion ≤ 0.04% | Use a minimum of 20% of any coal ash; or Use any ternary combination which replaces 20% to 50% of cement.  |  |  |
| С        | ≤ 0.10%                      | > 0.10%                               | Determine the dosage of SCMs needed to limit the 14-day expansion of coarse and intermediate¹ aggregate to ≤0.10% when tested individually in accordance with ASTM C1567.  |  |  |
| D        | > 0.10%                      | ≤ 0.10%                               | Use the Min replacement listed in the Coal Ash MPL, or when Option 8 is listed on the MPL, use a Min of 40% coal ash with a Max CaO <sup>2</sup> content of 25%, or use any ternary combination which replaces 35% to 50% of cement. |  |  |
|          | > 0.10%                      | ASTM C1293 1 yr.<br>Expansion ≤ 0.04% | Determine the dosage of SCMs needed to limit the 14-day expansion of each fine aggregate to ≤0.10% when individually tested in accordance with ASTM C1567.   |  |  |

Intermediate size aggregates will fall under the requirements of mix design coarse aggregate.

Article 421.4.2.7., "Optimized Aggregate Gradation (OAG) Concrete," the first sentence of the first paragraph is voided and replaced by the following.

The gradations requirements in Table 4 and Table 6 do not apply when OAG concrete is specified or used by the Contractor unless otherwise shown on the plans.

The fineness modulus for fine aggregate listed in Table 5, does not apply when OAG concrete is used.

**Article 421.4.6.2., Delivering Concrete,"** the third paragraph is supplemented by the following.

When truck mixers are equipped with automated water or chemical admixture measurement and slump or slump flow monitoring equipment, the addition of water or chemical admixtures during transit is allowed. Reports generated by this equipment must be submitted to the Engineer daily.

Article 421.4.6.2., "Delivering Concrete," the fifth paragraph is voided and replaced with the following. Begin the discharge of concrete delivered in truck mixers within the times listed in Table 14. Concrete delivered after these times, and concrete that has not begun to discharge within these times will be rejected.

Article 421.4.8.3., "Testing of Fresh Concrete," is voided and replaced with the following.

Testing Concrete. The Engineer, unless specified in other Items or shown on the plans, will test the fresh and hardened concrete in accordance with the following methods:

Average the CaO content from the previous ten values as listed on the test certificate.

- Slump. Tex-415-A;
- Air Content. Tex-414-A or Tex-416-A;
- Temperature. <u>Tex-422-A</u>;
- Making and Curing Strength Specimens. <u>Tex-447-A</u>;
- Compressive Strength. <u>Tex-418-A</u>;
- Flexural Strength. <u>Tex-448-A</u>; and
- Maturity. Tex-426-A.

Flexural strength and maturity specimens will not be made unless specified in other items or shown on the plans.

Concrete with slump less than minimum required after all addition of water withheld will be rejected, unless otherwise allowed by the Engineer. Concrete with slump exceeding maximum allowed may be used at the Contractor's option. If used, Engineer will make, test, and evaluate strength specimens as specified in Article 421.5., "Acceptance of Concrete." Acceptance of concrete not meeting air content or temperature requirements will be determined by Engineer. Fresh concrete exhibiting segregation and excessive bleeding will be rejected.

Article 421.4.8.3.1., "Job-Control Testing," is voided and not replaced.

# **Special Provision to Item 423 Retaining Walls**



Item 423, "Retaining Walls" of the Standard Specifications is amended with respect to the clause cited below. No other clauses or requirements of this Item are waived or changed.

Article 2.1., "General" is supplemented with the following:

Construct permanent retaining walls approved for use in accordance with <u>DMS 4800</u>, "Proprietary Earth Retaining Wall System," and on the Approved System list for Concrete Block Retaining Walls Systems and Mechanically Stabilized Earth Panel Type Systems.

# Special Provision to Item 426 Post-Tensioning



Item 426, "Post-Tensioning" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Section 2.1., "Prestressing Steel." The first bullet is voided and replaced with the following.

 Seven-wire steel strand meeting <u>DMS-4500</u>, "Steel Strand, Uncoated Seven-Wire Low Relaxation for Prestressed Concrete," or

Section 2.2., "Post-Tensioning System." The second bulleted item is voided and replaced with the following:

■ Provide pre-packaged grouts in accordance with <u>DMS-4670</u>, "Grouts for Post-Tensioning." Do not use grouts that exceed the manufacturers' recommended shelf life or 6 mo. after date of manufacture, whichever is less.

Section 4.2., "Required Submittals." The section is voided and replaced with the following.

- 4.2. Required Submittals. Submit information required in this Section for post-tensioned elements, in addition to forming and falsework plans required by Item 420, "Concrete Substructures," and Item 424, "Precast Concrete Structural Members (Fabrication)." Include all necessary construction information in these submittals for cast-in-place and precast construction including, but not limited to the information required in this Section.
- 4.2.1. **Design Calculations**. Provide design procedures, coefficients, allowable stresses, tendon spacing, and clearances in accordance with the AASHTO LRFD *Bridge Design Specifications* and PTI/ASBI M50 unless otherwise shown on the plans. Submit enough calculations to support the proposed system and method of post-tensioning including friction loss diagrams. When the required jacking force for a particular type of tendon, duct, and configuration is furnished on the plans, design calculations are not required except to adjust for conditions different from those shown on the plans.
- 4.2.2. **Post-Tensioning Details**. Provide drawings with details that meet the requirements of PTI/ASBI M50 and this Specification.
- 4.2.3. **Grouting Plan**. Submit for approval written grouting procedures at least four weeks before the start of the element's construction. Include items required by PTI M55.

Include the names of people responsible for PT installation and grouting operations, with the foreman of each grouting crew certified as a PTI Level 2 Bonded PT Field Specialist and ASBI Certified Grouting Technician.

4.2.4. **Stressing Safety Plan**. Provide a plan to protect the public, workers, and Department personnel on and around the vicinity where post-tensioning operations are occurring.

Submit for approval, a detailed safety plan which identifies potential risk associated with post-tensioning operations, including but not limited to:

- tendon alignment,
- temporary shoring,
- ram operations, and
- stand anchorage.

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Section 4.3., "Design Calculations." The section is voided and replaced with the following.

4.3. Packaging, Storing, and Handling of Post-Tensioning Components. Package, store, and handle post-tensioning steel, grout, duct, and other accessories in accordance with PTI/ASBI M50 and PTI M55 unless otherwise indicated. Acceptance and rejection criteria for strand will follow PTI/ASBI M50 and PTI M55.

The following exceptions apply:

- grout storage onsite will be limited to 30 days unless approval by the Engineer is given in advance of material delivery,
- install grout caps and ensure vents are closed at all times so that water and other contaminants cannot
  enter the duct before strand installation, and
- do not flush ducts at any time.

**Section 4.4., "Packaging, Storing, and Handling of Post-Tensioning Components."** The section is voided and replaced with the following.

4.4. **Duct and Prestressing Steel Installation for Post-Tensioning**. Follow PTI/ASBI M50 for duct and prestressing steel installation procedures and requirements unless otherwise specified. Verify that concrete strength requirements on the plans are met for stressing and staged loading of post-tensioned structural elements.

Stress the tendons within seven days of installing the strand in the ducts unless otherwise approved in advance. Follow the tensioning procedure noted in the approved post-tensioning details.

Section 4.5., "Duct and Prestressing Steel Installation for Post-Tensioning." The section is voided and replaced with the following.

4.5. **Grouting**. Grout in accordance with PTI M55.

Grout within 14 days of tendon stressing unless otherwise specified or approved. Obtain approval to extend the grouting time before stressing tendons.

Do not allow the grout temperature to exceed 85°F during mixing and pumping. Do not grout when the ambient temperature is below 35°F. Field-test the grout in accordance with Table 1 during grout installation. Perform field-testing by trained personnel at the Contractor's expense while witnessed by the Engineer. Pump at the lowest pressure possible that will maintain a continuous flow of grout.

Table1
Requirements for Field-Testing of Grout

| requirements for Field-Testing of Orout       |                |                     |  |  |  |  |
|---|----------------|---------------------|--|--|--|--|
| Test  | Frequency      | Requirement         |  |  |  |  |
| Schupak Pressure Bleed Test (ASTM C1741)      | 1 per day      | Per <u>DMS-4670</u> |  |  |  |  |
| Fluidity test (Tex-437-A, Method 2)           | 2 every 2 hr.  | per <u>DMS-4670</u> |  |  |  |  |
|   | 2 min. per day |                     |  |  |  |  |
| Compressive Strength test (3" × 6" cylinders) | 1 per day      | per <u>DMS-4670</u> |  |  |  |  |
| Mud Balance test (Tex-130-E, Part II)1,2      | 2 per day      | per PTI M55         |  |  |  |  |

- Take one sample from the mixer and one sample from the farthest duct outlet.
- 2. Verify wet density is within the range established by the department.

**Section 4.6., "Grouting."** The section is voided and not replaced.

Article 5., "MEASUREMENT AND PAYMENT." The section is voided and replaced with the following.

#### 5. **MEASUREMENT**

This Item will be measured by the each PT element or member. An element or member is defined by one of the following individual components.

■ PT Cap

- PT Column
- PT Bent
- Other elements shown in the plans.

The PT may extend into other elements which is subsidiary to the main element being post-tensioned.

#### 6. **PAYMENT**

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "PT" for the member type shown on the plans. This price is full compensation for submittals, mock-ups, prestressing steel, post-tensioning, ducts, grout fittings, grout, end anchorages, bearing plates, equipment, labor, materials, tools, and incidentals. Materials furnished for testing will not be paid for directly.

Post-tensioning of precast members, tensioned at a fabrication plant, will not be paid for directly but will be subsidiary to pertinent Items.

### **Special Provision to Item 427 Surface Finishes for Concrete**



Item 427, "Surface Finishes for Concrete" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 427.2.1 "Coatings," is supplemented with the following:

Epoxy Waterproofing. Provide Type X Epoxy per DMS-6100 "Epoxies and Adhesives." Match color of coating with Federal Standard 595C color 35630, concrete gray, unless otherwise shown on the plans.

Article 427.4.2.2 "Application," is supplemented with the following:

Epoxy Waterproofing. Mix epoxy per manufacturer's instructions. Apply the coating on a dry surface at a maximum application rate of 100 sq. ft per gallon. Apply a thin uniform film of mixed epoxy to the substrate by the use of a short nap roller or brush. The epoxy may be sprayed following the thinning requirements of the manufacturer. No more than 15% reduction is permitted.

Match the color of the applied coating with the color standard shown on the plans. Apply when ambient temperature is between 50°F and 100°F.

Article 427.6 "Payment," the second paragraph is voided and replaced in its entirety with:

When a surface finish for concrete is specified as a pay item, the work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Adhesive Grout Finish," "Concrete Paint Finish," "Opaque Sealer Finish," "Silicone Resin Paint Finish," "Epoxy Waterproof Finish," or "Blast Finish," This price is full compensation for materials; cleaning and preparing surfaces; application of materials; and equipment, labor, tools, and incidentals.

# Special Provision to Item 440 Reinforcement for Concrete



Item 440, "Reinforcement for Concrete," of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 440.2., "Materials," is supplemented with the following.

- 2.7. Welded Deformed Bar Mat Reinforcement. Provide welded deformed bar mats in accordance with ASTM A184 except as otherwise noted in this Specification. Fabricate welded bar mats from deformed steel bars in accordance with ASTM A706 by securely connecting every intersection with a process of electrical resistance welding that employs the principle of fusion combined with pressure. The bars must be assembled by automatic machines or by other suitable mechanical means that will assure accurate spacing and alignment of all bars of the finished product.
- 2.14. Zinc-Coated, Hot-Dip Galvanized Class I or Class II Steel Reinforcement. Provide zinc-coated, hot-dip galvanized Class I or Class II steel reinforcement in accordance with ASTM A767, Grade 60 or Grade 75, when shown on the plans and as allowed.
- 2.15. **Continuously Hot-Dip Galvanized Reinforcement (CGR).** Provide CGR in accordance with ASTM A1094 steel reinforcement, Grade 60 or Grade 75, when shown on the plans and as allowed.

Section 440.2.1., "Approved Mills." The second paragraph is voided and not replaced.

Section 440.2.5., "Weldable Reinforcing Steel," is supplemented with the following.

All welding operations must be performed before hot-dip galvanizing.

**Section 440.2.8., "Mechanical Couplers,"** is voided and replaced with the following.

Use couplers of the type specified in <u>DMS-4510</u>, "Mechanical Couplers for Reinforcing Steel," Section 4510.6.1., "General Requirements," when mechanical splices in reinforcing steel bars are shown on the plans.

Furnish only couplers pre-qualified in accordance with <u>DMS-4510</u>, "Mechanical Couplers for Reinforcing Steel." Ensure sleeve-wedge type couplers are not used on coated reinforcing. Sample mechanical couplers in accordance with <u>Tex-743-I</u> for testing before use on individual projects. Test the mechanical couplers for every project in which mechanical couplers are used in accordance with <u>Tex-744-I</u>. Furnish couplers only at locations shown on the plans.

Furnish couplers for stainless reinforcing steel with the same alloy designation as the reinforcing steel.

Provide hot-dip or mechanically galvanized couplers when splicing galvanized reinforcing or CGR.

Section 440.2.11., "Low Carbon/Chromium Reinforcing Steel." The first sentence is voided and replaced by the following.

Provide deformed steel bars in accordance with ASTM A1035, Grade 100, Type CS, when low-carbon, chromium-reinforcing steel is required on the plans. Type CM will be permitted only if specified on the plans.

Section 440.3.1., "Bending," is supplemented with the following.

Do not bend hot-dip galvanized reinforcement. Only minor positioning adjustments are permitted.

Bending of CGR is permitted after galvanizing.

Section 440.3.5., "Placing." The following will be added to the fourth paragraph.

Use Class 1 or Class 1A supports with CGR. Provide epoxy- or plastic-coated tie wires and clips for use with epoxy-coated reinforcing steel.

Section 440.3.6.3., "Repairing Coating," is supplemented with the following:

Repair damaged galvanized surfaces in accordance with Section 445.3.5.2., "Repair Processes."

# Special Provision to Item 441 Steel Structures



Item 441, "Steel Structures" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Section 441.2.2.. Approved Electrodes and Flux-Electrode Combinations," is voided and replaced with the following:

Use only electrodes and flux-electrode combinations conforming to AWS A5 specifications, and pertinent classifications for the applicable welding processes. When requested, submit a current Certificate of Conformance (COC) containing all test results as required by the applicable AWS A5 specification and welding code. Provide proof of Buy America compliance for welding consumables when requested. For bridge main member fabrication, submit the COC annually.

Section 441.2.3., "High-Strength Bolts," is revised and replaced by the following:

Use fasteners that meet Item 447, "Structural Bolting." Use galvanized fasteners on field connections of bridge members when ASTM F3125-Grade A325 bolts are specified, and steel is painted.

Section 441.3.1.51., "Plants," The second and third paragraphs are voided and replaced with the following:

Fabrication plants that produce the following non-bridge steel members must be approved in accordance with DMS-7380, "Steel Non-Bridge Member Fabrication Plant Qualification."

- Item 610, "Roadway Illumination Poles"
- Item 613, "High Mast Illumination Poles"
- Item 614, "High Mast Rings and Support Assemblies"
- Item 650, "Overhead Sign Support Structures"
- Item 654, "Sign Walkways"
- Item 686, "Traffic Signal Poles"
- Special Specification 6064, "Intelligent Transportation System (ITS) Poles."

The Materials and Tests Division (MTD) maintains a list of approved non-bridge fabrication plants on the Department MPL that produce these members.

**Section 441.3.1.6.1., "Erection Drawings,"** the third paragraph is voided and replaced with the following:

Perform erection engineering evaluation of the structural adequacy and stability of constructing the bridge system for each step of the steel erection.

Section 441.3.1.5.3., "Nondestructive Testing (NDT)," is voided and replaced with the following:

Personnel performing NDT must be qualified in accordance with the applicable AWS code and the employer's Written Practice. Level III personnel who qualifies Level I and Level II technicians must be certified by ASNT for which the NDT Level III is qualified. In addition, NDT technicians must pass hands-on tests that MTD administers. This will remain current provided they continue to perform testing on Department materials as evidenced by test reports requiring their signature. A technician who fails any of the hands-on tests must wait 3 mo. or as approved otherwise before retesting. Qualification to perform NDT will be revoked when the technician's employment is terminated or when the technician goes 6 mo. without performing a test on a Department project. The technician must pass a new hands-on test to be re-certified. Testing of similar weld joints for non-Department projects may be considered by the Engineer instead of re-testing provided enough documentation is submitted with the signature of the project's Engineer. These requirements also apply to testing agencies, and individual third-party contractors.

1 - 2 01-22 Statewide Section 441.3.1.5.4., "Welding Procedure Specification Qualification Testing," is voided and replaced by the following:

For Fabricators qualified in accordance with DMS-7370, DMS-7380, or DMS-7395, laboratories performing procedure qualification testing for welding procedure specifications (WPSs) must be accredited by a nationally recognized agency that performs testing in accordance with ISO/International Electrotechnical Commission (IEC) 17025 in the mechanical field of testing.

**Section 441.3.1.9., "Material Identification,"** is amended to include the following paragraph:

Low-stress stencil marks must have a radius instead of a sharp point. Acceptable stencils include dot, vibration, and rounded-V stencils. Label these stencils so that they are easily distinguishable from other stencils that are not lowstress.

Section 441.3.2.4.1., "Flange Tilt," the last sentence is voided and replaced with the following:

Minor jacking that does not deform the material will be permitted.

Section 441.3.2.5.3., "Magnetic Particle Testing," is voided and replaced with the following:

Use alternating current (AC) when using the yoke method unless otherwise approved. Welds may be further evaluated with halfwave rectified DC for subsurface indications. Centerline cracking may be detected with aluminum prod method when approved.

**Section 441.3.5.8., "Hammering,"** is added to state the following:

Do not perform hammering on any portion of the member that causes the material to permanently deform. Avoid damage to the material by measures such as use of brass or aluminum hammers or by padding the area to be hammered.

Section 441.3.8.1., "Shop Painting," is amended to include with the following paragraph:

Measure the anchor profile after blast cleaning at random locations along the thermal cut surfaces. If specified anchor profile is not achieved over the entire flame cut surface, grind the edges and re-blast to achieve the required anchor pattern.

Section 441.3.9., "Handling and Storage of Materials," The second sentence of the second paragraph is replaced by the following:

Keep materials clean and avoid damaging of the applied coating.

### Special Provision to Item 448 Structural Field Welding



Item 448, "Structural Field Welding" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 448.2., "Materials," the third paragraph is voided and replaced with the following:

Use only electrodes and flux-electrode combinations conforming to AWS A5 specifications and pertinent classifications for the applicable welding processes. When requested, submit a current Certificate of Conformance (COC) containing acceptable wording indicating Buy America compliance and all tests required by the applicable AWS specifications and welding codes. Tests must be conducted on electrodes of the same class, size, and brand; and manufactured by the same process and with the same materials as the electrodes to be furnished.

### Special Provision to Item 464 Reinforced Concrete Pipe



Item 464, "Reinforced Concrete Pipe," of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Section 2.1., "Fabrication." The section is voided and replaced with the following.

Fabrication plants must be approved by the Materials and Tests Division in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures," before furnishing precast reinforced concrete pipe for Departmental projects. The Department's MPL has a list of approved reinforced concrete pipe plants.

Furnish material and fabricate reinforced concrete pipe in accordance with DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures."

Section 2.3., "Marking." The first paragraph is voided and replaced with the following.

Furnish each section of reinforced concrete pipe marked with the following information specified in DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures."

- Class or D-Load of pipe,
- ASTM designation,
- Date of manufacture,
- Pipe size.
- Name or trademark of fabricator and plant location,
- Designation "TX" for precast units fabricated per DMS-7305;
- Designated fabricator's approval stamp for each approved unit,
- Pipe to be used for jacking and boring (when applicable), and
- Designation "SR" for pipe meeting sulfate-resistant concrete plan requirements (when applicable).

Section 2.5., "Causes for Rejection." The section is voided and replaced with the following.

Individual sections of pipe may be rejected for any of the conditions stated in the Annex of DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures."

Section 2.6., "Repairs." The section is voided and replaced with the following:

Make repairs, if necessary, as stated in the Annex of DMS-7305, "Fabrication and Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Drainage Structures."

# Special Provision to Item 502 Barricades, Signs and Traffic Handling



Item 502, "Barricades, Signs and Traffic Handling" of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

#### Article 502.1., "Description," is supplemented by the following:

Temporary work-zone (TWZ) traffic control devices manufactured after December 31, 2019, must have been successfully tested to the crashworthiness requirements of the 2016 edition of the Manual for Assessing Safety Hardware (MASH). Such devices manufactured on or before this date and successfully tested to NCHRP Report 350 or the 2009 edition of MASH may continue to be used throughout their normal service lives. An exception to the manufacture date applies when, based on the project's date of letting, a category of MASH-2016 compliant TWZ traffic control devices are not approved, or are not self-certified after the December 31, 2019, date. In such case, devices that meet NCHRP-350 or MASH-2009 may be used regardless of the manufacture date.

Such TWZ traffic control devices include: portable sign supports, barricades, portable traffic barriers designated exclusively for use in temporary work zones, crash cushions designated exclusively for use in temporary work zones, longitudinal channelizers, truck and trailer mounted attenuators. Category I Devices (i.e., lightweight devices) such as cones, tubular markers and drums without lights or signs attached however, may be self-certified by the vendor or provider, with documentation provided to Department or as are shown on Department's Compliant Work Zone Traffic Control Device List.

#### Article 502.4., "Payment," is supplemented by the following:

Truck mounted attenuators and trailer attenuators will be paid for under Special Specification, "Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)." Portable Changeable Message Signs will be paid for under Special Specification, "Portable Changeable Message Sign." Portable Traffic Signals will be paid for under Special Specification, "Portable Traffic Signals."

# Special Provision to Item 506 Temporary Erosion, Sedimentation, and Environmental Controls



For this project, Item 506, "Temporary Erosion, Sedimentation, and Environmental Controls," of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Article 506.1., "Description," is voided and replaced by the following:

Install, maintain, and remove erosion, sedimentation, and environmental control measures to prevent or reduce the discharge of pollutants in accordance with the Storm Water Pollution Prevention Plan (SWP3) or as directed. Ensure the installation and maintenance of control measures is performed in accordance with the manufacturer's or designer's specifications. Erosion and sediment control devices must be selected from the "Erosion Control Approved Products" or "Sediment Control Approved Products" lists. Perform work in a manner to prevent degradation of receiving waters, facilitate project construction, and comply with applicable federal, state, and local regulations.

Article 506.3., "Qualifications, Training, and Employee Requirements," is voided and not replaced.

Section 506.4.1., "Contractor Responsibilities," Section 506.4.2., "Implementation," and Section 506.4.3., "General," are voided and replaced by the following:

- 4.1. Contractor Responsibilities. Implement the SWP3 for the project site in accordance with the plans and specifications, and as directed. Coordinate storm water management with all other work on the project. Develop and implement an SWP3 for project-specific material supply plants within and outside of the Department's right of way in accordance with the specific or general storm water permit requirements. Prevent water pollution from storm water associated with construction activity from entering any surface water or private property on or adjacent to the project site.
- 4.2. Implementation.
- 4.2.1. **Commencement.** Implement the SWP3 as shown and as directed. Contractor proposed recommendations for changes will be allowed as approved. Do not implement changes until approval has been received and changes have been incorporated into the plans by the Engineer. Minor adjustments to meet field conditions are allowed and will be recorded by the Engineer in the SWP3.

Implement control measures before the commencement of activities that result in soil disturbance. Phase and minimize the soil disturbance to the areas shown on the plans. Coordinate temporary control measures with permanent control measures and all other work activities on the project to assure economical, effective, safe, continuous water pollution prevention. Provide control measures that are appropriate to the construction means, methods, and sequencing allowed by the Contract.

Do not prolong final grading and shaping. Preserve vegetation where possible throughout the project and minimize clearing, grubbing, and excavation within stream banks, bed, and approach sections.

- 4.3. **General**.
- 4.3.1. **Temporary Alterations or Control Measure Removal**. Altering or removal of control measures is allowed when control measures are restored within the same working day.

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- 4.3.2. **Stabilization**. Initiate stabilization for disturbed areas no more than 14 days after the construction activities in that portion of the site has temporarily or permanently ceased. Establish a uniform vegetative cover or use another stabilization practice as approved.
- 4.3.3. **Finished Work**. Upon the Engineer's acceptance of vegetative cover or other stabilization practice, remove and dispose of all temporary control measures unless otherwise directed. Complete soil disturbing activities and establish a uniform perennial vegetative cover. A project will not be considered for acceptance until a vegetative cover of 70% density of existing adjacent undisturbed areas is obtained or equivalent permanent stabilization is obtained as approved.
- 4.3.4. **Restricted Activities and Required Precautions**. Do not discharge onto the ground or surface waters any pollutants such as chemicals, raw sewage, fuels, lubricants, coolants, hydraulic fluids, bitumens, or any other petroleum product. Operate and maintain equipment on site in a manner as to prevent actual or potential water pollution. Manage, control, and dispose of litter on site such that no adverse impacts to water quality occur. Prevent dust from creating a potential or actual unsafe condition, public nuisance, or condition endangering the value, utility, or appearance of any property. Wash out concrete trucks only in approved contained areas. Use appropriate controls to minimize the offsite transport of suspended sediments and other pollutants if it is necessary to pump or channel standing water (i.e. dewatering). Prevent discharges that would contribute to a violation of Edwards Aquifer Rules, water quality standards, the impairment of a listed water body, or other state or federal law.

**Section 506.4.4., "Installation, Maintenance, and Removal Work."** The first paragraph is voided and replaced by the following.

Perform work in accordance with the SWP3, and according to the manufacturers' guidelines. Install and maintain the integrity of temporary erosion and sedimentation control devices to accumulate silt and debris until soil disturbing activities are completed and permanent erosion control features are in place or the disturbed area has been adequately stabilized as determined by the Engineer.

Section 506.4.5., "Monitoring and Documentation," is voided and not replaced.

Section 506.6.5.2., "Maintenance Earthwork for Erosion and Sediment Control for Cleaning and/or Restoring Control Measures," is voided and replaced by the following:

Earthwork needed to remove and obliterate of erosion-control features will not be paid for directly but is subsidiary to pertinent Items unless otherwise shown on the plans.

Sprinkling and rolling required by this Item will not be paid for directly but will be subsidiary to this Item.

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### **Special Provision to Item 520 Weighing and Measuring Equipment**



Item 520, "Weighing and Measuring Equipment" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Article 520.2., "Equipment." The third paragraph is voided and replaced by the following.

Calibrate truck scales using weights certified by the Texas Department of Agriculture (TDA) or an equivalent agency as approved. Provide a written calibration report from a scale mechanic for truck scale calibrations. Cease plant operations during the checking operation. Do not use inaccurate or inadequate scales. Bring performance errors as close to zero as practicable when adjusting equipment.

Article 520.2., "Equipment." The fourth paragraph is amended to include the following:

At the Contractors option, an electronic ticket delivery system (e-ticketing) may be used instead of printed tickets. The use of eticketing will require written approval of the Engineer. At a minimum, the approved system will:

- Provide electronic, real-time e-tickets meeting the requirements of the applicable bid items;
- Automatically generate e-tickets using software and hardware fully integrated with the automated scale system used to weigh the material, and be designed in such a way that data input cannot be altered by the Contractor or the Engineer;
- Provide the Engineer access to the e-ticketing data in real-time with a web-based or app-based system compatible with iOS;
- Provide offline capabilities to prevent data loss if power or connectivity is lost;
- Require both the Contractor and the Engineer to accept or reject the e-ticket and provide the ability to record the information required by the applicable bid items, as well as any comments. Record the time of the approval/rejection and include it in the summary spreadsheet described below. Provide each party the capability to edit their respective actions and any entered information;

The Contractor may discontinue use of the e-ticket system and provide printed tickets as needed to meet the requirements of the applicable bid items.

### Special Provision to Special Specification 6185 Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)



Item 6185, "Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)" of the Standard Specifications, is hereby amended with respect to the clauses cited below, and no other clauses or requirements of this Item are waived or changed hereby.

Article 4. "Measurement", is voided and replaced by the following:

- 4.1. **Truck Mounted Attenuator/Trailer Attenuator (Stationary).** This Item will be measured by the day. TMA/TAs must be set up in a work area and operational before a calendar day can be considered measureable. A day will be measured for each TMA/TA set up and operational on the worksite.
- 4.2. **Truck Mounted Attenuator/Trailer Attenuator (Mobile Operation).** This Item will be measured by the hour or by the day. The time begins once the TMA/TA is ready for operation at the predetermined site and stops when notified by the Engineer. When measurement by the hour is specified, a minimum of 4 hr. will be paid each day for each operating TMA/TA used in a mobile operation. When measurement by the day is specified, a day will be measured for each TMA/TA set up and operational on the worksite.

### **Special Specification 6185**



# Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)

#### 1. DESCRIPTION

Furnish, operate, maintain and remove upon completion of work, Truck Mounted Attenuator (TMA) or Trailer Attenuator (TA).

#### 2. MATERIALS

Furnish, operate and maintain new or used TMAs or TAs. Assure used attenuators are in good working condition and are approved for use. A list of approved TMA/TA units can be found in the Department's Compliant Work Zone Traffic Control Devices List. The host vehicle for the TMA and TA must weigh a minimum of 19,000 lbs. Host vehicles may be ballasted to achieve the required weight. Any weight added to the host vehicle must be properly attached or contained within it so that it does not present a hazard and that proper energy dissipation occurs if the attenuator is impacted from behind by a large truck. The weight of a TA will not be considered in the weight of the host vehicle but the weight of a TMA may be included in the weight of the host vehicle. Upon request, provide either a manufacturer's curb weight or a certified scales weight ticket to the Engineer.

#### 3. CONSTRUCTION

Place or relocate TMA/TAs as shown on the plans or as directed. The plans will show the number of TMA/TAs needed, for how many days or hours, and for which construction phases.

Maintain the TMA/TAs in good working condition. Replace damaged TMA/TAs as soon as possible.

#### 4. MEASUREMENT

- 4.1. **Truck Mounted Attenuator/Trailer Attenuator (Stationary).** This Item will be measured by the each or by the day. TMA/TAs must be set up in a work area and operational before a calendar day can be considered measurable. When measurement by the day is specified, a day will be measured for each TMA/TA set up and operational on the worksite.
- 4.2. **Truck Mounted Attenuator/Trailer Attenuator (Mobile Operation).** This Item will be measured by the hour. The time begins once the TMA/TA is ready for operation at the predetermined site and stops when notified by the Engineer. A minimum of 4 hr. will be paid each day for each operating TMA/TA used in a mobile operation.

#### 5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Truck Mounted Attenuators/Trailer Attenuators (Stationary)," or "Truck Mounted Attenuators/Trailer Attenuators (Mobile Operation)." This price is full compensation for furnishing TMA/TA: set up; relocating; removing; operating; fuel; and equipment, materials, tools, labor, and incidentals.

