

**PROPOSAL  
FOR CONSTRUCTION OF  
RAMP TOLL PLAZA MODIFICATIONS**

**FROM: SOUTH OF BELT LINE ROAD  
TO: EAST OF NORTH GARLAND AVENUE**

**SEGMENTS 1 THROUGH 5**

**CONTRACT 03214-PGB-00-CN-PM**

**FOR THE  
PRESIDENT GEORGE BUSH TURNPIKE**

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**NORTH TEXAS TOLLWAY AUTHORITY**

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**NORTH TEXAS TOLLWAY AUTHORITY  
NOTICE TO THE BIDDERS  
"PRE-BID MEETING AND BID OPENING"**

**Contract No.:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

The bidder's attention is called to the following information regarding the pre-bid meeting and the bid opening. The bidder must attend any mandatory meeting and/or workshop in order to submit a Proposal for this Project.

**NON-MANDATORY PRE-BID MEETING:**

DATE: May 31, 2012

TIME\*: 10:00 AM CDST

**BID OPENING:**

DATE: June 14, 2012

TIME\*: 2:00 PM CDST

**PLACE:** North Texas Tollway Authority (NTTA)  
5900 West Plano Parkway, Suite 100  
Plano, Texas 75093

\* Note: CST = Central Standard Time; CDST = Central Daylight Saving Time

Official plans and specifications are available for viewing, purchasing, and downloading online at <http://www.thomasrepro.com/dfs/ntta> for this procurement. Vendors wishing to view, purchase, and download plans and specifications online must first register with Thomas Reprographics.

Written requests or questions received before or on Thursday, June 7, 2012, will be formally responded to via Bid Document Clarifications by the Letting Official. E-mail the written requests or questions to NTTA's Director of Procurement Services at [bidpurchasing@ntta.org](mailto:bidpurchasing@ntta.org). Questions not submitted in this manner may not be answered.

It shall be the responsibility of each bidder to deliver its proposal to the Director of Procurement Services/NTTA Letting Official at the above listed address before or by the time listed above for its bid to be considered. The mailing envelope or outermost envelope should clearly state the bid or response name and number and be addressed to the attention of the Director of Procurement Services/NTTA Letting Official. The NTTA customer receptionist will stamp the date and time on the proposal envelope upon receipt and this will serve as the official date and time used for the bid opening purpose. Any discrepancies between the official time and any other time keeping devices will not be the responsibility of the Authority. Faxed, oral, or telephoned bids will not be accepted. Late bids will be returned unopened.



Each bidder must ensure that its proposal is executed in the correct spaces provided, as required in the proposal, that its bid is completely filled in, that its proposal guaranty is included, and that it supplies proper affidavits from its board of directors, partners, managers, or other applicable governing authority that has the power to authorize the execution, delivery, and performance under this proposal, certifying that the person executing the proposal has the proper authority to do so. Proposals that are not properly executed or do not contain all required affidavits and other attachments will not be read, will be rejected, and will be returned to the bidder. When there are minor errors or omissions in the bid proposal, the Director of Procurement Services/NTTA Letting Official, in his sole discretion, may provide waivers to the extent not inconsistent with the Authority's procurement policy or applicable law.



**NORTH TEXAS TOLLWAY AUTHORITY  
NOTICE TO THE BIDDERS  
"PREQUALIFICATION REQUIREMENTS"**

**Contract No.:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

The checked box below indicates the type of qualification requirements for this project:

- FULL PREQUALIFICATION**
- NTTA APPLICATION FOR QUALIFICATION (AFQ)**
- BIDDER'S QUESTIONNAIRE**
- NO PREQUALIFICATION REQUIREMENTS**

Qualification statements must be on file with TxDOT at least 10 days prior to the date of the bid opening. NTTA AFQs are due on or before the bid opening at NTTA's general administrative offices.

**FULL PREQUALIFICATION**

Bidder must be a Prequalified Contractor under "Confidential Questionnaire" with the Texas Department of Transportation.

**NTTA APPLICATION FOR QUALIFICATION (AFQ)**

Bidder must complete an NTTA AFQ and submit per the requirements of NTTA's SP-0.25.0.

**BIDDER'S QUESTIONNAIRE**

Bidder must be a Prequalified Contractor under "Bidder's Questionnaire" with the Texas Department of Transportation.

Any Bidder meeting the requirements of "Full Prequalification" automatically meets this requirement.

**NO PREQUALIFICATION REQUIREMENTS**

There are no prequalification requirements.



**PROPOSAL  
TO THE NORTH TEXAS TOLLWAY AUTHORITY  
FOR THE CONSTRUCTION OF  
RAMP TOLL PLAZA MODIFICATIONS  
FOR THE PRESIDENT GEORGE BUSH TURNPIKE  
A TURNPIKE PROJECT OF THE  
NORTH TEXAS TOLLWAY AUTHORITY SYSTEM**

From: South of Belt Line Road  
To: East of North Garland Avenue

Segments: 1 through 5

The terms “bidder”, “Contractor”, “Authority”, “proposal”, “contract”, “payment bond”, “performance bond”, “warranty bond”, “work”, “project”, “substantial completion”, “final completion”, “Special Provisions”, “Special Specifications”, “General Notes and Specification Data”, “Texas Standard Specifications”, “Standard Specifications”, “Letting Official”, and other terms used herein or elsewhere in the contract that are defined in Item 1 of the Texas Standard Specifications, as amended by Special Provision to Item 1, “Definition of Terms”; which is set forth below in this contract, shall have the meanings indicated in said Item 1, as amended by said Special Provision to Item 1.

The undersigned, as bidder, certifies that the only person or parties having an interest in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm or corporation; that none of the persons or parties having an interest in this proposal has any connection, official or otherwise, with the Authority, its agents, directors, employees, consultants or fiduciaries; that in submitting this proposal it is not acting as agent for any agent, director, employee, consultant or fiduciary of the Authority; that it has carefully examined the form of the



**PROPOSAL**  
(Continue)

contract attached hereto, the forms of payment bond, performance bond, and warranty bond attached hereto, the Texas Standard Specification, the General Notes and Specification Data attached hereto, the Special Provisions attached hereto, the Special Specifications attached hereto, the forms of Disclosure, Statement, Certification, Contractor's Assurance, Affidavit, and similar provisions attached hereto, and all addenda thereto, together with the conditions of this proposal; and that it has carefully examined the location for the work and the conditions, classes and availability of materials for the work and agrees that it will provide all the necessary labor, machinery, tools, supplies, equipment, transportation and other facilities, apparatuses, and other means of construction and will do all the work and furnish all the materials called for in the contract, in the manner prescribed therein and according to the requirements of the Executive Director of the Authority and shall perform all other obligations imposed by the contract, for the prices named in the Unit Description and Bid Price Schedule attached hereto.

It is understood that the quantities of work to be done and materials to be furnished as shown in this proposal are approximate only, and are intended principally to serve as a guide in preparing bids.

It shall be the duty of each bidder to ensure that its proposal is delivered to the proper place and by the proper time prescribed herein.

It is further agreed that the quantities of work to be done and materials to be furnished may be increased or diminished as may be considered necessary in the opinion of the Engineer to complete the work fully as planned and contemplated, and that all quantities of work, whether increased or decreased, are to be performed at the unit prices set forth in this proposal, except as may be otherwise expressly provided for in the General Notes and Specification Data, the Special Specifications, and the Standard Specifications.



**PROPOSAL**  
(Continue)

The work to be performed under this contract shall reach substantial completion and final completion in accordance with the schedule set forth in the Special Provision SP-0.03, Important Notice to Contractors - "Mandatory Construction Schedule".

Accompanying this proposal is a proposal guaranty in the form of a cashier's check, or teller's check (as such terms are defined in Section 3.104 of the Texas Business and Commerce Code), or a bank money order, or a bid bond for ONE HUNDRED THOUSAND AND NO/100 DOLLARS (\$100,000.00). A proposal guaranty in the form of a cashier's check, teller's check, or bank money order shall in all cases be issued by and drawn on a State or National Bank, or a State or National Savings and Loan Association, or a State or Federally Chartered Credit Union, or a State or Federal Savings Bank, payable to the order of the Authority. A proposal guaranty in the form of a bid bond must be on the bid bond form provided by the Authority, have powers of attorney attached, bear the impressed seal of the surety, and be signed by the bidder and an authorized individual of the surety. A bid bond will be accepted only from a surety authorized to execute the bond under and in accordance with state law.

The proposal guaranty check accompanying this proposal shall be returned to bidder except the apparent low bidder and second low bidder. Bid bonds will be retained by the Authority, unless upon the acceptance of the proposal, the bidder fails to meet a specified goal or fails to execute and file the Contract, in which case the proposal guaranty shall become the property of the Authority and shall be considered as the Authority's remedy and relief, and as liquidated damages, for damages due to delay and other inconveniences suffered by the Authority on account of the bidder's failure to execute and deliver the contract, bonds, acceptable evidence of insurance, Subcontractor information, and any other required information specified below in the contract.

Acceptance of this proposal by the Authority shall be made in writing and shall be deemed effective as of the date that notice of the Authority's acceptance is deposited in



**PROPOSAL**  
(Continue)

the United States mail, postage prepaid, addressed to the bidder at the address set forth below. It is understood that the Authority reserves the right to reject any or all bids.

In the event that this proposal is accepted by the Authority, the bidder shall procure payment and performance bonds if required by the contract for the full amount of the contract so as to secure proper compliance with the terms and provisions of the contract, to insure and guarantee the work until the Authority makes final payment of the full amount earned by the Contractor pursuant to Article 9.8 of Special Provision to Item 9, "Measurement and Payment", and to guarantee payment of all lawful claims for labor performed and materials furnished in the fulfillment of the contract.

The bidder shall procure a warranty bond in the amount of twenty five percent (25%) of the value shown in the Total Bid Amount for a period of two years to insure and guarantee the repair and/or replacement of any items furnished by the Contractor in this contract discovered to be defective in materials and/or workmanship following the date of final acceptance.

The work shall be accepted when fully completed and finished to the entire satisfaction of the Authority.

The undersigned, *under penalty of perjury under the laws of the State of Texas*, (a) certifies that the bid prices contained in this proposal have been carefully checked and are submitted as correct and final and (b) affirms the truth and accuracy of the certifications contained herein and made by signing this proposal.

The project is a portion of controlled access toll project, and delay in completion of the work will cause disruption in the operation of currently constructed or planned portions of the project and will cause losses to the Authority, including, but not limited to, lost revenue, additional interest on monies borrowed, increased administrative, legal and engineering costs, and other tangible and intangible losses.



**PROPOSAL**  
(Continue)

The liquidated damages, if any, set forth in the Special Provision SP-0.03, Important Notice to Contractors - "Mandatory Construction Schedule" is to partially cover such losses and expenses. The Contractor unconditionally and irrevocably acknowledges and agrees that the actual amount of said losses and expenses would be extremely difficult to determine and that the specified liquidated damages (if any) constitute a fair and reasonable estimate by the parties of the amount of said losses and expenses and in no event shall constitute or be construed as a penalty. Further, the Contractor irrevocably and unconditionally acknowledges that the time limits set forth the Special Provision SP-0.03, Important Notice to Contractors - "Mandatory Construction Schedule" constitute an essential benefit for the Authority and an essential element of the contract. The Authority shall recover said liquidated damages (if any) by deducting the amount thereof from any monies due or that may become due the Contractor, and if said monies are insufficient to cover said damages, then the Contractor or its Surety shall pay the amount due and the Authority shall be entitled to any and all rights and remedies available to it in law or equity to recover same.

By submitting a Proposal, the bidder agrees to comply with the NTTA's Disadvantaged, Minority, Women-Owned and Small Business Enterprises Policy (Diversity Policy). Without limiting its obligations stipulated by the Diversity Policy, the bidder awarded the Contract expressly agrees to make good-faith efforts to achieve the NTTA's D/M/WBE contract-specific goal defined in this bid document, provide documentation demonstrating those efforts, report any changes in D/M/W/SBE firms providing services, and make good-faith efforts to replace D/M/W/SBE firms unable to perform with other D/M/W/SBE firms at comparable levels of participation. Failure or refusal to comply with the applicable Diversity Policy requirements shall constitute a material breach of Contract.



**PROPOSAL**  
(Continue)

Bidder:

The Bidder's Name: \_\_\_\_\_

\*Signed: \_\_\_\_\_

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

\*Note: Signatures must comply with Article 2.6 of the Texas Standard Specifications, as amended by Special Provision to Item 2.

Please return the proposal guaranty to:

Name \_\_\_\_\_

Address \_\_\_\_\_

Address \_\_\_\_\_



**NORTH TEXAS TOLLWAY AUTHORITY**  
**“BID BOND”**

KNOW ALL PERSONS BY THESE PRESENTS,

That we, (Bidder Name) \_\_\_\_\_  
hereinafter called the Principal, and (Surety Name) \_\_\_\_\_

\_\_\_\_\_, a  
corporation or firm duly authorized to transact surety business in the State of Texas,  
hereinafter called the Surety, are held and firmly bound unto the North Texas Tollway  
Authority, hereinafter called the Obligee, in the sum of \_\_\_\_\_ and  
No/100 Dollars (\$ \_\_\_\_\_.00), the payment of which sum will be well and truly, made,  
and the said Principal and the said Surety, bind ourselves, our heirs, executors,  
administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a proposal to perform work for the following  
project of the Obligee, identified as: Ramp Toll Plaza Modifications on the President  
George Bush Turnpike, Segments 1 through 5, from South of Belt Line Road to East of  
North Garland Avenue, in Dallas, Denton, & Collin Counties.

NOW, THEREFORE, if the Obligee shall award the Contract for the foregoing project to  
the Principal, and the Principal shall satisfy all requirements and conditions required for  
the execution of the Contract and shall enter into the Contract in writing with the Obligee  
in accordance with the terms of such proposal, then this bond shall be null and void. If  
the Principal fails to execute such Contract in accordance with the terms of such  
proposal or fails to satisfy all requirements and conditions required for the execution of  
the Contract in accordance with the proposal, this bond shall become the property of the  
Obligee, without recourse of the Principal and/or Surety, not as a penalty but as  
liquidated damages.

Signed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

By: \_\_\_\_\_  
(Principal Name)

\_\_\_\_\_  
(Signature and Title of Principal)

\*By: \_\_\_\_\_  
(Surety Name)

\_\_\_\_\_  
(Signature of Attorney-in-Fact)

Impressed  
Surety Seal  
Only

\*Attach Power of Attorney (Surety) for Attorney-in-Fact



**NORTH TEXAS TOLLWAY AUTHORITY**  
**NOTICE TO THE BIDDER**  
**“TOTAL BID AMOUNT”**

**Contract No.:** 03214-PGB-00-CN-PM  
**Highway:** President George Bush Turnpike, **Segments:** 1 through 5  
**Counties:** Dallas, Denton, & Collin

In the space provided below, please enter your total bid amount for this project. Only this figure will be read publicly by the North Texas Tollway Authority (the Authority) at the 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 Authority. 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**



**NORTH TEXAS TOLLWAY AUTHORITY**  
**“CERTIFICATION OF INTEREST IN OTHER BID PROPOSALS**  
**FOR THIS WORK”**

**Contract No.:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

By signing this proposal, the bidder and the signer each certifies that the following information 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 by 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 firm 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.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**“AFFIDAVIT - CONFLICT OF INTEREST”**

**Contract No.:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Project:** Ramp Toll Plaza Modifications

Each bidder, offeror, or respondent (hereinafter also referred to as “you”) to an NTTA (also referred to as “Authority”) procurement are required to complete **Conflict of Interest Questionnaire (the attached CIQ Form)** below pursuant to state law and Section 4 of the NTTA Procurement Policy. The statement below is required by NTTA policies. Accordingly, you are advised of the following:

A member of the Board, an employee, or agent of the Authority may not accept or solicit any gift, favor, or service that might reasonably tend to influence that Board member, employee, or agent in the making of procurement decisions or that the Board member, employee, or agent knows or should have known is being offered with the intent to influence the Board member's, employee's, or agent's making of procurement decisions; or accept other compensation that could reasonably be expected to impair the Board member's, employee's, or agent's independence of judgment in the making of procurement decisions.

No bidder, offeror, or respondent shall offer any interest, gift, favor, service, or compensation described in the preceding sentence, and any such offer may disqualify the bidder, offeror, or respondent from consideration for the applicable procurement.

A bidder, offeror, or respondent shall be required to complete a Conflict of Interest Questionnaire for each local governmental officer disclosing any business or familial relationships with Board members, employees, or agents of the Authority. Such relationship may disqualify the bidder, offeror, or respondent from consideration for the applicable procurement.

If applicable, please describe below any business or familial relationship that your officers, employees, agents, or board members may have with a board member, employee, or agent of the Authority:

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\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title



# CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor or other person doing business with local governmental entity

### OFFICE USE ONLY

Date Received

This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.

A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

**1** Name of person who has a business relationship with local governmental entity.

**2**  Check this box if you are filing an update to a previously filed questionnaire.

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)

**3** Name of local government officer with whom filer has employment or business relationship.

\_\_\_\_\_  
Name of Officer

This section (item 3 including subparts A, B, C & D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire?

Yes       No

B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

Yes       No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?

Yes       No

D. Describe each employment or business relationship with the local government officer named in this section.

**4**

\_\_\_\_\_  
Signature of person doing business with the governmental entity

\_\_\_\_\_  
Date

Adopted 06/29/2007



**NORTH TEXAS TOLLWAY AUTHORITY**  
**“AFFIDAVIT - ANTI-COLLUSION”**

**Contract No.:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Project:** Ramp Toll Plaza Modifications

**IN THE STATE OF** \_\_\_\_\_ §

§

**COUNTY OF** \_\_\_\_\_ §

Before me, the undersigned authority, on this day personally appeared \_\_\_\_\_  
\_\_\_\_\_ who, being by me duly sworn, upon oath says: that \_\_\_ is duly  
qualified and authorized to make this affidavit for and on behalf of \_\_\_\_\_  
\_\_\_\_\_ (“Contractor”), of \_\_\_\_\_ County, \_\_\_ and is  
fully cognizant and has personal knowledge of the facts herein set out; that Contractor  
has not, either directly or indirectly, entered into any agreement, participated in any  
collusion, or otherwise taken any action in restraint of unbiased evaluation and selection  
of Contractor in connection with the contract for the above referenced contract.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

SWORN TO AND SUBSCRIBED BEFORE ME by the said \_\_\_\_\_,  
this \_\_\_\_\_ day \_\_\_\_\_, 20\_\_\_, to certify which witness my hand and seal of office.

[SEAL]

\_\_\_\_\_  
Notary Public in and for

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Please Print Name of Notary



**NORTH TEXAS TOLLWAY AUTHORITY**  
**“CERTIFICATION OF DEBARMENT”**

**Contract No.:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Project:** Ramp Toll Plaza Modifications

The bidder certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal Department, State, or the North Texas Tollway Authority (NTTA);
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public transaction or contract under a public transaction; violation of Federal, State, or the NTTA antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity such as Federal, State, or the NTTA with commission of any of the offenses enumerated in paragraph (2) of this certification; and,
4. Have not within a three-year period preceding this application/proposal had one or more public transactions terminated for cause or default.

---

Signature of Certifying Bidder

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Title

---

Date



**NORTH TEXAS TOLLWAY AUTHORITY  
“DISADVANTAGED, MINORITY, WOMEN-OWNED, AND SMALL BUSINESS  
ENTERPRISE PROGRAM”**

**Professional Services, Consulting and Goods/Services Contracts, and Special  
Provision for Construction and Maintenance related projects**

**1. General**

The North Texas Tollway Authority (the Authority) is committed to providing contracting opportunities for disadvantaged, minority, women-owned, and small business enterprises (D/M/WBE). In this regard, the Authority maintains DBE, M/WBE, and SBE programs in order to facilitate contracting opportunities for these businesses.

The programs are implemented in accordance with the NTTA’s Disadvantage, Minority, Women-Owned and Small Business Enterprises Policy (Diversity Policy), originally adopted by the NTTA Board of Directors under Resolution No. 10-19 on January 20, 2010, and any revisions thereafter.

The following document outlines:

- Criteria regarding commercially useful function
- Factors to determine good faith efforts
- Contractor responsibilities
- Monthly reporting and compliance requirements
- Noncompliance enforcement

The Business Diversity Department Contracting and Compliance Manual (CCM) outlines the procedures, provisions and compliance requirements to support and comply with the Authority’s Diversity Policy. The CCM is approved and incorporated into the contract by reference for all purposes by the Authority.

The CCM and the Diversity Policy may be obtained online at the NTTA website at <http://www.ntta.org/WorkingWithUs/Business+Diversity+Department/> or by contacting the Business Diversity Department at (214) 461-2007.

**2. Commercially useful function criteria**

A commercially useful function (CUF) is when the D/M/WBE is responsible for the performance, management and supervision of a distinct element of work, in accordance with normal industry practice. The criteria utilized to determine a commercially useful function is set forth in the CCM (page 18).

**3. Factors to determine good faith efforts**

All prime contractors are required to demonstrate a good faith effort toward achieving a D/M/WBE goal. A good faith effort can be demonstrated by actions which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to, either individually or collectively, achieve the goal.



If a prime contractor does not meet the designated goal, it shall nevertheless be eligible for award of the contract if it can demonstrate to the NTTA that it has made a good faith effort to meet the goal. The factors that determine if a good faith effort has been met are set forth in the CCM (page 23).

#### **4. Contractor's responsibilities**

All responding firms, including D/M/WBE certified firms, must submit documentation regarding all subcontractor utilization and how they will meet or exceed the established goal using certified D/M/WBE firms for this project on the Commitment Agreement Form (Form 4906) provided.

Commitment Agreement Form (Form 4906), good faith effort documentation and supporting information must be submitted to the Business Diversity Department for all contracting opportunities in accordance to the CCM. Form 4906 must be submitted to the Authority with the proposal.

#### ***Information for construction and maintenance related projects***

*For all construction and maintenance related projects, Form 4906 must be submitted to the Authority no later than 5:00 pm on the 14<sup>th</sup> day after written notification of the conditional award of the contract.*

Additional questions and/or clarification can be obtained by contacting the Director of Business Diversity at [businessdiversity@ntta.org](mailto:businessdiversity@ntta.org). Please copy the Procurement Services Department at [bidpurchasing@ntta.org](mailto:bidpurchasing@ntta.org) on all correspondence. Form 4906 must include a brief description of the type of work to be performed and the dollar value or percentage of utilization of work that will be assigned to the subcontractors including D/M/WBEs and must be signed by both the prime contractor and subcontractor.

All compliance forms may be obtained online at the NTTA website at <http://www.ntta.org/WorkingWithUs/Business+Diversity+Department/>

#### **5. Monthly reporting and compliance requirements**

Prime contractors must submit monthly reports, no later than the 15<sup>th</sup> of each month, using the Monthly Subcontractor Progress Report (Form 4907) throughout the term of the contract, and submit the Subcontractor Final Report (Form 4908) upon completion of the Contract in accordance with the CCM.

Prime contractors are also required to electronically submit their respective Form 4907 information into the business diversity contract compliance tracking system by the 15<sup>th</sup> of each month. Prime contractors will have a designated User ID & password to login to the contract compliance tracking system via the following link: <http://pro.prismcompliance.com>

#### **6. Noncompliance enforcement**

All participants of the D/M/WBE business process must comply with the requirements set forth in the Diversity Policy and are subject to noncompliance enforcement as set forth in the Non Compliance Enforcement section of the CCM.













**NORTH TEXAS TOLLWAY AUTHORITY  
MONTHLY SUBCONTRACTOR PROGRESS REPORT**

Form NTTA 4907

<b>Contract No.:</b>		<b>County:</b>	
<b>SA/WA/ETC#:</b>		<b>Reporting Period</b> (M/D/Yr to M/D/Yr)	
<b>Contractor:</b>		<b>Original Contract Amount:</b>	\$
<b>D/M/WBE Goal:</b>		<b>Current Contract Amount:</b>	\$
<b>D/M/WBE Goal Attained to Date:</b>		<b>D/M/WBE Goal Dollars:</b>	\$
		<b>Current Year to date D/M/WBE Dollars paid (Beginning January 1st - December 31st)</b>	\$

Name of Subcontractor/Supplier	Type of Work/Service performed	Amount Paid This Period to Subcontractor	Amount Paid To Date to Subcontractor
<b>D/M/WBE Certified Firms:</b>			
		\$	\$
		\$	\$
		\$	\$
		\$	\$
		\$	\$
		\$	\$
		\$	\$
		\$	\$
<b>D/M/WBE Firm Totals:</b>		\$	\$
<b>SBE Firms:</b>			
		\$	\$
		\$	\$
		\$	\$
		\$	\$
		\$	\$
		\$	\$
<b>SBE Firm Totals:</b>		\$	\$
<b>Non-Minority Firms:</b>			
		\$	\$
		\$	\$
		\$	\$
		\$	\$
		\$	\$
		\$	\$
<b>Non-Minority Firm Totals:</b>		\$	\$

Include payments to all certified DBEs, WBEs, MBEs, SBE's and all Non-Minority firms during the period noted above.

If using a non-minority hauling firm that leases from D/M/WBE truck owner-operators, payments made to each owner-operator must be reported.

Any changes to the original commitments previously approved by the department must be reported to the NTTA's stakeholder and the Business Diversity Department.

For projects with assigned D/M/WBE Goals, submission of this report for periods of negative D/M/WBE activity is required. This report is required until all subcontracting or material supply activity is completed. ***This report must be submitted to the NTTA or Construction Manager each month with your monthly invoices.***

I hereby certify that the above is a true and correct statement of the amounts paid to all the firms listed above.

Signature: \_\_\_\_\_  
Authorized Company Official
Date

The NTTA maintains the information collected through this form. With few exceptions, upon request you may be informed of the information that is collected about you. Under Sections 552.021 and 552.023 of the Texas Government Code, you are permitted to receive and review the information. Under Section 559.004 of the Texas Government Code, you are also permitted to have the NTTA correct information about you that it is incorrect.





**NORTH TEXAS TOLLWAY AUTHORITY  
SUBCONTRACTOR FINAL REPORT**

Form NTTA 4908

<b>Contract No.:</b>		<b>Original Contract Amount:</b>	\$
<b>SA/WA/ETC#:</b>		<b>Final Contract Amount:</b>	\$
<b>Contractor:</b>		<b>D/M/WBE Goal Amount:</b>	\$
<b>D/M/WBE Goal:</b>		<b>Goal Amount Attained to Date:</b>	\$

<b>Name of Subcontractor/Supplier</b>	<b>SBE, DBE, MBE, WBE, Non-Minority</b>	<b>Final Amount Paid To Subcontractor to Date</b>
<b>D/M/WBE Certified Firms:</b>		
		\$
		\$
		\$
		\$
		\$
		\$
		\$
		\$
	<b>Total:</b>	\$
<b>SBE Firms:</b>		
		\$
		\$
		\$
		\$
	<b>Total:</b>	\$
<b>Non-Minority Firms:</b>		
		\$
		\$
		\$
		\$
		\$
		\$
	<b>Total:</b>	\$

\* Include payments to all **NON-MINORITY** and certified DBEs, WBEs, MBEs and SBEs.

This is to certify that  % of the work was completed by D/M/WBE firms, as stated above.

IF THE GOAL WAS NOT ATTAINED, THEN ATTACH DOCUMENTATION THAT EXPLAINS THE REASONING.

Signature of General Contractor: \_\_\_\_\_ Date: \_\_\_\_\_

AFFIX NOTARY STAMP/SEAL ABOVE

Sworn to and subscribed before me, by the said \_\_\_\_\_, this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, to certify which, witness my hand and seal of office.

Signature of Notary Public: \_\_\_\_\_ Printed Name of Notary Public: \_\_\_\_\_

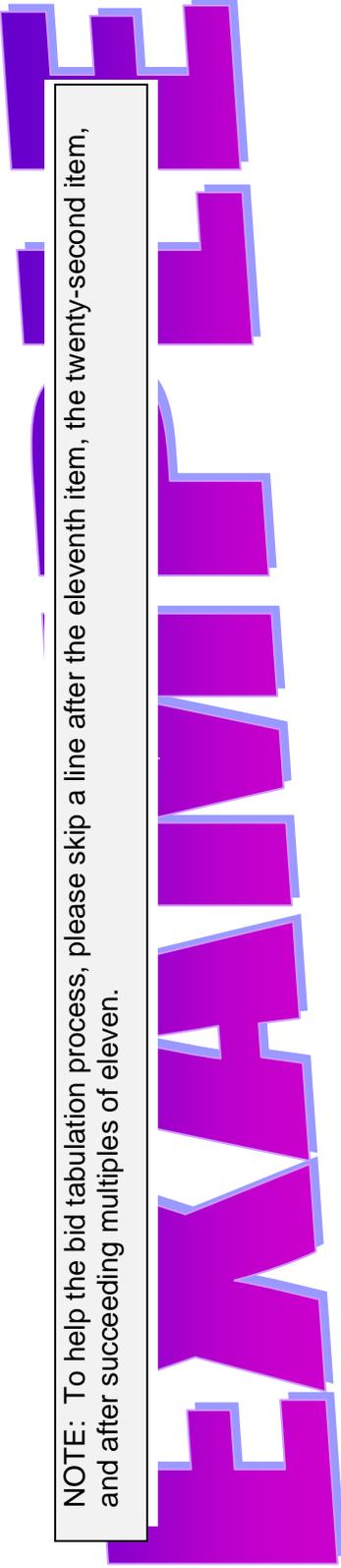
The NTTA maintains the information collected through this form. With few exceptions, upon request you may be informed of the information that is collected about you. Under Sections 552.021 and 552.023 of the Texas Government Code, you are permitted to receive and review the information. Under Section 559.004 of the Texas Government Code, you are also permitted to have the NTTA correct information about you that it is incorrect.



CONTRACT: 03214-PGB-00-CN-PM  
 HIGHWAY: President George Bush Turnpike, SEGMENTS: 1 through 5  
 COUNTIES: Dallas, Denton, and Collin

Alt. No.	Item		Bid Item Description	Unit of Measure	Approx. Quantities	Unit Bid Price	Amount	Item Sequence No.
	Item No.	S.P. Code No.						
100	2002	002	PREPARING ROW	STA	30	\$ 1,500.00	\$ 45,000.00	1
104	2001		REMOVING CONC (PAV)	SY	5,134	3.50	17,969.00	2

NOTE: To help the bid tabulation process, please skip a line after the eleventh item, the twenty-second item, and after succeeding multiples of eleven.



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

(YOUR FIRM'S NAME) certifies that the unit prices shown on this complete computer print-out for all of the bid items and the alternates contained in this proposal are the unit prices intended and that its bid will be tabulated using these unit prices and no other information from this print-out.

(YOUR FIRM'S NAME) acknowledges and agrees that the total bid amount shown will be read as its total bid and further agrees that the official total bid amount will be determined by multiplying the unit bid prices shown in this print-out by the respective estimated quantities shown in the proposal and then totaling all of the extended amounts.

Signed: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

Additional Signature for Joint Venture:  
 Signed: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

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



**NORTH TEXAS TOLLWAY AUTHORITY**  
**"UNIT DESCRIPTION AND BID PRICE SCHEDULE"**

**Contract:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

ITEM			UNIT BID PRICE ONLY - WRITTEN IN WORDS	UNIT	APPROX. QUANTITIES	AMOUNT	DEPT USE ONLY
ITEM NO.	ITEM CODE	S.P. NO.					
0104	2001		REMOVING CONC (PAV) _____ Dollars and _____ Cents	SY	5,764	\$ _____	1
0104	2011		REMOVING CONC (MEDIANS) _____ Dollars and _____ Cents	SY	952	\$ _____	2
0104	2013		REMOVING CONC (FOUNDATIONS) _____ Dollars and _____ Cents	SY	420	\$ _____	3
0104	2015		REMOVING CONC (SIDEWALKS) _____ Dollars and _____ Cents	SY	584	\$ _____	4
0104	2022		REMOVING CONC (CURB AND GUTTER) _____ Dollars and _____ Cents	LF	5,835	\$ _____	5
0104	2023		REMOVING CONC (CTB) _____ Dollars and _____ Cents	LF	100	\$ _____	6
0104	2032		REMOVING CONC (WHEELCHAIR RAMP) _____ Dollars and _____ Cents	SY	156	\$ _____	7
0105	2002		REMOVING STAB BASE AND ASPH PAV (2") _____ Dollars and _____ Cents	SY	7,081	\$ _____	8
0132	2006	007	EMBANKMENT (FINAL)(DENS CONT)(TY C) _____ Dollars and _____ Cents	CY	300	\$ _____	9
0340	2011	003	D-GR HMA(METH) TY-B PG64-22 _____ Dollars and _____ Cents	TON	1,011	\$ _____	10
0360	2018	003	CURB (TYPE II) _____ Dollars and _____ Cents	LF	2,686	\$ _____	11
0360	2031	003	CONC PVMT (CONT REINF-CRCP)(12")CL HES _____ Dollars and _____ Cents	SY	8,596	\$ _____	12



**NORTH TEXAS TOLLWAY AUTHORITY**  
**"UNIT DESCRIPTION AND BID PRICE SCHEDULE"**

**Contract:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

ITEM			UNIT BID PRICE ONLY - WRITTEN IN WORDS	UNIT	APPROX. QUANTITIES	AMOUNT	DEPT USE ONLY
ITEM NO.	ITEM CODE	S.P. NO.					
0432	2040		RIPRAP (MOW STRIP)(5 IN) _____ Dollars and _____ Cents	CY	81	\$ _____	13
0496	2002		REMOV STR (INLET) _____ Dollars and _____ Cents	EA	27	\$ _____	14
0496	2018		REMOVE STR (CONC) _____ Dollars and _____ Cents	EA	56	\$ _____	15
0496	2030		REMOVE STR (BOLLARD) _____ Dollars and _____ Cents	EA	88	\$ _____	16
0496	2039		REMOV STR (BUILDING) _____ Dollars and _____ Cents	EA	30	\$ _____	17
0496	2042		REMOV STR (SMALL) _____ Dollars and _____ Cents	EA	140	\$ _____	18
0496	7012		REMOVE STR (GENERATOR) _____ Dollars and _____ Cents	EA	29	\$ _____	19
0500	2001	005	MOBILIZATION _____ Dollars and _____ Cents	LS	1	\$ _____	20
0502	2001	033	BARRICADES, SIGNS AND TRAFFIC HANDLING _____ Dollars and _____ Cents	MO	14	\$ _____	21
0506	2034	012	TEMPORARY SEDIMENT CONTROL FENCE _____ Dollars and _____ Cents	LF	6,291	\$ _____	22
0506	2038	012	BIODEGRADABLE EROSION CONTROL LOGS(18") _____ Dollars and _____ Cents	LF	1,585	\$ _____	23
0512	2026	002	PORT CTB (MOVE)(LOW PROF)(TY 1) _____ Dollars and _____ Cents	LF	1,580	\$ _____	24



**NORTH TEXAS TOLLWAY AUTHORITY**  
**"UNIT DESCRIPTION AND BID PRICE SCHEDULE"**

**Contract:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

ITEM			UNIT BID PRICE ONLY - WRITTEN IN WORDS	UNIT	APPROX. QUANTITIES	AMOUNT	DEPT USE ONLY
ITEM NO.	ITEM CODE	S.P. NO.					
0512	2044	002	PORT CTB (REMOVE)(LOW PROF)(TY 1) _____ Dollars and _____ Cents	LF	2,400	\$ _____	25
0512	2045	002	PORT CTB (REMOVE)(LOW PROF)(TY 2) _____ Dollars and _____ Cents	LF	600	\$ _____	26
0512	2048	002	PORT CTB (FUR & INST)(F-SHAPE)(TY 1) _____ Dollars and _____ Cents	LF	5,785	\$ _____	27
0512	2050	002	PORT CTB (MOVE)(F-SHAPE)(TY 1) _____ Dollars and _____ Cents	LF	4,489	\$ _____	28
0512	2052	002	PORT CTB (REMOVE)(F-SHAPE)(TY 1) _____ Dollars and _____ Cents	LF	5,785	\$ _____	29
0514	2042	002	PERM CONC TRF BARR(SLG SLP)(TY 1)(MOD) _____ Dollars and _____ Cents	LF	6,330	\$ _____	30
0531	2015		CONC SIDEWALKS (4") _____ Dollars and _____ Cents	SY	623	\$ _____	31
0540	2002	023	MTL W-BEAM GD FEN (STEEL POST) _____ Dollars and _____ Cents	LF	288	\$ _____	32
0540	2011	023	MTL BEAM GD FEN TRANS (THRIE-BEAM) _____ Dollars and _____ Cents	EA	25	\$ _____	33
0542	2001		REMOVING METAL BEAM GUARD FENCE _____ Dollars and _____ Cents	LF	455	\$ _____	34
0544	2001		GUARDRAIL END TREATMENT (INSTALL) _____ Dollars and _____ Cents	EA	16	\$ _____	35
0545	2003		CRASH CUSH ATTEN (REMOVE) _____ Dollars and _____ Cents	EA	56	\$ _____	36



**NORTH TEXAS TOLLWAY AUTHORITY**  
**"UNIT DESCRIPTION AND BID PRICE SCHEDULE"**

**Contract:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

ITEM			UNIT BID PRICE ONLY - WRITTEN IN WORDS	UNIT	APPROX. QUANTITIES	AMOUNT	DEPT USE ONLY
ITEM NO.	ITEM CODE	S.P. NO.					
0545	2007		CRASH CUSH ATTEN (INSTL)(TRACC) _____ Dollars and _____ Cents	EA	18	\$ _____	37
0545	2049		CRASH CUSH ATTEN (INSTL)(WORK ZONE) _____ Dollars and _____ Cents	EA	30	\$ _____	38
0545	2050		CRASH CUSH ATTEN(MOV&RESET)(WORK ZONE) _____ Dollars and _____ Cents	EA	30	\$ _____	39
0545	2051		CRASH CUSH ATTEN (REMOVE)(WORK ZONE) _____ Dollars and _____ Cents	EA	30	\$ _____	40
0545	2063		CRASH CUSH ATTEN (INSTAL)(SMT)(N) _____ Dollars and _____ Cents	EA	18	\$ _____	41
0618	2012		CONDT (PVC) (SCHD 40) (1") _____ Dollars and _____ Cents	LF	8,340	\$ _____	42
0618	2018		CONDT (PVC) (SCHD 40) ( 2") _____ Dollars and _____ Cents	LF	20,065	\$ _____	43
0618	2019		CONDT (PVC) (SCHD 40) (2") (BORE) _____ Dollars and _____ Cents	LF	2,620	\$ _____	44
0618	2052		CONDT (RM) (2") _____ Dollars and _____ Cents	LF	12,735	\$ _____	45
0624	2013	014	GROUND BOX TY D (162922) _____ Dollars and _____ Cents	EA	27	\$ _____	46
0624	2014	014	GROUND BOX TY D (162922) W/APRON _____ Dollars and _____ Cents	EA	190	\$ _____	47
0636	2003	014	ALUMINUM SIGNS (TY O) _____ Dollars and _____ Cents	SF	772.25	\$ _____	48



**NORTH TEXAS TOLLWAY AUTHORITY**  
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ITEM			UNIT BID PRICE ONLY - WRITTEN IN WORDS	UNIT	APPROX. QUANTITIES	AMOUNT	DEPT USE ONLY
ITEM NO.	ITEM CODE	S.P. NO.					
0644	2006		INS SM RD SN SUP&AM TY 10BWG(1) SA(U) _____ Dollars and _____ Cents	EA	6	\$ _____	49
0644	2060		REMOVE SM RD SN SUP & AM _____ Dollars and _____ Cents	EA	2	\$ _____	50
0658	2258		INSTL DEL ASSM (D-SW)SZ (TYC)CTB _____ Dollars and _____ Cents	EA	200	\$ _____	51
0658	2269		INSTL DEL ASSM (D-SY)SZ 1(FLX)GF2 _____ Dollars and _____ Cents	EA	75	\$ _____	52
0658	2277		INSTL DEL ASSM (D-SY)SZ (TYC)CTB _____ Dollars and _____ Cents	EA	703	\$ _____	53
0658	2323		INSTL OM ASSM (OM-3L)(FLX)SRF _____ Dollars and _____ Cents	EA	30	\$ _____	54
0658	2327		INSTL OM ASSM (OM-3R)(FLX)SRF _____ Dollars and _____ Cents	EA	30	\$ _____	55
0662	2067		WK ZN PAV MRK REMOV (W) 4" (SLD) _____ Dollars and _____ Cents	LF	2,283	\$ _____	56
0662	2084		WK ZN PAV MRK REMOV (W) (ARROW) _____ Dollars and _____ Cents	EA	2	\$ _____	57
0662	2099		WK ZN PAV MRK REMOV (Y) 4" (SLD) _____ Dollars and _____ Cents	LF	15,158	\$ _____	58
0666	2015		REFL PAV MRK TY I (W) 6" (BRK)(100MIL) _____ Dollars and _____ Cents	LF	630	\$ _____	59
0666	2022		REFL PAV MRK TY I (W) 6" (SLD)(060MIL) _____ Dollars and _____ Cents	LF	39,124	\$ _____	60



**NORTH TEXAS TOLLWAY AUTHORITY**  
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**Counties:** Dallas, Denton, and Collin

ITEM			UNIT BID PRICE ONLY - WRITTEN IN WORDS	UNIT	APPROX. QUANTITIES	AMOUNT	DEPT USE ONLY
ITEM NO.	ITEM CODE	S.P. NO.					
0666	2039		REFL PAV MRK TY I (W) 12"(LNDP)(100MIL) _____ Dollars and _____ Cents	LF	88	\$ _____	61
0666	2042		REFL PAV MRK TY I (W) 12"(SLD)(100MIL) _____ Dollars and _____ Cents	LF	900	\$ _____	62
0666	2054		REFL PAV MRK TY I (W) (ARROW) (100MIL) _____ Dollars and _____ Cents	EA	5	\$ _____	63
0666	2072		REFL PAV MRK TY I(W)(ENTR GORE)(100MIL) _____ Dollars and _____ Cents	EA	2	\$ _____	64
0666	2075		REFL PAV MRK TY I(W)(EXIT GORE)(100MIL) _____ Dollars and _____ Cents	EA	1	\$ _____	65
0666	2096		REFL PAV MRK TY I (W) (WORD) (100MIL) _____ Dollars and _____ Cents	EA	5	\$ _____	66
0666	2120		REFL PAV MRK TY I (Y) 6" (SLD)(100MIL) _____ Dollars and _____ Cents	LF	33,611	\$ _____	67
0666	2146		REF PAV MRK TY II (W) 6" (BRK) _____ Dollars and _____ Cents	LF	630	\$ _____	68
0666	2149		REF PAV MRK TY II (W) 6" (SLD) _____ Dollars and _____ Cents	LF	39,124	\$ _____	69
0666	2154		REF PAV MRK TY II (W) 12" (LNDP) _____ Dollars and _____ Cents	LF	88	\$ _____	70
0666	2155		REF PAV MRK TY II (W) 12" (SLD) _____ Dollars and _____ Cents	LF	900	\$ _____	71
0666	2160		REF PAV MRK TY II (W) (ARROW) _____ Dollars and _____ Cents	EA	5	\$ _____	72



**NORTH TEXAS TOLLWAY AUTHORITY**  
**"UNIT DESCRIPTION AND BID PRICE SCHEDULE"**

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**Counties:** Dallas, Denton, and Collin

ITEM			UNIT BID PRICE ONLY - WRITTEN IN WORDS	UNIT	APPROX. QUANTITIES	AMOUNT	DEPT USE ONLY
ITEM NO.	ITEM CODE	S.P. NO.					
0666	2166		REF PAV MRK TY II (W) (ENTR GORE) _____ Dollars and _____ Cents	EA	2	\$ _____	73
0666	2167		REF PAV MRK TY II (W) (EXIT GORE) _____ Dollars and _____ Cents	EA	1	\$ _____	74
0666	2173		REF PAV MRK TY II (W) (WORD) _____ Dollars and _____ Cents	EA	5	\$ _____	75
0666	2181		REF PAV MRK TY II (Y) 6" (SLD) _____ Dollars and _____ Cents	LF	33,611	\$ _____	76
0672	2012	034	REFL PAV MRKR TY I-C _____ Dollars and _____ Cents	EA	196	\$ _____	77
0672	2014	034	REFL PAV MRKR TY I-R _____ Dollars and _____ Cents	EA	72	\$ _____	78
0672	2017	034	REFL PAV MRKR TY II-C-R _____ Dollars and _____ Cents	EA	109	\$ _____	79
0678	2002		PAV SURF PREP FOR MRK ( 6") _____ Dollars and _____ Cents	LF	73,365	\$ _____	80
0678	2004		PAV SURF PREP FOR MRK (12") _____ Dollars and _____ Cents	LF	988	\$ _____	81
0678	2007		PAV SURF PREP FOR MRK (ARROW) _____ Dollars and _____ Cents	EA	5	\$ _____	82
0678	2009		PAV SURF PREP FOR MRK (ENTR GORE) _____ Dollars and _____ Cents	EA	2	\$ _____	83
0678	2010		PAV SURF PREP FOR MRK (EXIT GORE) _____ Dollars and _____ Cents	EA	1	\$ _____	84



**NORTH TEXAS TOLLWAY AUTHORITY**  
**"UNIT DESCRIPTION AND BID PRICE SCHEDULE"**

**Contract:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

ITEM			UNIT BID PRICE ONLY - WRITTEN IN WORDS	UNIT	APPROX. QUANTITIES	AMOUNT	DEPT USE ONLY
ITEM NO.	ITEM CODE	S.P. NO.					
0678	2013		PAV SURF PREP FOR MRK (RPM) _____ Dollars and _____ Cents	EA	109	\$ _____	85
0678	2015		PAV SURF PREP FOR MRK (SYMBOL) _____ Dollars and _____ Cents	EA	10	\$ _____	86
0688	2002		VEH LP DETECT (SAWCUT) _____ Dollars and _____ Cents	LF	6,225	\$ _____	87
0690	2024		REMOVAL OF SIGNAL HEAD ASSM _____ Dollars and _____ Cents	EA	55	\$ _____	88
0803	7016		PLUG EXISTING WASTEWATER PIPE _____ Dollars and _____ Cents	EA	30	\$ _____	89
0803	7069		CUT & PLUG EXIST WATER MAIN _____ Dollars and _____ Cents	EA	30	\$ _____	90
7540	7001		ELIM EXT PAV MRK & MRKS (6") _____ Dollars and _____ Cents	LF	76,180	\$ _____	91
7540	7003		ELIM EXT PAV MRK & MRKS (12") _____ Dollars and _____ Cents	LF	988	\$ _____	92
7540	7004		ELIM EXT PAV MRK & MRKS (ARROW) _____ Dollars and _____ Cents	EA	2	\$ _____	93
7540	7005		ELIM EXT PAV MRK & MRKS (DBL ARROW) _____ Dollars and _____ Cents	EA	2	\$ _____	94
7540	7010		ELIM EXT PAV MRK & MRKS (ENTR GORE) _____ Dollars and _____ Cents	EA	1	\$ _____	95
7540	7011		ELIM EXT PAV MRK & MRKS (EXIT GORE) _____ Dollars and _____ Cents	EA	1	\$ _____	96



**NORTH TEXAS TOLLWAY AUTHORITY**  
**"UNIT DESCRIPTION AND BID PRICE SCHEDULE"**

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**Counties:** Dallas, Denton, and Collin

ITEM			UNIT BID PRICE ONLY - WRITTEN IN WORDS	UNIT	APPROX. QUANTITIES	AMOUNT	DEPT USE ONLY
ITEM NO.	ITEM CODE	S.P. NO.					
			_____ Dollars and _____ Cents			\$ _____	97
			_____ Dollars and _____ Cents			\$ _____	98
			_____ Dollars and _____ Cents			\$ _____	99
			_____ Dollars and _____ Cents			\$ _____	100
			_____ Dollars and _____ Cents			\$ _____	101
			_____ Dollars and _____ Cents			\$ _____	102
			_____ Dollars and _____ Cents			\$ _____	103
			_____ Dollars and _____ Cents			\$ _____	104
			_____ Dollars and _____ Cents			\$ _____	105
			_____ Dollars and _____ Cents			\$ _____	106
			_____ Dollars and _____ Cents			\$ _____	107

**TOTAL BID \$ \_\_\_\_\_**



**NORTH TEXAS TOLLWAY AUTHORITY**  
**PRESIDENT GEORGE BUSH TURNPIKE**  
**SEGMENTS 1 THROUGH 5**  
**RAMP TOLL PLAZA MODIFICATIONS**

The referenced Texas Department of Transportation standard specifications, special provisions, and special specifications and accompanying North Texas Tollway Authority general notes and specification data, special provisions, and special specifications in this document have been selected by me, or under my responsible supervision, as being applicable to this project.



The seal appearing on this document was authorized by:

**Lilah T. Ramey, P.E.**  
**TX P.E. NO. 87868**  
**Firm: Lina T. Ramey & Associates, Inc.**  
**TX Firm# 782**

on: May 14, 2012

The accompanying special provisions to Items 1 through 9 were developed by me, or under my responsible supervision, for inclusion in the project contract documents.



The seal appearing on this document was authorized by:

**Kelly Rae Johnson, P.E.**  
**P.E. NO. 89341**  
**Project Delivery**  
**North Texas Tollway Authority**

on: May 15, 2012

Note: Alteration of a sealed document without proper notification to the responsible Engineer is an offense under the Texas Engineering Practice Act.



**NORTH TEXAS TOLLWAY AUTHORITY  
PRESIDENT GEORGE BUSH TURNPIKE  
SEGMENTS 1 THROUGH 5  
INDEX OF  
GOVERNING SPECIFICATIONS, SPECIAL PROVISIONS  
AND SPECIAL SPECIFICATIONS**

Note: For the purpose of construing this proposal and the contract, the Standard Specifications for Construction of Highways, Streets and Bridges, as adopted by the Texas Department of Transportation on June 1, 2004 (referred to herein as the "Standard Specifications" or the "Texas Standard Specifications") are approved and incorporated into the contract by reference for all purposes by the Authority as official specifications, together with, and as modified by, Special Provisions and Special Specifications as are listed below, and by the General Notes and Specification Data.

General. The Standard Specifications applicable to this project are identified as, but not limited to, the following. Whether or not listed, any of the Standard Specifications which are pertinent to work performed on this project are applicable and shall be observed.

**STANDARD SPECIFICATIONS:**

Items 1 thru 9 Inclusive General Requirements and Covenants

Item 104	Removing Concrete
Item 105	Removing Stabilized Base and Asphalt Pavement
Item 132	Embankment (100, 204, 210, 216, 400)
Item 340	Dense-Graded Hot Mix Asphalt (Method) (210, 300, 301, 320, 520, 585)
Item 360	Concrete Pavement (300, 420, 421, 438, 440, 529, 585)
Item 432	Riprap (247, 420, 421, 427, 431, 440)
Item 496	Removing Structures (430)
Item 500	Mobilization
Item 502	Barricades, Signs and Traffic Handling
Item 506	Temporary Erosion, Sedimentation, and Environmental Controls
Item 512	Portable Concrete Traffic Barrier (420, 421, 424, 440, 442)
Item 514	Permanent Concrete Traffic Barrier (400, 416, 420, 421, 424, 440, 442, 448)
Item 531	Sidewalks (104, 360, 420, 421, 440, 530)
Item 540	Metal Beam Guard Fence (421, 445, 529, 542, 544)
Item 542	Removing Metal Beam Guard Fence
Item 544	Guardrail End Treatments
Item 545	Crash Cushion Attenuators (421)
Item 618	Conduit (400, 445, 476, 622)
Item 624	Ground Boxes (421, 440)
Item 636	Aluminum Signs (643)

Item 644	Small Roadside Sign Supports and Assemblies (421, 440, 441, 442, 445, 634, 636, 643, 656)
Item 658	Delineator and Object Marker Assemblies (445)
Item 662	Work Zone Pavement Markings (666, 668, 672, 677)
Item 666	Reflectorized Pavement Markings (316, 318, 662, 677, 678)
Item 672	Raised Pavement Markers (677, 678)
Item 678	Pavement Surface Preparation for Markings (677)
Item 688	Pedestrian Detectors and Vehicle Loop Detectors (618, 624, 682, 684)
Item 690	Maintenance of Traffic Signals (416, 421, 476, 610, 618, 620, 622, 624, 625, 627, 628, 634, 636, 656, 680, 682, 684, 685, 686, 687, 688)

**SPECIAL PROVISIONS:** Special Provisions and General Notes and Specification Data will govern and take precedence over the Special Specifications and the Standard Specifications, wherever in conflict therewith.

**TxDOT Special Provisions unless otherwise noted:**

NTTA Special Provision	Important Notice to Contractors "R.O.W. and Utility Relocations by Others"	(SP-0.02.1)
NTTA Special Provision	Important Notice to Contractors "Mandatory Construction Schedule"	(SP-0.03.4)
NTTA Special Provision	Important Notice to Contractors "Sales and Use Tax Exemption"	(SP-0.04.0)
NTTA Special Provision	Important Notice to Contractors "Existing Utilities"	(SP-0.05.0)
NTTA Special Provision	Important Notice to Contractors "Value Engineering Proposals"	(SP-0.17.0)
NTTA Special Provision	Important Notice to Contractors "Correction of Defects"	(SP-0.18.0)
NTTA Special Provision	Important Notice to Contractors "NTTA Enterprise Project Delivery System"	(SP-0.19.1)
NTTA Special Provision	Important Notice to Contractors "NTTA Business Diversity PRISM Contract Compliance Tracking Software"	(SP-0.20.1)
NTTA Special Provision to Item 1	Definition of Terms	(SP-1.4)
NTTA Special Provision to Item 2	Instructions to Bidders	(SP-2.3)
NTTA Special Provision to Item 3	Award and Execution of Contract	(SP-3.5)
NTTA Special Provision to Item 4	Scope of Work	(SP-4.1)
NTTA Special Provision to Item 5	Control of the Work	(SP-5.0)
NTTA Special Provision to Item 6	Control of Materials	(SP-6.1)
NTTA Special Provision to Item 7	Legal Relations and Responsibilities	(SP-7.12)
NTTA Special Provision to Item 8	Prosecution and Progress	(SP-8.8)
NTTA Special Provision to Item 9	Measurement and Payment	(SP-9.3)

Special Provision to Item 132	(132-007)
Special Provision to Item 247	(247-033)
Special Provision to Item 300	(300-039)
Special Provision to Item 302	(302-010)
Special Provision to Item 316	(316-016)
Special Provision to Item 318	(318-010)
Special Provision to Item 340	(340-003)
Special Provision to Item 360	(360-003)
NTTA Special Provision to Item 416	(SP-416.1)
Special Provision to Item 420	(420-002)
Special Provision to Item 421	(421-035)
Special Provision to Item 424	(424-002)
Special Provision to Item 431	(431-001)
Special Provision to Item 440	(440-006)
Special Provision to Item 441	(441-007)
Special Provision to Item 442	(442-016)
Special Provision to Item 448	(448-002)
Special Provision to Item 450	(450-001)
Special Provision to Item 476	(476-003)
Special Provision to Item 500	(500-005)
Special Provision to Item 502	(502-033)
Special Provision to Item 506	(506-012)
Special Provision to Item 512	(512-002)
Special Provision to Item 514	(514-002)
Special Provision to Item 540	(540-023)
Special Provision to Item 620	(620-001)
Special Provision to Item 624	(624-014)
NTTA Special Provision to Item 628	(SP-628.0)
Special Provision to Item 636	(636-014)
NTTA Special Provision to Item 643	(SP-643)
Special Provision to Item 672	(672-034)
Special Provision to Item 682	(682-001)
Special Provision to Item 685	(685-014)
Special Provision to Item 687	(687-004)

**TxDOT Special Specifications Unless Otherwise Noted:**

NTTA Item 803, SS-803.1	Water Mains, Wastewater Lines, and Other Municipal Improvements
NTTA Item 850, SS-850.2	Natural Grey or Integrally Colored Concrete (420, 421, 424, 427)
Item 7540	High Pressure Waterblasting System (300, 302, 316)

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 above-listed specification items, and including the Special Provisions listed above, the General Notes and Specification Data, the other provisions of this contract, and the Standard Specifications (as the same are modified herein) constitute the complete specifications for this project.

**NORTH TEXAS TOLLWAY AUTHORITY  
SPECIAL PROVISION  
IMPORTANT NOTICE TO CONTRACTORS  
"R.O.W. AND UTILITY RELOCATIONS BY OTHERS"**

**Contract No.:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

The Authority anticipates the acquisition and/or access to right-of-way and removal and relocation of improvements, utilities, and obstructions to the construction provided for in this contract in accordance with the schedule set forth below.

The following is a list of known outstanding right-of-way and easements to be acquired, if any, description of improvements which have not been removed, and a list of utilities that have not been removed, adjusted, and/or relocated as of May 14, 2012.

**Outstanding Right-Of-Way to Be Acquired**

PARCEL NUMBER	OWNER	TARGET DATE OF POSSESSION
	None	

**Utilities to be removed, adjusted, and/or relocated**

The facilities improvements, utilities, and obstructions listed below will either be removed by others, remain in place, or will be accommodated in this Contract as noted below.

EXPECTED OWNER	UTILITY AND LOCATION	TARGET DATE OF ADJUSTMENT
	None	

The Contractor understands and agrees that the dates listed above are estimates only, are not guaranteed, and do not bind the Authority.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION**  
**IMPORTANT NOTICE TO CONTRACTORS**  
**"MANDATORY CONSTRUCTION SCHEDULE"**

**Contract No.:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

**Final Completion Schedule.** The Contractor shall schedule the work in a manner that the project will reach final completion (as defined in the Special Provision to Item 1) by four hundred twenty-five (425) calendar days from the commencement of time charges. The Engineer shall be the sole judge as to whether final completion has been achieved.

A delay in final completion of the entire project beyond the date for final completion specified above will cause delay in the incremental opening to traffic of other complete and incomplete portions of the PGBT and will cause losses to the Authority, including, but not limited to, lost revenue, interest on monies borrowed, increased administrative, legal, and engineering costs, damage to the Authority's reputation, and other tangible and intangible losses.

Failure to achieve final completion within the specified time limits will cause the Authority hardship and financial loss, and automatically shall activate the applicable liquidated damages provisions specified in this "Mandatory Construction Schedule". The liquidated damages for this contract shall be FIVE THOUSAND and NO/100 DOLLARS (\$5,000.00) per day for each calendar day that elapses after the time limit specified for final completion as stated above, until final completion has been achieved in accordance with the requirements of the Special Provision to Item 8. The Contractor unconditionally and irrevocably acknowledges and agrees that the actual amount of said losses and expenses would be extremely difficult to determine and that the specified liquidated damages constitute a fair and reasonable estimate by the parties of the amount of said losses and expenses and in no event shall constitute or be construed as a penalty. Further, the Contractor irrevocably and unconditionally acknowledges that the time limits set forth herein constitute an essential benefit for the Authority and an essential element of the contract.

The Authority shall recover liquidated damages by deducting the amount thereof from any monies due or that may become due the Contractor, and if said monies be insufficient to cover said damages, then the Contractor or its Surety shall pay the amount due and the Authority shall be entitled to any and all rights and remedies available to it in law or equity to recover same.

November, 2007

In the event a court or other authority having jurisdiction to do so determines that this liquidated damages provision is unenforceable for any reason, the Contractor agrees that it shall be liable to the Authority for actual damages for the Contractor's delays in achieving substantial and/or final completion, as applicable, within the time required by the Contract.

**NORTH TEXAS TOLLWAY AUTHORITY  
SPECIAL PROVISION  
IMPORTANT NOTICE TO CONTRACTORS  
"SALES AND USE TAX EXEMPTION"**

The Contractor shall be responsible for the payment of all federal, state, local, and other taxes, impositions, and assessments imposed in connection with this contract (if any), including without limitation all taxes imposed on property, services, and other items required in connection with Contractor's performance of this contract. The amount of payments to be made by the Authority to the Contractor as stated in this contract shall not be increased to cover any taxes, impositions, or assessments payable by the Contractor in connection with this contract.

The Authority is a tax-exempt entity under Section 151.309 of the Texas Tax Code. The Contractor is solely responsible for determining if under the Texas Tax Code, the Texas Administrative Code, or any other legal authority, any property or service purchased by the Contractor in connection with its performance of this contract is exempt from taxation.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION**  
**IMPORTANT NOTICE TO CONTRACTORS**  
**"EXISTING UTILITIES"**

Contractor is hereby notified that there are existing public and private utility entities which the Authority believes have structures in or adjacent to the limits of the work. A list indicates the entity owning and controlling the utility, and the person to be contacted, if there is any, is provided in the General Notes and Specification Data and the locations of known existing utilities are shown on the plans. However, the Authority does not guarantee the accuracy of the information concerning the existing utility structures, including their size, location, depth, or length. The Contractor is responsible for making its own investigation as to the whereabouts of utilities prior to beginning work in any location. Prior to any excavation or drilling, the Contractor shall obtain from the owners the location of any existing utilities (whether or not shown on the plans) and shall become cognizant of and cooperate with any necessary adjustments, which may have to be made by the owners. Additionally, before commencing construction, the Contractor shall verify by test pits the location of all utilities. By submitting its bid, the Contractor warrants and understands that notwithstanding anything to the contrary contained in the contract, it is its responsibility to verify all information concerning utility structures, including the information listed in the General Notes and Specification Data and the information contained in the plans, that it has made all investigations essential to a full understanding of the difficulties that may be encountered in performing the work as it relates to utility structures, and that it assumes full and complete responsibility and risk for completing the work for the compensation and within the time provided in the contract.

Regardless of whether existing utility structures will eventually be relocated, it shall be the Contractor's responsibility to protect all such lines in the course of performing work under the contract. Any structures damaged by the Contractor's operations shall be promptly repaired at the Contractor's expense and to the complete satisfaction of the utility owner and the Engineer.

Because of the imminent danger of working in the vicinity of the utilities, the Contractor shall utilize heavy timber mats, compacted earth embankment surfaced with flexible base, or other working platforms, where, in the sole judgment of the Engineer to protect the existing utilities, facilities might be damaged by the Contractor's operations. Prior to beginning operations, the Contractor shall submit to the Engineer for approval, a plan outlining its methods of operation and details of supporting heavy equipment in locations where utilities might be damaged. Submittals shall conform to the requirements of Item 5 of the Standard Specifications and the Special Provision to Item 5, "Control of the Work".

February, 2005

After completion of operations in the vicinity of utilities, the Contractor shall restore the area to its condition at the time of entry unless otherwise instructed by the utility owner and the Engineer.

No specific measurement or payment will be made for work to be done, or for equipment and materials to be furnished, as a result of the requirements in this Special Provision. All costs shall be considered subsidiary to and included in the bid for the various Items required by the plans and the contract.

Special care must be exercised during all phases of construction operations in the vicinity of these structures.

It shall be the Contractor's responsibility to familiarize itself and at all times comply with the operational requirements of all utility owners relevant to the work.

**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION**  
**IMPORTANT NOTICE TO CONTRACTORS**  
**"VALUE ENGINEERING PROPOSALS"**

**Contract No.:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

The Contractor is encouraged to develop, prepare, and submit for the Authority's consideration proposals for Contract changes that result in a reduction of the estimated cost of the Work without impairing essential functions or characteristics of the Project, including service life, economy of operation, ease of maintenance, desirability and safety, as determined by the Authority in its sole discretion. Such changes may not be based solely upon a change in quantities, performance, accuracy or reliability, or a relaxation of the requirements contained in the Contract Documents. If the Authority determines that the proposal warrants a change to the Contract, the change shall be documented by a change order under which a portion of the estimated net savings to the Authority shall be shared with the Contractor on terms acceptable to the Authority and the Contractor. The Contractor acknowledges and agrees that the Authority shall have no obligation to accept or implement any proposal submitted by the Contractor.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION**  
**IMPORTANT NOTICE TO CONTRACTORS**  
**"CORRECTION OF DEFECTS"**

**Contract No.:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike, **Segments:** 1 through 5

**Counties:** Dallas, Denton, and Collin

Unless otherwise specifically provided in the Contract, all equipment, material and articles incorporated into the Work covered by the Contract shall be new and of the most suitable grade for the purposes intended.

The Contractor warrants that Work performed under this Contract shall conform to the Contract requirements. The Contractor shall, without charge, replace or correct Work found by the Authority not to conform to Contract Plans, Standard Specifications, Special Specifications, or other requirements, terms, or conditions of the Contract.

With respect to all equipment, materials and designs furnished or workmanship performed by the Contractor or any subcontractor or supplier of Contractor at any tier, the Contractor warrants that the Work is free of defects, and the Contractor covenants to correct at the Contractor's expense any defects in equipment, materials, and designs furnished or workmanship performed by the Contractor or any subcontractor or supplier of Contractor at any tier.

In addition, the Contractor shall remedy at the Contractor's expense any damage to real or personal property owned or controlled by the Authority, when the damage is the result of the Contractor's failure to conform to the Contract requirements or any defect of equipment, material, workmanship, or design furnished.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION**  
**IMPORTANT NOTICE TO CONTRACTORS**  
**“NTTA ENTERPRISE PROJECT DELIVERY SYSTEM”**

**1. Introduction**

The NTTA Enterprise Project Delivery System (the EPDS) is the Authority’s web-based computer system that provides management applications such as, notices, field and office management, and file management including, but not limited to, forms, workflows, administrative applications, and reports. The EPDS serves as a record repository by tracking and storing project records such as contract documents, correspondences, plans and shop drawing submittals, requests for information (RFIs), nonconformance reports (NCRs), corrective action requests (CARs), prevention action reports (PARs), and other construction submittals from the execution to the close out of a contract. The EPDS produces various types of reports based on the data stored in the system to help the Authority monitor the progress of the project. The EPDS utilizes workflows which correspond with the NTTA Quality Management System (QMS) Manual which provides procedures and requirements to achieve the standards and quality set forth by the Authority. The project information within the EPDS may be accessed over the internet 24 hours a day, seven days a week.

**2. Contractor’s Obligations**

The Contractor, and its designated representatives, shall utilize the EPDS for all transmittals, submittals, RFIs, and other tasks requested by the Engineer. All project related documents shall be processed in accordance with the applicable workflows shown in the EPDS including, but not limited to, records of correspondence, schedules, progress reports, inspection reports, requests for information, meeting agendas, meeting minutes, shop drawing submittals, plan revision submittals, change orders, NCRs, CARs, PARs, progress payments, etc. The EPDS is an official record of all communications between the Contractor and the Authority.

The Contractor and designated representatives shall understand the procedures and workflows listed in the following sections of the NTTA QMS Manual which can be found at the NTTA website at [ntta.org](http://ntta.org) under “Working With Us”, and “NTTA QMS Manual and Forms”:

**A. Section 3, “Program Development Process”, Sub-section 6, “Construction”**

- 1. RFI Review Process (CON-01).** CON-01 defines the process by which an RFI is reviewed, response developed, finalized, and returned to the prime contractor.
- 2. Submittal Review Process (CON-02).** CON-02 defines the process by which a construction submittal is reviewed and approved.
- 3. Change Order (CO) Process (CON-03).** CON-03 defines the process by

which a contract change order is requested and approved.

4. **Construction Administration (CON-04).** CON-04 documents the processes by which a construction contract is administered, monitored, and managed.
5. **Construction Contract Closeout (CON-06).** CON-06 defines the process for closeout of a construction contract to ensure that all specified work has been completed in accordance with requirements of the contract, that all documents of record have been received, and that all financial aspects of the contract are addressed and resolved.

**B. Section 4, “Program Administration and Support”, Sub-section 2, “Document Management”**

1. **Document Control (DM-01).** DM-01 defines the procedure for approval, distribution, filing and control of NTTA Global project and Corridor specific documents.

**C. Section 4, “Program Administration and Support”, Sub-section 4, “Quality Management”**

1. **Quality Audit (QM-08).** QM-08 defines the procedure by which the Authority will schedule, conduct, and report results of quality audits conducted against the NTTA established processes.
2. **Control of Nonconforming Items – Construction (QM-09).** QM-09 defines the procedure for controlling nonconforming items in construction including identification, segregation, resolution, and re-inspection as necessary.
3. **Corrective & Preventive Action (QM-10).** QM-10 defines the procedure for processing requests for corrective or preventive actions as a result of customer complaints, an identified process nonconformance or a potential nonconformance either resulting from an audit or other awareness of process failings or nonconformance.

**D. Section 4, “Program Administration and Support”, Sub-section 5, “Environmental Management”**

1. **Storm Water Management (ENV-01).** ENV-01 defines the monitoring process to ensure compliance with the Construction General Permit (CGP) issued by the Texas Commission on Environmental Quality (TCEQ) under its Texas Pollutant Discharge Elimination System (TPDES) permitting program for construction activities.
2. **Environmental Documentation Submittal Process (ENV-02).** ENV-02 defines the process by which all environmental documents shall be prepared and submitted.
3. **Control of Environmental Nonconformance (ENV-03).** ENV-03 defines the procedure for processing environmental compliance nonconformance including identification, resolution, implementation of solution, re-inspection, and closure.

Within 7 days after the Contract is awarded by the NTTA Board, or when notified by the

Engineer, the Contractor shall submit a list containing the name, company, role/title, telephone number, and e-mail address of individuals who will attend the training sessions for the use of the EPDS, which will be provided by the Authority at no cost. All EPDS users shall complete the training prior to receiving access to the EPDS; no exceptions will be granted. The Contractor and its designated representatives shall agree to comply with all terms and conditions associated with its use of the EPDS. Any time during the construction, the Contractor may request for additional EPDS training as a refresher course for existing EPDS users or to add new individuals who will require use of the EPDS.

### **3. Equipment**

The Contractor shall obtain the necessary computer equipment, at its own expense, to access the EPDS.

Computer equipment and software requirements are listed in the General Notes and Specification Data of the project.

In the event that the EPDS becomes inoperable or unavailable to the Contractor, the Contractor shall contact the Authority's EPDS helpdesk to have the software repaired and contact the Engineer for directions of processing documentation until the EPDS is operational. Any expenses incurred for extra work will be subsidiary to various items in the Contract. Once the EPDS is in operation again, the Contractor shall upload the required documentation and submit the requests through the EPDS.

### **4. Documentation**

All project documents that are uploaded and transmitted via the EPDS must comply with the following electronic formats:

- A.** Documents generated by Microstation or AutoCAD shall be printed to Portable Document Format (PDF) files using Adobe Acrobat software.
- B.** Manually marked-up documents such as drawings, sketches, correspondence, etc. or documents with non-electronic signatures shall be scanned to Tagged Image Format (TIF) or PDF files with a minimum resolution of 300 dpi using CCITT Group 4 (2d Fax) compression.
- C.** Documents generated by software programs such as Microsoft Office and graphic designing software shall be printed to PDF files using Adobe Acrobat software. No scanning will be permitted.
- D.** Electronic photographs shall be uploaded in Joint Photographic Experts Group (JPEG) or (JPG) files, sized at a minimum resolution of 1024x768 pixels.
- E.** Grayscale or color photo images that are scanned shall be saved to JPEG or JPG files with medium to low quality compression at a minimum resolution of 300 dpi.
- F.** Product data in PDF files available for download from the Manufacturer's website may be used.

October, 2009

**5. Nonconformance of Work.** The Engineer will issue a CAR/PAR and correction shall be made in accordance with the CAR/PAR processes if the Contractor fails to:

- A. participate in the EPDS training,
- B. use the EPDS to process project documentation,
- C. follow the procedures and workflows set forth in the NTTA QMS Manual,
- D. provide equipment, or
- E. provide documentation in the format set forth in this Special Provision.

**6. Measurement and Payment.** The work performed, materials furnished, equipment, labor, tools, and incidentals will not be measured or paid for directly, but will be subsidiary to various bid Items.

**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION**  
**IMPORTANT NOTICE TO CONTRACTORS**  
**“NTTA BUSINESS DIVERSITY PRISM CONTRACT COMPLIANCE**  
**TRACKING SOFTWARE”**

**1. Introduction**

The NTTA PRISM contract compliance software (NTTA PRISM system) is the Authority’s web-based computer system that tracks the monthly subcontractor payment reporting for NTTA contracts.

As outlined in the NTTA Business Diversity Department Contracting and Compliance Manual (CCM), if a contract includes a D/M/WBE subcontracting commitment, the prime contractor shall submit a Monthly Subcontractor Progress Report (Form 4907) to the Business Diversity Department (BDD). Form 4907 reflects actual payments made for the specific month indicated. Information provided on Form 4907 is utilized to monitor and track the percentage of work performed by all subcontractors and to confirm whether the contract-specific goal established is fulfilled.

When fully implemented, the NTTA PRISM system is intended to replace the current manual subcontractor payment reporting with a more efficient online reporting process.

**2. Contractor’s Obligations**

The Contractor shall utilize the NTTA PRISM system for monthly subcontractor payment reporting and other reporting compliance as outlined in the CCM. Contractors will have a designated User ID and password to login to the NTTA PRISM system and may access the NTTA PRISM system over the internet 24 hours a day, seven days a week via the following link: <http://pro.prismcompliance.com>.

The NTTA PRISM system is an official record of communications between the Contractor and the NTTA Business Diversity Department. Information provided in the NTTA PRISM system is utilized to monitor and track the percentage of work performed by all subcontractors and to confirm whether the contract-specific goal established is fulfilled.

The Contractor shall understand the procedures listed in the Pre-Award and Post-Award Compliance sections of the CCM which can be found at the NTTA website at [ntta.org](http://www.ntta.org) under “Working With Us”, and “Business Diversity”.  
<http://www.ntta.org/WorkingWithUs/Business+Diversity+Department/>

Within 14 days after the Contract is awarded, the Contractor shall submit a list containing the name, company, role/title, telephone number, and e-mail address of individuals who will attend the training sessions for the use of the NTTA PRISM system. Training will be provided by the Authority at no cost. All the NTTA PRISM system users shall complete the training prior to receiving access to the NTTA PRISM system; no exceptions will be granted. The Contractor shall agree to comply with all terms and conditions associated with its use of the NTTA PRISM system. At any time during the contract, the Contractor may request for additional NTTA PRISM system training as a refresher course for existing NTTA PRISM system users or to add new individuals who will require use of the NTTA PRISM system.

### **3. Equipment**

The Contractor shall obtain the necessary computer equipment, at its own expense, to access the NTTA PRISM system. Please refer to the General Notes in the plan set regarding the list of computer equipment and software required for this project to meet the requirements set forth in the Special Provision 0.19, "Importance Notice to Contractors – NTTA Enterprise Project Delivery System". This same list of computer equipment and software required will suffice for the NTTA PRISM system.

The Contractor will be able to access the NTTA PRISM system via the internet from any location 24 hours a day using their designated user id and password via the following link: <http://pro.prismcompliance.com>. In the event that the NTTA PRISM system becomes inoperable or unavailable to the Contractor, the Contractor shall contact the Business Diversity Department to have the software repaired and for directions of processing required documentation until the NTTA PRISM system is operational. Once the NTTA PRISM system is in operation again, the Contractor shall upload the required documentation through the NTTA PRISM system.

### **4. Documentation**

The Contractor shall understand the procedures listed in the Pre-Award and Post-Award Compliance sections of the CCM and submit all required documentation.

### **5. Noncompliance**

The Contractor shall understand and be required to comply with the procedures listed in the Pre-Award and Post-Award Compliance sections of the CCM which can be found at the NTTA website at [ntta.org](http://www.ntta.org) under "Working With Us", and "Business Diversity".  
<http://www.ntta.org/WorkingWithUs/Business+Diversity+Department/>

### **6. Measurement and Payment**

The work performed, materials furnished, equipment, labor, tools, and incidentals required for compliance with this special provision will not be measured or paid for directly, but will be subsidiary to the various bid items.

**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION TO ITEM 1**  
**“DEFINITION OF TERMS”**

For this Contract, the Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges, June 1, 2004 (the “Texas Standard Specifications”), all documents referenced therein, and all manuals, bulletins, supplements, specifications, and similar materials issued by the Texas Department of Transportation (“TxDOT”), or any predecessor or successor thereto, which are applicable to this Contract, are hereby modified with respect to the terms cited below and no others are changed hereby.

THE TERM “STATE”, “STATE HIGHWAY AGENCY”, “STATE HIGHWAY DEPARTMENT OF TEXAS”, “STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION”, “TEXAS STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION”, “TEXAS DEPARTMENT OF TRANSPORTATION”, “DEPARTMENT”, “TEXAS TURNPIKE AUTHORITY”, “STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION COMMISSION”, “TEXAS DEPARTMENT OF TRANSPORTATION COMMISSION”, “TEXAS TRANSPORTATION COMMISSION”, “STATE HIGHWAY COMMISSION”, OR “COMMISSION” SHALL, IN THE USE OF THE TEXAS STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND SPECIAL SPECIFICATIONS AND GENERAL NOTES AND SPECIFICATION DATA PERTAINING THERETO, AND REQUIRED CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS, FOR ALL WORK IN CONNECTION WITH THE NORTH TEXAS TOLLWAY AUTHORITY SYSTEM, AND ALL EXTENSIONS, ENLARGEMENTS, EXPANSIONS, IMPROVEMENTS, AND REHABILITATIONS THERETO, BE DEEMED TO MEAN THE NORTH TEXAS TOLLWAY AUTHORITY, UNLESS THE CONTEXT CLEARLY INDICATES A CONTRARY MEANING. ANY REFERENCE IN THE TEXAS STANDARD SPECIFICATIONS TO THE STATE OF TEXAS, OR TO ITS OFFICIALS, EMPLOYEES, OR AGENTS, SHALL BE DEEMED TO MEAN THE NORTH TEXAS TOLLWAY AUTHORITY, ITS OFFICIALS, EMPLOYEES, OR AGENTS.

For this Contract, Item 1 of the Texas Standard Specifications is hereby modified with respect to the clauses cited below and no other clause or requirement of this Item is waived or changed hereby.

Article 1.2, “**Abbreviations**”, is hereby supplemented by the following:

NPDES	National Pollution Discharge Elimination System
DBE	Disadvantaged Business Enterprise
SBE	Small Business Enterprise

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MBE	Minority Business Enterprise
WBE	Women Business Enterprise
D/M/W/SBE	Disadvantaged, Minority, Women-Owned and Small Business Enterprise

Article 1.28, “**Commission**”, is hereby deleted and replaced by the following:

**1.28. Commission.** The North Texas Tollway Authority, a regional tollway authority and a political subdivision of the State of Texas authorized and existing pursuant to Chapter 366 of the Texas Transportation Code, unless the context clearly indicates a contrary intent and meaning.

Article 1.33, “**Contract**”, is hereby deleted and replaced by the following:

**1.33. Contract.** The agreement between the Authority and the Contractor establishing the obligations of the parties for furnishing of materials and performance of the work prescribed in the Contract Documents.

Article 1.34, “**Contract Documents**”, is hereby deleted and replaced by the following:

**1.34. Contract Documents.** Elements of the Contract including, but not limited to, the plans, the form of Contract attached hereto, the Texas Standard Specifications, the General Notes and Specification Data attached hereto, the Special Provisions attached hereto, the Special Specifications attached hereto, the forms of Disclosure Statement, Certification, Affidavit, Contractor’s Assurance, contract bonds and similar provisions attached hereto, and all addenda thereto and all change orders and supplemental agreements thereto, together with the conditions of the Proposal and all applicable provisions of the Procurement Policy.

Article 1.45, “**Debar (Debarment)**”, is hereby deleted and replaced by the following:

**1.45. Debar (Debarment).** Action taken by the Authority, Texas Department of Transportation, or federal government pursuant to regulations that prohibit a person or company from entering into a Contract, or from participating as a subcontractor, or supplier of materials or equipment used in a project of the Authority or in a highway improvement Contract as defined in Transportation Code, Chapter 223, Subchapter A.

Article 1.47, “**Department**”, is hereby deleted and replaced by the following:

**1.47. Department.** The North Texas Tollway Authority, a regional tollway authority and a political subdivision of the State of Texas authorized and existing pursuant to Chapter 366 of the Texas Transportation Code, unless the context clearly indicates a contrary intent and meaning.

Article 1.50, “**Disadvantaged Business Enterprise (DBE)**”, is hereby deleted and replaced by the definition set forth in the NTTA Business Diversity Department

Contracting & Compliance Manual (CCM) and as supplemented in the front end document to the contract titled “Disadvantaged, Minority, Women-Owned and Small Business Enterprise Program”.

Article 1.53, “**Engineer**”, is hereby deleted and replaced by the following:

**1.53. Engineer.** The Director of Project Delivery or Director of Maintenance for the Authority, or his or her duly authorized representative acting within the scope of his authority.

Article 1.58, “**Hazardous Materials or Waste**”, is hereby deleted and replaced by the following:

**1.58. Hazardous Materials or Waste.** The term Hazardous Materials or Waste shall mean any hazardous or toxic substances, materials, or wastes including, but not limited to, a “hazardous substance” under 40 C.F.R. part 302, a “hazardous waste” under 40 C.F.R. part 261, asbestos, petroleum, polychlorinated biphenyls, lead-based paint, and any substance or waste regulated under state law by the Texas Commission on Environmental Quality or the Texas Railroad Commission.

Article 1.70, “**Letting Official**”, is hereby deleted and replaced by the following:

**1.70. Letting Official.** The employee of the Authority, empowered by the Executive Director of the Authority, will officially receive bids and close the receipt of bids at an advertised letting.

Article 1.75, “**Major Item**”, is hereby deleted and replaced by the following:

**1.75. Major Item.** Any item of work included in the Contract that has a total cost equal to or greater than the lesser of (1) 5% of the total Contract amount (i.e. the original Contract amount, as modified by all Change Orders), or (2) \$100,000.

Article 1.120, “**Special Provisions**”, is hereby supplemented by the addition of the following:

Special provisions include, but are not limited to, Important Notices to Contractors included with the proposal form.

Article 1.123, “**Small Business Enterprise (SBE)**”, is hereby deleted and replaced by the definition set forth in the NTTA Business Diversity Department Contracting & Compliance Manual (CCM) and as supplemented in the front end document to the contract titled “Disadvantaged, Minority, Women-Owned and Small Business Enterprise Program”.

Article 1.124, “**State**”, is hereby deleted and replaced by the following:

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**1.124. State.** The North Texas Tollway Authority, a regional tollway authority and a political subdivision of the State of Texas authorized and existing pursuant to Chapter 366 of the Texas Transportation Code, unless the context clearly indicates a contrary intent and meaning.

Article 1.128, "**Subcontractor**", is hereby deleted and replaced by the following:

**1.128. Subcontractor.** An individual, partnership, limited liability company, corporation, or any combination thereof to which the Contractor sublets, or proposes to sublet, any portion of a Contract, excluding a material supplier, a hauling firm hauling only from a commercial source to the project, truck owner-operator, wholly owned subsidiary, or specialty-type businesses such as security companies and rental companies.

Article 1.133, "**Supplemental Agreement**", is hereby amended by deleting the second sentence thereof, which is hereby replaced by the following:

A supplemental agreement will be used by the Authority whenever the modifications include: (1) assignment of this Contract from one entity to another, (2) a change in the name of the Contractor, (3) an agreement with the Surety to complete a defaulted contract, or (4) other cases desired by the Authority.

Article 1.146, "**Work Order**", is hereby supplemented by the addition of the following:

Work order also shall be defined as the "Notice to Proceed."

**Item 1** is hereby supplemented by the addition of the following Articles:

**1.148. Authority.** The North Texas Tollway Authority (NTTA), a regional tollway authority and a political subdivision of the State of Texas authorized and existing pursuant to Chapter 366 of the Texas Transportation Code.

**1.149. Bid.** The offer of the bidder for performing the work described in the plans and specifications including any changes made by addenda.

**1.150. Diversity Policy.** The Disadvantaged, Minority, Women-Owned and Small Business Enterprise Policy originally adopted by the NTTA Board of Directors under Resolution 10-19. The Diversity Policy Statement incorporates the policies, objectives and requirements of state and federal laws relating to procurement and contracts, and outlines the specific programs established by the NTTA to ensure participation of disadvantaged, minority, women-owned and small businesses in NTTA procurement opportunities.

**1.151. Construction Contract Closeout Process.** A process for closeout of construction contract to ensure that all specified work has been completed in accordance with requirements of the contract, that all documents of record have been received, and that all financial aspects of the contract are addressed and resolved.

**1.152. Construction Manager.** The consultant to the Authority, or its duly authorized representative, providing construction management, oversight, coordination, and liaison among contractors, the public, local governments, consultants, engineers, and the Authority. Unless otherwise designated by the Authority, the Construction Manager shall serve as the Engineer.

**1.153. Consulting Engineers.** The consultant to the Authority, with that term being further defined in the Trust Agreement, or its duly authorized representative. See General Notes and Specification Data for the assigned Consulting Engineers.

**1.154. Corridor Manager.** The consultant to the Authority, or its duly authorized representative, charged by the Authority with responsibility to manage and oversee the planning, design, and construction of all sections of an Authority project throughout the entire length of the project corridor.

**1.155. County.** A political subdivision of the State as stated under Article 9, "Counties," of the Texas Constitution.

**1.156. North Texas Tollway Authority System.** A grouping of the following Turnpike projects of the Authority: the Dallas North Tollway, the Addison Airport Toll Tunnel, the President George Bush Turnpike, the Eastern Extension of the President George Bush Turnpike, the Mountain Creek Lake Bridge, the Lewisville Lake Toll Bridge, and the Sam Rayburn Tollway, together with all present and future expansions, extensions, enlargements, improvements, and rehabilitations thereto, all of which being financed, constructed, operated and administered by the Authority as a single operating system.

**1.157. Design Section Engineer.** The consultant to the Authority charged by the Authority with responsibility to develop and manage the design of a roadway section of the project corridor. See General Notes and Specification Data for the assigned Design Section Engineer.

**1.158. Final Completion.** As defined in Article 8.5, "Failure to Complete Work on Time", which is set forth in the Special Provision to Item 8, "Prosecution and Progress".

**1.159. Procurement Policy.** The "Policy Regarding Procurement of Goods and Services and Disposition of Property by the North Texas Tollway Authority," adopted by the Authority under Authority Resolution 04-57, as amended from time to time.

**1.160. Project.** The construction improvement, expansion, and enlargement by the Authority of the North Texas Tollway Authority System or any other turnpike project that the Authority is authorized by law to construct, improve, expand, or enlarge through the performance of the work, including the construction of turnpike main lanes, service roads, approach roadways, interchanges, intersections, ramps, toll facilities, bridges, buildings, and landscaping, and/or, where appropriate, the modification of existing structures and roadway, all in conformance with (a) the Contract, (b) respect to a North Texas Tollway Authority System project, a Trust Agreement dated as of July 1, 1989, as

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supplemented from time to time by Supplemental Trust Agreements (collectively the "Trust Agreement"), establishing and governing the operation of the North Texas Tollway Authority System and governing the revenue bonds from which the cost of constructing the project will be paid, (c) all other applicable documents governing additional sources of funding for the project (if any), and (d) the provisions of Chapter 366 of the Texas Transportation Code, as amended, hereinafter referred to as the "Turnpike Act".

**1.161. Substantial Completion.** As defined in Article 8.5, "Failure to Complete Work on Time", which is set forth in the Special Provision to Item 8, "Prosecution and Progress".

**1.162. Temporary Structures.** All temporary bridges, culverts, and structures required to maintain traffic during the construction of the work.

## NORTH TEXAS TOLLWAY AUTHORITY

### SPECIAL PROVISION TO ITEM 2

#### “INSTRUCTIONS TO BIDDERS”

For this Contract, Item 2 of the Texas Standard Specifications is hereby modified with respect to the clauses cited below and no other clause or requirement of this Item is waived or changed hereby.

Article 2.2, “**Eligibility of Bidders**”, is hereby deleted and replaced by the following:

**2.2. Eligibility of Bidders.** The Bidder must be capable of performing each of the various items of the work bid upon.

Unless otherwise noted in the proposal, at the time of bid submission the Bidder must be prequalified with TxDOT as a bidder of sufficient financial strength and competency to be considered for performing all aspects and meeting all requisites of this proposal, and the estimated cost of the proposed Contract must be within the Bidder’s available bidding capacity. The Authority reserves the right, at its sole option, to request a hard copy of the TxDOT prequalification from the low bidder as a proof of current eligibility prior to award of the contract.

Unless otherwise noted in the proposal, a firm not prequalified with TxDOT and/or not having a bidding capacity within the estimated cost of the proposed Contract shall not be eligible to bid, and any bid submitted by such a firm shall be rejected and shall not be considered by the Authority. In the case of a joint venture, unless otherwise noted in the proposal, all joint venture participants must be prequalified with TxDOT, and an equally divided portion of the estimated cost of the proposed Contract must be within each participant’s available bidding capacity.

Article 2.3, “**Issuing Proposal Forms**”, is hereby deleted and replaced by the following:

**2.3. Issuing Proposal Forms.**

**A. Requests for Proposal Forms.** A potential Bidder may view, purchase, and download the plans, specifications, and other related contract documents of a specific project online at <http://www.thomasrepro.com/dfs/ntta>. Vendors wishing to view, purchase, and download plans and specifications online must first register with Thomas Reprographics. A list of proposed construction procurements can be found at the Authority website ([www.ntta.org](http://www.ntta.org)).

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**B. Non-issuance of Proposal Forms for Construction Contracts.** A potential Bidder will not be eligible to submit its bid if one or more of the following apply:

1. For a proposed Contract involving federal funds, at the time of the bid opening, the Bidder is disqualified or debarred by an agency of the federal government as a participant in programs and activities involving federal assistance and benefits.
2. For any proposed Contract, at the time of the bid opening, the Bidder is suspended or debarred by the Texas Transportation Commission or the Authority, or is prohibited from rebidding a specific proposal because of bid error or failure to enter into a Contract of the first awarded bid.
3. For any proposed Contract, at the time of the bid opening, the Bidder or a subsidiary or affiliate of the Bidder has received compensation from the Authority to participate in the preparation of the plans or specifications on which the bid or Contract is based.

Article 2.5, “**Examining Documents and Work Locations**”, is hereby supplemented by the addition of the following:

The estimate of quantities shown on the plans or in the proposal, whether based on subsurface investigations or not, are in no way warranted to indicate the true quantities or distribution of quantities.

Make direct requests in writing to the Authority for clarification of and/or explanation of the proposal, plans, special notices, Standard Specifications, Special Provisions to the Standard Specifications, Special Specifications, General Notes and Specification Data, or any other Contract Documents. Any response by the Authority to Bidders’ requests will be based upon such information and knowledge available to the Authority at the time of the request; however, the Authority does not warrant the accuracy of any such response.

Article 2.6, “**Preparing the Proposal**”, is hereby supplemented by the following:

Include, in a form prescribed by the Authority, a certification of eligibility status. The certification shall describe any suspension, debarment, voluntary exclusion or ineligibility determination actions by an agency of the federal government, and any indictment, conviction or civil judgment involving fraud or official misconduct, each with respect to the Bidder or any person associated therewith in the capacity of owner, partner, director, officer, principal investor, project director/supervisor, manager, auditor or a position involving the administration of federal funds, and shall cover the 3 year period immediately preceding the date of the proposal.

Information adverse to the Bidder as contained in the certification will be reviewed by the Authority and by the Federal Highway Administration (FHWA), and may result in rejection of the bid and disqualification of the Bidder.

Article 2.7, “**Nonresponsive Proposals**”, is hereby supplemented by the following:

Proposals may be rejected if they show any alteration of words or figures, additions not called for, conditional or uncalled for alternate bids, incomplete bids, any alteration of words or figures or erasures not initialed by the person or persons signing the proposal or irregularities of any kind.

Section 2.8.A. “**Guaranty Check**”, is hereby amended by replacing the reference to “Texas Transportation Commission” with “North Texas Tollway Authority”.

Article 2.9, “**Delivery of Proposal**”, is hereby deleted and replaced by the following:

**2.9. Delivery of Proposal.** Proposals shall be submitted to the location described in the official advertisement of the project. Place the completed proposal form, the certifications required under Article 2.6, the proposal guaranty, the total bid amount form, the bid price schedule, the affidavits, and other required documents as specified in the Proposal Book in a sealed envelope marked to indicate the contents. When submitting by mail, place the envelope in another sealed envelope and address as indicated in the official advertisement of the project. The mailing envelope or outermost envelope should clearly state the bid or response name and number and be addressed to the attention of the Director of Procurement Services/NTTA Letting Official. It is the Bidder’s responsibility to ensure that the sealed proposal arrives at the location described in the official advertisement on or before the hour and date set for the opening. The proposal must be in the hands of the Director of Procurement Services/NTTA Letting Official by that time, regardless of the method chosen for delivery, in order to be accepted.

Article 2.14.C, “**Rounding of Unit Prices**”, is hereby deleted and replaced by the following:

**C. Rounding of Unit Prices.** The Authority will round off all unit bids involving fractional parts of a cent to the nearest whole cent (\$0.00) in determining the amount of the bid as well as computing the amount due for payment of each Item under the Contract. For rounding purposes, entries of five-tenths of a cent or more will be rounded up to the next highest cent, while entries less than five-tenths of a cent will be rounded down to the next lowest cent.

Article 2.14.E, “**Consideration of Unit Prices**”, is hereby amended by deleting the first paragraph of that Article, which is hereby replaced by the following:

**E. Consideration of Unit Prices.** Unit bid price entries such as no dollars and no cents, zero dollars and zero cents, or numerical entries of \$0.00, will be tabulated as one whole cent (\$0.01).

Article 2.14.F, “**Consideration of Alternate Items**”, is hereby amended by deleting the first paragraph of that Article, which is hereby replaced by the following:

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**F. Consideration of Alternate Items.** The Authority will make two calculations using one cent (\$0.01) for each item if:

Article 2.15, “**Consideration of Bid Errors**”, is hereby amended by deleting the last paragraph of that Article, which is hereby replaced by the following:

Acceptance of the bid error claim will, as determined solely by the Authority, result in either:

- rejection of all bids; or
- award of the Contract to the second lowest Bidder, provided that the second lowest Bidder’s unit bid prices are reasonable, as determined by the Executive Director, and the Executive Director recommends in writing the award of the Contract to the second lowest Bidder.

If the Authority elects to reject all bids, the erring Contractor will not be allowed to rebid the project when it is relet and may be subject to sanctions by the Authority.

**Item 2** is hereby supplemented by the addition of the following Articles:

**2.17. Child Support Order Compliance.** A child support obligor who is more than 30 days delinquent in paying child support, and a business entity in which the obligor is a sole proprietor, partner, shareholder, member, or owner with an ownership interest of at least 25%, are not eligible to receive payments from state funds under a contract to provide property, materials or services, or receive a state-funded grant or loan.

If the project is funded in whole or in part with state funds or by a state-funded grant or loan, by signing the Contract, the Contractor shall be deemed to:

- certify, under penalty of perjury under the laws of the State of Texas, that the sole proprietor, partner, shareholder, member, or owner of the firm is not 30 or more days delinquent in providing child support;
- acknowledge that the Authority is relying on the foregoing material representation of fact in entering into the Contract;
- agree that if it is later determined that the Contractor knowingly rendered an erroneous representation, then, in addition to other remedies available, the Authority may terminate the Contract for cause or default; and
- agree to provide immediate written notice to the Authority if at any time it learns that its representation was erroneous when submitted or has become erroneous by reason of changed circumstances.

**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION TO ITEM 3**  
**“AWARD AND EXECUTION OF CONTRACT”**

For this Contract, Item 3 of the Standard Specifications is hereby modified with respect to the clauses cited below and no other clause or requirement of this Item is waived or changed hereby.

Article 3.1, “**Award of Contract**”, is hereby deleted and replaced by the following:

**3.1. Award of Contract.** Within 100 days after the opening of proposals, the Authority or designated representative will award the Contract, reject all proposals, or defer awarding the Contract or rejecting all proposals for up to 210 days following the opening of proposals. The Authority reserves the right to reject any or all proposals and to waive technicalities in the best interest of the Authority.

The award of the Contract shall occur when the Authority’s Board of Directors (“Board”) or a designated representative duly authorized by the Board to award Contracts accepts a Contractor’s bid for a proposed Contract and authorizes the Authority to enter into the Contract.

**A. Award.** The Authority or designated representative will award the Contract to the lowest responsible Bidder as determined by Article 2.14, “Tabulating Bids.” The Authority may award a Contract to the second lowest responsible Bidder when all of the following requirements have been met:

1. The low Bidder withdraws its bid, or the Authority determines the low Bidder materially fails to meet the Authority’s qualification requirements, or the Authority rejects the low bid under Article 3.1.B, “Rejection of Low Bid,” of this Special Provision.
2. The second lowest responsible Bidder’s unit bid prices are reasonable as determined by the Executive Director.
3. The Executive Director recommends in writing the award of the Contract to the second lowest responsible Bidder.

**B. Rejection of Low Bid.** The Authority will reject the low bid and, if the same or substantially the same Contract is relet, the Bidder will not be allowed to bid on such Contract, if either:

1. The low bid is mathematically and materially unbalanced; or
2. The low bid contains a bid error that satisfies the requirements and criteria in

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Article 2.15, "Consideration of Bid Errors."

**C. Rejection of All Bids.** The Authority will reject all proposals if any of the following exist:

1. Collusion may have existed among the Bidders. Collusion participants will not be allowed to bid future proposals for the same Contract.
2. The lowest bid is materially higher than the Authority's estimate and the Authority determines that re-advertising for bids is likely to result in a lower bid.
3. Rejection of the Contract is in the best interest of the Authority.

**D. Deferral.** The Authority may defer the award of the Contract or reject any or all proposals when deferral or rejection is in the best interest of the Authority.

Article 3.3, "**Disadvantaged Business Enterprise (DBE)/Small Business Enterprise (SBE)**", is hereby deleted and replaced by the following:

**3.3. Disadvantaged, Minority, Women-Owned and Small Business Enterprise (D/M/W/SBE).** Submit all subcontractor information in the timeframe specified when required by the proposal.

Article 3.4, "**Execution of Contract**", is hereby amended as follows:

### **3.4 Execution of Contract**

1. Delete the words "and Surety" in Article 3.4.A., "Contracts"; and
2. Add the following paragraphs to the end of Article 3.4.B., "Bonds", immediately after "Table 1" thereof:

If required under the proposal, submit within 15 days after written notification of the award of the Contract an executed warranty bond with powers of attorney in the amount specified in the proposal. Furnish the warranty bond as a guaranty for the Authority for the faithful performance of all warranty obligations regarding the work.

For all federally funded projects, submit within 15 days after written notification of the award of the Contract an executed retainage bond with powers of attorney in the amount of 10% of the full amount of the Contract price. The retainage bond is to be used as a guaranty for the protection of any claimants and the Authority for overpayments, liquidated damages, and other deductions or damages owed by the Contractor in connection with the Contract.

Article 3.5, "**Failure to Enter Contract**", is hereby deleted and replaced by the following:

### **3.5. Failure to Enter Contract.**

**A. Forfeiture of Proposal Guaranty.** If the Contractor fails to comply with any of the requirements in Article 3.3, “Disadvantaged, Minority, Women-Owned and Small Business Enterprise (D/M/W/SBE)” or Article 3.4, “Execution of Contract” of this Special Provision, the proposal guaranty will become the property of the Authority, not as a penalty, but as liquidated damages. The Contractor by submitting a proposal, acknowledges and agrees that the actual amount of losses and expenses resulting from its failure to execute, file or furnish any of the foregoing items would be impossible or extremely difficult to determine, and that the liquidated damages amount represented by the proposal guaranty constitutes a fair and reasonable estimate by the parties of the amount of said losses and damages. A Bidder who forfeits its proposal guaranty in accordance with this Article 3.5, “Failure to Enter Contract” will not be considered in future proposals for the same work unless there has been a substantial change in the design of the project subsequent to the forfeiture of the proposal guaranty.

**B. Award to Second Lowest Bidder.** If the Contractor fails to comply with any of the requirements in Article 3.3 “Disadvantaged, Minority, Women-Owned and Small Business Enterprise (D/M/W/SBE)” or in Article 3.4, “Execution of Contract” of this Special Provision, the Authority may rescind the award to the lowest responsible bidder and subsequently award the Contract to the second lowest responsible Bidder when all of the following requirements have been met:

1. The second lowest responsible Bidder’s unit bid prices are reasonable, as determined by the Executive Director.
2. The Executive Director recommends in writing the award of the Contract to the second lowest responsible Bidder.

If the Authority awards the Contract to the second lowest responsible bidder, the second lowest responsible bidder shall comply with all of the requirements of Article 3.3, “Disadvantaged, Minority, Women-Owned and Small Business Enterprise (D/M/W/SBE)” and Article 3.4, “Execution of Contract” of this Special Provision.

Article 3.6, “**Approval and Execution of Contract**”, is hereby deleted and replaced by the following:

**3.6. Award and Execution of Contract.** The Authority’s award and execution of this Contract will be made or withheld pursuant to the provisions of the Regional Tollway Authority Act and the Authority’s Procurement Policy. Until the Contract is fully executed, the award of the Contract confers no rights on the firm or person to whom the Contract is awarded. Without limiting the foregoing, if the Authority determines that termination of the procurement is in the best interest of the Authority or the public, then regardless of whether the award has been made, the Authority may terminate the procurement at any time before the Authority’s execution of the Contract. By submitting

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a bid, each Bidder waives any and all claims against the Authority for all loss, cost expense, liability, or other damages suffered by the Bidder due to the Authority's termination of the procurement before the full execution of the Contract.

Article 3.7, "**Return of Proposal Guaranty**", is hereby deleted and replaced with the following:

**3.7. Return of Proposal Guaranty.** The proposal guaranty check of the two lowest Bidders will be retained until after the Contract has been rejected or awarded and executed. Bid bonds will not be returned.

**Item 3** is hereby supplemented by the addition of the following Articles:

**3.11. Independent Contractor.** Operate entirely as an independent contractor in the performance of services rendered under this Contract. **TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW, INDEMNIFY AND SAVE HARMLESS THE AUTHORITY, ITS AGENTS, CONSULTANTS, DIRECTORS, OFFICERS, AND EMPLOYEES FROM ANY CLAIMS OR LIABILITIES ARISING IN ANY MANNER WHATSOEVER FROM THE CONTRACTOR'S NEGLIGENCE OR WRONGFUL ACTS IN PERFORMANCE OF THE CONTRACT, ALL AS MORE PARTICULARLY SET FORTH IN ITEM 7.** Confirm that all required rights of entry have been obtained and take all appropriate steps to ensure the safety of the Contractor's employees and of the public in connection with its pursuit of the services provided under this Contract. Not represent itself to any party as being an agent of the Authority, the Consulting Engineers, the Design Section Engineer, the Corridor Manager, or the Construction Manager. Nothing in this Contract is intended to create, nor shall be deemed or construed by the parties or by any third party as creating, (1) the relationship of principal and agent, partnership or joint venture between the Contractor and the Authority, the Consulting Engineers, the Design Section Engineer, the Corridor Manager, or the Construction Manager, or (2) a joint enterprise between the Contractor and the Authority, the Consulting Engineers, the Design Section Engineer, the Corridor Manager, the Construction Manager and/or any other party. Without limiting the foregoing, the purposes for which the Contractor and the Authority have entered into this Contract are separate and distinct, and there are no pecuniary interests, common purposes and/or equal rights of control among the parties hereto.

**3.12. Sole Benefit.** This Contract is entered into for the sole benefit of the Authority and the Contractor and, where permitted pursuant to Article 3.9, their respective successors and assigns. Nothing in this Contract or in any approval subsequently provided by either party hereto shall be construed as giving any benefits, rights, remedies or claims to any other person, firm, corporation or other entity, including, without limitation, the public in general or any member thereof, or to authorize anyone not a party to this Contract to maintain a suit for personal injuries, property damage or any other relief in law or equity in connection with this Contract.

**3.13. Interpretation.** No provision of this Contract shall be construed against or interpreted to the disadvantage of any party by any arbitrator or any court or other

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governmental or judicial authority by reason of such party having or being deemed to have drafted, prepared, structured or dictated such provisions. The Authority and the Contractor are of equal bargaining position and have executed this Contract of their own free wills after consulting with competent legal counsel, and both parties are fully informed of and familiar with its terms.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION TO ITEM 4**  
**“SCOPE OF WORK”**

For this Contract, Item 4 of the Texas Standard Specifications is hereby modified with respect to the clauses cited below and no other clause or requirement of this Item is waived or changed hereby.

Article 4.2, “**Changes in the Work**”, is hereby modified by the addition of the following:

Under a Contract that is not a routine maintenance Contract, if a party requests an adjustment, the following tables will control contract adjustment when a major item of the Contract is increased in excess of 125% or decreased below 75%.

**Table 2**  
**Unit Price Reduction Table**

<b>% Increase</b>	<b>Factor</b>	<b>% Increase</b>	<b>Factor</b>
25-28	0.98	61	0.86
29-32	0.97	62	0.85
33-35	0.96	63	0.84
36-38	0.95	64	0.83
39-41	0.94	65	0.82
42-44	0.93	66	0.81
45-47	0.92	67	0.80
48-50	0.91	68	0.79
51-53	0.90	69	0.78
54-56	0.89	70	0.77
57-59	0.88	71	0.76
60	0.87	72 and over	0.75

**Table 3  
Unit Price Increase Table**

<b>% Decrease</b>	<b>Factor</b>	<b>% Decrease</b>	<b>Factor</b>
25-28	1.02	61	1.14
29-32	1.03	62	1.15
33-35	1.04	63	1.16
36-38	1.05	64	1.17
39-41	1.06	65	1.18
42-44	1.07	66	1.19
45-47	1.08	67	1.20
48-50	1.09	68	1.21
51-53	1.10	69	1.22
54-56	1.11	70	1.23
57-59	1.12	71	1.24
60	1.13	72 and over	1.25

Article 4.3, “**Differing Site Conditions**”, is amended by deleting the last sentence thereof, which is hereby replaced by the following:

No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has notified the Engineer in writing of its intentions to make a claim for additional compensation under this Article before beginning such work, but in all events, at once whenever it has (or should have) knowledge of the condition(s) providing the basis for such claim. An assessment of damages is not required, but is desirable. If such notice is not given and the Engineer is not provided an opportunity to keep an accurate account of the actual cost of the work in question, then the Contractor waives its right to file a claim for such work, unless the circumstances are such that the Contractor could not reasonably have knowledge of the additional cost prior to the performance of the work. Notice of claim by the Contractor and the documentation of the cost of the work by the Engineer shall not be construed as proof or substantiation of the validity of said claim.

No contract adjustment will be allowed under this Article for any effects caused by unchanged work.

Article 4.4, “**Requests and Claims for Additional Compensation**”, is hereby deleted and replaced by the following:

**4.4 Extension of Time.** If the Work on any Critical Path item is delayed through no fault of the Contractor or its subcontractors or any entity for which it has responsibility and the Contractor has exercised reasonable efforts to recover from such delay, then the Contractor may be entitled to an extension of time within which to perform the Work. Notwithstanding anything to the contrary elsewhere in the Contract, the Contractor hereby acknowledges and agrees that in no event shall Contractor be entitled to increased costs or compensation of any kind as a result of any delay, inefficiency, disruption, hindrance, acceleration or other impediment. With respect to delays resulting from inclement weather, the Contractor shall anticipate average or usual number of inclement days when work cannot proceed and the same shall not be considered as warranting extensions of time under this Article 4.4. If, however, the Engineer determines that the Contractor is or has been delayed by conditions of weather, seasons, or flood conditions of such unusual severity as to have been unforeseeable and so as to have rendered the Contractor’s timely performance pursuant to the terms of the Contract impossible, the Engineer may grant an extension of time. A request for an extension of time under this article shall be made in accordance with Article 8.11, as set forth in the Special Provision to Item 8.

Article 4.5, “**Maintenance of Traffic**”, is hereby deleted and replaced by the following:

**4.5. Maintenance of Traffic.** Traffic must be routed over the project during construction. A suggested sequence of work is included in the plans. Unless otherwise specified in the plans, provide, as the entire responsibility of the Contractor, for the passage of traffic in comfort and safety at all times. This shall include, but not be limited to, the proper construction, maintenance, barricading, and delineation of detours. If needed, make lane closures in accordance with Article 7.9 and as further designated in the General Notes and Specification Data, the plans, or any other Contract Documents. Maintain the work in passable condition, including proper drainage, to accommodate traffic. Provide and maintain temporary approaches and crossings of intersecting highways and streets in a safe, smooth and passable condition. Construct and maintain necessary access to adjoining property as shown in the plans or as directed. Furnish, install, and maintain traffic control devices in accordance with the Contract. The cost of maintaining traffic will be paid for in accordance with the Contract. Where construction and maintenance of detours has been provided under another contract, take responsibility for any damage to such detours and barricades caused by Contractor’s own operations, and repair all such damage at its own cost and expense. Additionally, restore, at Contractor’s own cost and expense, any existing streets, roadways or other facilities for public travel, as well as any privately owned property, damaged by its operation.

The Engineer will notify the Contractor if, in the opinion of the Engineer, the above requirements are not met. The Authority may perform the work necessary for compliance, but this does not change the legal responsibilities set forth in the Contract. The cost to the Authority will be deducted from money due or to become due to the Contractor.

Article 4.6, "**Final Clean Up**", is hereby deleted and replaced by the following:

**4.6. Final Clean Up.** Upon completion of the work, remove litter, debris, objectionable material, temporary structures, excess materials, and equipment from the work locations. Clean and restore property damaged by the Contractor's operations during the prosecution of the work. Leave the work locations in a neat and presentable condition and free from any hazards which may have resulted from the Contractor's activities. This work will not be paid for directly but will be considered subsidiary to Items of the Contract.

Except as otherwise provided in the General Notes with regard to temporary shoring material, remove from the right of way cofferdams, construction buildings, material and fabrication plants, temporary structures, excess materials, and debris resulting from construction. Where work is in a stream, remove debris to the ground line of the bed of the stream. Leave stream channels and rights of way in a neat and presentable condition. Clean structures to the flow line or the elevation of the outfall channel, whichever is higher. Dispose of all excess material in accordance with federal, state, and local regulations.

If the Contractor's operations have resulted in damage to sodded areas within the right-of-way, outside or beyond the work area, resod such areas at the Contractor's expense in accordance with the applicable requirements of Item 162, "Sodding for Erosion Control".

**Item 4** is hereby supplemented by the addition of the following Articles:

**4.7. Removal and Disposal of Structures and Obstructions.** Remove all fences, buildings, and structures of any character not necessary to the prosecution of the work or other obstructions upon or within the limits of the right-of-way and dispose of them as directed by the Engineer and in all events, in accordance with all applicable laws. Unless otherwise provided in this Contract, perform the removal and disposal of such structures and obstructions at the Contractor's own expense. Such removal and disposal shall be considered subsidiary to other items of this Contract.

**4.8. Work and Storage Areas.** The Contractor will be permitted to use the existing right-of-way as a work and storage area provided such use does not interfere in any way with the prosecution of the project, the operations of other contractors or the operation of any public thoroughfare. Obtain preapproval by the Authority for any area the Contractor wishes to designate and use as a work and/or storage area. Restore

any site utilized for Contractor's operations, either on the right-of-way or on other public or private property, to the condition existing at the time work on the project began, at Contractor's sole expense, prior to termination of this Contract. Secure a release from the owner of private property so used before final payment is made under this Contract.

**4.9. Work Under Separate Contracts.** During installation, of the work, construction activities by several contractors and public utility companies may be underway within the limits of the project in which the Contractor shall perform the work under this Contract and/or areas adjacent thereto. These other contractors and public utility companies will be utilizing rights-of-way, easements, streets, and/or service roads through, in, and across the limits of this Contract. Conduct operations so as not to interfere with the work of the aforementioned parties. Coordination of efforts and cooperation among the various contractors performing work on the entire project is a requirement of the Contractor under this Contract. Should a difference of opinion arise as to the rights of the Contractor and of others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the work, and his decision shall be final and binding upon the Contractor.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION TO ITEM 5**  
**“CONTROL OF THE WORK”**

For this Contract, Item 5 of the Texas Standard Specifications is hereby modified with respect to the clauses cited below and no other clause or requirement of this Item is waived or changed hereby.

Article 5.2, “**Plans and Working Drawings**”, is hereby supplemented by the addition of the following:

Working drawings, shop fabrication plans or drawings, and those other submittals required by each item of these specifications shall be submitted according to the following procedure:

**A. Initial Submission.** For the initial submittal, submit 2 copies of the drawings or data to the Consulting Engineers for review.

**B. Returns for Corrections.** The Consulting Engineers will return 1 copy of the drawings or data to the Contractor for corrections, if necessary.

**C. Resubmission.** Resubmit 2 copies of the corrected drawings or data to the Consulting Engineers for further review.

**D. Repeat Until Approved** The above procedure will be repeated until the Contractor receives 1 copy marked “Approved”.

**E. Additional Approved Copies.** Then send 5 copies, plus those additional copies needed for Contractor’s own use, to the Consulting Engineers. These copies will be marked “Approved” and distributed. For drawings or data that affect outside fabrication, such as precast concrete and structural steel elements, 2 additional copies are required.

**F. Transmittal Letters to Authority.** Send a copy of each letter of transmittal to the Authority upon each submittal to the Consulting Engineers.

**G. Coordination and Timing of Submissions.** Prepare and transmit each submittal to the Consulting Engineers sufficiently in advance of performing related work or other applicable activities, so the construction will not be delayed or improperly sequenced by processing time, allowing for non-approval and resubmittal (if required). Coordinate each submittal with other activities. No extension of time will be authorized

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because of the Contractor's failure to transmit submittals to the Consulting Engineers sufficiently in advance of the work.

Working drawings shall be considered to be those plans required to fully inform the Engineer of construction methods the Contractor proposes to use in prosecution of the work. Shop fabrication plans or drawings or shop details shall be considered to be those plans necessary to facilitate the off-site casting of precast concrete elements or the shop fabrication, assembly, and erection of structural steel and other metalwork requiring shop fabrication before final construction. Prepare and submit shop fabrication plans or drawings and working drawings as required by the pertinent Items of the General Notes and Specification Data, Standard Specifications, Special Provisions, and Special Specifications.

In general, prepare working drawings for the retaining walls, temporary shoring of embankments, trench excavation protection, and for all features of construction for which the plans and the specifications permit a choice and selection by the Contractor. Design calculations are a requirement of this submittal.

Prepare all working drawings on standard sheets 11"x17". The margin at the left edge shall be 1 inch wide and all others 1/4 inch wide. Each sheet shall have a title in the lower right-hand corner and shall show the sheet numbering, name of the Contractor, the Authority's contract number, name(s) of the applicable County or Counties and name of supplier or subcontractor, if applicable.

The review and approval of shop drawings by the Consulting Engineers is limited to a determination of whether or not the shop drawings conform to the design concept and the requirements of this Contract, and does not extend to information not called for in this Contract.

For substructure and general construction, working drawings shall show in detail or by written description the methods and structures selected by the Contractor in sufficient detail so that their strengths, adequacies, and sufficiencies and their conformity to the permanent structure in the plans and the specifications can be checked or verified. Design calculations are a requirement of this submittal.

For reinforcing steel, working drawings shall be complete diagrams to supplement the reinforcing details shown on the plans, including any special features or variations from details shown, or to serve the Contractor's convenience; and bar lists shall include diagrams for the bending of each bar not to be used straight. Only changes or supplements to plan details will require working drawing submittals.

Tracings of all working drawings and shop fabrication plans or drawings shall have a suitable enclosure block in which is indicated the approval date and also space for similar approval dates of any revisions. After approval of working drawings and shop fabrication plans or drawings by the Consulting Engineers, no changes shall be made

without resubmission, and all changes or revisions later made shall be clearly marked and dated, and prints of drawings shall not be issued for use until after the drawing has been approved and the date of approval is noted on the tracing as stated. No work shall be done until the drawings have been approved.

In addition to the above-described working drawings and shop fabrication plans or drawings, samples, material and product certifications, and catalog cuts and brochure submittals on material, equipment, and fixtures shall be furnished to the Consulting Engineers prior to the Contractor's placing firm orders for same. Submittals shall conform to the requirements of the various trade specifications. Submittals shall show dimensions, performance characteristics and capacities, wiring diagrams, controls, schedules, and other information pertinent to the performance, construction, and durability of the item.

Prior to making a submittal, check, and cause each fabricator/subcontractor to check, all working drawings, shop fabrication plans or drawings, and material, equipment, and fixture vendor submittals to satisfy Contractor and each such fabricator/subcontractor as to the appropriateness of their application and for conformance with the plans and the specifications. Any item submitted that differs from the plans and the specifications shall be so indicated by the Contractor. Obtain and distribute submittals, as necessary, after, as well as before, final approval.

Stamp, initial, and date, and cause such fabricator/subcontractor to stamp, initial and date, each document transmitted to indicate Contractor's and such fabricator's/subcontractor's approval of the submittal. Submittals which are incomplete or indicate no attempt at conformance with this Contract will not be reviewed. Samples of materials submitted will not be returned unless the Contractor makes special arrangements for transportation.

The review of catalog cuts, brochures, and other submittals by the Consulting Engineers shall not relieve the Contractor of the responsibility for conflicts in this Contract, the plans or the specifications, unless the Contractor has, in writing, called the attention of the Consulting Engineers to such deviations at the time of the submission; nor shall it relieve the Contractor from responsibility for errors or omissions in such items that it submits for review. Review of the catalog cuts, brochures, and other submittals indicates only the acceptance of the manufacturer and quality, and assumes that the specific requirements and arrangements are in compliance with the intent of the plans and the specifications. Furnish, install, and prove in operation all mechanical and electrical devices, with the associated controls for each, to be in conformance with the intent of these Specifications and to provide satisfactory operating systems.

The Authority will not be liable for any expense by the Contractor for materials purchased, labor performed or delay of the work prior to approval of required submittals.

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When approval of a change to the fabrication and shop drawings, erection and other working drawings, samples, material and product certifications, and/or catalog cuts and brochure submittals is requested by the Contractor, obtain such approval from the Consulting Engineers in writing before proceeding with said change. Submit an adequate number of copies of the documentation pertaining to any such change to the Consulting Engineers.

Payment for all working drawings, shop drawings, and miscellaneous submittals, for revisions thereof, and for copies furnished shall be subsidiary to the related items of the proposal.

Article 5.3, “**Conformity with Plans, Specifications and Special Provisions**” is hereby deleted and replaced by the following:

**5.3. Conformity with Plans, Specifications, and Special Provisions.** Furnish materials and perform work in reasonably close conformity with the lines, grades, cross-sections, dimensions, details, gradations, physical and chemical characteristics of materials, and other requirements shown in the Contract (including additional plans for non-site-specific work). Reasonably close conformity limits will be as defined in the respective Items of the Contract or, if not defined, as determined by the Engineer. Obtain approval before deviating from the plans and approved working drawings. Do not perform work beyond the lines and grades shown on the plans or any extra work not included in the plans without the Engineer’s authority. Work performed beyond the lines and grades shown on the plans or any extra work performed without authority is considered unauthorized and excluded from pay consideration. The Authority will not pay for material rejected due to improper fabrication, excess quantity, or any other reasons within the Contractor’s control. When work fails to meet Contract requirements, remove and replace all defective work in an acceptable manner to the Engineer at no additional cost. The Engineer has the authority to correct or to remove and replace defective or unauthorized work. The cost may be deducted from any money due or to become due to the Contractor.

Article 5.4, “**Coordination of Plans, Specifications and Special Provisions**”, the first sentence is hereby deleted and replaced by the following:

The specifications, accompanying plans (including additional plans for non-site-specific work), Special Provisions, General Notes and Specification Data, Special Specifications, and supplemental agreements or change orders are intended to work together and be interpreted as a whole.

Article 5.5, “**Cooperation of Contractor**”, is hereby supplemented by the addition of the following:

**E. Removal of Superintendent.** The Engineer shall have the right to have the Superintendent furnished by the Contractor removed pursuant to this Article if, in the

Engineer's sole judgment, such Superintendent is not fulfilling his obligations under this Article and/or under this Contract, including, but not limited to, said Superintendent's failure or inability to properly interpret and implement the plans and the specifications, to effectively expedite the work and supervise all employees utilized in connection therewith, to ensure adequate communication with, and a minimum inconvenience to, the public, or to cooperate with utilities, railroads, other contractors or agencies working on the project. Failure of the Contractor to replace its Superintendent when requested by the Engineer shall be cause for the Authority to withhold progress payments.

Article 5.6, "**Construction Surveying**", is hereby deleted and replaced by the following:

**5.6. Construction Surveying.** Construct the work to the position and elevations as set out on the plans and approved changes. Provide a qualified and experienced force, acceptable to the Engineer, to establish all lines and levels, to furnish and set all construction stakes, and to perform other required survey work.

The Engineer will furnish horizontal and vertical control points, such as baseline points of intersection and bench marks, as shown on the plans.

Establish all auxiliary survey control points necessary for construction.

If there is any discrepancy between the survey and the plans, notify the Engineer and do not proceed with work affected by such discrepancy until Contractor has received instructions from the Engineer.

Reestablish all survey control points and right-of-way monuments before completion of the project. The reestablishment of survey control points and right-of-way monuments shall be by a Texas registered professional land surveyor.

The Engineer may, at its option, make spot or complete checks on all construction alignment and grades to determine the accuracy of the Contractor's survey work. These checks, however, will not relieve the Contractor of its responsibility for constructing the work to the positions and elevations as shown on the plans.

Preserve all control points established by the Engineer and if, in the opinion of the Engineer, any of the stakes or bench marks have been carelessly or willfully destroyed or disturbed by the Contractor, replace the stakes or bench marks or the cost of replacement will be charged against the Contractor and deducted from any monies due or to become due the Contractor.

No specific payment shall be made for the work required in this Article or for any rework or restaking for whatever reason, but the cost of all labor, equipment, targets, towers, stakes and other supplies necessary to perform the work shall be subsidiary to and included in the bid for the various items required by the plans and this Contract.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION TO ITEM 6**  
**“CONTROL OF MATERIALS”**

For this Contract, Item 6 of the Texas Standard Specifications is hereby modified with respect to the clauses cited below and no other clause or requirement of this Item is waived or changed hereby.

Article 6.2, “**Material Quality**”, is supplemented by the addition of the following:

If it is found that previously approved sources of supply do not produce uniform and/or otherwise satisfactory products, or if the product from any source proves unacceptable at any time, the Contractor shall furnish materials from other approved sources.

Article 6.4, “**Sampling, Testing, and Inspection**”, is hereby deleted and replaced by the following:

**6.4. Sampling, Testing, and Inspection.** Inspections and tests of equipment and materials to be incorporated in the work shall be required by the Authority from time to time during the progress of the work to assure that the equipment and materials meet specified requirements. In addition, certain tests may be required by codes, ordinances or plan approval authorities or may be desired exclusively for the Contractor’s convenience.

All inspections and tests will be in accordance with pertinent codes and regulations and with selected standards of the American Society for Testing and Materials and TxDOT. The material requirements and standard test methods in effect at the time the proposed Contract is advertised govern.

Design, sampling, and testing, including professional quality control efforts in general, will be performed by engineering testing laboratories. Such services will be at the direction and expense of the Authority. As an exception to the above requirement, furnish a professional testing laboratory, other than that retained by the Authority, to develop all Portland cement concrete and hot mix asphaltic concrete designs, and prepare and analyze trial and hot bin batches of the different designs as appropriate, as directed by the Engineer, entirely at the Contractor’s own cost and expense. When requested, furnish a complete written statement of the origin, composition, and/or manufacture of any or all materials to be used in the work.

Unless otherwise noted in the Contract, all testing must be performed within the United States and witnessed by the Engineer. If materials or processes require testing

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outside the contiguous 48 United States, reimburse the Department for inspection expenses.

When tests are required, other than those made in the laboratory, for the purpose of control in the manufacture of a construction item, furnish such facilities and equipment as may be necessary to perform the tests and inspection and be responsible for calibration of all test equipment required.

Determine, by advance discussion with the Engineer, the time required for the engineering testing laboratory to perform Contractor's tests and to issue each of its findings. Allow time for such sampling and reporting activities within its construction schedule. When changes of construction schedules are necessary during construction, coordinate all such changes of schedule with the engineering testing laboratory, as required.

Representatives of engineering testing laboratories shall have access to the work and to all mixing plants, fabricating shops, and other locations where items proposed for the work are being prepared in order that the laboratories may properly perform their functions.

Do not allow or cause any work performed or installed to be covered up or enclosed prior to all required inspections, tests, and approvals. Should any work be enclosed or covered up before it has been approved, uncover all such work. After work has been completely inspected, tested, and approved, make all repairs necessary to restore the work to the condition in which it was found at the time of uncovering.

The engineering testing laboratories will provide all personnel and sampling equipment, take all samples and specimens, and deliver all samples and specimens to the laboratories for testing.

Promptly process and distribute all required copies of test reports and related instructions to ensure all necessary retesting and/or replacement of materials with the least possible delay to progress of the work.

The Authority will pay for all initial testing services requested by the Engineer. When Engineer-requested initial tests indicate noncompliance with this Contract, the costs of all subsequent retesting occasioned by the noncompliance will be deducted by the Authority from the sums due the Contractor. Inspections and tests required by codes or ordinances, or by a plan approval authority, shall be the responsibility of, and be paid for by, the Contractor unless otherwise provided for in this Contract. Inspections and tests for the Contractor's convenience shall be the sole responsibility of the Contractor.

Incorporate into the work only material that has been inspected and tested by or on behalf of the Authority and has been accepted by the Authority. Remove, at the

Contractor's expense, materials from the work locations that are used without prior testing and approval or written permission of the Engineer.

All materials used are subject to inspection or testing at any time during preparation or use. Material that has been tested and approved at a supply source or staging area may be reinspected or tested before or during incorporation into the work, and rejected if it does not meet Contract requirements. Copies of test results are available upon request. Do not use material that, after approval, becomes unfit for use.

Article 6.7, "**Department-furnished Material**", is hereby deleted and replaced by the following:

**Article 6.7. Furnished Equipment and Materials.** The Authority and others will supply certain structural elements, items of equipment and materials as shown on the plans. The cost of handling and placing such items supplied by the Authority and others will not be paid for directly but is subsidiary to the Item in which or for which they are used. Assume responsibility for structural elements, equipment and materials upon receipt.

All equipment and materials not provided by the Authority, or others, shall be new and the use of used or secondhand equipment and materials of any kind will not be permitted.

Article 6.8, "**Use of Materials Found on the Right of Way**", is hereby deleted and replaced by the following:

**Article 6.8. Use of materials Found on the Right of Way.** With the approval of the Engineer, material found in the excavation areas and meeting the Department's specifications may be used in the work. This material will be paid for at the Contract bid price for excavation and under the Item for which the material is used. Do not excavate or remove any material from within the right of way that is not within the limits of the excavation without written permission. If excavation is allowed within a right of way project-specified location (PSL), replace the removed material with suitable material at no cost to the Department as directed.

Article 6.10, "**Hazardous Materials**", is hereby deleted and replaced by the following:

**Article 6.10. Hazardous Materials.** All known areas containing Hazardous Materials are identified in the plans. The Contractor shall follow the procedures set forth in the Contract for all excavation activities. For hazardous materials found on sites owned or controlled by the Authority and designated in the plans, Contractor will be reimbursed in accordance with Contract bid items.

For hazardous materials found on sites owned and controlled by the Authority and not designated in the plans, notify the Engineer immediately when a visual observation or odor indicates that Hazardous Materials may be present on property owned or controlled by the Authority. The Authority is responsible for testing and defining required procedures for removal of such Hazardous Materials not introduced by the Contractor. When the Contractor assumes responsibility for removal and disposal of the Hazardous Materials not identified in the plans and not resulting from Contractor's own release of hazardous materials, the Contractor shall be compensated in accordance with Article 9.5, "Force Account" for such removal and disposal. The Engineer may suspend the work wholly or in part during the testing, removal, or disposition of Hazardous Materials on sites owned or controlled by the Authority.

The testing, removal and disposition of Hazardous Materials introduced onto work locations by the Contractor will be at the Contractor's sole expense. When Hazardous Materials are introduced onto work locations by the Contractor, working day charges will not be suspended and extensions of working days will not be granted.

Notwithstanding the foregoing, the Contractor shall remove and dispose of capacitors in any existing luminaires in the project area in accordance with federal, state and local regulations.

**Item 6** is hereby supplemented by the addition of the following Articles:

**6.12. Product Options.** Certain items of equipment and materials to be used in this project have been specified as the product of a manufacturer for convenience and to establish a standard of quality. When so specified, one of the following methods has been used:

**A. No Substitutions.** If a material is specified by the manufacturer's name, and no mention is made of "equal to" and no other manufacturer is mentioned, then no substitutions will be considered.

**B. Multiple Manufacturers Named.** If a material is specified by the manufacturer's name and several manufacturers are listed, any of those mentioned will be considered as acceptable. Space requirements and details are designed to fit with this product. It shall be the responsibility of the Contractor to verify that the product it proposes to use meets all space and detail requirements.

**C. "Equal to" Products.** If a material is specified stating "equal to" a manufacturer's product, then similar products of equal quality will be considered. Submit proof, if required, of the alternate product's characteristics which substantiate its equivalency to the product specified.

**6.13. Substitutions.** Subject to Article 6.12, the use of alternate equipment and materials will be permitted, provided that the alternate items are equal to that specified

and the Engineer grants approval of such substitutions. Approval of alternate equipment and materials will not be given prior to award of this Contract. Approval by the Engineer of any specific item of equipment or material shall in no way relieve the Contractor of the responsibility for the satisfactory performance of equipment and materials meeting the intent of the specifications.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION TO ITEM 7**  
**“LEGAL RELATIONS AND RESPONSIBILITIES”**

**Contract No.:** 03214-PGB-00-CN-PM

**Highway:** President George Bush Turnpike **Section:** Segments 1-5

**County:** Dallas, Denton & Collin

For this Contract, Item 7 of the Texas Standard Specification is hereby modified with respect to the clauses cited below and no other clause or requirement of this Item is waived or changed hereby.

Article 7.1, “**Laws to be Observed**”, is hereby deleted and replaced by the following:

**7.1. Laws to be Observed.** Comply with all federal, state, and local laws, ordinances, and regulations applicable to the work. **INDEMNIFY AND SAVE HARMLESS THE AUTHORITY AND ITS REPRESENTATIVES AGAINST ANY CLAIM ARISING FROM VIOLATION BY THE CONTRACTOR OF ANY LAW, ORDINANCE, OR REGULATION APPLICABLE TO THE WORK.** This Contract is between the Authority and the Contractor only. No person or entity may claim third-party beneficiary status under this Contract or any of its provisions, nor may any non-party sue for personal injuries or property damage under this Contract.

Article 7.2, “**Permits, Licenses, and Taxes**”, is hereby deleted and replaced by the following:

**7.2. Permits, Licenses, and Taxes.** As required by applicable law, procure all permits and licenses and pay all charges, fees, and taxes pertaining to the work and give all notices necessary and incidental to the due and lawful prosecution of work, except for permits provided by the Authority and as specified in Article 7.19, “Preservation of Cultural and Natural Resources and the Environment.”

Article 7.4, “**Insurance and Bonds**”, is hereby deleted and replaced by the following:

**7.4. Insurance and Bonds.** Do not commence work under the Contract until furnishing the Authority with satisfactory proof that Contractor has provided insurance of such character and in such amounts as set forth below. Submit complete policies or certificates evidencing the policy coverages and stipulations. Certificate submittals shall be provided on forms adopted by the Association for Cooperative Research and Development (ACORD).

Purchase and maintain in full force and effect until completion of the work and the expiration of the applicable Texas statute of limitations such insurance as will cover the obligations and liabilities of Contractor and its agents, employees, and subcontractors which may arise from operations under this Contract. All such insurance shall be written with companies having an A.M. Best Financial Strength Rating of A- or better, and be in a Financial Size Category of X or greater. All policies shall be on Occurrence Forms. Claims Made Policy Forms are not acceptable. All companies must be acceptable to the Authority.

Until the expiration of the applicable Texas statute of limitations, secure and maintain, in Contractor's own name, the following:

**A. Workers' Compensation** in compliance with the laws of the State of Texas and Employer's Liability insurance with minimum limits of:

\$ 500,000      Each Accident  
\$ 500,000      Disease Policy Limit  
\$ 500,000      Disease Each Employee

A "Waiver of Subrogation" in favor of the Authority shall be attached to the policies.

**B. Commercial General Liability Insurance** on a per project basis covering the Contractor with minimum limits of:

2004 ISO, CGL or Equivalent Limits for Bodily Injury and/or Property Damage:

\$ 2,000,000      General Aggregate  
\$ 2,000,000      Products and Completed Operations Aggregate  
\$ 1,000,000      Personal and Advertising Injury  
\$ 1,000,000      Each Occurrence  
\$ 50,000      Fire Damage

The policy must have Endorsement CG-25-03 (Amendment - Aggregate Limits of Insurance) making the General Aggregate Limits apply separately to each job site.

**Required for this Contract**     **Not required for this Contract**

The Commercial General Liability Insurance policies shall provide “X”, “C”, and “U” coverages. Verification of such coverage must be shown in the Remarks Article of the Certificate of Insurance.

**Required for this Contract**     **Not required for this Contract**

- C. Business Auto Liability Insurance** with minimum limits of \$ 1,000,000 Combined Single Limit for Bodily Injury and/or Property Damage, including Owned, Hired and Non-Ownership Liability Coverage. This policy shall not contain any limitation with respect to a radius of operation for any vehicle covered, and shall not exclude from the coverage of the policy any vehicle to be used in connection with the work.

**Required for this Contract**     **Not required for this Contract**

- D. Umbrella Liability** with minimum limits of \$ 2,000,000 per occurrence and in the aggregate annually, as applicable, within the underlying policies. The Umbrella Policy shall contain the provision that it will continue in force as an underlying insurance in the event of exhaustion of underlying aggregate policy limits.

**Required for this Contract**     **Not required for this Contract**

- E. Builders Risk Insurance** shall be secured and maintained by the Contractor, at the Contractor’s expense, and kept in full effect until final acceptance by the NTTA. The Contractor shall be financially responsible for any deductible applied to losses under such Builder’s Risk policy. Coverage shall include “all risks” including loss or damage by fire, lightning, windstorm, flood, earthquake, hail, explosion, riot, riot attending a strike, civil commotion, terrorism, aircraft, vehicles, smoke, vandalism, malicious mischief, theft, and other such risks as are now or hereafter included in the uniform standard extended coverage endorsement in common use or otherwise customarily insured for similar structures in the geographic area of the Project. The minimum amount of coverage to be carried shall be in an amount equal to **35 percent** of the full amount payable to the Contractor under the Contract, and shall be increased to reflect all change orders (if any) that increase the amount payable to the Contractor, but shall not be reduced as a result of any reductive change orders. Costs of repair for damage are not reimbursable by the Authority in accordance with this Special Provision.

**Required for this Contract**     **Not required for this Contract**

- F. Railroad Protective Liability.** If any of the work or any warranty work is within the limits of railroad right-of-way, the Contractor shall comply with the requirements of NORTH TEXAS TOLLWAY AUTHORITY - SPECIAL

PROVISION - IMPORTANT NOTICE TO CONTRACTORS - "RAILROAD CONSTRUCTION AND INSURANCE REQUIREMENTS," which is a part of the contract, including, but not limited to, the insurance requirements thereof.

Required for this Contract  Not required for this Contract

The Authority, Section Engineer, the Consulting Engineers, and the Construction Manager(s) shall be included as Additional Insured's by endorsement to all policies issued required under this Article other than Workers' Compensation insurance policies.

**G. Insurance for any Subcontractor** hired to work on this Contract will be the responsibility of the Primary Contractor and may be addressed by one of the following options:

1. **Option 1:** The Contractor shall secure and maintain, until the expiration of the applicable Texas statute of limitations, Certificates of Insurance from all subcontractors, evidencing the proper types of insurance coverages for the work to be performed by the Subcontractor. The Contractor shall also ensure that the Subcontractor's required insurance coverages are in amounts sufficient to cover the type of work assigned to the subcontractor; or
2. **Option 2:** The Contractor shall take responsibility for the subcontractor's insurance coverage by including the subcontractor as an additional insured under their required insurance coverages.

Insurance Certificates of subcontractors and sub-subcontractors will be maintained by the Contractor for the duration of the project.

**H. Insurance During Warranty Period.** If one or more Warranty Bonds are required by this Contract, the Contractor shall secure and maintain, in its own name, proof of Workers' Compensation/Employer's Liability insurance, Commercial General Liability insurance, Business Auto Liability insurance, and Umbrella Liability insurance during the duration of all warranty work covered by such Warranty Bonds. The Contractor shall not commence any warranty work until it has furnished the Authority with satisfactory proof that it has provided insurance of such character and in such amounts as set forth below. The requirements for such liability insurance policies are same as stated above in paragraphs 7.4.A, 7.4.B, 7.4.C and 7.4.D except for the coverage amounts, which are as follows:

1. **Workers' Compensation/Employer's Liability Insurance** with minimum limits of:

\$ 500,000 Each Accident  
\$ 500,000 Disease Policy Limit  
\$ 500,000 Disease Each Employee

A "Waiver of Subrogation" in favor of the Authority shall be attached to the policy.

**2. Commercial General Liability Insurance** with minimum limits of:

2004 ISO, CGL or Equivalent Limits for Bodily Injury and/or Property Damage:

\$ 2,000,000 General Aggregate  
\$ 2,000,000 Products and Completed Operations Aggregate  
\$ 1,000,000 Personal and Advertising Injury  
\$ 1,000,000 Each Occurrence  
\$ 50,000 Fire Damage

The policy must have Endorsement CG-25-03 (Amendment - Aggregate Limits of Insurance) making the General Aggregate Limits apply separately to each job site.

**Required for this Contract**  **Not required for this Contract**

The Commercial General Liability Insurance policies shall provide "X", "C", and "U" coverage's. Verification of such coverage must be shown in the Remarks Article of the Certificate of Insurance.

**Required for this Contract**  **Not required for this Contract**

**3. Business Auto Liability Insurance** with minimum limits of \$ 1,000,000 Combined Single Limit for Bodily Injury and/or Property Damage, including Owned, Hired and Non-Ownership Liability Coverage.

**Required for this Contract**  **Not required for this Contract**

**4. Umbrella Liability** with minimum limits of \$ 2,000,000 per occurrence and in the aggregate annually, as applicable, within the underlying policies. The Umbrella Policy shall contain the provision that it will continue in force as an underlying insurance in the event of exhaustion of underlying aggregate policy limits.

**Required for this Contract**  **Not required for this Contract**

Liability insurance coverages during warranty periods shall continue only during the period when the Contractor is performing warranty work.

**Additional Insured** during warranty period must name the same entities as listed in this Contract.

If the warranty work is within the limits of the railroad right-of-way, the insurance requirements of the railroad must also be provided during the period the Contractor is performing the warranty work.

**Required for this Contract**  **Not required for this Contract**

The insurance carrier shall include in each of the insurance policies required under this Article the following statements:

**“This policy shall not be canceled or materially changed nor non-renewed during the period of coverage without at least thirty (30) days’ written prior notice to the North Texas Tollway Authority, 5900 West Plano Parkway, Suite 100, Plano, Texas 75093, Attention: Insurance Coordinator”.**

The Contractor shall be responsible for any deductible stated in any policy required under the Contract.

Carry the insurance specified above until all work required to be performed under the terms of this Contract is satisfactorily completed, as evidenced by the formal acceptance thereof and final payment of all amounts owed the Contractor by the Authority, or provide, prior to the end of coverage, a new Certificate of Insurance. If, for any reason, the required insurance coverage is not kept in force, stop all work until acceptable documentation is provided to the Authority. Notify the Authority, in writing, by certified mail or hand delivery of any material change in the insurance coverage of the Contractor or any subcontractor or sub-subcontractor within 10 days of such change.

On all policies, the insurer shall certify that the aggregate amount shown on insurance limits is in full force and has not been diminished.

Neither the approval by the Authority of any insurance supplied by a Contractor nor the failure to disapprove that insurance shall relieve the Contractor from full responsibility for any liability as set forth herein.

No special payments shall be made for any insurance that the Contractor may be required to carry, but all costs thereof shall be included in the price bid for the various items included in the proposal. Bidders shall determine all the kinds and cost of

insurance that may be required before submitting their bids and shall submit acceptable evidence of same to the Authority pursuant to the provisions of Article 3.4, "Execution of Contract".

The Contractor hereby waives any and every claim which arises or may arise in its favor against the Authority, the Engineer, the Construction Manager, the Section Engineer, and the Consulting Engineers and their respective owners, directors, officers, employees, consultants, contractors, and agents pursuant to this Contract which is covered, in whole or in part, by insurance provided or to be provided pursuant to the terms hereof. Such waiver shall be in addition to, and not limitation of, any other waiver or release contained in this Contract. Inasmuch as such waiver shall preclude the assignment of any aforesaid claim by way of subrogation or otherwise to an insurance company (or any other person), the Contractor hereby agrees immediately to give to each insurance company which has issued policies of insurance pursuant hereto written notice of the terms of such waiver and to cause such insurance policies to be properly endorsed, if necessary, to prevent the invalidation of such insurance coverages by reason of such waiver.

Provide a substitute Surety on the Contract bonds in the original full Contract amount within 15 days of notification if the Surety is declared bankrupt or insolvent, the Surety's underwriting limitation drops below the Contract amount or the Surety's right to do business is terminated by the State. The substitute Surety must be authorized by the laws of the State and acceptable to the Authority. Work will be suspended until a substitute Surety is provided. Working day charges will be suspended for 15 days or until an acceptable Surety is provided, whichever is sooner.

Article 7.7, "**Public Safety and Convenience**", is hereby supplemented by the addition of the following:

Avoid to the greatest extent practicable the operation of heavy construction equipment over adjacent streets. If such operation is unavoidable, take care to prevent the creation of any nuisance, including, but not limited to, the tracking of dirt, the blowing of dust, and/or the dropping of debris from uncovered loads.

Article 7.12, "**Responsibility for Damage Claims**", is hereby deleted and replaced by the addition of the following:

**7.12 Responsibility for Damage Claims. INDEMNIFY AND SAVE HARMLESS THE AUTHORITY AND ITS OFFICERS, DIRECTORS, AGENTS, CONSULTANTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, OR CLAIMS AND FROM ALL LIABILITY AND DAMAGES FOR ANY AND ALL INJURY OR DAMAGE TO ANY PERSON OR PROPERTY DUE TO THE CONTRACTOR'S NEGLIGENCE IN THE PERFORMANCE OF THE WORK, ONGOING OR COMPLETED, AND FROM ANY CLAIMS ARISING OR AMOUNTS RECOVERED UNDER ANY LAWS, INCLUDING, WITHOUT LIMITATION, WORKERS' COMPENSATION AND THE**

**TEXAS TORT CLAIMS ACT. INDEMNIFY AND SAVE HARMLESS THE AUTHORITY AND ITS OFFICERS, DIRECTORS, AGENTS, CONSULTANTS AND EMPLOYEES AND ASSUME RESPONSIBILITY FOR ALL DAMAGES AND INJURY TO PROPERTY OF ANY CHARACTER OCCURRING DURING THE PROSECUTION OF THE WORK RESULTING FROM ANY ACT, OMISSION, NEGLIGENCE, OR MISCONDUCT ON THE CONTRACTOR'S PART IN THE MANNER OR METHOD OF EXECUTING THE WORK; FROM FAILURE TO PROPERLY EXECUTE THE WORK; OR FROM DEFECTIVE WORK OR MATERIAL.**

**TO THE EXTENT A CLAIM ARISING OUT OF AN INJURY TO THE CONTRACTOR'S EMPLOYEE IS COVERED BY THE WORKER'S COMPENSATION AND/OR EMPLOYERS' LIABILITY INSURANCE THAT THE CONTRACTOR IS REQUIRED TO CARRY UNDER THIS CONTRACT AND/OR APPLICABLE LAW ("CONTRACTOR'S EMPLOYEE INSURANCE"), OR IF CONTRACTOR DOES NOT ACTUALLY MAINTAIN CONTRACTOR'S EMPLOYEE INSURANCE, TO THE EXTENT THE CLAIM WOULD HAVE BEEN COVERED BY REQUIRED CONTRACTOR'S EMPLOYEE INSURANCE, THEN, TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW, THE CONTRACTOR'S INDEMNITY AGAINST A CLAIM ARISING, OR ALLEGED TO ARISE, OUT OF AN INJURY TO AN EMPLOYEE OF THE CONTRACTOR WILL NOT BE AFFECTED BY THE ACTIVE OR PASSIVE ORDINARY NEGLIGENCE OR SOLE, JOINT, CONCURRENT OR COMPARATIVE ORDINARY NEGLIGENCE OF THE AUTHORITY, WHETHER OR NOT LIABILITY WITHOUT FAULT OR STRICT LIABILITY IS IMPOSED OR SOUGHT TO BE IMPOSED ON THE AUTHORITY.**

**PIPELINES AND OTHER UNDERGROUND INSTALLATIONS THAT MAY OR MAY NOT BE SHOWN ON THE PLANS MAY BE LOCATED WITHIN THE RIGHT OF WAY. PRIOR TO COMMENCING THE WORK, CONDUCT AN INVESTIGATION FOR THE LOCATION OF UTILITIES. INDEMNIFY AND SAVE HARMLESS THE AUTHORITY AND ITS OFFICERS, DIRECTORS, AGENTS, CONSULTANTS AND EMPLOYEES FROM ANY SUITS OR CLAIMS RESULTING FROM DAMAGE BY THE CONTRACTOR'S OPERATIONS TO ANY PIPELINE OR UNDERGROUND INSTALLATION. AT THE PRECONSTRUCTION CONFERENCE, SUBMIT THE SCHEDULED SEQUENCE OF WORK TO THE RESPECTIVE UTILITY OWNERS SO THAT THEY MAY COORDINATE AND SCHEDULE ADJUSTMENTS OF THEIR UTILITIES THAT CONFLICT WITH THE PROPOSED WORK.**

**IF THE CONTRACTOR ASSERTS ANY CLAIM OR BRINGS ANY TYPE OF LEGAL ACTION (INCLUDING AN ORIGINAL ACTION, THIRD-PARTY ACTION, OR CROSS-CLAIM) AGAINST ANY OFFICER, DIRECTOR, AGENT, CONSULTANT OR EMPLOYEE OF THE AUTHORITY FOR ANY CAUSE OF ACTION OR CLAIM FOR ALLEGED NEGLIGENCE ARISING FROM THE CONTRACT, THE CONTRACTOR WILL BE INELIGIBLE TO BID ON ANY PROPOSED CONTRACT WITH THE AUTHORITY DURING THE PENDENCY OF THE CLAIM OR LEGAL ACTION.**

**TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW, THE INDEMNIFICATION PROVIDED BY CONTRACTOR UNDER THIS ARTICLE 7.12 SHALL EXPRESSLY INCLUDE INDEMNIFICATION OF THE INDEMNIFIED PERSONS AGAINST THEIR OWN NEGLIGENCE WITH RESPECT TO ANY OF THE MATTERS COVERED HEREBY.**

Article 7.13, “**Responsibility for Hazardous Materials**”, is hereby deleted and replaced by the addition of the following:

**7.13. Responsibility for Hazardous Materials. INDEMNIFY AND SAVE HARMLESS THE AUTHORITY AND ITS OFFICERS, DIRECTORS, AGENTS, CONSULTANTS, AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, LIABILITIES, DEMANDS, LOSSES, DAMAGES, FORFEITURES, PENALTIES, FINES, COSTS AND EXPENSES (INCLUDING REASONABLE ATTORNEY FEES AND EXPENSES) (COLLECTIVELY, “LIABILITIES”), FOR ANY INJURY OR DAMAGE TO PERSONS OR PROPERTY WHICH ARISE FROM THE GENERATION, STORAGE, HANDLING, TREATMENT, TRANSPORTATION, OR DISPOSITION OF HAZARDOUS MATERIALS BY THE CONTRACTOR, INCLUDING, WITHOUT LIMITATION, ANY AND ALL LIABILITIES WHICH RESULT FROM THE INDEMNIFIED PERSON’S OWN NEGLIGENCE (WHETHER ACTIVE OR PASSIVE) AND/OR STRICT LIABILITY, TO THE MAXIMUM EXTENT ALLOWED BY APPLICABLE LAW.**

For the purposes of the indemnity provisions hereof, any acts or omissions of Contractor, or by any employees, agents, assignees, consultants, or subcontractors of Contractor, or others acting for or on behalf of Contractor, shall, whether or not they are negligent, intentional, willful, or unlawful, be strictly attributable to Contractor.

Article 7.14, “**Contractor’s Responsibility for Work**”, is hereby deleted and replaced by the following:

**7.14 Contractor’s Responsibility for Work.** Until final acceptance of the work under the Contract, have responsibility for the work, including responsibility for maintenance of the work, and the charge and care thereof, take every precaution against injury or damage to any part of the work by the action of the elements or by any other cause, whether arising from the execution or from the non-execution of the work or otherwise. Protect all materials to be used in the work at all times, including periods of suspension.

When any roadway or portion of the roadway is in suitable condition for travel, it may be opened to traffic as directed. Opening of the roadway to traffic does not constitute final acceptance or a waiver of any of the provisions of this Contract.

Until final acceptance of the work by the Engineer, maintain the project in good condition, including, but not limited to, the roadway. Repair damage to all work until final acceptance. Repair damage to existing facilities in accordance with the Contract or as directed by the Engineer. Costs of repair for damage to existing facilities or work caused by Contractor operations shall be at the Contractor's expense. Costs of repair for damage that was not due to the Contractor's operations (including, but not limited to, loss or damage by fire, lightning, windstorm, flood, earthquake, hail, hurricane, tornado, and other such cataclysmic phenomena of nature, explosion, riot, riot attending a strike, civil commotion, terrorism, aircraft, vehicles, smoke, vandalism, malicious mischief, theft, and other such risks) will not be paid for except as provided below. In the case of suspension of the work for any cause, be responsible for the preservation of all materials and construction previously performed by Contractor.

**A. Reimbursable Repair.** The Contractor will be reimbursed for its costs to repair damage:

- solely and directly caused by acts of the Authority or its contractors other than the Contractor; or
- to crash-cushion attenuators and guardrail end treatments.

**B. Appurtenances.** Except for crash-cushion attenuators and guardrail end treatments listed in Section 7.14.A, reimbursement will not be made for repair of damage to the following temporary appurtenances, regardless of cause:

- signs,
- barricades,
- changeable message signs, and
- other work zone traffic control devices.

**C. Roadways and Structures.** Until final acceptance, the Contractor will remain responsible for all work constructed under the Contract. The Authority will not reimburse the Contractor for repair work to new construction, unless the failure or damage is within the items listed in Section 7.14.A, "Reimbursable Repair." The Authority will be responsible for the cost for repair of damage to existing roadways and structures not caused by the Contractor's operations. Existing roadways and structures do not include any work under the Contract.

**D. Detours.** The Contractor will be responsible for the cost of maintenance of detours constructed under the Contract, unless the failure or damage is within the items listed in Section 7.14.A, "Reimbursable Repair." The Engineer may consider failures beyond the Contractor's control when determining reimbursement for repairs to detours constructed. The Authority will be responsible for the cost of maintenance of existing streets and roadways used for detours or handling traffic.

**E. Relief from Maintenance.** The Engineer may relieve the Contractor from responsibility of maintenance as outlined in this Article. This relief does not release the Contractor from responsibility for defective materials or work or constitute final acceptance.

- 1. Isolated Work Locations.** For isolated work locations, when all work is completed, including work for Article 4.6, "Final Clean Up," the Engineer may relieve the Contractor from responsibility for maintenance.
- 2. Work Except for Vegetative Establishment and Test Periods.** When all work for all or isolated work locations has been completed, including work for Article 4.6, "Final Clean Up," with the exception of vegetative establishment and maintenance periods and test and performance periods, the Engineer may relieve the Contractor from responsibility for maintenance of completed portions of work.
- 3. Work Suspension.** When all work is suspended for an extended period of time, the Engineer may relieve the Contractor from responsibility for maintenance of completed portions of work during the period of suspension.

**F. Basis of Payment.** When reimbursement for repair work is allowed and performed, payment will be made in accordance with pertinent Items or Article 4.2, "Changes in the Work."

Article 7.15, **Electrical Requirements, Section A. Definitions, Section 3.**  
**Certified Person** is hereby deleted and replaced by the following:

**3. Certified Person.** A certified person is a person who has passed the test from the TxDOT course TRF450, "TxDOT Roadway Illumination and Electrical Installations" or other courses as approved by the Engineer. Submit a current and valid TRF certification upon request. On June 1, 2011, Texas Engineering Extension Service (TEEX) certifications for "TxDOT Electrical Systems" course will no longer be accepted. All TRF 450 certifications that have been issued for "TxDOT Roadway Illumination and Electrical Installations" course that expire before June 1, 2011 will be accepted until June 1, 2011.

Article 7.15, **Electrical Requirements, Section A. Definitions, Section 4.**  
**Licensed Electrician** is hereby deleted and replaced by the following:

**4. Licensed Electrician.** A licensed electrician is a person with a current and valid unrestricted master electrical license, or unrestricted journeyman electrical license that is supervised or directed by an unrestricted master electrician. An unrestricted master electrician need not be on the work locations at all times electrical work is being done, but the unrestricted master electrician must approve work performed by

the unrestricted journeyman. Licensed electrician requirements by city ordinances do not apply to on state system work.

The unrestricted journeyman and unrestricted master electrical licenses must be issued by the Texas Department of Licensing and Regulation or by a city in Texas with a population of 50,000 or greater that issues licenses based on passing a written test and demonstrating experience.

The Engineer may accept other states' electrical licenses. Submit documentation of the requirements for obtaining that license. Acceptance of the license will be based on sufficient evidence that the license was issued based on:

- passing a test based on the NEC similar to that used by Texas licensing officials, and
- sufficient electrical experience commensurate with general standards for an unrestricted master and unrestricted journeyman electrician in the State of Texas.

Article 7.17, "**Personal Liability of Public Officials**", is hereby deleted and replaced by the following:

**7.17. Personal Liability.** In carrying out the provisions of this Contract or in exercising any power or authority granted hereunder, there shall be no liability for the Engineer, Consulting Engineer, or the Construction Manager or their respective authorized assistants, either personally or otherwise, in their capacity as agents and representatives of the Authority, and there shall be no liability, either personal or otherwise, for any member of the Board of Directors of the Authority or any of the Authority's officers, employees, agents or consultants.

Article 7.19, "**Preservation of Cultural and Natural Resources and the Environment**" is hereby amended by deleting Section F, "Project-Specific Locations" thereof, which is replaced by the following:

**F. Project-Specific Locations.** For all project-specific locations (PSLs) on or off the right of way (material sources, waste sites, parking areas, storage areas, field offices, staging areas, haul roads, etc.), signing the Contract certifies compliance by Contractor and all subcontractors and suppliers with all applicable laws, rules, and regulations pertaining to the preservation of cultural resources, natural resources, and the environment as issued by the following or other agencies:

- Occupational Safety and Health Administration,
- Texas Commission on Environmental Quality,
- Texas Department of Transportation,
- Texas Historical Commission,

- Texas Parks and Wildlife Department,
- Texas Railroad Commission,
- U.S. Army Corps of Engineers,
- U.S. Department of Energy
- U.S. Department of Transportation,
- U.S. Environmental Protection Agency,
- U.S. Federal Emergency Management Agency, and
- U.S. Fish and Wildlife Service.

All subcontractors must also comply with applicable environmental laws, rules, regulations, and requirements in the Contract. Maintain documentation of certification activities including environmental consultant reports, Contractor documentation on certification decisions and contacts, and correspondence with the resource agencies. Provide documentation upon request.

Obtain written approval from the Engineer for all PSLs in the right of way not specifically addressed in the plans. Prepare an SWP3 for all Contractor facilities, such as asphalt or concrete plants located within TxDOT right of way. Comply with all TCEQ permit requirements for portable facilities, such as concrete batch plants, rock crushers, asphalt plants, etc. Address all environmental issues, such as Article 404 permits, wetland delineation, endangered species consultation requirements, or archeological and historic site impacts. Obtain all permits and clearances in advance.

Article 7.19. “**Preservation of Cultural and Natural Resources and the Environment**” is further supplemented by the following:

**G. Asbestos Containing Material.** In Texas, 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, Subpart M (NESHAP) 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.

Provide notice of demolition or renovation to the structures listed in the plans at least 30 calendar days prior to initiating demolition or renovation of each structure or load bearing member. Provide the scheduled start and completion date of structure demolition, renovation, or removal.

When demolition, renovation, or removal of load bearing members is planned for several phases, provide the start and completion dates identified by separate phases.

DSHS requires that notifications be postmarked at least 10 working days prior to initiating demolition or renovation. If the date of actual demolition, renovation, or removal is changed, the Authority will be required to notify DSHS at least 10

days in advance of the work. This notification is also required when a previously scheduled (notification sent to DSHS) demolition, renovation or removal is delayed. Therefore, if the date of actual demolition, renovation, or removal is changed, provide the Engineer, in writing, the revised dates in sufficient time to allow for the Authority'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 Authority retains the right to determine the actual advance notice needed for the change in date to address post office business days and staff availability.

**Item 7** is hereby supplemented by the addition of the following Articles:

**7.20. Contractor's Responsibility for Safety.** In accordance with generally accepted construction practices, be solely and completely responsible for conditions at the job site, including the safety of all persons and property during performance of the work. This requirement shall apply continuously and shall not be limited to normal working hours.

**7.21. Third Party Beneficiary.** It is specifically agreed between the parties hereto that it is not intended by any of the provisions of any part of this Contract to create in the public, or in any member thereof, any third party beneficiary rights hereunder, or to authorize anyone not a party to this Contract to maintain a suit for personal injuries, property damage or any other relief in law or equity pursuant to the terms and provisions of this Contract. The duties, obligations, and responsibilities of the parties to this Contract with respect to third parties shall remain as imposed by law, and no provision of this Contract is in any way intended to constitute a waiver by the Authority of any immunities or other defenses from suit or from liability that the Authority may have by operation of law.

**7.22. Non-Waiver by the Authority.** Any failure by the Authority at any time, or from time to time, to enforce or require strict keeping and performance of any of the terms or conditions of this Contract shall not constitute a waiver of such terms or conditions or any breach and shall not affect or impair such terms or conditions in any way, or the right of the Authority to avail itself of such remedies as it may have for any breach or breaches of such terms or conditions.

**7.23. Agricultural Irrigation.** Regulate the sequence of work and make provisions as necessary to provide for agricultural irrigation or drainage during the work. Meet with the Irrigation District or land owner to determine the proper time and sequence when irrigation demands will permit shutting-off water flows to perform work.

Unless otherwise provided on the plans, the work required by these provisions will not be paid for directly but shall be considered as subsidiary work pertaining to the various bid items of this contract.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION TO ITEM 8**  
**“PROSECUTION AND PROGRESS”**

For this Contract, Item 8 of the Texas Standard Specifications is hereby modified with respect to the clauses cited below and no other clause or requirement of this Item is waived or changed hereby.

Article 8.1, “**Prosecution of Work**”, is hereby deleted and replaced by the following:

**8.1. Prosecution of Work.** Before starting work, schedule and attend a preconstruction conference with the Engineer. Failure to schedule and attend a preconstruction conference is not grounds for delaying the beginning of working day charges. Unless otherwise shown in this Contract, begin the work to be performed under this Contract within 10 days (7 calendar days for routine maintenance contracts) after the authorization date to begin work pursuant to the provisions of Article 3.8, “Beginning of Work”. Prosecute the work continuously to completion within the working days specified. Unless otherwise shown on the plans, work may be prosecuted in concurrent phases if no changes are required in the traffic control plan or if a revised traffic control plan is approved. Notify the Engineer at least 24 hours before beginning any new operation. Do not start new operations to the detriment of work already begun. Minimize interference to traffic. When callout work is required, begin work in the right of way within the specified time and continuously prosecute the work until completion.

The commencement, sequencing, and prosecution of the work shall be governed by the orders of the Engineer.

There will be other contractors retained by the Authority operating within the limits of the project. Plan and prosecute the work in such a manner and sequence that there will be no interference, interruptions, or delays to the operations of other contractors.

Ensure that the work presents a neat and orderly appearance at all times; perform all clean-up necessitated by Contractor’s operations.

Complete all clean up and remove all construction machinery and equipment, surplus material, supplies, and debris from the project right-of-way prior to acceptance of the work by the Engineer.

Observance of these special provisions and requirements is considered an essential part of the work to be done under this Contract and any subsequent contracts.

No direct compensation will be allowed for fulfilling these requirements, as this work is considered subsidiary to the Items of this Contract.

In planning and executing the sequence of the work for this project, take into consideration the progress and state of completion of the other portions of the project, and of work being performed by any other contractors.

Article 8.2, “**Progress Schedules**”, is hereby deleted and replaced by the following:

## **8.2. Progress Schedules.**

**A. Routine Maintenance Contracts and Other Contracts Designated by the Engineer.** Before starting work on a routine maintenance contract, submit an outline of the proposed procedure for performing the work. Include a sequence of work and an estimated progress schedule if required. Submit revised progress schedules as requested. When shown on the plans, provide progress schedules meeting the requirements of Section 8.2.B., “Construction Contracts”. The Engineer may direct the Contractor to comply with this Article 8.2.A. (in lieu of Article 8.2.B.) with respect to any Contract.

**B. Construction Contracts.** Unless otherwise specified by the Engineer, the following shall apply to all Contracts, other than routine maintenance contracts:

### **1. General.**

Plan, schedule, and report the progress of the work so as to ensure timely completion of the work. To facilitate the planning and tracking of the work, use a dual level scheduling format (Baseline Schedule and Two-Week Look-Ahead Layout). Comply with the scheduling requirements described herein. Failure to comply with these requirements will constitute nonperformance under the terms of this Contract.

- a. All float contained in the Baseline Schedule, as initially approved or generated thereafter, shall be considered a Project resource available to either party or Parties as needed to achieve schedule milestones, interim completion dates and/or Completion Deadlines. All float shall be shown as such in the Baseline Schedule on each affected schedule path. Identification of (or failure to identify) float on the schedule shall be examined by the Engineer in determining whether to approve the Baseline Schedule. Once identified, Contractor shall monitor, account for and maintain float in accordance with critical path methodology. In that regard, to the extent that the Baseline Schedule reflects a project completion date earlier than that specified in this Contract, it is understood and agreed by Contractor that the Authority disclaims any liability for Contractor’s failure to achieve such completion date regardless of the cause of such failure.
- b. All schedules will be approved by the Authority only upon review and recommendation from the Engineer. Approved schedules will become a part of this Contract. The approval of a schedule by the Authority does

not relieve the Contractor of responsibility for the accuracy and feasibility of such schedule.

Maintain and submit the Baseline Schedule and Two-Week Look-Ahead Layout, respectively, incorporating the sequence of construction shown on the plans and/or outlined in the Special Provisions. If the Contractor desires to deviate from the Traffic Control Plans as shown in the plans, a written narrative explaining the need for said change and a descriptive definition of the change shall be given to the Construction Manager for approval. Approval of this change will not be authorized until the new sequencing is reviewed within the Baseline Schedule showing the desired changes. The schedules shall be based on the calendar date or calendar dates provided in this Contract.

Depending on the size of the Project, the Baseline Schedule will be provided as follows:

- a. Project with Contract amount under \$5,000,000: submit a Baseline Detailed Schedule, including logic relationships, using Microsoft Project or approved equal. The Engineer shall agree upon the details shown in this schedule. The Contractor must provide the name of the representative who will produce and maintain the schedule.
- b. Project with contract amount equal to or greater than \$5,000,000: submit a Baseline CPM (Critical Path Method) Schedule, including logic relationships, using web-based version of Primavera that is compatible with the Authority's web-based version of Primavera. Contact the Engineer for proper version number. The Engineer shall agree upon the details shown in this schedule. If the work during the course of the project falls behind, the Engineer has the authority to direct the Contractor to add resources to the Baseline CPM Schedule to ensure the completion of the project in a timely manner. The Contractor must provide the name of the representative who will produce and maintain the schedule. The Contractor's representative shall have at least five (5) years of experience in CPM scheduling and in the use of the Primavera software.

**2. Baseline Schedule.** The Baseline Schedule shall include the major construction activities for the Contract including each activity that may impact the start or completion of related construction activities.

- a. The Baseline Schedule will be used by the Contractor and the Engineer to track the progress of specific construction activities. It shall be a timescaled network logic diagram, showing the work stages and operations for all activities required by this Contract. The diagram shall be in sufficient detail to allow day-to-day monitoring of the Contractor's operations. The diagram shall include milestone events as identified by this Contract.

- b. A Preliminary Baseline Schedule is due 14 days after the Notice-to-Proceed, and the Final Baseline Schedule is due 20 days after receipt of comments on the Preliminary Baseline Schedule. No payment will be processed until the Final Baseline Schedule is approved by the Engineer.
- c. The Baseline Schedule shall include a detailed network diagram acceptable to the Engineer with the following features:
  - (1) All reports shall include in this sequence: Activity ID, Activity Description, Original Duration, Remaining Duration, Percent Complete, Early Start and Finish Dates, Total Float, Budgeted Quantity and Unit of Measure, similar to the proposal.
  - (2) The schedule shall be time-scaled in calendar days. All activities shall be plotted on their early start and finish dates. Unless approved by the Engineer, activities shall not exceed 20 days in length.
  - (3) Each updated copy shall show the date of latest revision.
  - (4) The order and interdependence of activities and the sequence of work shall be clear and in chronological order.
  - (5) In addition to all construction activities, such tasks as mobilization, demobilization, submittal and approval of samples of materials, submittals and approval of shop drawings and forming designs, procurement of significant materials and equipment, fabrication of special items and their installation and testing, interfacing with other contracts, opening to traffic, and final clean up shall be depicted in the schedule and are subject to the same requirements as other construction activities.
  - (6) Activities shall be sufficiently detailed with clear definitions using "log record" if necessary so that a reviewer can follow the sequence.
  - (7) The diagram shall show, for each activity, the preceding and following event numbers or the activity number, the activity description, the total float, and the duration of the activity in calendar days.
  - (8) Activity descriptions shall be unique and specific with respect to the type of work and its location.
  - (9) All activities shall be tied into Activity Codes, i.e. type of work activities, area of work, phase of work, and bid item.

- (10) All settings within the Scheduling/Leveling dialog box shall remain default.
- (11) The only open-ended activities shall be the first activity and the last activity; no additional open-ended activities will be accepted.
- (12) Excessive predecessor/successor usage will not be accepted; 3 to 4 predecessors/successors to an activity.
- (13) All out of sequence activities shall be corrected prior to schedule submission.
- (14) No hammocks are to be used,
- (15) Any constraints to be utilized on the schedule other than the contract milestone dates must be authorized in advance by the Construction Manager.
- (16) Critical path shall be determined by the longest path and will be noted on the update in red.
- (17) Additional milestones other than contract milestones and the predecessor/successor logic used by the Contractor shall be approved by the Construction Manager.
- (18) When an activity within the schedule does not have work progressed within 30 days, the activity must be given a finish date and new logic added to a new activity detailing when work will resume on the area where progress was ceased. This information must be entered into the log as to the reason the activity was ceased and establish a new activity number where progress will resume.
- (19) If, in the opinion of the Engineer, the Baseline Schedule requires revision in whole or in part, he/she shall direct the Contractor to provide the needed revisions. In that case, submit the revised schedule within 5 calendar days after the request.
- (20) Activity ID'S will be unique and cannot be altered or reused.
- (21) Activity descriptions are to be unique. Any change to the descriptions must be approved by the Engineer.

**3. Two-Week Look-Ahead Layout.** The Two-Week Look-Ahead Layout requires a higher level of detail than the Baseline Schedule. The Two-Week Look-Ahead Layout shall be submitted to the Engineer five (5) days before the first day of the two-week period it describes.

Submit (3) hard copies and one (1) CD-ROM copy of the Two-Week Look-Ahead Layout. This Two-Week Look-Ahead Layout will consist of the daily activities such as forming, placing reinforcing steel, concrete pours, stripping forms, etc., on the calendar days they are scheduled to be performed. The Contractor is to use the Baseline Schedule to create the Two-Week Look-Ahead Layout. This schedule will be reviewed against the Baseline Schedule/Revised Baseline Schedule by the Engineer on a weekly basis. Information to be submitted on the Two-Week Look-Ahead Layout is: item number, activity description, and average daily crew size for the project. The format of the Two-Week Look-Ahead Layout will be approved by the Engineer prior to the start of construction. The Two-Week Look-Ahead Layout shall be generated by the same software as the Baseline Schedule/Revised Baseline Schedule.

- 4. Project Status Spreadsheet.** Submit the Project Status Spreadsheet in the format as shown in Attachment A of this item or as directed by the Engineer at no additional cost to the Authority. The Project Status Spreadsheet will summarize the monthly and cumulative status of the project, revenue, forecasted revenue, and approved change orders. The project status, revenue status, and forecasted revenue listed on the Project Status Spreadsheet shall be calculated based on the Baseline Schedule/Revised Baseline Schedule. The Project Status Spreadsheet shall be updated every time the Baseline Schedule is revised to reflect the changes shown in the Revised Baseline Schedule. The Engineer shall agree upon the details shown on the Project Status Spreadsheet.

**5. Change in Scope of Work**

- a. When changes are added to the Contract, the Contractor shall submit to the Engineer a written time impact analysis illustrating the influence of each asserted change on the current schedule. Each time impact analysis shall include a fragnet demonstrating how the Contractor proposes to incorporate the change into the Baseline Schedule.
- b. Each analysis shall demonstrate the estimated time impact based on the events, the date the direction was given the Contractor to perform the changed work, the status of construction at that point in time, and the computation of event item of all critical activities affected by the change. The event times and activity durations used in the analysis shall be those included in the latest revision and update of the Baseline Schedule at that point in time, or as adjusted for the events.
- c. The Engineer will accept or reject the Contractor's time impact analysis within 20 working days after receipt thereof, unless subsequent meetings and negotiations are necessary.
- d. Upon mutual agreement by both parties, fragnets illustrating the influence of extra work orders shall be incorporated into the Baseline

Schedule/Revised Baseline Schedule. The revised schedule shall be included in the next monthly submittal.

**6. Schedule Delay**

- a. If, at any time, the work on any critical path item is delayed for a period which exceeds 20 days, then the Contractor shall prepare and submit to the Engineer, for review and approval at the next monthly schedule submittal, a Recovery Schedule demonstrating Contractor's proposed plan to regain lost schedule progress and to achieve the original contractual milestones as stated in this Contract.
- b. The Engineer shall notify the Contractor within 14 days after receipt of each Recovery Schedule whether the Recovery Schedule is deemed accepted or rejected. Within 7 days after the rejection, the Contractor shall resubmit a revised Recovery Schedule incorporating the Engineer's comments for review and approval. When the Engineer accepts the Contractor's Recovery Schedule, the Contractor shall incorporate and fully include such schedule into the Baseline Schedule/Revised Baseline Schedule. The revised schedule shall be included in the next monthly submittal.
- c. All costs incurred by the Contractor in preparing, implementing and achieving the Recovery Schedule shall be borne by the Contractor.
- d. If Contractor fails to provide an acceptable Recovery Schedule as required herein, the Authority shall withhold an additional 10% of the current progress payment until the Contractor has prepared and the Engineer has approved such Recovery Schedule. Additional money withheld will be paid to the Contractor with the next scheduled monthly invoice following compliance.

**7. Revised Baseline Schedule.** The Baseline Schedule shall be revised and submitted to the Engineer for approval when there is a:

- a. change in scope of work
- b. schedule delay, or
- c. as directed by the Engineer

The cost of preparing the Revised Baseline Schedule will be considered as subsidiary to various items in the Contract. Execution of the work according to accepted schedule and programs of construction, or approved modifications thereto, shall be an obligation of the Contractor. The Authority's acceptance or approval of a revised schedule shall not cure any default by the Contractor under this Contract, nor waive any rights or remedies available to the Authority for a default by the Contractor under this Contract.

- 8. Schedule Updates and Reports.** If, in the opinion of the Engineer, the schedule requires revision in whole or in part, he shall direct the Contractor to provide a Recovery Schedule which is addressed in Section 8.2.B.6, "Schedule Delay".

The Schedule Updates and Reports shall be submitted monthly and shall:

- a. Show the activities or portion of activities completed during the one month report period, the activities completed on this Contract to date, show the actual start and finish dates for completed activities, and show a start date and percent complete for activities in progress.
- b. Provide a narrative description of job progress, problem areas, current and anticipated delaying factors and their anticipated effect, and any corrective actions proposed or taken. The narrative description shall also clearly identify the critical path, any departures from earlier schedules, including, but not limited to, changes in logical sequence or logical ties, constraints, changes in activity duration, and any other changes, additions, or departures. The reason for each departure must be included in the narrative description. Any additions, deletions, or changes to milestone events must be approved by the Engineer. Major activities to be worked on in the next 30 and 60 days, as well as any major activities that took place in the last 30 days.
- c. Contain a tabulation of the following data for each activity:
  - Preceding and following event numbers (numbers shall be selected and assigned so as to permit identification of the activities with bid items);
  - Activity description;
  - Activity duration;
  - Earliest start date;
  - Earliest finish date;
  - Latest start date;
  - Latest finish date;
  - Total float times; and
  - Responsibility for activity (e.g., Contractor, Subcontractor, supplier, etc.)
- d. List any problem areas that could cause a delay.
- e. Show number of days that the Contractor is behind schedule, and when required, show a detailed recovery plan of how the Contractor will bring the project back into compliance of the mandatory construction dates.

Critical activities shall be prominently distinguished on all reports. All extra work shall be shown on an updated schedule.

- 9. Monthly Submittals.** Submit the Monthly Schedule Updates, Project Status Spreadsheet, and other schedules when required on the same date as the invoice. The cut-off day shall be the 25th day of the month. If the schedules, layout, spreadsheet, and invoice are not received by the 5th of the month, the Contractor agrees that the Authority may withhold an additional 10% of the current progress payment until the Contractor is in compliance. Additional money withheld will be paid to the Contractor with the next scheduled monthly invoice following compliance.

All hard copy of the submittals will be printed on paper 8.5 inches in width x 11 inches in length in a format acceptable by the Engineer.

Submit the following items with the invoice:

- a. Revised Baseline Schedule (when required) - Three (3) hard copies and one (1) CD-ROM copy.
- b. Schedule Updates and Reports – Three (3) hard copies and one (1) CD-ROM copy.
- c. Project Status Spreadsheet - Three (3) hard copies and one (1) CD-ROM copy.
- d. Recovery Schedule (when required) - Three (3) hard copies and one (1) CD-ROM copy.

Provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and this Contract. Should prosecution of the work be discontinued for any reason, notify the Engineer and the Authority at least 24 hours in advance of resuming operations, and submit a revised progress schedule.

- C. Contracts with Multiple Work Orders.** For multiple work order Contracts, provide for each work order, as required by the Engineer, a schedule in accordance with Section 8.2.A, “Routine Maintenance Contracts and Other Contracts Designated by the Engineer”, or Section 8.2.B, “Construction Contracts”.

Article 8.3, “**Computation of Contract Time for Completion**”, is hereby deleted and replaced by the following:

**8.3. Computation of Contract Time for Completion.** Working day charges will begin 10 calendar days (7 calendar days for routine maintenance Contracts) after the date of the written authorization to begin work. Working day charges will continue in accordance with the Contract. The Engineer may consider increasing the number of working days under extraordinary circumstances.

- A. Working Day Charges.** Working days will be charged Sunday through Saturday, including all holidays, regardless of weather conditions, material availability, or other conditions not under the control of the Contractor. For

multiple work order Contracts, working days will be established in each work order on a separate basis.

- B. Restricted Work Hours.** Restrictions on Contractor work hours and the related definition for working day charges are as prescribed in this Article unless otherwise shown on the plans.
- C. Nighttime Work.** Nighttime work is allowed only when shown on the plans or directed or allowed by the Engineer. Nighttime work is defined as work performed from 30 minutes after sunset to 30 minutes before sunrise.
- D. Time Statements.** The Engineer will furnish the Contractor a monthly time statement. Review the monthly time statement for correctness. Report protests in writing, no later than 30 calendar days after receipt of the time statement, providing a detailed explanation for each day protested. Not filing a protest within 30 calendar days will indicate acceptance of the working day charges and future consideration of that statement will not be permitted.

Article 8.4, “**Temporary Suspension of Work or Working Day Charges**”, is hereby supplemented by the addition of the following:

Without limiting the ability of the Authority to suspend work pursuant to other provisions of this Contract, the Engineer may suspend the work and the “working day charges”, in accordance with this Article 8.4, on any holiday, on the day preceding the holiday, on the day following the holiday or on any day for which an unusual public event is scheduled in the region if the Engineer and the Contractor mutually agree the Contractor should not work. Such suspension shall be based upon, among other things, past experience as to the volume of holiday traffic that may be expected.

Article 8.5, “**Failure to Complete Work on Time**”, is hereby deleted and replaced by the following:

**8.5. Failure to Complete Work on Time.** If the Contractor fails to complete fully, entirely, and in conformity with the provisions of this Contract, the work and each and every part or appurtenance thereof within the time stated in this Contract, or a separate work order when specified in the Contract, or within such further time as may have been granted in accordance with the provisions of Special Provision Article 8.11, “Extension of Time”, pay the Authority for each and every calendar day (Saturdays, Sundays, and legal holidays included) that Contractor is in default on time to complete the work, the amount or amounts specified in the Proposal and in the Special Provision – Important Notice to Contractors – Mandatory Construction Schedule, if included in this Contract, which said amount or amounts per day is agreed upon by the parties hereto to be liquidated damages, not a penalty. Such amount or amounts may be deducted from any money due or to become due the Contractor.

The project, of which the work forms an essential part, is operated as a controlled access toll turnpike project, and delay in completion of the work will cause disruption in the operation of currently constructed or planned portions of the project, and will cause losses to the Authority including, but not limited to, lost revenue, additional interest on monies borrowed, increased administrative, legal and engineering costs, and other tangible and intangible losses. The liquidated damages set forth in the proposal, and incorporated herein by reference, are to partially cover such losses and expenses.

The Contractor unconditionally and irrevocably acknowledges and agrees that the actual amount of said losses and expenses would be impossible or extremely difficult to determine, and that the liquidated damages set forth herein constitute a fair and reasonable estimate by the parties of the amount of said losses and expenses and in no event shall constitute or be construed as a penalty. The Contractor irrevocably and unconditionally acknowledges that the time limits set forth in the Contract constitute an essential benefit for the Authority and an essential element of the Contract.

The Authority shall recover said liquidated damages by deducting the amount thereof from any monies due or that may become due the Contractor, and if said monies be insufficient to cover said damages, then the Contractor or its Surety shall pay the amount due and the Authority shall be entitled to any and all rights and remedies available to it in law or equity to recover same.

The Engineer, at its sole discretion and option, may waive the collection of liquidated damages if the work in its entirety, or if any portion of the work for which a date of completion is stipulated, has been substantially completed within the prescribed time of completion therefore.

“Substantial completion” shall mean that measure of completion of the work under this Contract that will ensure the following:

- A.** That there will be no delay in the opening of the applicable portion of the project for operation on the established date, nor in the operation of currently constructed portions of the project as a result of the failure of the Contractor to fully complete the work or any part or parts thereof within the prescribed times of completion; and
- B.** That there will be no delay in the reopening of any public or private streets, rights-of-way, or thoroughfares which, in connection with the project, have been either totally or partially closed, or from which public traffic has been diverted by detour as a result of the failure of the Contractor to fully complete the work or any part or parts thereof within the prescribed times of completion; and
- C.** That all other concurrent or subsequent work by other contractors can proceed on any incomplete or completed part or parts of the project on the dates set forth in the contracts for said other work; and

- D. That the uncompleted work under the Contract will be performed in a sequence and manner that will not delay, impair the efficiency or safety of, nor increase the costs to, the public, other contractors, the Authority, or the Authority's agents and consultants, nor result in the loss of toll revenues that the Authority would otherwise collect if the work were completed by the stipulated date of final completion.

The Engineer shall be the sole judge as to whether substantial completion has been achieved as described above.

"Final completion" means the completion of the work, and each and every part or appurtenance thereof, fully, entirely, and in conformity with the provisions of this contract so that nothing remains to be done, including any corrective or "punchlist" items, and, as described in Article 9.8, "Final Payment", set forth in Special Provision to Item 9, the issuance of certifications of completion and acceptance by the Consulting Engineers and, if required by the Engineer, the Construction Manager, and the Authority's acceptance of said certifications of completion and acceptance, which acceptance shall be provided or withheld in the sole judgment of the Engineer.

If the Contractor fails to complete the work within the time fixed by this Contract, or extensions thereof, and if the Engineer shall, nevertheless, permit the Contractor to continue and complete same, such permission shall neither modify nor waive any liability of the Contractor for damages arising from noncompletion of the work within the said time, but all such liabilities shall continue in full force against the Contractor.

Article 8.6, "**Abandonment of Work or Default of Contract**", is hereby deleted and replaced by the following:

**8.6. Abandonment of Work or Default of Contract.** The Engineer may declare the Contractor to be in default of the Contract if the Contractor:

- fails to begin the work within the number of days specified,
- fails to prosecute the work to assure completion within the number of days specified,
- fails to perform the work in accordance with the Contract requirements,
- neglects or refuses to remove and replace rejected materials or unacceptable work,
- discontinues the prosecution of the work without the Engineer's approval,
- becomes insolvent, is declared bankrupt, commits an act of bankruptcy or insolvency, allows any final judgment to remain unsatisfied for a period of 10 days, or makes an unauthorized assignment for the benefit of any creditors,
- makes an unauthorized assignment,
- fails to resume work that has been discontinued within a reasonable number of days after notice to do so,
- is uncooperative, disruptive or threatening, or

- fails to conduct the work in an acceptable manner.

If any of these conditions occur, the Engineer may give notice in writing to the Contractor and the Surety of the intent to declare the Contractor in default. If the Contractor does not fully correct and cure such default within 10 days after the notice, the Authority may upon written notice declare the Contractor to be in default of the Contract. The Authority will also provide written notice of default to the Surety, if any. Working day charges will continue until completion of the Contract. The Contractor may also be subject to sanctions under the Texas Administrative Code.

The Authority will determine the method used for the completion of the remaining work as follows:

- The Authority may complete the work using any or all materials at the work locations that it deems suitable and acceptable. Any costs incurred by the Authority for the completion of the work under the Contract will be the responsibility of the Contractor and/or the Surety.
- The Authority may, without violating the Contract, demand that the Contractor's Surety complete the remaining work in accordance with the terms of the original Contract. A completing Contractor will be considered a subcontractor of the Surety. The Authority reserves the right to approve or reject proposed subcontractors. Work may resume after the Authority receives and approves certificates of insurance as required in Article 7.4, "Insurance and Bonds." Certificates of insurance may be issued in the name of the completing Contractor. The Surety is responsible for making every effort to expedite the resumption of work and completion of the Contract.

From the time of notification of the default until work resumes (either by the Surety or the Authority), the Authority will maintain traffic control devices and will do any other work it deems necessary, unless otherwise agreed upon by the Authority and the Surety. All costs associated with this work will be deducted from money due to the Contractor and/or the Surety.

The Authority will hold all money earned but not disbursed by the date of default. Upon resumption of the work after the default, all payments will be made to the Surety. All costs and charges incurred by the Department as a result of the default, including the cost of completing the work under the Contract, costs of maintaining traffic control devices, costs for other work deemed necessary, and any applicable liquidated damages or disincentives will be deducted from money due the Contractor for completed work. If these costs exceed the sum that would have been payable under the Contract, the Surety will be liable and pay the Authority the balance of these costs in excess of the Contract price. If the costs incurred by the Authority are less than the amount that would have been payable under the Contract if the work had been completed by the Contractor, the Authority will be entitled to retain the difference. If it is determined, after the Contractor is declared in default, that the Contractor was not in default, the Authority may, at its option, deem the rights and obligations of the parties to be the same as if a termination had been issued for the convenience of the public as provided in Article 8.7, "Termination of Contract."

April 2010

Article 8.7, “**Termination of Contract**”, is hereby supplemented by the addition of the following:

Termination of the Contract, as stated above, will not relieve the Contractor or the Surety of the responsibility of replacing defective work as required by the Contract.

Article 8.8, “**Subcontracting**”, Section A, “**Construction Contracts and Federally Funded Routine Maintenance Contracts**”, the first and second paragraphs are hereby deleted and replaced by the following:

**A. Construction Contracts and Federally Funded Routine Maintenance Contracts.** The Contractor must perform work with its own organization on at least 30% of the total contract cost including the original contract amount and its change orders thereafter.

As stated in the NTTA Business Diversity Department Contracting & Compliance Manual, the Subcontractor must perform work with its own organization on at least 30% of the total contract cost including the original contract amount and its change orders thereafter.

Article 8.8, “**Subcontracting**”, is hereby supplemented by the addition of the following to Section A thereof:

In the case when the Contractor is found to be in default of the Contract, the requirement that 30% of the total Contract cost including the original contract amount and its change orders thereafter shall be performed by the Contractor with its own organization may be suspended by the Authority, but the Authority’s approval of all Subcontractors continues to be required.

If the DBE goal amount for this project is greater than zero, submit a copy of the executed subcontract agreement with the request for subcontractor approval for all DBE subcontracts, including all tiered DBE subcontracts.

Item 8 is hereby supplemented by the addition of the following Articles:

**8.11. Extension of Time.** Throughout the progress of the work, areas in which construction can be performed may be limited until (1) additional rights-of-way are obtained, (2) utilities are adjusted, (3) other contractors and public utility companies have moved out of the way of the progress of construction, or (4) changes in the work have been issued.

A request for an extension of time that is timely and properly made pursuant to Article 4.3 or Article 4.4 may be granted by the Engineer notwithstanding that other work can be completed under the Contract. Also, the Engineer may respond to a request timely and properly made under Article 4.3 or Article 4.4 before substantial completion of the work. Otherwise, notwithstanding anything to the contrary contained herein, except for requests pursuant to Article 4.3 or Article 4.4, requests for time extensions based upon delays, disruptions, or hindrances arising from any of the above-referenced causes or any other cause will not be considered, nor will Contractor be entitled to any such time extensions, until all construction that can be

performed under the Contract has been completed in the sole judgment of the Engineer or halted by order of the Authority and any determination by the Engineer to grant an extension of time due to the conditions referenced in this Article 8.11 will not be made until after substantial completion of the work.

Unless otherwise provided herein, no extensions of time for any reason will be granted.

No extension of time will be considered unless written notice is given to the Engineer of such delay and of the Contractor's intention to request an extension of time within 5 days after the beginning of such delay, and said notice shall give complete information as to the nature, cause, and probable extent of the delay.

The Authority's decision to grant an extension, or multiple extensions, of time to any other contractor involved in the project, or any other project for the Authority for any reason whatsoever shall not in any way affect the Contractor's obligations hereunder nor the Authority's right to insist on full and timely performance pursuant to the terms of the Contract.

**8.12. Time of the Essence.** Time is of the essence in the performance of all work to be done by the Contractor pursuant to this Contract.







**ATTACHMENT A - PROJECT STATUS SPREADSHEET #10**  
3/29/09

# EXAMPLE

Contract No.: XXXX-XX-XX-CN-PM  
 Highway: President George Bush Turnpike  
 Contractor's Name: ABC Construction  
 Report Period: 2/26/2009 - 3/25/2009  
 Notice-to-Proceed Date: 5/14/2008  
 Estimated Completion Date: 11/20/2009  
 Original Contract Value: \$31,768,954.70  
 Total Approved Change Orders (including this month): \$ 1,062,241.20  
 Total Contract Value (This Month): \$32,831,195.90

Section: XX

MONTHLY STATUS	PSS #8	PSS #9	PSS #10	PSS #11	PSS #12	PSS #13	PSS #14	PSS #15	PSS #16	PSS #17	PSS #18	
Month	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
Schedules % Complete (monthly)	5.0%	5.0%	5.5%	6.5%	7.5%	7.5%	8.0%	8.0%	8.0%	1.5%	1.0%	
Actual % Complete (monthly)	5.6%	5.4%	7.1%									
Scheduled \$ (monthly)	\$ 1,200,000.00	\$ 1,500,000.00	\$ 1,750,000.00	\$ 2,200,000.00	\$ 2,500,000.00	\$ 2,500,000.00	\$ 2,500,000.00	\$ 2,800,000.00	\$ 1,700,000.00	\$ 1,050,000.00	\$ 431,195.90	
Actual \$ (monthly)	\$ 1,167,306.90	\$ 1,376,985.30	\$ 1,879,543.10									
Scheduled % Complete (monthly)	3.7%	4.6%	5.3%	6.7%	7.6%	7.6%	7.6%	8.5%	5.2%	3.2%	1.3%	
Actual % Complete (monthly)	3.6%	4.2%	5.7%									
Current Submittal (monthly)			\$ 2,250,000.00	\$ 2,200,000.00	\$ 2,500,000.00	\$ 2,700,000.00	\$ 2,500,000.00	\$ 2,800,000.00	\$ 1,500,000.00	\$ 1,050,000.00	\$ 417,205.60	
Previous Submittal (monthly)			\$ 1,900,000.00	\$ 2,200,000.00	\$ 2,400,000.00	\$ 2,500,000.00	\$ 2,500,000.00	\$ 2,500,000.00	\$ 900,000.00	\$ 650,000.00	\$ 167,205.60	
Variance (monthly)				-2.2%	-4.0%	-7.4%	0.0%	-10.7%	-40.0%	-38.1%	-59.9%	
Approved Change Orders (monthly)			\$ 267,498.40									

CUMULATIVE STATUS	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
Schedules % Complete (cumulative)	48.0%	53.0%	58.5%	65.0%	72.5%	80.0%	88.0%	96.0%	97.5%	99.0%	100.0%	
Actual % Complete (cumulative)	47.7%	53.1%	60.2%									
Scheduled \$ (cumulative)	\$ 13,900,000.00	\$ 15,400,000.00	\$ 17,150,000.00	\$ 19,350,000.00	\$ 21,850,000.00	\$ 24,350,000.00	\$ 26,850,000.00	\$ 29,650,000.00	\$ 31,350,000.00	\$ 32,400,000.00	\$ 32,831,195.90	
Actual \$ (cumulative)	\$ 13,857,461.90	\$ 15,234,447.20	\$ 17,113,990.30									
Scheduled % Complete (cumulative)	42.7%	47.3%	52.2%	58.9%	66.6%	74.2%	81.8%	90.3%	95.6%	98.7%	100.0%	
Actual % Complete (cumulative)	42.6%	46.8%	52.1%									
Current Submittal (cumulative)			\$ 1,900,000.00	\$ 4,100,000.00	\$ 6,500,000.00	\$ 9,000,000.00	\$ 11,500,000.00	\$ 14,000,000.00	\$ 14,900,000.00	\$ 15,550,000.00	\$ 15,717,205.60	
Previous Submittal (cumulative)			\$ -	\$ 2,250,000.00	\$ 4,750,000.00	\$ 7,450,000.00	\$ 9,950,000.00	\$ 12,750,000.00	\$ 14,250,000.00	\$ 15,300,000.00	\$ 15,717,205.60	
Approved Change Orders (cumulative)	\$ 794,742.80	\$ 794,742.80	\$ 1,062,241.20	\$ 1,062,241.20	\$ 1,062,241.20	\$ 1,062,241.20	\$ 1,062,241.20	\$ 1,062,241.20	\$ 1,062,241.20	\$ 1,062,241.20	\$ 1,062,241.20	

**Notes:**

Schedules % Complete (monthly): Enter the estimated percent complete for each month based on the Baseline Schedule.

Actual % Complete (monthly): Enter the actual percent complete for each month based on the Baseline Schedule.

Scheduled \$ (monthly): Enter the estimated total dollar amount requested for each month based on the Baseline Schedule.

Actual \$ (monthly): Enter the actual dollar amount shown on the monthly invoice.

Scheduled % Complete (monthly): Enter the calculated percent complete of estimated cost for each month over the total contract amount.

Actual % Complete (monthly): Enter the calculated percent complete of actual dollar amount for each month over the total contract amount.

Current Submittal (monthly): Enter the forecasted spending for next month and the remainder of the Contract.

Previous Submittal (monthly): Enter the monthly forecasted spending submitted from the previous Progress Status Spreadsheet.

Variance (monthly): Enter the calculated monthly variance in percent using the following formula:  $[(\text{Previous Submittal (monthly)} - \text{Current Submittal (monthly)}) / \text{Current Submittal (monthly)}]$

Approved Change Orders (monthly): Enter the approved change order amount.

Cumulative Status Table (contained formulas only): The cumulative percent and dollar amounts shall be calculated from data shown in the Monthly Status Table.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION TO ITEM 9**  
**“MEASUREMENT AND PAYMENT”**

For this Contract, Item 9 of the Texas Standard Specification is hereby modified with respect to the clauses cited below and no other clause or requirement of this Item is waived or changed hereby.

Article 9.3, “**Scope of Payment**”, is hereby deleted and replaced by the following:

**9.3. Scope of Payment.** Notwithstanding anything to the contrary contained herein, except claims pursuant to Article 4.3, “Differing Site Conditions,” and to the fullest extent permitted by law, the Authority will not be liable and the Contractor hereby waives any claim for any loss or damage incurred by the Contractor, whether direct or indirect or whether related to efforts by the Contractor to accelerate the work, on account of any delay, disruption, hindrance or any other impediment whatsoever, no matter by what or by whom caused, including, but not limited to, by reason of the Engineer’s acts in giving directions, in temporarily suspending the work or, in rejecting materials or methods or workmanship; or by seasons, weather or stream fluctuations; or by the acts or failure to act of utility owners, railroads, governmental or quasi-governmental agencies or authorities; or by the non-completion of work to be performed by the Authority, by other contractors, by utility owners, railroads or by others. Rather, the amounts provided in this Contract for payment for the work are understood and agreed to include and cover all expenses or costs due to delays, disruptions, hindrances or any other impediment regardless of their cause. The Contractor shall accept the compensation, as provided in this Contract, as full payment for furnishing all materials, supplies, labor, tools, and equipment necessary to complete the work under this Contract; for any loss or damage which may arise from the nature of the work, or from the action of the elements, until the final acceptance of the work by the Engineer; for any infringement of patent, trademark or copyright; and for completing the work according to the plans and the specifications. The payment of any current or partial estimate shall in no way affect the obligation of the Contractor at its expense to repair or renew any defective parts of the construction or to replace any defective materials used in the construction and to be responsible for all damages due to such defects if such defects or damages are discovered on or before the final inspection and acceptance of the work.

Article 9.5, “**Force Account**”, is hereby amended as follows: (1) the last sentence of Section E, “Subcontracting,” is deleted and not replaced; (2) Section F, “Law Enforcement”, is deleted in its entirety and not replaced; and (3) the following two new Sections I and J are added to the end of Article 9.5., “Force Account”:

**I. Prior Agreement of Authority Required.** Work performed on a “Force Account” basis must be agreed upon by the Authority. The Authority will not be liable for the

cost of work allegedly performed on a "Force Account" basis unless agreed upon in writing by the Authority prior to the commencement of such work.

**J. Full Compensation.** The compensation, as herein provided for, shall be received by the Contractor as payment in full for extra work completed on the "force account" basis and will include, but not be limited to, use of small tools, overhead expense and profit.

Article 9.6, "**Progress Payments**", **Section A, "Retainage"**, **Section 1, "Routine Maintenance Contracts"** is voided and replaced by the following:

**1. Routine Maintenance Contracts.**

NTTA Maintenance Contracts will be subject to retainage as set forth in Articles 9.6.A.2.a, "Contracts without Recycled Materials" thru 9.6.A.2.d, "Final Retainage Release", and as supplemented in this Special Provision.

Article 9.6, "**Progress Payments**", **Section A, "Retainage"**, **Section 2, "Construction Contracts"** is supplemented by the addition of the following immediately after the sub-title of Section 2, "Construction Contracts":

**2. Construction Contracts.**

For federally funded projects, a retainage bond will be required to guarantee the protection of any claimants and the Authority for overpayments, liquidated damages, and other deductions or damages owed by the Contractor in connection with the Contract; therefore, for projects in which a retainage bond is supplied, Articles 9.6.A.2.a, "Contracts without Recycled Materials" thru 9.6.A.2.d, "Final Retainage Release" listed in this Item will not be applied.

For non-federally funded projects or any project for which a retainage bond is not supplied, the retainage will be withheld in accordance with the requirements set forth in Articles 9.6.A.2.a, "Contracts without Recycled Materials" thru 9.6.A.2.d, "Final Retainage Release."

Article 9.6, "**Progress Payments**", **Section B, "Payment Provisions for Subcontractors"**, is voided and replaced by the following:

**B. Payment Provisions for Subcontractors.** For the purposes of this Article only, the term subcontractor includes suppliers and the term work includes materials provided by suppliers at a location approved by the Authority. Pay the subcontractors for work performed within 10 days after receiving payment for the work performed by the subcontractor. Also, pay any retainage on a subcontractor's work within 10 days after satisfactory completion of all of the subcontractor's work. Completed subcontractor work includes vegetative establishment, test, maintenance, performance, and other similar periods that are the responsibility of the subcontractor.

For the purpose of this Section, satisfactory completion is accomplished when:

- the subcontractor has fulfilled the Contract requirements of both the Authority and the subcontract for the subcontracted work, including the submittal of all information required by the specifications and the Authority; and
- the work done by the subcontractor has been inspected, approved, and paid by the Authority.

The inspection and approval of a subcontractor's work does not eliminate the Contractor's responsibilities for all the work as defined in Article 7.14, "Contractor's Responsibility for Work."

The Authority may pursue actions against the Contractor, including withholding of estimates and suspending the work, for noncompliance with the subcontract requirements of this Section upon receipt of written notice with sufficient details showing the subcontractor has complied with contractual obligations as described in this Article.

These requirements apply to all tiers of subcontractors. Incorporate the provisions of this Article into all subcontract or material purchase agreements.

Article 9.8, "**Final Payment**", is hereby deleted and replaced by the following:

**9.8. Final Payment.** When the work has been completed by the Contractor and all parts of the work have been reviewed and certified by the Engineer that the work has been completed in-full and in conformance with the plans, specifications, and other components of this Contract, the Authority will pay to the Contractor the full amount of compensation earned by the Contractor based upon the latest available quantity measurements, less the retainage provided for herein. This estimate will be known as the semifinal estimate and shall have deducted from it (if any) the monies paid in all previous payments.

Subsequent to the date of the semifinal estimate and at such time as all work has been completed, the construction contract closeout process shall be completed and approved by the Authority to ensure that all specified work has been completed in accordance with the requirements of the contract, that all documents of record have been received, and that all financial covenants and requirements pertaining to the contract are satisfied, the Authority will pay to the Contractor the full amount of the compensation earned by the Contractor less any sums previously paid under this Contract, provided, however, that before making final payment of the full amount earned by the Contractor, the Authority may require the Contractor to furnish satisfactory evidence that the Contractor has paid all payrolls, bills, expenses, and costs of every type and nature whatsoever connected with the performance of the work under this Contract.

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The acceptance by the Contractor of final payment shall release the Authority from all claims and liabilities of every type and nature owing to the Contractor in connection with performance of the work under this Contract.

Nothing in this Item concerning payment shall be construed to prevent the Authority from withholding or deducting from the final payment to the Contractor the total amount of any claims of any type or nature whatsoever, including, but not limited to, liquidated damages, which the Authority shall have against the Contractor, nor shall the preceding paragraph be construed as preventing the Authority from requiring bond from the Contractor to cover claims which may have been filed with the Authority against the Contractor by others.

## SPECIAL PROVISION

132---007

### Embankment

For this project, Item 132, “Embankment,” 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 132.3 Construction, Section D. Compaction Methods.** The first paragraph, last sentence, is replaced by the following:

Compact embankments in accordance with Section 132.3.D.1, “Ordinary Compaction,” or Section 132.3.D.2, “Density Control,” as shown on the plans. Section 132.3.D.3, “Density Control by Computer-Generated (CG) Curve,” may be used by the contractor as an option for density control.

**Article 132.3 Construction, Section D. Compaction Methods,** is supplemented by the following:

- 3. Density Control by Computer-Generated (CG) Curve.** At the Contractor’s discretion, a CG curve may be used for density control. The option to use a CG curve for density control is not available for soils with a PI greater than 35; follow the requirements of Section 132.3.D.2, “Density Control.”

Compact each layer to the required density using equipment complying with Item 210, “Rolling.” Determine the maximum lift thickness based on the ability of the compacting operation and equipment to meet the required density. Do not exceed layer thickness of 12 in. loose or 10 in. compacted material, unless otherwise approved. Maintain a level layer with consistent thickness to ensure uniform compaction.

When using this method, provide CG field moisture-density curves and CG Tex-114-E moisture-density curves based on the input parameters specified in Table 3 for each source and type of material or when directed by the Engineer. The CG field dry density ( $D_{fcg}$ ) must be greater than or equal to the CG Tex-114-E maximum dry density ( $D_{acg}$ ). The Engineer will obtain independent soil samples and use Tex-114-E to determine the maximum dry density ( $D_a$ ) and optimum moisture content ( $W_{opt}$ ) each time a new curve is submitted. Provide access to the computer program used to generate the curve, when directed.

**Table 3**  
**Computer Generated Lab and Field Compaction Curve Input Criteria**

<b>Input Variables</b>	<b>Test Method</b>
Liquid Limit, %	Tex-104-E
Plasticity index (PI), %	Tex-106-E
Soil gradation	Tex-110-E, Tex-111-E
Soil classification	Tex-142-E
Compaction roller brand, type, and model	N/A
Loose lift thickness, in.	N/A
Soil specific gravity	Use 2.65 for soil type SC. Use 2.68 for soil type CL. Use 2.69 for soil type CH.

Provide a compaction control report showing all input and output parameters and CG compaction curves, including:

- CG Tex-114-E laboratory maximum dry density ( $D_{acg}$ )
- CG Tex-114-E laboratory optimum moisture content ( $W_{optcg}$ )
- CG field maximum dry density ( $D_{fcg}$ )
- CG field optimum moisture content ( $W_{f_{optcg}}$ )
- Graph of CG laboratory and field compaction curves and the “Zero Air Voids Line”
- Minimum number of roller passes to achieve the required density and moisture content.

Meet the requirements for field maximum dry density ( $D_{fcg}$ ) and field optimum moisture content ( $W_{f_{optcg}}$ ) specified in Table 4, unless otherwise shown on the plans. Use only the roller specified as an input parameter for the CG curve to meet density requirements.

**Table 4**  
**Field Density Control Requirements**

<b>Description</b>	<b>Density</b>	<b>Moisture Content</b>
	<b>Tex-115-E</b>	
PI ≤ 15	≥ 98% $D_{fcg}$	≥ $W_{f_{optcg}}$
15 < PI ≤ 35	≥ 98% $D_{fcg}$ and ≤ 102% $D_{fcg}$	≥ $W_{f_{optcg}}$

Each layer is subject to testing by the Engineer for density and moisture content. During compaction, the moisture content of the soil should be above CG optimum moisture content but should not exceed the value shown on the moisture-density curve, above optimum, required to achieve 98% dry density.

When the CG field maximum dry density ( $D_{fcg}$ ) is not achieved, perform the following steps in order:

- Verify that construction controls including lift soil properties, minimum number and uniformity of compactor passes, lift thickness, and moisture content are correct.
- If needed, rework the lift with the corrected controls using the original CG curve.
- Generate a new CG field compaction curve based on actual in-place soil properties and rework the lift.

- Rework the material using non-CG Tex-114-E moisture-density curve.

When required, remove small areas of the layer to allow for density tests. Replace the removed material and recompact at no additional expense to the Department. Proof-roll in accordance with Item 216, "Proof Rolling," when shown on the plans or as directed. Correct soft spots as directed.

**Article 132.3 Construction, Section E. Maintenance of Moisture and Reworking.** The first sentence is replaced by the following:

Maintain the density and moisture content once all requirements in Table 2 or 4 are met.



**SPECIAL PROVISION****247---033****Flexible Base**

For this project, Item 247, “Flexible Base,” 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 247.2. Materials, Section A. Aggregate, Table 1. Material Requirements** is replaced by the following:

**Table 1**  
**Material Requirements**

Property	Test Method	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Master gradation sieve size (cumulative % retained)	Tex-110-E				As shown on the plans	
2-1/2 in.		-	0	0		0
1-3/4 in.		0	0-10	0-10		0-5
7/8 in.		10-35	-	-		10-35
3/8 in.		30-50	-	-		35-65
No. 4		45-65	45-75	45-75		45-75
No. 40		70-85	60-85	50-85	70-90	
Liquid Limit, % max. <sup>1</sup>	Tex-104-E	35	40	40	As shown on the plans	35
Plasticity Index, max. <sup>1</sup>	Tex-106-E	10	12	12	As shown on the plans	10
Plasticity index, min. <sup>1</sup>						
Wet ball mill, % max. <sup>2</sup>	Tex-116-E	40	45	-	As shown on the plans	40
Wet ball mill, % max. increase passing the No. 40 sieve		20	20	-	As shown on the plans	20
Classification, max. <sup>3</sup>	Tex-117-E	When shown on the plans	When shown on the plans	-	As shown on the plans	-
Min. compressive strength, psi	Tex-117-E				As shown on the plans	
lateral pressure 0 psi		45	35	-		-
lateral pressure 3 psi		-	-	-		90
lateral pressure 15 psi		175	175	-		175

1. Determine the plastic index in accordance with Tex-107-E (linear shrinkage) when liquid limit is unattainable as defined in Tex-104-E.

2. When a soundness value is required by the plans, test material in accordance with Tex-411-A.

3. When Classification is required by the plans, a triaxial Classification of 1.0 or less for Grades 1 and 2.3 or less for Grade 2 is required. The Classification requirement for Grade 4 will be as shown on the plans.

**Article 247.2. Materials, Section A. Aggregate, Section 3. Recycled Material, Section b. Recycled Material (Including Crushed Concrete) Requirements, Section (1), Contractor Furnished Recycled Materials** is supplemented by the following:

Provide recycled materials that have a maximum sulfate content of 3000 ppm when tested in accordance with Tex-145-E.

**Article 247.4. Construction, Section C. Compaction** is supplemented by the following:

Before final acceptance, the Engineer will select the locations of tests and measure the flexible base depth in accordance with Tex-140-E when Complete in Place measurement is specified. Correct areas deficient by more than 1/2 in. in thickness by scarifying, adding material as required, reshaping, recompacting, and refinishing at the Contractor's expense.

**Article 247.4. Construction, Section C. Compaction, Section 2. Density Control first paragraph** is replaced by the following:

Compact to at least 100% of the maximum dry density determined by Tex-113-E, unless otherwise shown on the plans. Maintain moisture during compaction at not less than 1 percentage point below the optimum moisture content determined by Tex-113-E. Determine the moisture content of the material in accordance with Tex-115-E or Tex-103-E during compaction daily and report the results the same day to the Engineer, unless otherwise shown on the plans or directed.

**SPECIAL PROVISION****300---039****Asphalts, Oils, and Emulsions**

For this project, Item 300, “Asphalts, Oils, and Emulsions,” 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 300.2. Materials.** The first paragraph is voided and replaced by the following:

Provide asphalt materials that meet the stated requirements when tested in accordance with the referenced Department, AASHTO, and ASTM test methods. Unless otherwise shown in the plans and specifications, provide asphalt materials that have been preapproved for use by the Construction Division, in accordance with Tex-545-C, “Asphalt Binder Quality Program.”

**Article 300.2. Materials, Section C, Cutback Asphalt.** Table 4 “Rapid-Curing Cutback Asphalt” is voided and replaced by the following:

**Table 4  
Rapid-Curing Cutback Asphalt**

Property	Test Procedure	Type-Grade					
		RC-250		RC-800		RC-3000	
		Min	Max	Min	Max	Min	Max
Kinematic viscosity, 140°F, cSt	T 201	250	400	800	1,600	3,000	6,000
Water, %	D 95	–	0.2	–	0.2	–	0.2
Flash point, T.O.C., °F	T 79	80	–	80	–	80	–
Distillation test:	T 78						
Distillate, percentage by volume of total distillate to 680°F							
to 437°F		40	75	35	70	20	55
to 500°F		65	90	55	85	45	75
to 600°F		85	–	80	–	70	–
Residue from distillation, volume %		70	–	75	–	82	–
Tests on distillation residue:							
Penetration, 100 g, 5 sec., 77°F	T 49	80	120	80	120	80	120
Ductility, 5 cm/min., 77°F, cm	T 51	100	–	100	–	100	–
Solubility in trichloroethylene, %	T 44	99.0	–	99.0	–	99.0	–
Spot test	Tex-509-C	Neg.		Neg.		Neg.	

**300.2. Materials, Section C, Cutback Asphalt.** Table 5 “Medium-Curing Cutback Asphalt” is voided and replaced by the following:

**Table 5**  
**Medium-Curing Cutback Asphalt**

Property	Test Procedure	Type-Grade							
		MC-30		MC-250		MC-800		MC-3000	
		Min	Max	Min	Max	Min	Max	Min	Max
Kinematic viscosity, 140°F, cSt	T 201	30	60	250	500	800	1,600	3,000	6,000
Water, %	D 95	–	0.2	–	0.2	–	0.2	–	0.2
Flash point, T.O.C., °F	T 79	100	–	150	–	150	–	150	–
Distillation test:	T 78								
Distillate, percentage by volume of total distillate to 680°F									
to 437°F		–	25	–	10	–	–	–	–
to 500°F		40	70	15	55	–	35	–	15
to 600°F		75	93	60	87	45	80	15	75
Residue from distillation, volume %		50	–	67	–	75	–	80	–
Tests on distillation residue:									
Penetration, 100 g, 5 sec., 77°F	T 49	120	250	120	250	120	250	120	250
Ductility, 5 cm/min., 77°F, cm <sup>1</sup>	T 51	100	–	100	–	100	–	100	–
Solubility in trichloroethylene, %	T 44	99.0	–	99.0	–	99.0	–	99.0	–
Spot test	Tex-509-C	Neg.		Neg.		Neg.		Neg.	

1. If the penetration of residue is more than 200 and the ductility at 77°F is less than 100 cm, the material is acceptable if its ductility at 60°F is more than 100 cm.

**300.2. Materials, Section C, Cutback Asphalt.** Table 6 “Special-Use Cutback Asphalt” is voided and replaced by the following:

**Table 6**  
**Special-Use Cutback Asphalt**

Property	Test Procedure	Type-Grade					
		MC-2400L		SCM I		SCM II	
		Min	Max	Min	Max	Min	Max
Kinematic viscosity, 140°F, cSt	T 201	2,400	4,800	500	1,000	1,000	2,000
Water, %	D 95	–	0.2	–	0.2	–	0.2
Flash point, T.O.C., °F	T 79	150	–	175	–	175	–
Distillation test:	T 78						
Distillate, percentage by volume of total distillate to 680°F							
to 437°F		–	–	–	–	–	–
to 500°F		–	35	–	0.5	–	0.5
to 600°F		35	80	20	60	15	50
Residue from distillation, volume %		78	–	76	–	82	–
Tests on distillation residue:							
Polymer		SBR					
Polymer content, % (solids basis)	Tex-533-C	2.0	–	–	–	–	–
Penetration, 100 g, 5 sec., 77°F	T 49	150	300	180	–	180	–
Ductility, 5 cm/min., 39.2°F, cm	T 51	50	–	–	–	–	–
Solubility in trichloroethylene, %	T 44	99.0	–	99.0	–	99.0	–

**SPECIAL PROVISION**

**302---010**

**Aggregates For Surface Treatments**

Item 302, “Aggregates for Surface Treatments,” 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 302.2. Materials, Section A. Aggregate.** The fourth paragraph is voided and replaced by the following:

Furnish aggregates that meet the quality requirements shown in Table 3, unless otherwise shown on the plans. When Limestone Rock Asphalt (LRA) is used, furnish in accordance with DMS-9210, “Limestone Rock Asphalt (LRA).” Provide aggregates from sources listed in the Department’s *Bituminous Rated Source Quality Catalog* (BRSQC). If a source is not listed in the catalog or its listed ratings do not meet requirements of the plans, material from that source may be used only when tested by the Engineer and approved before use. Allow 30 calendar days for testing of material from such sources.

**Article 302.2. Materials, Section A. Aggregate, Table 2** is voided and replaced by the following:

**Table 2  
Aggregate Gradation Requirements (Cumulative % Retained<sup>1</sup>)**

Sieve	Grade								
	1	2	3S <sup>2</sup>	3		4S <sup>2</sup>	4	5S <sup>2</sup>	5 <sup>3</sup>
				Non-lightweight	Lightweight				
1"	-	-	-	-	-	-	-	-	-
7/8"	0-2	0	-	-	-	-	-	-	-
3/4"	20-35	0-2	0	0	0	-	-	-	-
5/8"	85-100	20-40	0-5	0-5	0-2	0	0	-	-
1/2"	-	80-100	55-85	20-40	10-25	0-5	0-5	0	0
3/8"	95-100	95-100	95-100	80-100	60-80	60-85	20-40	0-5	0-5
1/4"	-	-	-	95-100	95-100	-	-	65-85	-
#4	-	-	-	-	-	95-100	95-100	95-100	50-80
#8	99-100	99-100	99-100	99-100	98-100	98-100	98-100	98-100	98-100

1. Round test results to the nearest whole number.
2. Single-size gradation.
3. Grade 5S may be substituted for Grade 5 for LRA only, unless otherwise approved by the Engineer.

**Article 302.2. Materials, Section A. Aggregate.** Table 3 is voided and replaced by the following:

**Table 3  
Aggregate Quality Requirements**

Property	Test Method	Requirement	Remarks
SAC	AQMP	As shown on the plans	
Deleterious Material, %, Max	Tex-217-F, Part I	2.0	Not required for lightweight aggregate.
Decantation, %, Max	Tex-406-A	1.5	
Flakiness Index, Max	Tex-224-F	17	Unless otherwise shown on the plans
Los Angeles Abrasion, %, Max	Tex-410-A	35	
Magnesium Sulfate Soundness, 5 Cycle, %, Max	Tex-411-A	25	
Micro-Deval Abrasion, %, Max	Tex-461-A	-	Not used for acceptance purposes. Used by the Engineer as an indicator for further investigation.
Coarse Aggregate Angularity, 2 Crushed Faces, %, Min	Tex-460-A, Part I	85	Unless otherwise shown on the plans. Only required for crushed gravel
<b>Additional Requirements for Lightweight Aggregate</b>			
Dry Loose Unit Wt., lb./cu. ft.	Tex-404-A	35-60	
Pressure Slaking, %, Max	Tex-431-A	6.0	
Freeze-Thaw Loss, %, Max	Tex-432-A	10.0	
Water Absorption, 24 <sup>o</sup> hr., %, Max	Tex-433-A	12.0	Unless otherwise shown on plans.

**Article 302.2. Materials, Section B. Precoating.** First paragraph is voided and replaced with the following:

When precoating is shown on the plans, precoat aggregate uniformly and adequately with asphalt material to the satisfaction of the Engineer. When shown on the plans, specific aggregates may be prohibited from being precoated. Meet Table 2 and 3 requirements before precoating. Furnish precoated aggregate that spreads uniformly using approved mechanical spreading equipment.

**Article 302.2. Materials, Section B. Precoating, Section 1. Asphalt Material** is voided and replaced with the following:

**1. Asphalt Material.** Precoat the aggregates with asphalt material that meets the requirements of Item 300, "Asphalts, Oils, and Emulsions." Unless a specific precoat material is specified on the plans, use any asphalt material that meets the requirements of Item 300.

## **SPECIAL PROVISION**

### **316---016**

#### **Surface Treatments**

For this project, Item 316, “Surface Treatments”, 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 316.3.A.3. Computerized Distributor.** This section is voided and not replaced.

**Article 316.4.D.3. Asphalt Material Designed for Winter Use.** This section is voided and replaced by the following:

**A. Cold Weather Surface Treatments.** When asphalt application is allowed outside of the above temperature restrictions, the Engineer will approve the binder grade and the air and surface temperatures for asphalt material application. Apply surface treatment at air and surface temperatures as directed.

**Article 316.5.A. Asphalt Material.** This section is voided and replaced by the following:

**B. Asphalt Material.** Asphalt material will be measured at the applied temperature by strapping the tank just before and just after road application and determining the net volume in gallons from the distributor’s calibrated strap stick. The quantity to be measured for payment will be the number of gallons used, as directed, in the accepted surface treatment.



## **SPECIAL PROVISION**

### **318---010**

#### **Hot Asphalt-Rubber Surface Treatments**

For this project, Item 318, “Hot Asphalt-Rubber Surface Treatments”, 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 318.3.A. Distributor.** The second sentence is voided and not replaced.

**Articles 318.3.I. Truck Scales.** This article is voided and not replaced.

**Article 318.5. Measurement.** The first paragraph is voided and replaced by the following:

**A. A-R Binder.** A-R binder, including all components, will be measured at the applied temperature by strapping the tank just before and just after road application and determining the net volume in gallons from the distributor’s calibrated strap stick. The quantity to be measured for payment will be the number of gallons used, as directed, in the accepted surface treatment.



## SPECIAL PROVISION

### 340---003

#### Dense-Graded Hot-Mix Asphalt (Method)

For this project, Item 340, “Dense-Graded Hot-Mix Asphalt (Method),” 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 340.2. Materials, Section A. Aggregate, Section 2. RAP** is voided and replaced by the following:

**2. RAP.** RAP is salvaged, milled, pulverized, broken, or crushed asphalt pavement. Crush or break RAP so that 100% of the particles pass the 2-in. sieve.

Use of Contractor-owned RAP including HMA plant waste is permitted, unless otherwise noted in the plans. Department-owned RAP stockpiles are available for the Contractor’s use when the stockpile locations are shown on the plans. Department-owned RAP generated through required work on the Contract is available for the Contractor’s use when shown on the plans. Perform any necessary tests to ensure Contractor or Department-owned RAP is appropriate for use. Unless otherwise shown on the plans, the Department will not perform any tests or assume any liability for the quality of the Department-owned RAP.

Fractionated RAP is defined as having 2 or more RAP stockpiles whereas the RAP is divided into coarse and fine fractions. The coarse RAP stockpile will contain only material retained by processing over a 3/8 in. screen or 1/2 in. screen unless otherwise approved. The fine RAP stockpile will contain only material passing the 3/8 in. screen or 1/2 in. screen unless otherwise approved. The Engineer may allow the Contractor to use an alternate to the 3/8 in. screen or 1/2 in. screen to fractionate the RAP. The maximum percentages of fractionated RAP may be comprised of coarse or fine fractionated RAP or the combination of both coarse and fine fractionated RAP. Utilize a separate cold feed bin for each stockpile of fractionated RAP used.

Determine asphalt content and gradation of RAP stockpiles for mixture design purposes. Perform other tests on RAP when shown on the plans. Unless otherwise shown on the plans, use no more than 10% unfractionated RAP in surface mixtures and no more than 20% unfractionated RAP in non-surface mixtures that are placed within 8 in. of the final riding surface. Use no more than 30% unfractionated RAP in non-surface mixtures that are placed 8 in. or more from the final riding surface. Unless otherwise shown on the plans, use no more than 20% fractionated RAP in surface mixtures and no more than 30% fractionated RAP in non-surface mixtures that are placed within 8 in. of the final riding surface. Use no more than 40% fractionated RAP in non-surface mixtures that are placed 8 in. or more from the final riding surface. “Surface” mixtures are defined as mixtures that will be the final lift or riding surface of the pavement structure. “Non-Surface” mixtures are defined as mixtures that will be an intermediate or base layer in the pavement structure. Do not use Department or Contractor owned RAP contaminated with dirt or other objectionable materials. Do not use Department or Contractor owned RAP if

the decantation value exceeds 5% and the plasticity index is greater than 8. Test the stockpiled RAP for decantation in accordance with the laboratory method given in Tex-406-A, Part I. Determine the plasticity index using Tex-106-E if the decantation value exceeds 5%. The decantation and plasticity index requirements do not apply to RAP samples with asphalt removed by extraction.

Do not intermingle Contractor-owned RAP stockpiles with Department-owned RAP stockpiles. Remove unused Contractor-owned RAP material from the project site upon completion of the project. Return unused Department-owned RAP to the designated stockpile location.

**Article 340.2. Materials, Section A. Aggregate.** is supplemented by the following:

**4. Recycled Asphalt Shingles (RAS).** The contractor may use post-manufactured RAS or post-consumer RAS; however, the use of post-consumer RAS may be restricted when shown on the plans. RAS are defined as processed asphalt shingle material from manufacturing of asphalt roofing shingles or from re-roofing residential structures. “Post-manufactured RAS” are processed manufacturer’s shingle scrap by-product. “Post-consumer RAS,” or “tear-offs,” are processed shingle scrap removed from residential structures.

Process the RAS by ambient grinding or granulating such that 100% of the particles pass the 1/2 in. sieve when tested in accordance with Tex-200-F, Part I. Add sand meeting the requirements of Table 1 and Table 2 to RAS stockpiles, if needed, to keep the processed material workable. Use a maximum of 4% sand by weight of RAS. Perform a sieve analysis on processed RAS material prior to extraction of the asphalt.

Determine asphalt content and gradation of the RAS material for mixture design purposes in accordance with Tex-236-F. Unless otherwise shown on the plans, use no more than 5% processed RAS of the total mixture weight. When RAS is used, whether in conjunction with RAP or not, calculate and ensure the ratio of the virgin binder to total binder is greater than 65% in surface mixtures and 60% in non-surface mixtures. “Surface” mixtures are defined as mixtures that will be final lifts or riding surfaces of a pavement structure. “Non-Surface” mixtures are defined as mixtures that will be intermediate or base layers in a pavement structure. When RAS is used in conjunction with fractionated RAP, use no more than 20% combined RAS and RAP for surface mixtures, and no more than 30% combined RAS and RAP in non-surface mixtures, unless otherwise shown on the plans. When RAS is used in conjunction with un-fractionated RAP, use no more than 10% combined RAS and RAP for surface mixtures, and no more than 20% combined RAS and RAP in non-surface mixtures, unless otherwise shown on the plans.

Certify compliance of the RAS with specification DMS-11000, “Evaluating and Using Nonhazardous Recyclable Materials Guidelines”. If the RAS has not come into contact with any hazardous materials, treat it as an established NRM. Do not use RAS if deleterious materials as measured by Tex-217-F, Part I, are more than 1.5% of the stockpiled RAS.

## **SPECIAL PROVISION**

**360---003**

### **Concrete Pavement**

For this project, Item 360, "Concrete Pavement," 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 360.3. Equipment, Section E. Curing Equipment.** The third sentence is voided and replaced by the following:

Provide curing equipment that is independent of all other equipment when required to meet the requirements of Article 360.4.I, "Curing."

**Article 360.4. Construction, Section H. Spreading and Finishing, Section 2. Maintenance of Surface Moisture.** The first and second sentences are voided and replaced by the following:

Prevent surface drying of the pavement before application of the curing system by means that may include water fogging, the use of wind screens and the use of evaporation retardants.

**Article 360. 4. Construction, Section I. Curing.** The first sentence is voided and replaced by the following:

Keep the concrete pavement surface from drying as described in Section 360.4.H.2, "Maintenance of Surface Moisture," until the curing material has been applied.

**Article 360. 4. Construction, Section I. Curing, Section 1. Membrane Curing.** The first paragraph is voided and replaced by the following:

Spray the concrete surface uniformly with 2 coats of membrane curing compound at an individual application rate of not more than 180 sq. ft. per gallon. Do not allow the concrete surface to dry before applying the curing compound. Use a towel or absorptive fabric to remove any standing pools of bleed water that may be present on the surface before applying the curing compound. Apply the first coat within 10 min. after completing texturing operations. Apply the second coat within 30 min. after completing texturing operations.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION TO ITEM 416**  
**“DRILLED SHAFT FOUNDATIONS”**

For this Contract, Item 416 of the Texas 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 416.3, “**Construction, Section F. Concrete**”, the first paragraph is hereby voided and replaced by the following:

Perform all work in accordance with requirements of Item 420, “Concrete Structures.” Mass concrete placement requirements, pursuant to Article 420.4, “Construction, Section G. Placing Concrete, Subarticle 14. Mass Placements,” shall apply to all drilled shafts 72” in diameter and greater.

Article 416.5, “**Payment, Section A. Drilled Shaft**”, is hereby voided and replaced by the following:

**A. Drilled Shaft.** 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 “Drilled Shaft” or “Drilled Shaft (Non-reinforced)” or “Drilled Shaft (Sign Mounts)” or “Drilled Shaft (High Mast Pole)” or “Drilled Shaft (Roadway Illumination Pole)” or “Drilled Shaft (Traffic Signal Pole)” or “Drilled Shaft (Closed Circuit Television)” or “Drilled Shaft (Dynamic Message Sign)” of the specified diameter, subject to the limitations for overruns authorized by the Engineer given in Section 416.5.A.1, “Overrun.”

Article 416.5, “**Payment, Section A. Drilled Shaft, Section 2. Maximum Plan Length Shaft**”, is supplemented by the following:

- For roadway illumination poles, the maximum plan length shaft is the maximum length shaft, regardless of diameter, for any roadway illumination pole included in the contract.
- For traffic signal poles, the maximum plan length shaft is the maximum length shaft, regardless of diameter, for any traffic signal pole included in the contract.

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- For closed circuit television poles, the maximum plan length shaft is the maximum length shaft, regardless of diameter, for any closed circuit television pole included in the contract.
- For dynamic message sign poles, the maximum plan length shaft is the maximum length shaft, regardless of diameter, for any dynamic message sign pole included in the contract.

Article 416.5, "**Payment, Section C. Core Hole**", is hereby voided and replaced with the following:

**C. Core Hole.** Core Holes will be subsidiary to the unit price bid for the various classifications of drilled shafts specified under Item 416.

## **SPECIAL PROVISION**

### **420---002**

#### **Concrete Structures**

For this project, Item 420, "Concrete Structures," 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 420.4. Construction, Section I, "Finish of Bridge Slabs".** The tenth paragraph is supplemented with the following:

For bridge approach slabs the carpet drag, burlap drag, or broom finish may be applied either longitudinally or transversely.

**Article 420.4. Construction, Section I, "Finish of Bridge Slabs".** The first sentence of the fourteenth paragraph is voided and replaced by the following:

Unless noted otherwise, saw-cut grooves in the hardened concrete of bridge slabs, bridge approach slabs, and direct-traffic culverts to produce the final texturing after completion of the required curing period.

**Article 420.4. Construction, Section I, "Finish of Bridge Slabs".** The fourteenth paragraph is amended by the following:

When saw-cut grooves are not required in the plans, provide either a carpet drag or broom finish for micro-texture. In this case insure that an adequate and consistent micro-texture is achieved by applying sufficient weight to the carpet and keeping the carpet or broom from getting plugged with grout. For surfaces that do not have adequate texture, the Engineer may require corrective action including diamond grinding or shot blasting.

**Article 420.4. Construction, Section J. Curing Concrete.** The first sentence of the fourth paragraph is voided and replaced by the following:

For upper surfaces of bridge slabs, bridge approach slabs, median and sidewalk slabs, and culvert top slabs constructed using Class S concrete, apply interim curing using a Type 1-D curing compound before the water sheen disappears but no more than 45 minutes after application of the evaporation retardant. Do not allow the concrete surface to dry before applying the interim cure, and do not place the interim cure over standing water.

**Article 420.6 Payment.** The pay adjustment formula given in the sixth bullet of the fourth paragraph is voided and replaced by the following:

$$A = Bp[-5.37(Sa/Ss)^2 + 11.69(Sa/Ss) - 5.32]$$

Where:

*A* = Amount to be paid

*Sa* = Actual strength from cylinders or cores

*Ss* = Specified design strength

*Bp* = Unit bid price

**SPECIAL PROVISION****421---035****Hydraulic Cement Concrete**

For this project, Item 421, "Hydraulic Cement Concrete," 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 421.2.D. Water, Table 1. Chemical Limits for Mix Water** is voided and replaced by the following:

**Table 1**  
**Chemical Limits for Mix Water**

<b>Contaminant</b>	<b>Test Method</b>	<b>Maximum Concentration (ppm)</b>
Chloride (Cl)	ASTM C 114	
Prestressed concrete		500
Bridge decks and superstructure		500
All other concrete		1,000
Sulfate (SO <sub>4</sub> )	ASTM C 114	2,000
Alkalies (Na <sub>2</sub> O + 0.658K <sub>2</sub> O)	ASTM C 114	600
Total Solids	ASTM C 1603	50,000

**Article 421.2.B. Supplementary Cementing Materials (SCM)** is supplemented with the following:

- 6. Modified Class F Fly Ash (MFFA).** Furnish MFFA conforming to DMS-4610, "Fly Ash."

**Article 421.2.D. Water, Table 2. Acceptance Criteria for Questionable Water Supplies** is voided and replaced by the following:

**Table 2**  
**Acceptance Criteria for Questionable Water Supplies**

<b>Property</b>	<b>Test Method</b>	<b>Limits</b>
Compressive strength, min. % control at 7 days	ASTM C 31, ASTM C 39 <sup>1,2</sup>	90
Time of set, deviation from control, h:min.	ASTM C 403 <sup>1</sup>	From 1:00 early to 1:30 later

- Base comparisons on fixed proportions and the same volume of test water compared to the control mix using 100% potable water or distilled water.
- Base comparisons on sets consisting of at least two standard specimens made from a composite sample.

**Article 421.2.E.1 Coarse Aggregate.** The fourth paragraph is voided and replaced by the following:

Unless otherwise shown on the plans, provide coarse aggregate with a 5-cycle magnesium sulfate soundness when tested in accordance with Tex-411-A of not more than 25% when air

entrainment is waived and 18% when air entrainment is not waived. Crushed recycled hydraulic cement concrete is not subject to the 5-cycle soundness test.

**Article 421.2.E.2 Fine Aggregate.** The fifth paragraph is voided and replaced by the following:

$$\text{Acid insoluble (\%)} = \{(A1)(P1)+(A2)(P2)\}/100$$

where:

*AI* = acid insoluble (%) of aggregate 1

*A2* = acid insoluble (%) of aggregate 2

*P1* = percent by weight of aggregate 1 of the fine aggregate blend

*P2* = percent by weight of aggregate 2 of the fine aggregate blend

**Article 421.2.E.2. Fine Aggregate.** The final paragraph is voided and replaced by the following:

For all classes of concrete, provide fine aggregate with a fineness modulus between 2.3 and 3.1 as determined by Tex-402-A.

**Article 421.2.E. Aggregate** is supplemented by the following:

- 4. Intermediate Aggregate.** When necessary to complete the concrete mix design, provide intermediate aggregate consisting of clean, hard, durable particles of natural or lightweight aggregate or a combination thereof. Provide intermediate aggregate free from frozen material and from injurious amounts of salt, alkali, vegetable matter, or other objectionable material, and containing no more than 0.5% clay lumps by weight in accordance with Tex-413-A.

If more than 30% of the intermediate aggregate is retained on the No. 4 sieve, the retained portion must meet the following requirements:

- must not exceed a wear of 40% when tested in accordance with Tex-410-A.
- must have a 5-cycle magnesium sulfate soundness when tested in accordance with Tex-411-A of not more than 25% when air entrainment is waived and 18% when air entrainment is not waived.

If more than 30% of the intermediate aggregate passes the 3/8" sieve, the portion passing the 3/8" sieve must not show a color darker than standard when subjected to the color test for organic impurities in accordance with Tex-408-A and must have an acid insoluble residue, unless otherwise shown on the plans, for concrete subject to direct traffic equal to or greater than the value calculated with the following equation:

$$AI_{ia} \geq \frac{60 - (AI_{fa})(P_{fa})}{(P_{ia})}$$

where:

*AI<sub>fa</sub>* = acid insoluble (%) of fine aggregate or fine aggregate blend

*P<sub>fa</sub>* = percent by weight of the fine aggregate or fine aggregate blend as a percentage of the total weight of the aggregate passing the 3/8" sieve in the concrete mix design

*P<sub>ia</sub>* = percent by weight of the intermediate aggregate as a percentage of the total weight of the aggregate passing the 3/8" sieve in the concrete mix design

**Article 421.2.F. Mortar and Grout** is supplemented by the following:

Section 421.4.A.6, “Mix Design Options,” does not apply for mortar and grout.

**Article 421.3.A. Concrete Plants and Mixing Equipment** is supplemented by the following:

When allowed by the plans or the Engineer, for concrete classes not identified as structural concrete in Table 5 or for Class C concrete not used for bridge-class structures, the Engineer may inspect and approve all plants and trucks in lieu of the NRMCA or non-Department engineer sealed certifications. The criteria and frequency of Engineer approval of plants and trucks is the same used for NRMCA certification.

**Article 421.3.A.2. Volumetric Mixers** is supplemented by the following:

Unless allowed by the plans or the Engineer, volumetric mixers may not supply classes of concrete identified as structural concrete in Table 5.

**Article 421.4.A Classification and Mix Design.** The first paragraph is voided and replaced by the following:

Unless a design method is indicated on the plans, furnish mix designs using ACI 211, “Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete,” Tex-470-A, or other approved procedures for the classes of concrete required in accordance with Table 5. Perform mix design and cement replacement using the design by weight method unless otherwise approved. Do not exceed the maximum water-to-cementitious-material ratio.

**Article 421.4.A. Classification and Mix Design, Table 5 Concrete Classes** is voided and replaced by the following:

**Table 5  
Concrete Classes**

<b>Class of Concrete</b>	<b>Design Strength, Min. 28-day <math>f'_c</math> (psi)</b>	<b>Maximum W/C Ratio<sup>1</sup></b>	<b>Coarse Aggregate Grades<sup>2,3</sup></b>	<b>General Usage<sup>4</sup></b>
A	3,000	0.60	1–4, 8	Inlets, manholes, curb, gutter, curb & gutter, conc. retards, sidewalks, driveways, backup walls, anchors
B	2,000	0.60	2–7	Riprap, small roadside signs, and anchors
C <sup>5</sup>	3,600	0.45	1–6	Drilled shafts, bridge substructure, bridge railing, culverts except top slab of direct traffic culverts, headwalls, wing walls, approach slabs, concrete traffic barrier (cast-in-place)
C(HPC) <sup>5</sup>	3,600	0.45	1-6	As shown on the plans
D	1,500	0.60	2–7	Riprap
E	3,000	0.50	2–5	Seal concrete
F <sup>5</sup>	Note 6	0.45	2–5	Railroad structures; occasionally for bridge piers, columns, or bents
F(HPC) <sup>5</sup>	Note 6	0.45	2–5	As shown on the plans
H <sup>5</sup>	Note 6	0.45	3–6	Prestressed concrete beams, boxes, piling, and concrete traffic barrier (precast)
H(HPC) <sup>5</sup>	Note 6	0.45	3–6	As shown on the plans
S <sup>5</sup>	4,000	0.45	2–5	Bridge slabs, top slabs of direct traffic culverts

Class of Concrete	Design Strength, Min. 28-day $f'_c$ (psi)	Maximum W/C Ratio <sup>1</sup>	Coarse Aggregate Grades <sup>2,3</sup>	General Usage <sup>4</sup>
S(HPC) <sup>5</sup>	4,000	0.45	2-5	As shown on the plans
P	See Item 360	0.45	2-3	Concrete pavement
DC <sup>5</sup>	5,500	0.40	6	Dense conc. overlay
CO <sup>5</sup>	4,600	0.40	6	Conc. overlay
LMC <sup>5</sup>	4,000	0.40	6-8	Latex-modified concrete overlay
SS <sup>5</sup>	3,600 <sup>7</sup>	0.45	4-6	Slurry displacement shafts, underwater drilled shafts
K <sup>5</sup>	Note 6	0.45	Note 6	Note 6
HES	Note 6	0.45	Note 6	Note 6

1. Maximum water-cement or water-cementitious ratio by weight.
2. Unless otherwise permitted, do not use Grade 1 coarse aggregate except in massive foundations with 4-in. minimum clear spacing between reinforcing steel bars. Do not use Grade 1 aggregate in drilled shafts.
3. Unless otherwise approved, use Grade 8 aggregate in extruded curbs.
4. For information only.
5. Structural concrete classes.
6. As shown on the plans or specified.
7. Use a minimum cementitious material content of 650 lb/cy of concrete. Do not apply Table 6 over design requirements to Class SS concrete.

**Article 421.4.A. Classification and Mix Design, Table 6 Over Design to Meet Compressive Strength Requirements.** Footnote 3 is supplemented by the following:

For Class K and concrete classes not identified as structural concrete in Table 5 or for Class C concrete not used for bridge-class structures, the Engineer may designate on the plans an alternative over-design requirement up to and including 1,000 psi for specified strengths less than 3,000 psi and up to and including 1,200 psi for specified strengths from 3,000 to 5,000 psi.

**Article 421.4.A.1. Cementitious Materials** is supplemented by the following:

The upper limit of 35% replacement of cement with Class F fly ash specified by mix design Options 1 and 3 may be increased to a maximum of 45% for mass placements, high performance concrete, and precast members when approved.

**Article 421.4.A.3. Chemical Admixtures** is supplemented by the following:

When a corrosion-inhibiting admixture is required, use a 30% calcium nitrite solution. The corrosion-inhibiting admixture must be set neutral unless otherwise approved. Dose the admixture at the rate of gallons of admixture per cubic yard of concrete shown on the plans.

**Article 421.4.A.4 Air Entrainment** is voided and replaced by the following:

Air entrain all concrete except for Class B and concrete used in drilled shafts unless otherwise shown on the plans. Unless otherwise shown on the plans, target an entrained air content of 4.0% for concrete pavement and 5.5% for all other concrete requiring air entrainment. To meet the air-entraining requirements, use an approved air-entraining admixture. Unless otherwise shown on the plans, acceptance of concrete loads will be based on a tolerance of  $\pm 1.5\%$  from the target air content. If the air content is more than 1.5 but less than 3.0% above the target air, the concrete

may be accepted based on strength tests. For specified concrete strengths above 5,000 psi, a reduction of 1% is permitted.

**Article 421.4.A Table 7 Air Entrainment** is voided.

**Article 421.4.A.6. Mix Design Options.** The first and second paragraphs are voided and replaced by the following:

For structural concrete identified in Table 5 and any other class of concrete designed using more than 520 lb. of cementitious material per cu. yd., use one of the mix design Options 1–8 shown below, unless otherwise shown on the plans.

For concrete classes not identified as structural concrete in Table 5 and designed using less than 520 lb. of cementitious material per cu. yd., use one of the mix design Options 1–8 shown below, except that Class C fly ash may be used instead of Class F fly ash for Options 1, 3, and 4 unless sulfate-resistant concrete is shown on the plans.

Do not use mix design Options 6 or 7 when High Performance Concrete (HPC) is required. Option 8 may be used when HPC is required provided: a minimum of 20% of the cement is replaced with a Class C fly ash; Tex-440-A, “Initial Time of Set of Fresh Concrete” is performed during mix design verification; the additional requirements for permeability are met; and the concrete is not required to be sulfate-resistant.

**Article 421.4.A.6.b. Option 2** is voided and replaced by the following:

**b. Option 2.** Replace 35 to 50% of the cement with GGBFS or MFFA.

**Article 421.4.A.6.c. Option 3** is voided and replaced by the following:

**c. Option 3.** Replace 35 to 50% of the cement with a combination of Class F fly ash, GGBFS, MFFA, UFFA, metakaolin, or silica fume; however, no more than 35% may be fly ash, and no more than 10% may be silica fume.

**Article 421.4.A.6.f. Option 6** is voided and replaced by the following:

**f. Option 6.** Use lithium nitrate admixture at a minimum dosage determined by testing conducted in accordance with Tex-471-A, “Lithium Dosage Determination Using Accelerated Mortar Bar Testing.” Before use of the mix, provide an annual certified test report signed and sealed by a licensed professional engineer, from a laboratory on the Department’s List of Approved Lithium Testing Laboratories, certified by the Construction Division as being capable of testing according to Tex-471-A, “Lithium Dosage Determination Using Accelerated Mortar Bar Testing.”

**Article 421.4.A.6.g. Option 7** is voided and replaced by the following:

**g. Option 7.** When using hydraulic cement only, ensure that the total alkali contribution from the cement in the concrete does not exceed 3.5 lb. per cubic yard of concrete when calculated as follows:

$$\text{lb. alkali per cu. yd.} = \frac{(\text{lb. cement per cu. yd.}) \times (\% \text{ Na}_2\text{O equivalent in cement})}{100}$$

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

Do not use Option 7 when any of the aggregates in the concrete are listed on the Department’s List of Aggregate Sources Excluded from Option 7 ASR Mitigation.

**Article 421.4.A.6.h. Option 8** is voided and replaced by the following:

**h. Option 8.** For any deviations from Options 1–5, perform annual testing on coarse, intermediate, and fine aggregate separately in accordance with ASTM C 1567. Before use of the mix, provide a certified test report signed and sealed by a licensed professional engineer, from a laboratory on the Department’s List of Approved ASTM C 1260 Laboratories, demonstrating that the ASTM C 1567 test result for each aggregate does not exceed 0.08% expansion at 14 days.

Do not use Option 8 when any of the aggregates in the concrete are listed on the Department’s List of Aggregate Sources Excluded from Option 8 ASR Mitigation. When HPC is required, provide a certified test report signed and sealed by a licensed professional engineer demonstrating that AASHTO T 277 test results indicate the permeability of the concrete is less than 1,500 coulombs tested immediately after either of the following curing schedules:

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

**Article 421.4.B. Trial Batches** is supplemented by the following:

Once a trial batch substantiates the mix design, the proportions and mixing methods used in the trial batch become the mix design of record.

**Article 421.4.B. Trial Batches.** The fourth sentence of the second paragraph is voided and replaced by the following:

Test at least one set of design strength specimens, consisting of two specimens per set, at 7-day, 28-day, and at least one additional age.

**Article 421.4.D. Measurement of Materials, Table 9** is voided and replaced by the following:

**Table 9  
Measurement Tolerances – Non-Volumetric Mixers**

<b>Material</b>	<b>Tolerance (%)</b>
Cement, wt.	-1 to +3
SCM wt.	-1 to +3
Cement + SCM (cumulative weighing), wt.	-1 to +3
Water, wt. or volume	±3
Fine aggregate, wt.	±2
Coarse aggregate, wt.	±2
Fine + coarse aggregate (cumulative weighing), wt.	±1
Chemical admixtures, wt. or volume	±3

**Article 421.4.E. Mixing and Delivering Concrete.** The first paragraph is supplemented with the following:

Do not top-load new concrete onto returned concrete.

**Article 421.4.E.3. Truck-Mixed Concrete.** The first paragraph is voided and replaced by the following:

Mix the concrete in a truck mixer from 70 to 100 revolutions at the mixing speed designated by the manufacturer to produce a uniform concrete mix. Deliver the concrete to the project in a thoroughly mixed and uniform mass and discharge the concrete with a satisfactory degree of uniformity. Additional mixing at the job site at the mixing speed designated by the manufacturer is allowed as long as the requirements of Section 421.4.A.5, “Slump” and Section 421.4.E, “Mixing and Delivering Concrete” are met.



## **SPECIAL PROVISION**

### **424---002**

#### **Precast Concrete Structures (Fabrication)**

For this project, Item 424, “Precast Concrete Structures (Fabrication),” 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 424.3. Construction, Section B. Fabrication, Section 4. Quality of Concrete.** The first paragraph is voided and replaced by the following:

Provide concrete in accordance with Item 421, “Hydraulic Cement Concrete,” except for the following:

- Air-entrained concrete will not be required in precast concrete members, unless otherwise shown on the plans.
- Use a minimum of 25% Class F fly ash with mix design Option 1 from Section 421.4.A.6, “Mix Design Options,” for all precast concrete members.
- Do not use mix design Options 6, 7, or 8 from Section 421.4.A.6., “Mix Design Options” for all precast concrete members.

For each type of structure or unit, use the class of concrete shown on the plans or in the pertinent Item.



## **SPECIAL PROVISION**

### **431---001**

#### **Pneumatically Placed Concrete**

For this project, Item 431, “Pneumatically Placed Concrete,” 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 431.2 Materials.** The first paragraph is supplemented with the following:

Unless otherwise shown on the plans pre-bagged materials meeting the following requirements may be used in lieu of Class I or II concrete:

- Min. Compressive strength of 5000 psi at 28 days tested per ASTM C 42,
- Max. Absorption of 17% tested per ASTM C 642,
- Max. 28-day permeability of 1500 coulombs tested per ASTM C 1202,
- Max. 28-day shrinkage of 0.10% per ASTM C 157, and
- Min. Slant Shear of 1500 psi tested per ASTM C 882,

Submit pre-bagged materials for approval. Material testing may be required prior to approval and installation test panels will be required in accordance with Section 431.2.D. “Proportioning and Mixing.”



**SPECIAL PROVISION**  
**440---006**  
**Reinforcing Steel**

For this project, Item 440, "Reinforcing Steel" 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 440.2 Materials, Section A. Approved Mills** is supplemented by the following:

Contact the Construction Division with the name and location of the producing mill for stainless steel reinforcement at least 4 weeks prior to ordering any material.

**Article 440.2. Materials, Section D. Weldable Reinforcing Steel** is supplemented by the following:

Do not weld stainless reinforcing steel without permission from the Engineer. If welding is required, provide stainless steel reinforcing suitable for welding and submit welding procedures and electrodes to the Engineer for approval.

**Article 440.2. Materials, Section F. Epoxy Coating.** The second paragraph is voided and replaced by the following:

Furnish coated reinforcing steel meeting the requirements in Table 3.

**Article 440.2. Materials, Section F. Epoxy Coating.** Paragraph four is voided and not replaced.

**Article 440.2. Materials, Section G. Mechanical Couplers** is voided and replaced by the following:

When mechanical splices in reinforcing steel bars are shown on the plans, use couplers of the type specified in DMS-4510, "Mechanical Couplers for Reinforcing Steel," Article 4510.5.A, "General Requirements."

Furnish only couplers produced by a manufacturer pre-qualified in accordance with DMS-4510. Do not use sleeve-wedge type couplers on coated reinforcing. Sample and test couplers for use on individual projects in accordance with DMS-4510. Furnish couplers only at locations shown on the plans.

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

**Article 440.2. Materials** is supplemented by the following:

**H. Fibers.** When allowed by the plans, supply fibers at the minimum dosage listed on the Material Producer List maintained by the Materials and Pavements Section of the Construction Division. When shown on the plans, use fibers that do not corrode due to carbonation of concrete or the use of deicing salts.

**I. Stainless Steel.** When stainless reinforcing steel is required in the plans, provide deformed steel bars of the types listed in Table 3a and conforming to ASTM A 955, GR 60 or higher.

**Table 3a**  
**Acceptable Types of Deformed Steel Bar**

<b>UNS Designation</b>	S31653	S31803	S24100	S32304
<b>AISI Type</b>	316LN	2205	XM-28	2304

**Article 440.3. Construction, Section A. Bending** is supplemented by the following:

Bend stainless reinforcing steel in accordance with ASTM A955.

**Article 440.3. Construction, Section C. Storage** is supplemented by the following:

Do not allow stainless steel reinforcement to be in direct contact with uncoated steel reinforcement, nor with galvanized reinforcement. This does not apply to stainless steel wires and ties. Store stainless steel bar reinforcement separately, off the ground on wooden supports.

**Article 440.3. Construction, Section D. Splices.** The fifth bullet is voided and replaced by the following:

- For box culvert extensions with less than 1 ft. of fill, lap the existing longitudinal bars with the new bars as shown in Table 5. For extensions with more than 1 ft. of fill, lap at least 1 ft. 0 in.

**Article 440.3. Construction,** is supplemented by the following:

**G. Handling and Placing Stainless Steel Reinforcing.**

Handle, cut, and place stainless steel bar reinforcement using tools that are not used on carbon steel. Do not use carbon steel tools, chains, slings, etc. when handling stainless steel. Use only nylon or polypropylene slings. Cut stainless steel using shears, saws, abrasive cutoff wheels, or torches. Remove any thermal oxidation using pickling paste. Do not field bend stainless steel without approval.

Use 16 gauge fully annealed stainless steel tie wire conforming to the material properties listed in 440.2.I. “Stainless Steel”. Support all stainless steel on solid plastic, stainless steel, or epoxy coated steel chairs. Do not use uncoated carbon steel chairs in contact with stainless steel.

## **SPECIAL PROVISION**

**441---007**

### **Steel Structures**

For this project, Item 441, “Steel Structures,” 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 441.3, “Construction,” Section A, “General Requirements,” Section 1, “Applicable Codes,”** is voided and replaced by the following:

Perform all fabrication in accordance with AASHTO/NSBA Steel Bridge Collaboration S2.1, including fabrication of non-bridge members. Follow all applicable provisions of the appropriate AWS code (D1.5 or D1.1) except as otherwise noted in the plans or in this Item. Weld sheet steel (thinner than 1/8 in.) in accordance with ANSI/AWS D1.3, Structural Welding Code—Sheet Steel. Unless otherwise stated, requirements of this Item are in addition to the requirements of S2.1. In case of a conflict between this Item and S2.1, follow the more stringent requirement. Perform all bolting in accordance with Item 447, “Structural Bolting.”

**Article 441.3, “Construction,” Section A, “General Requirements,” Section 5, “Qualification of Plant, Laboratories, and Personnel,” Section b, “Nondestructive Examination (NDE),”** is voided and replaced by the following:

Personnel performing NDE must be qualified in accordance with the applicable AWS code. Level III personnel that qualify Level II inspectors shall be certified in accordance with CP189. Testing agencies and individual third-party contractors must also successfully complete periodic audits for compliance, performed by the Department. In addition, ultrasound technicians must pass a hands-on test administered by the Construction Division. A technician who fails the hands-on test must wait 6 months before taking the test again. Qualification to perform ultrasonic testing for the Department will be revoked when the technician’s employment is terminated, and recertification based on a new hands-on test will be required.

**Article 441.3, “Construction,” Section A, “General Requirements,” Section 8, “Submerged-Arc Welding (SAW),”** is voided and replaced by the following:

- a. Submerged-Arc Welding(SAW). Provide equipment with automatic guidance capable of maintaining the position of the arc and controlling the speed of travel so that, when once set by the operator, little manipulation is needed. Small adjustments to compensate for acceptable plate waviness, acceptable tilt of flange, etc. will be permitted. Do not use hand-held semiautomatic SAW for welding bridge members unless altered to provide automatic guidance to otherwise approved.

- b. Flux Cored Arc Welding (FCAW). Flux Cored Arc Welding is permitted on web to flange welds provided an external shielding gas is used.

**Article 441.3, “Construction,” Section A, “General Requirements,” Section 9, “Inspection.”** The second paragraph is voided and replaced by the following:

Provide the Inspector with the helpers and equipment needed to move material to allow inspection. QC is solely the responsibility of the Contractor. The Contractor must have a QC staff qualified in accordance with the applicable AWS code. Welding inspectors must be current AWS Certified Welding Inspectors. The QC staff must provide inspection of all materials and workmanship prior to inspection by the Department.

**Article 441.3, “Construction,” Section B, “Welding,” Section 5, “Nondestructive Examination (NDE),” Section c, “Magnetic Particle Testing.”** The first sentence is voided and not replaced.

**Article 441.3, “Construction,” Section D, “Dimensional Tolerances,” Section 2, “Flange Straightness.”** The second sentence is voided and replaced by the following:

Rolled material must meet this straightness requirement before being laid out or worked.

**Article 441.3, “Construction,” Section D, “Dimensional Tolerances,” Section 3, “Alignment of Deep Webs in Welded Field Connection.”** The first sentence is voided and replaced by the following:

For girders 48 in. deep or deeper, the webs may be slightly restrained while checking compliance with tolerances of S2.1 for lateral alignment at welded field connections.

**Article 441.3, “Construction,” Section D, “Dimensional Tolerances,” Section 4, “Bearings,” Section c, “Shoes,”** is supplemented by the following:

- For a pin and rocker type expansion shoe, the axis of rotation coincides with the central axis of the pin.
- When the shoe is completely assembled, as the top bolster travels through its full anticipated range, no point in the top bolster plane changes elevation by more than 1/16 in. and the top bolster does not change inclination by more than 1 degree, for the full possible travel.

**Article 441.3, “Construction,” Section D, “Dimensional Tolerances,” Section 4, “Bearings,”** is supplemented by the following:

**d. Beam supports.** Fabricate beam support planes true to the box girder bearing to 1/16 in. in the short direction and true to the vertical axis of the nesting girders to 1/16 in.

**Article 441.3, “Construction,” Section G, “Shop Assembly,” Section 1, “General Shop Assembly.”** The first paragraph is voided and replaced by the following:

**1. General Shop Assembly.** Shop-assemble field connections of primary members of trusses, arches, continuous beam spans, bents, towers (each face), plate girders, field connections of floor beams and stringers (including for railroad structures), field-bolted plate diaphragms for curved plate girders and railroad underpasses, and rigid frames. Field-bolted crossframes and rolled-section diaphragms do not require shop assembly. Complete fabrication, welding (except for shear studs), and field splice preparation before members are removed from shop assembly. Obtain approval for any deviation from this procedure. The Contractor is responsible for accurate geometry.



## **SPECIAL PROVISION**

**442---016**

### **Metal for Structures**

For this project, Item 442, “Metal for Structures,” 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 442.2, “Materials,” Section A, “Structural Steel,” Section 1, “Bridge Structures.”** The third sentence is voided and not replaced.

**Article 442.5, “Payment,”** is voided and replaced by the following:

**442.5. 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 “Structural Steel” of the type (Rolled Beam, Plate Girder, Tub Girder, Box Girder, Railroad Through-Girder, Railroad Deck-Girder, Miscellaneous Bridge, Miscellaneous Non-Bridge) specified. This price is full compensation for materials, fabrication, transportation, erection, paint, painting, galvanizing, equipment, tools, labor, and incidentals.



## **SPECIAL PROVISION**

**448---002**

### **Structural Field Welding**

For this project, Item 448, “Structural Field Welding,” 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 448.3 Equipment** is voided and replaced by the following:

Provide electrode drying and storing ovens that can maintain the required temperatures specified in Section 448.4.C.1, “Electrode Condition.” Each oven must have a door that is sealed and can be latched. Each oven must have a small port that may be opened briefly to insert a thermometer or the oven must be equipped with a thermometer that allows for direct reading of temperature inside the oven without opening the oven. Provide equipment able to preheat and maintain the temperature of the base metal as required and as shown on the plans. Provide approved equipment, temperature indicator sticks, infrared thermometer, etc., for checking preheat and interpass temperatures at all times while welding is in progress. Provide welding equipment meeting the requirements of the approved welding procedure specifications (WPS), if required, and capable of making consistent high-quality welds.

**Article 448.4.B.2.Certified Steel Structures Welder.** The second bulleted item is voided and replaced by the following:

- Use metal for test plates that meets Item 442, “Metal for Structures,” with a minimum yield point of 36 ksi. The minimum width of test plate must be sufficient to accommodate the radiograph inspection of 6 continuous inches of the weld, not counting the ends of the weld.

**Article 448.4.C.5. Welding Practice.** The second paragraph is voided and replaced by the following:

Use the stringer-bead technique where possible for groove welds. In vertical welding passes, progress upward using a back-step sequence keeping the end of the low-hydrogen electrode contained within the molten metal and shield of flux, unless the electrode manufacturer’s specifications indicate otherwise

**Article 448.4.C.7. Radiographic Inspection** is supplemented by the following:

Meet the requirements specified in Section 441.3.B.5.a, “Radiographic Testing” for radiograph film quality.



## SPECIAL PROVISION

### 450---001

#### Railing

For this project, Item 450, "Railing," 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 450.2. Materials** is supplemented with the following:

Where epoxy anchors are allowed or required, provide an approved Type III, Class C epoxy in accordance with DMS-6100, "Epoxies and Adhesives," for installing drilled and epoxied rail anchorage reinforcement or rail anchor bolts. Use other materials if shown in the plans. Provide only dual cartridge epoxy systems mixed with a static mixing nozzle supplied by the epoxy adhesive manufacturer and dispensed with a tool supplied by the epoxy adhesive manufacturer. Do not use bulk epoxies. Drill and install anchorage reinforcement or anchor bolts to the embedment depth shown in the plans or the depth recommended by the manufacturer, whichever is deeper. No additional payment will be made for providing embedment deeper than shown in the plans. If no resistance or embedment depth is specified in the plans, select an embedment depth capable of developing the yield strength of the steel anchor.

**Article 450.3. Construction, Section B. Concrete Railing.** The last paragraph is voided and replaced by the following:

Obtain approval to slipform railing. Slipforming equipment must be approved. Do not slipform railing with cast-in-place anchor bolts unless noted otherwise. Provide additional reinforcing, at Contractor's expense, as needed to prevent movement of the reinforcement cage. Clear cover and epoxy coating requirements for additional reinforcement are the same as shown for the rail reinforcement. The rail reinforcing cage may be tack welded to the rail anchorage reinforcement provided the rail and anchorage reinforcement are not epoxy coated and weld locations measured along the rail are no closer than 3 ft. If epoxy coated reinforcement is required for the railing proposed to be slipformed, tie all bar intersections. Provide a wire line to maintain vertical and horizontal alignment of the slipform machine. Attach a grade line gauge or pointer to the machine so a continuous comparison can be made between the rail being placed and the established grade line. Rails or supports at the required grade are allowed instead of sensor controls. Prior to placing concrete, make one or more passes with the slipform over the rail segment to ensure proper operation and maintenance of grades and clearances. Provide slipformed rail within a vertical and horizontal alignment tolerance of +/- 1/4 in. in 10 ft. Construct rail with a smooth and uniform appearance. Consolidate concrete so it is free of honeycomb. Provide concrete with a consistency that will maintain the shape of the rail without support. Minimize starting and stopping of the slipform operation by ensuring a continuous supply of concrete.

Do not exceed the manufacturer's recommended speed for the slipform machine. If slipforming causes movement of the reinforcement such that plan clearances are not achieved, stop slipforming and take remedial action. Remove and replace unsatisfactory slipformed rail at the Contractor's expense.

Install epoxy adhesive anchorages in accordance with the manufacturer's instructions including hole size, drilling equipment and method, hole cleaning equipment and method, mixing and dispensing epoxy, and anchor insertion. Do not alter the manufacturer's mixing nozzle or dispenser. Anchorage bars or bolts must be clean and free of grease, oil, or any other foreign material. Do not weld to an anchor bar or anchor bolt that is anchored with epoxy adhesive. Do not expose rail to traffic until epoxy adhesive has cured.

**Article 450.3. Construction, Section C. Tests** is supplemented with the following:

The Engineer will select three anchor bars or bolts of the first day's production to be tested after the epoxy has cured. Test the bars or bolts in the presence of the Engineer in accordance with ASTM E 1512, using a restrained test, to evaluate the epoxy adhesive's bond strength. Verify that the anchor bars or bolts develop the required pullout resistance in the plans or 75 percent of the yield strength of the bars or bolts, whichever is less, without a bond failure of the epoxy. The Engineer may require additional tests during production. If any of the tests do not meet the required test load, perform corrective measures to provide adequate capacity. Repair damage from testing.

**Article 450.5. Payment** is voided and replaced with 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 "Railing" of the type specified. This price will be full compensation for furnishing, preparing, and placing concrete, expansion joint material, reinforcing steel, structural steel, aluminum, cast steel, pipe, anchor bolts or bars, testing of epoxy anchors, and all other materials required in the finished railing; removal and disposal of salvageable materials; and hardware, paint and painting of metal railing, galvanizing, equipment, labor, tools, and incidentals.

## SPECIAL PROVISION

### 476---003

#### **Jacking, Boring, or Tunneling Pipe or Box**

For this project, Item 476, "Jacking, Boring, or Tunneling Pipe or Box," 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 476.3. Construction, Section A. Jacking.** The third paragraph is voided and replaced by the following:

Ensure that excavation for the underside of the pipe for at least 1/3 of the circumference of the pipe conforms to the contour and grade of the pipe. Ensure that the excavation for the bottom slab of the box conforms to the grade of the box. If desired, over excavate to provide not more than 2 in. of clearance for the upper portion of the pipe or box. Taper this clearance to zero at the point where the excavation conforms to the contour of the pipe or box. When jacking of pipe has begun, the operation shall be carried on without interruption, insofar as practicable, to prevent the pipe from becoming firmly set in the embankment. Pressure-grout any over excavation of more than 1 in. When shown on the plans, pressure-grout between the carrier pipe and casing.

**Article 476.3. Construction, Section B. Boring.** The fifth paragraph is voided and replaced by the following:

1. **Larger Diameter Boring Methods.** For drainage and large utility borings, use the pilot hole or auger method. Pressure-grout any over excavation of more than 1 in. When shown on the plans, pressure-grout between the carrier pipe and casing.
  - a. **Pilot Hole Method.** Bore a 2 in. pilot hole the entire length of the crossing, and check it for line and grade on the opposite end of the bore from the work shaft. This pilot hole will serve as centerline for the larger diameter hole to be bored.
  - b. **Auger Method.** Use a steel encasement pipe of the appropriate diameter equipped with a cutter head to mechanically perform the excavation. Use augers of sufficient diameter to convey the excavated material to the work shaft.
2. **Electrical and Communication Conduit Boring.** For electrical and communication conduit borings, limit over excavation to the dimensions shown in Table 1. Increased boring diameters will be allowed for outer diameters of casing and couplings. Pressure grouting will not be required for electrical and communication conduit borings.

**Table 1**

**Allowable Bore Diameter for Electrical or Communication Conduit or Casing**

<b>Single Conduit Bores</b>		<b>Multiple Conduit Bores</b>	
<b>Conduit Size (in.)</b>	<b>Maximum Allowable Bore (in.)</b>	<b>Conduit Size (in.)<sup>1</sup></b>	<b>Maximum Allowable Bore (in.)</b>
2	4	4	6
3	6	5	8
4	6	6	10
6	10	7	12
		8	12

1. The diameter of multiple conduits is the sum of the outside diameter of the two largest conduits for placement of up to 4 conduits in one bore. Submit boring diameters for the Engineer's approval when more than 4 conduits are to be placed in a bore.

**Article 476.3. Construction, Section C. Tunneling** is supplemented by the following:

When shown on the plans, pressure-grout between the carrier pipe and liner plate.

## **SPECIAL PROVISION**

### **500---005**

#### **Mobilization**

For this project, Item 500, "Mobilization," 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 500.1. Description** is supplemented by the following:

Work for this Item includes submissions required by the Contract.

**Article 500.3. Payment, Section A** is voided and replaced by the following:

**A.** Payment will be made upon presentation of a paid invoice for the payment, performance, or retainage bonds, and required insurance. The combined payment for bonds and insurance will be no more than 10% of the mobilization lump sum or 1% of the total Contract amount, whichever is less.

**Article 500.3. Payment, Section F** is voided and replaced by the following:

**F.** Upon final acceptance, 97% of the mobilization lump sum bid will be paid. Previous payments under this Item will be deducted from this amount.

**Article 500.3. Payment** is supplemented by the following:

**G.** Payment for the remainder of the lump sum bid for "Mobilization" will be made after all submittals are received, final quantities have been determined and when any separate vegetative establishment and maintenance, test and performance periods provided for in the Contract have been successfully completed.



## **SPECIAL PROVISION**

### **502---033**

#### **Barricades, Signs, and Traffic Handling**

For this project, 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 502.4. Payment, Section C. Maximum Total Payment Prior to Acceptance** is voided and replaced by the following:

**C. Maximum Total Payment Prior to Acceptance.** The total payment for this Item will not exceed 10% of the total Contract amount before final acceptance in accordance with Article 5.8, “Final Acceptance.” The remaining balance will be paid in accordance with Section 502.4.E, “Balance Due.”



**SPECIAL PROVISION**

**506---012**

**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 506.2. Materials. Section I. Sandbags.** Table 1 is replaced with the following:

**Table 1  
Sand Gradation**

<b>Sieve #</b>	<b>Retained (% by Weight)</b>
4	MAXIMUM 3%
100	MINIMUM 80%
200	MINIMUM 95%

**Article 506.4 Construction, B. General, 2. Maintenance,** is voided and replaced by the following:

**B. General.**

- 2. Maintenance.** Perform maintenance in accordance with the plans and the TPDES General Permit. Correct ineffective control measures. Implement additional controls as directed.

An Inspector will perform a regularly scheduled SWP3 inspection every 14 calendar days and within 24 hours after a storm event of 0.5 in. or greater. Make corrections as soon as possible before the next anticipated rain event or within 7 calendar days after being able to enter the site to work on each control device. A control device site being “too wet to work” during the entire 7 calendar day time period is the only acceptable reason for not accomplishing the corrections within the 7 calendar day time limit. Provide documentation on the Department’s inspection form developed from the Department’s inspections or through other approved methods.

If maintenance corrections are not made within this timeframe, work on the project may be suspended by the Engineer. Time charges will continue until SWP3 is brought into compliance and documentation of corrective action is provided. This in no way releases the contractor of liability for noncompliance.



## **SPECIAL PROVISION**

### **512---002**

#### **Portable Concrete Traffic Barrier**

For this project, Item 512, “Portable Concrete Traffic Barrier,” 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 512.2. Materials.** The first paragraph is supplemented by the following:

For precast concrete traffic barrier,

- Furnish the class of concrete shown on the plans. Air-entrained concrete will not be required, unless otherwise shown on the plans.
- Use a minimum of 25% Class F fly ash with mix design Option 1 from Section 421.4.A.6, “Mix Design Options.”
- Do not use mix design Options 6, 7, or 8 from Section 421.4.A.6., “Mix Design Options.”

**Article 512.3. Construction.** The second sentence of the first paragraph is voided and replaced by the following:

Multi-project fabrication plants as defined in Item 424, “Precast Concrete Structures (Fabrication)” that produce concrete traffic barrier, except temporary barrier furnished and retained by the Contractor, must be approved in accordance with DMS-7350, “Qualification Procedure for Multi-Project Fabrication Plants of Precast Concrete Traffic Barrier.”



## **SPECIAL PROVISION**

### **514---002**

#### **Permanent Concrete Traffic Barrier**

For this project, Item 514, “Permanent Concrete Traffic Barrier,” 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 514.2. Materials** is supplemented by the following:

For precast concrete traffic barrier,

- Air-entrained concrete will not be required in precast concrete traffic barrier, unless otherwise shown on the plans.
- Use a minimum of 25% Class F fly ash with mix design Option 1 from Section 421.4.A.6, “Mix Design Options.”
- Do not use mix design Options 6, 7, or 8 from Section 421.4.A.6., “Mix Design Options.”



**SPECIAL PROVISION**

**540---023**

**Metal Beam Guard Fence**

For this project, Item 540, “Metal Beam Guard Fence,” 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 540.2. Materials, Section A. Metal Beam Rail Elements.** The third paragraph is replaced by the following:

Furnish metal beam rail elements from a manufacturer on the Department’s approved Material Producer List, entitled “Metal Beam Guard Fence Rail Element Manufacturers.”

**Article 540.2. Materials, Section B. Posts, Section 2. Steel Posts** is voided and replaced by the following:

- 2. Steel Posts.** Provide rolled sections conforming to the material requirements of ASTM A 36. Drill or punch posts for standard rail attachment as shown on the plans. Galvanize in accordance with Item 445, “Galvanizing.” Low fill culvert posts may be fabricated as galvanized “blanks” with the hole to accept the rail and the final height field fabricated. Treat all exposed post surfaces caused by the field fabrication in accordance with Section 445.3.D. “Repairs.”

**Article 540.2. Materials, Section B. Posts, Table 1, Rail Element Requirements.** The section entitled “**Markings**” is voided and replaced by the following:

Markings	Permanently mark each metal beam rail element with the information required in AASHTO M 180. Permanently mark all curved sections of metal beam rail element, in addition, with the radius of the curved section in the format “R=xx ft.” These additional markings (die-imprinted) must be on the back of the metal beam rail section away from traffic and visible after erection.
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**Article 540.2. Materials, Section B. Posts** is supplemented by the following:

**3. Composite Posts.** Meet the requirements of DMS-7210, “Composite Material Posts and Blocks for Metal Beam Guard Fence.”

**Article 540.2. Materials** is supplemented by the following:

**H. Terminal Anchor Posts.** Furnish new terminal anchor posts from steel conforming to the material requirements of ASTM A 36. Fabricate posts in accordance with Item 441, “Steel Structures.” Galvanize terminal anchor posts after fabrication in accordance with Item 445, “Galvanizing.”

**I. Driveway Terminal Anchor Posts.** Furnish new terminal anchor posts from steel conforming to the material requirements of ASTM A 36. Fabricate posts in accordance with Item 441, “Steel Structures.” Galvanize terminal anchor posts after fabrication in accordance with Item 445, “Galvanizing.”

**Article 540.3. Construction, Section B. Rail Elements** is supplemented by the following:

**Short Radius.** Special rail fabrication will be required at installations having a curvature of less than 150 ft. radius. The required radius shall be as shown on the plans. Short radius metal beam guard fence requires the placement of controlled release terminal (CRT) posts of the quantity shown on the plans.

**Article 540.3. Construction** is supplemented by the following:

**G. Driveway Terminal Anchor Posts.** Embed terminal anchor posts in concrete unless otherwise shown on the plans.

**Article 540.4. Measurement** is supplement by the following:

**D. Short Radius.** Measurement will be by the foot to the nearest whole foot along the face of the rail in place, from beginning of radius (and first CRT post) to the end of radius.

**E. Driveway Terminal Anchor Section.** Measurement will be by each section, complete in place, consisting of a driveway terminal anchor post and one 6 ft. section of rail element.

**Article 540.5. Payment.** The first paragraph is voided and replaced by the following:

**540.5. Payment.** The work performed and material furnished in accordance with this Item and measured as provided under “Measurement” will be paid for at the unit price bid for “Metal W-Beam Guard Fence” of the post type specified, “Metal Thrie-Beam Guard Fence” of the post type specified, “Terminal Anchor Section,” “Metal Beam Guard Fence Transition” of the type specified, “Metal W-Beam Guard Fence Adjustment,” “Metal Thrie-Beam Guard Fence Adjustment,” “Terminal Anchor Section Adjustment,” “Transition Adjustment,” “Short Radius,” or “Driveway Terminal Anchor Section.” When weathering steel is required, Type IV will be specified.

**Article 540.5. Payment, Section C. Transition** is voided and replaced by the following:

**C. Transition.** The price bid for “Metal Beam Guard Fence Transition” is full compensation for furnishing nested sections of thrie-beam; nested sections of W-beam; thrie-beam-to-W-beam transitional rail piece, posts, concrete, curb, and connections to W-beam guard fence and bridge rails; thrie-beam terminal connectors and terminal connectors; excavation and backfilling; and equipment, labor, tools, and incidentals.

**Article 540.5. Payment** is supplemented by the following:

**E. Short Radius.** The price bid for “Short Radius” is full compensation for furnishing special rail fabricated metal beam guard fence, controlled release terminal (CRT) posts, materials, hauling, erection, blocks, driving posts, excavating, backfilling, equipment, labor, tools, and incidentals.

**F. Driveway Terminal Anchor Section.** The price bid for “Driveway Terminal Anchor Section ” is full compensation for furnishing the rail element, driveway anchor assembly, driveway terminal anchor post, and foundations; installing the rail element anchor assembly and the driveway terminal anchor post and foundations; excavation and backfilling; and equipment, labor, tools, and incidentals.



## **SPECIAL PROVISION**

### **620---001**

#### **Electrical Conductors**

For this project, Item 620, “Electrical Conductors,” 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 620.2 Materials.** The fourth and fifth paragraphs are void and replaced by the following:

Use white insulation for grounded (neutral) conductors, except that grounded conductors AWG No. 4 and larger may be black with white tape marking at every accessible location. Do not use white insulation or marking for any other conductor except control wiring specifically shown on the plans.

Ensure that insulated grounding conductors are green except that insulated grounding conductors AWG No. 4 and larger may be black with green tape marking at every accessible location. Do not use green insulation or marking for any other conductor except control wiring specifically shown on the plans.



## SPECIAL PROVISION

### 624---014

#### Ground Boxes

For this project, Item 624, "Ground Boxes," 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 624.1. Description** is voided and replaced by the following:

Construct, furnish, and install ground boxes complete with lids. Remove existing ground boxes.

**Article 624.2 Construction and Materials.** The first paragraph is voided and replaced by the following:

Provide new materials that comply with the details shown on the plans and meet the following requirements:

- Construct cast-in-place concrete ground boxes and aprons in accordance with Item 420, "Concrete Structures," and Item 440, "Reinforcing Steel."
- Provide fabricated precast polymer concrete ground boxes, and precast concrete ground boxes that comply with DMS-11070, "Ground Boxes."
- Construct a concrete apron, when shown on the plans, in accordance with Item 432, "Riprap," and Item 440, "Reinforcing Steel."

**Article 624.2. Construction and Materials** is supplemented by the following:

Remove existing ground boxes to at least 6 in. below the conduit level. Uncover conduit to a sufficient distance so that 90 degree bends can be removed and conduit reconnected. Clean the conduit in accordance with Item 618, "Conduit" and pull, splice, or terminate new conductors as indicated in the plans. Cleaning of conduit is subsidiary to this Item. Pulling, splicing, or terminating conductors will be paid under Item 620, "Electrical Conductors." Backfill area to ground level with acceptable material upon completing adjacent work related to conduit and conductors.

**Article 624.3. Measurement** is voided and replaced by the following:

This Item will be measured by each ground box complete in place or by each ground box removed.

**Article 624.4. Payment** is voided and 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 "Ground Boxes" of the types and sizes specified and for "Remove Existing Ground Boxes." This price is full compensation for excavating and backfilling; constructing, furnishing, installing, and removing the ground boxes and concrete aprons when required; and equipment, labor, materials, tools, and incidentals.



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL PROVISION TO ITEM 628**  
**“ELECTRICAL SERVICES”**

For this Contract, Item 628, “Electrical Services,” of the Standard Specifications, is hereby modified with respect to the clauses cited below and no other clause or requirement of this Item is waived or changed hereby.

Article 628.2, “**Materials**”, the second and third paragraphs are hereby deleted and replaced by the following:

For the installation of electrical services, use new materials that meet the requirements of the NEC, UL, CSA, and NEMA” and that comply with NTTA ESC standard drawings.

Article 628.2, “**Materials**”, is hereby supplemented by the following:

Provide evidence of UL certification to produce electrical services and to build service entrance enclosures.

Faulty fabrication or poor workmanship in materials, equipment, or installation will be justification for rejection.

Provide manufacturer’s warranties or guarantees when manufacturers offer such warranties or guarantees as a customary trade practice.

Furnish mini power transformers in accordance with the requirements shown on the NTTA ESC standard drawings.

Furnish generator receptacle panel and generator breakers in accordance with the requirements shown on the NTTA ESC standard drawings.

Article 628.3, “**Construction, Section A. Installation,**” is hereby deleted and replaced by the following:

**A. Installation.** Ensure components of the electrical service meet the requirements of the NTTA Electrical Service Center and TxDOT Electrical Detail Standards. Follow NEC and local utility company requirements when installing the electrical equipment. Coordinate the utility companies’ work for providing service.

Article 628.3, “**Construction,**” is hereby supplemented by the following:

Submit 2 legible copies of catalog sheets for all components required for a complete electrical service, schematics, and pedestal service drawings to the Engineer for review and approval.

Mark catalog sheets to indicate the specific product submitted for pre-approval. Provide samples when directed by the Engineer.

February, 2008

Article 628.5, "**Payment, Section A. Installation,**" is hereby deleted and replaced by the following:

**A. Installation.** This price is full compensation for paying all fees, permits, and other costs; making arrangements with the utility company for all work and materials provided by the utility company; furnishing, installing, and connecting all components including poles, service supports, foundations, anchor bolts, riprap, enclosures, switches, breakers, mini power transformers, generator receptacle panels, conduit (from the service equipment including the elbow below ground), fittings, conductors (from the service equipment including the elbow below ground), brackets, bolts, hangers, and hardware; and equipment, labor, tools, and incidentals.

## SPECIAL PROVISION

### 636---014

#### Aluminum Signs

For this project, Item 636, "Aluminum Signs," 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 636.1. Description** is voided and replaced by the following:

- **Installation.** Furnish, fabricate, and erect signs. Sign supports are provided for under other Items.
- **Replacement.** Replace existing signs on existing sign supports.
- **Refurbishing.** Refurbish existing signs on existing sign supports.

**Article 636.2. Materials, Section A. Sign Blanks** is voided and replaced by the following:

**A. Sign Blanks.** Furnish sign blank substrates in accordance with DMS-7110, "Aluminum Sign Blanks" or DMS-8305, "Fiberglass Sign Substrate," and in accordance with the types shown on the plans. Use single-piece sheet-aluminum substrates for Type A (small) signs. Use either extruded aluminum or fiberglass substrates for Type G (ground-mounted) or Type O (overhead-mounted) signs as shown on the plans.

**Article 636.2. Materials, Section B. Sign Face Reflectorization** is supplemented by the following:

Ensure that sign legend, symbols, borders, and background exhibit uniform color, appearance, and retroreflectivity when viewed both day and night.

**Article 636.2. Materials, Section C. Sign Messages.** The last two bullets are voided and replaced by the following:

- Fabricate non-reflective black film legend from materials meeting DMS-8300.
- Furnish direct-applied route markers and other attachments within the parent sign face, unless otherwise specified in the plans.

**Article 636.2. Materials, Section D. Hardware** is supplemented by the following:

Furnish sign hardware for fiberglass signs in accordance with the fiberglass substrate manufacturer's recommendations.

**Article 636.3. Construction, Section A. Fabrication, Part 1. Sign Blanks.** The first paragraph is voided and replaced by the following:

Furnish sign blanks to the sizes and shapes shown on the plans and that are free of buckles, warps, burrs, dents, cockles, or other defects. Do not splice individual extruded aluminum or fiberglass panels.

**Article 636.3. Construction, Section A. Fabrication, Part 2. Sheeting Application** is voided and replaced by the following:

**2. Sheeting Application.** Apply sheeting to sign blanks in conformance with the sheeting manufacturer's recommended procedures. Meet the fabrication requirements of DMS-8300, Section 8300.7.F, "Sign Fabrication" for white, orientation non-compliant sheeting listed on the Department's Material Producer List entitled "Sign Face Materials." Clean and prepare the outside surface of extruded aluminum or fiberglass flanges in the same manner as the sign panel face.

Minimize the number of splices in the sheeting. Overlap the lap-splices by at least 1/4 in. Use butt splices for Type C microprismatic, Type D, and Type E reflective sheeting. Provide a 1-ft. minimum dimension for any piece of sheeting. Do not splice sheeting for signs fabricated with transparent screen inks or colored transparent films.

**Article 636.3. Construction, Section A. Fabrication, Part 3. Sign Assembly.** The first paragraph is voided and replaced by the following:

**3. Sign Assembly.** Assemble extruded aluminum signs in accordance with the details shown on the plans. Assemble fiberglass signs in accordance with the fiberglass manufacturer's recommendations located on the Department's Material Producer List entitled "Fiberglass Sign Substrates." Sign face surface variation must not exceed 1/8 in. per foot. Surface misalignment between panels in multi-panel signs must not exceed 1/16 in. at any point.

**Article 636.3. Construction, Section B. Storage and Handling.** The last paragraph is voided and replaced by the following:

Store all finished signs off the ground and in a vertical position until erected. Store finished sheet-aluminum substrate signs in a weatherproof building. Extruded aluminum and fiberglass substrate signs may be stored outside.

**Article 636.3. Construction, Section E. Replacement** is supplemented by the following:

Mounting hardware for fiberglass signs will be per the fiberglass substrate manufacturer's recommendations.

**Article 636.3. Construction, Section H. Documentation** is added.

**H. Documentation.** Provide a notarized original of the Signing Material Statement (Form 2273) with the proper attachments for verification of compliance.

**Article 636.5. Payment.** The first paragraph is voided and 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 “Aluminum Signs,” “Fiberglass Signs,” “Signs,” “Replacing Existing Aluminum Signs,” “Replacing Existing Fiberglass Signs,” “Refurbishing Aluminum Signs,” or “Refurbishing Fiberglass Signs,” of the type specified.

**Article 636.5. Payment, Section B. Replacement** is voided and replaced by the following:

**B. Replacement.** This price is full compensation for: furnishing and installing new aluminum or fiberglass signs and hardware; removal of existing signs; fabrication of sign panels; treatment of sign panels required before application of the background materials; application of the background materials and messages to the sign panels; furnishing and fabricating frames, wind beams, stiffeners, or required joint backing strips; furnishing bolts, rivets, screws, fasteners, clamps, brackets, and sign support connections; assembling and erecting the signs; preparing and cleaning the signs; salvaging and disposing of unsalvageable material; and equipment, materials, labor, tools, and incidentals.



**NORTH TEXAS TOLLWAY AUTHORITY  
SPECIAL PROVISION TO ITEM 643  
“SIGN IDENTIFICATION DECALS”**

For this CONTRACT, Item 643, “Sign Identification Decals,” 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 643.2. Materials.** Figure 1 and Table 1 are replaced by the following:

<b>NTTA</b>													
<b>C</b>	<b>Fabrication Date</b>											<b>T</b>	<b>1</b>
J	F	M	A	M	J	J	A	S	O	N	D		<b>2</b>
	200		201		202		203		204				<b>3</b>
	0	1	2	3	4	5	6	7	8	9			<b>4</b>
<b>Sheeting MFR - Substrate</b>													
A	B	C	D	E	F	G	H	J	K	L	M		<b>5</b>
<b>Film/Ink MFR</b>													
A	B	C	D	E	F	G	H	J	K	L	M		<b>6</b>
<b>Sheeting MFR - Legend</b>													
A	B	C	D	E	F	G	H	J	K	L	M		<b>7</b>
<b>Installation Date</b>													
				0	1	2	3						<b>8</b>
	0	1	2	3	4	5	6	7	8	9			<b>9</b>
J	F	M	A	M	J	J	A	S	O	N	D		<b>10</b>
	200		201		202		203		204				<b>11</b>
	0	1	2	3	4	5	6	7	8	9			<b>12</b>

**Figure 1  
Decal Design (row numbers explained in Table 1).**

**Table 1  
Decal Description**

<b>Row Explanation</b>
<b>1</b> – Sign Fabricator
<b>2</b> – Month Fabricated
<b>3</b> – First 3 Digits of Year Fabricated
<b>4</b> – Last Digit of Year Fabricated
<b>5</b> – Manufacturer of the Sheeting Applied to the Substrate
<b>6</b> – Film (colored transparent or non-reflective black) or Screen Ink Manufacturer
<b>7</b> – Manufacturer of the Sheeting for the Legend
<b>8</b> – Tens digit of Date Installed
<b>9</b> – Ones Digit of Date Installed
<b>10</b> – Month Installed
<b>11</b> – First 3 Digits of Year Installed
<b>12</b> – Last Digit of Year Installed

**Article 643.3. Construction, Section A. Sign Fabricator.** Replace the first bullet with the following:

- “C” if fabricated by a commercial sign fabricator or “T” if fabricated by the Department or the Texas Department of Criminal Justice,

**Article 643.3. Construction, Section A. Sign Fabricator.** Replace the last bullet with the following:

- sheeting, film, and ink manufacturers (codes for these manufacturers are located in the Department’s approved Material Producer List, “Sign Face Materials”)

## **SPECIAL PROVISION**

**672---034**

### **Raised Pavement Markers**

For this project, Item 672, "Raised Pavement Markers," 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 672.2. Materials, Section B. Adhesives** is supplemented by the following:

- The Contractor may propose alternate adhesive materials for consideration and approval by the Engineer.

**Article 672.3. Construction.** The sixth paragraph is voided and replaced by the following:

Use the following adhesive materials for placement jiggle bar tile, reflectorized pavement markers, and traffic buttons unless otherwise shown on the plans:

- standard or flexible bituminous adhesive for applications on bituminous pavements.
- epoxy adhesive or flexible bituminous adhesive for applications on hydraulic cement concrete pavements.

Use epoxy adhesive for plowable reflectorized pavement markers.

**Article 672.3. Construction** is supplemented by the following:

Provide a 30-day performance period that begins the day following written acceptance for each separate location. The date of written acceptance will be the last calendar day of each month for the RPMs installed that month for the completed separate project locations. This written acceptance does not constitute final acceptance.

Replace all missing, broken or non-reflective RPMs. Visual evaluations will be used for these determinations. Upon request, the Engineer will allow a Contractor representative to accompany the Engineer on these evaluations.

The Engineer may exclude RPMs from the replacement provisions of the performance, provided the Engineer determines that the failure is a result of causes other than defective material or inadequate installation procedures. Examples of outside causes are extreme wear at intersections, damage by snow or ice removal, and pavement failure.

Replace all missing or non-reflective RPMs identified during the performance period within 30 days after notification. The end of the performance period does not relieve the Contractor from the performance deficiencies requiring corrective action identified during the performance period.

**Article 672.5. Payment** is supplemented by the following:

No additional payment will be made for replacement of RPMs failing to meet the performance requirements.





**SPECIAL PROVISION**

**682--001**

**Vehicle and Pedestrian Signal Heads**

Specification Item 682, "Vehicle and Pedestrian Signal Heads," 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 682.2. Materials. Section B. General.** The first paragraph is void and replaced by the following:

Provide vehicle signal heads in accordance with DMS-11120, "Vehicle Signal Heads" and DMS-11121, "12 Inch LED Traffic Signal Lamp Unit." Provide vehicle signal heads from manufacturers prequalified by the Department. The Traffic Operations Division maintains a list of prequalified vehicle signal head manufacturers.



## SPECIAL PROVISION

### 685---014

#### Roadside Flashing Beacon Assemblies

For this project, Item 685, "Roadside Flashing Beacon Assemblies," 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 685.5. Payment.** The second paragraph is voided and replaced by the following:

New conduit will be paid for under Item 618, "Conduit", except for conduit in the foundation and within 6 inches of the foundation. New electrical conductors will be paid for under Item 620, "Electrical Conductors." New tray cable will be paid for under Item 621, "Tray Cable." New duct cable will be paid for under Item 622, "Duct Cable." New ground boxes will be paid for under Item 624, "Ground Boxes". New electrical services will be paid for under Item 628, "Electrical Services." New signs will be paid for under Item 634, "Plywood Signs," or Item 636, "Aluminum Signs." New signal heads will be paid for under Item 682, "Vehicle and Pedestrian Signal Heads." New traffic signal cable will be paid for under Item 684, "Traffic Signal Cable."

**Article 685.5. Payment, A. Installation** is voided and replaced by the following:

**A. Installation.** This price is full compensation for furnishing, fabricating, galvanizing, assembling, and erecting the roadside flashing beacon assemblies; foundations; conduit in the foundation and within 6 inches of the foundation; furnishing and placing anchor bolts, nuts, washers, and templates; controller; and equipment, materials, labor, tools, and incidentals.

**Article 685.5. Payment, B. Relocation** is voided and replaced by the following:

**B. Relocation.** This price is full compensation for removing the roadside flashing beacon assemblies; removing existing foundations; installing new foundations; installing new conduit in the foundation and within 6 inches of the foundation; furnishing, fabricating, and installing any new components as required and replacing the assembly on its new foundations with all manipulations and electrical work; controller; salvaging; disposal of unsalvageable material; loading and hauling; and equipment, material, labor, tools, and incidentals.



## **SPECIAL PROVISION**

### **687---004**

#### **Pedestal Pole Assemblies**

For this project, Item 687, “Pedestal Pole Assemblies,” 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 687.2. Materials** is supplemented by the following:

- C. Pedestrian Push Button Pole Assembly.** Provide diameter as shown in the plans, schedule 40 steel pipe or tubing, aluminum pipe (alloy 6061-T6), or rigid metal conduit. Do not use aluminum conduit. Galvanize pedestrian push button post in accordance with Item 445, “Galvanizing,” unless otherwise shown on the plans.

**Article 687.3 Construction.** The second and third paragraphs are voided and replaced by the following:

- B. Installation.** Install pedestal pole assemblies and pedestrian push button pole assemblies as shown on the plans or as directed. Pedestal pole assemblies include foundation, pole shaft, base, anchor bolts, anchor bolt nuts, anchor bolt template, shims, and miscellaneous components. Pedestrian push button post assemblies include foundation, pole, pedestrian button and post cap and pedestrian sign.
- C. Painted Finish.** When required, paint pedestal pole and pedestrian push button post assemblies in accordance with details shown on the plans.

**Article 687.4 Measurement** is voided and replaced by the following:

This Item will be measured by each pedestal pole assembly or each pedestrian push button post assembly.”

**Article 687.5 Payment** is voided and 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 “Pedestal Pole Assembly” or by the unit bid price for “Pedestrian Push Button Post Assembly.”



**NORTH TEXAS TOLLWAY AUTHORITY**  
**SPECIAL SPECIFICATION**  
**ITEM 803**  
**“WATER MAINS, WASTEWATER LINES, AND OTHER**  
**MUNICIPAL IMPROVEMENTS”**

**803.1. Description.** Furnish and install water pipes, water valves, water valves stacks, water meter boxes, water service connection, fire hydrants, fittings, wastewater manholes and covers, wastewater pipes, wastewater force main, wastewater plug, encasement pipes for water and wastewater lines, drainage appurtenances, paving and other municipal improvements and supporting materials in conformance with applicable municipal entity specifications and requirements included in the Proposal and details shown on the Plans. Obtain necessary permit(s), provide testing as necessary, and request inspection of the completed water lines and wastewater lines prior to being placed in service.

**803.2. Materials.** Furnish all materials in accordance with the requirements shown on the Plans and specifications. Where required, pick-up materials furnished by the utility companies and deliver to the project site.

**803.3. Construction.** Protect from all damages to property of any character, resulting from any act, omission, neglect, or misconduct in the execution or non-execution of the work. Promptly repair, at no additional cost to the Authority, any damage to the property and/or any interruption to the service such as line stoppages or breakage caused by the Contractor's operation.

**A. Specifications.** Perform the work in such a manner consistent with applicable municipal entity's specifications and regulations or, where required, in accordance with the North Central Texas Council of Governments requirements.

1. Utility Company Specifications: The current specifications for water mains and wastewater lines for the City of Richardson may be obtained from the Development and Engineering Department. Telephone: 972-744-4240, and fax 972-744-5804. The specifications can also be viewed on the utility company's Internet Home Page at <http://www.cor.net/developmentservices.aspx?id=1400>.

2. Utility Company Specifications: The current specifications for water mains and wastewater lines for the City of Carrollton may be obtained from the Water Utilities Department. Telephone: 972-466-3425, and fax 972-466-3429. The specifications can also be viewed on the utility company's Internet Home Page at [http://www.cityofcarrollton.com/development/publicworks/Water%20Utilities\\_home.asp](http://www.cityofcarrollton.com/development/publicworks/Water%20Utilities_home.asp).

3. Utility Company Specifications: The current specifications for water mains and wastewater lines for the City of Dallas may be obtained from the Water Utilities Department. Telephone: 214-670-3146, and fax 214-670-3154. The specifications can also be viewed on the utility company's Internet Home Page at [http://www.dallascityhall.com/dwu/water\\_utilities.html](http://www.dallascityhall.com/dwu/water_utilities.html).

4. Utility Company Specifications: The current specifications for water mains and wastewater lines for the City of Garland may be obtained from the Engineering Department. Telephone: 972-205-2170, and fax 972-205-2675. The specifications can also be viewed on the utility company's Internet Home Page at <http://www.ci.garland.tx.us/Home/Departments/Development+Services/Engineering/Default>

5. Utility Company Specifications: The current specifications for water mains and wastewater lines for the City of Irving may be obtained from the Water Utilities Department. Telephone: 972-721-2281, and fax 972-721-2280. The specifications can also be viewed on the utility company's Internet Home Page at <http://www.ci.irving.tx.us/water-utilities/index.html>.

6. Utility Company Specifications: The current specifications for water mains and wastewater lines for the City of Plano may be obtained from the Engineering-Development Department. Telephone: 972-941-7152, and fax 972-941-7397. The specifications can also be viewed on the utility company's Internet Home Page at <http://plano.gov/Departments/Engineering/Development/Pages/default.aspx>.

7. General Specifications: Latest Edition of the Public Works Construction Standards – North Central Texas, including all amendments. A copy of the Public Works Construction Standards may be obtained from the North Central Texas Council of Governments, 616 Six Flags Drive, Arlington, Texas. Telephone (817) 695-9140.

**B. Permits.** Acquire all necessary permits from the applicable municipal entity to perform the work. Adhere to Special Provision 7, Article 7.2, "Permits, Licenses, and Taxes", for the procurement of all permits.

**C. Testing.** Provide testing for water mains and wastewater lines in conformance with the municipal entity's requirements or as directed by the Engineer. Perform the following testing as minimum:

1. For water mains: hydrostatic test, sterilization test
2. For wastewater lines: low pressure air test, video camera inspection or television inspection test, vacuum test of the manholes, infiltration-exfiltration test (required when water table is six feet above the invert of the pipe).

**D. Inspection.** All water mains, wastewater lines, drainage and pavement systems and their appurtenances, which are constructed, modified, or repaired under this specification, will be inspected by a representative of the applicable municipal entity. This

representative will decide all questions about quality and acceptability of materials, work performed, work progress, Contract interpretations, and acceptable Contract fulfillment.

**803.4. Measurements and Payment.** This item is a plans quantity measurement and the quantity to be paid for will be that quantity shown in the proposal and on the "Estimate and Quantity" sheet of the contract plans, except as modified by Article 9.2. If no adjustments of quantities are required, additional measurements or calculations will not be required.

The work performed and the materials furnished, in accordance with this Item will be paid for at the unit price bid for the appropriate designation(s). These prices shall be full compensation for furnishing all labor, materials, tools, equipment, testing, and incidentals necessary to satisfactorily complete the work prescribed in this specification and as detailed on the plans including excavation, embedment, and backfill.



**NORTH TEXAS TOLLWAY AUTHORITY  
SPECIAL SPECIFICATION**

**ITEM 850**

**“NATURAL GREY OR INTEGRALLY COLORED CONCRETE”**

**850.1. Description.** The purpose of this Specification is to obtain uniformity in concrete surface finishes and minimize variation in color of concrete. Furnish and place natural grey or integrally colored concrete for vertical structures as specified on the plans for the visible portion of the following pre-cast and cast-in-place elements:

- Traffic rails
- Concrete traffic barriers
- Bridge bents
- Abutments and wingwalls
- Retaining walls and copings
- Noise and screen walls
- Toll gantry columns
- Buildings
- Ramp gantry IT screen walls
- Dynamic Message Sign columns
- Concrete columns or pedestals of overhead sign or lighting structures greater than three (3) feet above finished grade.
- Other elements as shown on the plans

**850.2. Materials.** Furnish new materials conforming to the items shown on the plans that contain natural grey or integrally colored concrete and the following:

- Item 420, “Concrete Structures”
- Item 421, “Hydraulic Cement Concrete”
- Item 424, “Precast Concrete Structures (Fabrication)”
- Item 427, “Surface Finishes for Concrete”

Provide materials from the same source for each concrete mix design. When material sources are changed for any reason, submit a new concrete mix design, samples, mock-up sample(s), and Quality Control Work Plan for review and approval by the Engineer.

**A. Admixtures**

1. **Chemical Admixtures.** Provide admixture products from the same manufacturer and of the same type that will not be detrimental to the

integrity of the concrete or aesthetics in visible portions of the structure, including efflorescence staining and other surface discolorations.

2. **Color Admixtures.** Provide pure and concentrated mineral pigment(s) for color admixture products that meet the requirements of ASTM C 979, "Standard Specification for Pigments for Integrally Colored Concrete."
- B. Form Liners.** Provide commercially available form liners manufactured from quality elastomeric urethane materials having durability, tear strength, flexibility and resiliency to maintain pattern details for a minimum of 100 uses for each pattern specified. The Contractor may propose a substitute pattern, provided that the aesthetics of the proposed pattern is not materially different from that of the specified form liner. The Contractor shall bear all development costs, including the cost of providing a full-size concrete mock-up sample with proposed pattern constructed. The Engineer must review and conditionally approve the proposed pattern prior to any mock-up casting. Final approval of a substitute pattern shall be made by the Engineer in his sole discretion following inspection of the mock-up sample casting.
- C. Slip-Forming.** Construct traffic rail or concrete traffic barrier using slip formed construction methods and finishing techniques that create a uniform color and consistent surface finish in the finished work to the satisfaction of the Engineer.

### 850.3. Construction

#### A. General Requirements

1. Provide a concrete finish as shown on the plans and specified herein meeting the requirements of Section 427.4.B.2.c, "Off-the-Form Finish" for Cast-In-Place Concrete and Section 427.4.B.2.d, "Form Liner Finish" for Pre-cast Concrete. Forms and form liners, regardless of material, shall conform to the profiles, dimensions and tolerances of the finished product and produce a patterned finish as shown on the plans without damage, compromise or discoloration to the concrete.
2. Design, fabricate and install hardware and miscellaneous support materials, so that when installed, they do not leave blemishes and other imperfections on the surface when the completed work is viewed from a distance of 30-feet. Where possible, insert form ties through grooved rustications to conceal their appearance.

#### B. Submittals.

1. **Concrete Mix Design.** Submit a design for each type of concrete mix in accordance with the specifications and other requirements set forth in this Specification not less than seven (7) calendar days prior to the concrete sample submittals. Each concrete mix design will receive preliminary

approval when the mix design is determined to satisfy the strength and composition requirements of its application.

Furnish the following:

- a. **Natural Grey Concrete.** The preliminary target color is Federal Standard 595B Color No. 36559.
  - b. **Integrally Colored Concrete.** The target color is described in the plans, "General Notes and Specification Data".
  - c. **Finishes.** The acceptance of each concrete color and finish will be determined after the element is formed and surface has received cleaning by a method approved by the Engineer.
  - d. **Miscellaneous Materials.** Submit for approval by the Engineer, manufacturer's information and product data for form release agents, curing compounds, and other materials that may affect concrete color.
2. **Quality Control Work Plan (QCWP) for Cast-in-Place and Precast Concrete Elements.** Submit a QCWP for review and approval prior to casting the mock-up sample(s). The QCWP shall include an adequately detailed process to ensure the concrete elements will achieve a uniform color and consistent surface finish, free from visible defects. The QCWP shall be used by the Contractor and its precast fabrication to meet the visual quality requirements set forth in this Specification.

Minimum requirements include:

- a. Responsibilities and qualifications of lead workers and project staff directly responsible for concrete appearance management on the project site and in the fabrication plant(s);
- b. Communication plan to ensure workers have read or otherwise understand the requirements of this Specification;
- c. Manufacturing processes, storage and handling procedures, transportation and delivery procedures both in the fabrication plant(s) and on the job site, installation procedures, and cleaning procedures;
- d. Procedure for checking precast concrete units at the fabrication plant(s) and cast-in-place at the project site to ensure conformance with concrete appearance requirements of this Specification and the plans, especially in regard to the Approved Target Color and finish;
- e. Procedure for replacing the approved mock-up sample(s) used for inspection during the fabrication of precast units if the color of such samples no longer meets requirements;

- f. Procedure for confirming that the installation of the precast concrete units at the project site during and after the construction of the vertical elements conforms to the requirements of this Specification and the plans;
- g. Plan for correcting or replacing cast-in-place or precast concrete units that do not meet the visual quality requirements at the fabrication plant(s) or at the project site; and
- h. Other requirements shown on the plans and described herein.

### 3. Samples.

- a. Submit five (5) concrete tile samples for the initial target color selection. The Contractor may submit color cards for the selection prior to submitting the tile samples. Indicate pigment number and dosage rate (if applicable) used to prepare the samples.
- b. After the target color is selected by the Engineer, submit five (5) concrete samples each in different shades, measuring 2-foot width x 2-foot height x 2-inch depth, and demonstrating concrete color range, texture, and surface finish of the proposed natural grey concrete or integrally colored concrete. The first sample will have the target color, the second and third samples will have darker shades than the target color, and the fourth and fifth samples will have lighter shades than the target color. The Engineer may request additional samples (at no additional cost) with darker and/or lighter shades to provide additional data for the color range selection.

Color measurement equipment (spectrophotometer) will be used by the Engineer for color quantification and evaluating reproduction tolerance. Instrumental values will be reported in a CIE 1976 L\* a\* b\* numeric expression (or International Commission on Illumination, CIELAB, CIE Lab) to meet the following:

- Color Scale - CIE L\*, a\*, b\* color values for target and tolerances
- CIE Illuminant – D65 Daylight
- CIE Standard Observer – 10 Degree Standard Observer
- Instrument Geometry – 45/0
- Sample Preparation – All samples wiped or brushed clean prior to taking a reading.
- Sample Presentation - 1-inch (25-mm) diameter instrumentally fixed. Three readings will be taken in opposite areas and averaged to minimize measurement variation.

The shade variation between the lightest color sample and the target

color, and between the target color and the darkest color sample, shall not exceed 3.0 delta L\* ( $\Delta L^* \leq 3$ ) or 6 units total based on the CIE color value readings.

The Engineer will establish a new target color from these samples and record its CIE color value readings using the Authority's spectrophotometer. These readings will be used to guide construction of the mock-up sample(s). The new target color shall be referred to as the "Established Target Color".

- c. Submit procedures to the Engineer for approval for each cleaning method described below including, but not limited to, the abrasive material(s), equipment, and cleaning process. Submit one (1) concrete sample, measuring 10-foot width x 5-foot height x 6-inch depth, demonstrating concrete color range and surface finish of the proposed natural grey concrete or integrally colored concrete. The sample will be used to demonstrate different types of blast cleaning methods. The concrete sample will have four (4) sections with small rustication strips separating each section. Each quadrant will be 5-foot width x 2.5-foot height. Blast each section as follows:

- (1) Section 1- No Cleaning. No blast cleaning is required.
- (2) Section 2 - Brush-Off Blast Cleaning. Clean the concrete surface to provide a dry abrasive blast finish that will:
  - break the sheen of the concrete surface,
  - leave a finish of about medium sandpaper,
  - not expose any tips of aggregate,
  - not provide objectional bug holes,
  - leave sufficient surface mortar for a second cleaning if necessary to remove areas of efflorescence.
- (3) Section 3 - Light Blast Cleaning. Clean the concrete surface to provide a dry abrasive blast finish that will:
  - expose tips of aggregates,
  - show over blasting slightly,
  - remove the mortar after a second blast,
  - expose the aggregate after a second blast, if required.
- (4) Section 4 - Medium Blast Cleaning. Clean the concrete surface to provide a dry abrasive blast finish that will:
  - expose the aggregate tips clearly,
  - expose large aggregates,
  - show over blasting clearly.

The cleaning methods must be approved by the Engineer prior to the inspection of mock-up samples. Furnish additional blast cleaning

sample(s), at no additional cost to the Authority, if the cleaning methods do not meet the requirements set forth in this Specification.

- 4. Mock-up Samples and/or Mock-up Patch Repair.** Cast mock-up samples for each production concrete mix design. The approved mock-up samples shall have a color with a  $\Delta L^*$  value that does not exceed 2.0 ( $\Delta L^* \leq 2.0$ ) or 4.0 units total, and a  $\Delta b^*$  value that does not exceed 1.0 ( $\Delta b^* \leq 1.0$ ) or 2.0 units total, from the Established Target Color based on the CIE color value readings, and include features of actual construction such as reveals, chamfers, texture insets, etc.

The tolerances and color differences will be determined in accordance with Section 6.2 of the ASTM D2244, "Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates."

Furnish mock-up sample(s) in accordance with the following:

Type of mock-up sample	Minimum Number of Sample(s)	Sample Size and Shape
Slip-form concrete	1	20 LF in length of the same size, shape, and finish as the proposed slip-form concrete element.
Precast concrete	5 retaining wall panels and 5 coping sections for each production concrete mix design and 1 for other precast elements	Same size and shape as precast unit(s) specified on the plans. The mock-up sample(s) will be prepared at the fabrication plant(s). For precast units used in retaining wall system(s), the Engineer will select mock-up samples that meet the established target color, or color that meets the range set forth in this Section 850.3.B.4, from the completed precast units ready for inspections. The same procedure will be applied for replacements of mock-up sample(s).
Conventional cast-in-place (CIP) concrete or self consolidating concrete (SCC)	2 for each production concrete mix design	Shape and size shall be representative of final CIP concrete as approved by the Engineer. Each mock-up sample will be cast by mixing a minimum

Type of mock-up sample	Minimum Number of Sample(s)	Sample Size and Shape
		5-CY batch of the proposed mix that will be used for casting final concrete elements.
Precast building	1	1 panel of the same size, shape, and finish as the proposed building. Accepted mock-up panel may be incorporated into the precast structure.

When the minimum number of mock-up samples is greater than one (1), produce each mock-up sample on different days in order to demonstrate color uniformity and consistency in appearance between the obtained samples. Construct additional sample(s) as necessary when a sample fails to demonstrate a uniform color and consistent surface finish within the established color range.

Submit records of the mixing and placing procedures including date, weather conditions, surface finish curing methods, and mix constituents for each mock-up sample approved by the Engineer for use in the construction of proposed vertical structures as shown on the plans.

Use one of the mock-up sample(s) to prepare a mock-up patch repair sample demonstrating the proposed patching techniques with a minimum of two (2) patches on the edge and interior of the sample. The patch on the edge shall be at least 2-inch width x 4-inch height x 2-inch depth and the patch on the interior of the mock-up sample will be at least 6-inch width x 6-inch height x ½-inch depth. All concrete patching techniques will be reviewed and approved by the Engineer. Mock-up patch repair sample will be evaluated at 1 day, 1 week, and 1 month to see how the patch changes over time versus the larger sample. The Engineer may require modifications to the patching procedures if color changes over time are noticeable.

Secure mock-up sample(s), including the mock-up patch repair sample, in a vertical position for reference during construction and final inspection of the vertical structures.

When the mock-up sample(s) reaches its curing time, clean the mock-up sample(s) and mock-up patch repair sample in accordance with the approved cleaning method to remove dirt, debris, and other contamination prior to the establishment of the approved project color range. The Engineer will conduct a visual appraisal of mock-up acceptability without using color measurement equipment, during dry daylight conditions suitable for this activity at a minimum distance of 30-feet from the mock-up sample(s). The

approved mock-up sample(s) shall demonstrate a uniform color and consistent surface finish free from visual defects as described in this Specification.

The Engineer will also review the mock-up sample(s) and determine the final target colors for the project using color measurement equipment. This color shall be referred to as the "Approved Target Color" and may be different from the Established Target Color previously designated. If necessary, a new CIE color value reading will be recorded and the approved color range for concrete production will be determined based on the following requirements:

- a. For precast concrete, the  $\Delta L^*$  value shall not exceed 2.0 ( $\Delta L^* \leq 2.0$ ) or 4.0 units total, and the  $\Delta b^*$  value shall not exceed 1.0 ( $\Delta b^* \leq 1.0$ ) or 2.0 units total, from the Approved Target Color based on the CIE color value readings.
- b. For cast-in-place concrete, the  $\Delta L^*$  value shall not exceed 3.0 ( $\Delta L^* \leq 3.0$ ) or 6.0 units total and  $\Delta b^*$  value shall not exceed 1.0 ( $\Delta b^* \leq 1.0$ ) or 2.0 units total, from the Approved Target Color based on the CIE color value readings.
- c. The Approved Target Color and range subsequently established by CIE color value readings for precast concrete must fall within the approved cast-in-place color range.

Final concrete mix designs, including the project approved color range, will be approved based on the approved mock-up sample(s).

The approved mock-up sample(s) including mock-up patch repair sample will be used by the Engineer as necessary for inspecting and judging the aesthetic compliances of the vertical concrete structures.

Perform the following until all vertical concrete structures are accepted:

- maintain all mock-up sample(s) in a dry and covered condition;
- protect all mock-up sample(s) from damage, loss, and destruction;
- transport and set-up all mock-up sample(s) at the job sites as necessary to verify compliance with aesthetic requirements and as directed by the Engineer; and
- dispose of all mock-up sample(s) at the completion of the project.

### **C. Casting/Fabricating of Concrete.**

Do not fabricate or cast planned concrete structures for the project prior to approval of corresponding concrete mix designs and mock-up sample(s).

All concrete work shall be cast or fabricated in accordance with the approved concrete mix designs and mock-up sample(s).

After the approval of mock-up sample(s), do not change material sources or admixtures, concrete mix designs, water/cement ratio and other factors that may alter structural and appearance characteristics in the completed work without prior written approval of the Engineer. Maintain consistency in workmanship throughout the project. Adjustments, if made, shall be at no additional cost to the Authority, including the cost of new mock-up sample(s) and/or mock-up patch repair which shall be required to demonstrate that the changes will conform to the approved color range and finish consistency in the completed work. Do not proceed with adjustments without prior written approval of the Engineer.

Approved mock-up samples shall be placed in a vertical position on the Project prior to commencement of the construction work. Samples shall be relocated by the Contractor as directed by the Engineer.

Supply concrete from the same batch plant for the duration of each placement. Central dispatch from multiple plants will not be permitted unless approved by the Engineer.

Fabricate and install all concrete work in a manner that does not leave visual defects on the surface when viewed from a distance of 30-feet with the unaided eye.

When fabricating precast elements or constructing cast-in-place elements using multiple batches/pours, ensure that finished surfaces meet color and appearance requirements of this Specification and the plans.

All concrete work shall comply with the approved QCWP. If a root cause for concrete work that does not have a uniform color and consistent surface finish free of surface defects is a result of QCWP procedures, subsequent work that perpetuates the nonconformance shall not proceed until approval of a proposed solution by the Engineer.

All precast concrete work shall comply with the following:

- Samples of raw materials used in the fabrication of precast units shall be available for inspection at the fabrication plant(s) to verify the consistency of materials.

The Engineer will visit the precast fabrication plant(s) and the project site during the construction to perform routine inspections to ensure compliance with the contract requirements. The Engineer's failure to conduct inspections concurrent with Contractor's work activities shall not relieve the Contractor of any responsibility for conforming to the requirements of this Specification.

- Clean all precast concrete units in accordance with the approved cleaning

method to remove dirt, debris, and other contamination prior to visual inspection. The Engineer will inspect the pre-cast units for visible defects, uniform color, and consistent surface finish by comparing the completed units against the approved mock-up sample(s) and by using the portable spectrophotometer to confirm compliance with the required color range at the precast fabrication plant(s).

- The precast units will be inspected by the Engineer for color uniformity and surface consistency, during daylight hours under suitable conditions, within seven (7) days after casting and curing and for each precast unit that meets the aesthetic requirements of this Specification, a color approval will be granted for that unit. Precast units that do not receive color approval will not be eligible for re-evaluation after the seven (7) day period for use in the project.
- Store all precast elements on a firm surface to avoid warping and cracking and cover with impervious materials to protect from rain, snow, dirt, physical damage, staining, and discoloration until they are ready to be shipped to the project site or installed. Handle and lift the precast elements in such a manner as not to cause damage or significant distortion.
- Do not ship or install precast units that are stained, discolored, showing efflorescence, or subject to other physical damage that would compromise the required uniformity of color or surface finish in the final work. Correct the visible defects to the satisfaction of the Engineer prior to shipping or installation.
- The precast concrete units will be inspected by the Engineer for compliance with this Specification at the project site during and after the installation. Inspections performed by the Engineer shall not relieve the Contractor of their responsibility for implementation of proactive measures required to achieve consistent compliance with requirements of this Specification.

The Engineer will provide interim compliance reviews for the aesthetic requirements throughout construction of the vertical structures. The Engineer will notify the Contractor of any potential visual defects when encountered.

**850.4. Acceptance of Completed Concrete Work.** The Engineer will conduct a visual appraisal of concrete work acceptability during dry daylight conditions suitable for this activity at a minimum distance of 30-feet from the constructed work. When directed by the Engineer, the approved mock-up sample(s) will be used as reference(s) and shall be transported to locations required for that purpose. Concrete shade variation within the completed work shall be within the approved project color range or as accepted by the Engineer. Color measuring equipment will be used to determine compliance with the approved project color range in areas where color differences are visible. The Engineer's readings will be final and binding.

As defined in Section 850.3.B.3.c.(2), Brush-Off Blast Cleaning will be the procedure required for performance of work under this Specification.

The following list of visual non-conformances will be used by the Engineer to judge the visual qualities of the completed work:

- Lack of uniformity of concrete color between structures (i.e., multiple bents in a bridge) within the same line of sight
- Lack of uniformity of concrete color within the same structural element (i.e., columns in a bent, panels in a wall, etc.)
- Mottled surface appearance
- Discolored area (stained) or blotches
- Efflorescence stain
- Warped or out-of-plane surfaces
- Poor form fit up or quality (i.e., visible form seams)
- Lift lines/ cold joints
- Excessive or large bug holes
- Un-patched or honeycomb areas
- Visible patches
- Abrasive blast – over blast or under blast
- Visible streaks
- Sand seams, and
- Other visual defects as determined by the Engineer.

When the vertical structures are approved, but the construction is still in progress, protect the approved concrete surfaces from external substances and other events that could damage the uniformity in color and consistency in the appearance as shown in the approved QCWP.

**850.5. Correction to Defective Work.** Work that fails to meet the visual qualities specified in this Specification will be considered defective. The Authority, without limiting any other remedies available to the Authority, may require correction, removal, and replacement of such non-conforming work at the Contractor's expense. All decisions regarding defective work will be made by the Engineer in his sole judgment. Item 5.3, Conformity with Plans, Specifications and Special Provisions, will not be used as a basis for accepting work that does not meet the requirements of this Specification.

Correct the defects to achieve consistency of color and surface finishes as required by this Specification and the plans. Clean all exposed surfaces in accordance with the approved cleaning method or other method as approved by the Engineer after the concrete has been corrected.

Subsequent work that builds upon an identified visual nonconforming element shall

not proceed until a proposed solution and schedule for implementation has been approved by the Engineer.

When the Contractor fails to correct visual defects within an acceptable time frame as determined by the Engineer, the Authority may withhold a penalty (including, but not limited to the value of the work or the repair/replacement value of the work, which ever is greater) as determined by the Engineer from the monthly estimate of the amount of work performed until the correction is completed to the satisfaction of the Engineer.

**850.6. Acceptance of the Project.** All vertical concrete structures will receive final inspection prior to the acceptance of the Project to ensure the aesthetic requirements as shown on the plans and in this Specification have been achieved by the Contractor after the acceptance of completed concrete work. Clean all structures in accordance with the approved cleaning method to remove dirt, debris, and other contamination prior to final inspection. When there is evidence showing that the uniformity in color and consistency in the appearance of the approved concrete surfaces were damaged, the Contractor shall correct the concrete surfaces to the satisfaction of the Engineer at no additional cost to the Authority. If the Contractor refuses to correct identified visual defects, the Authority will declare a default by the Contractor under this Contract.

**850.7. Measurement and Payment.** The work performed, materials furnished, including the furnishing of samples; the furnishing, maintaining, transporting, and removal of mock-up sample(s), mock-up patch repair samples, and/or precast mock-up replacements; the cleaning of completed concrete work; the correction of concrete elements that have visual defects; and the furnishing of equipment, labor, tools, and incidentals will not be measured or paid for separately but will be subsidiary to the pertinent vertical concrete structure specified on the plans.

## SPECIAL SPECIFICATION

7540

### High Pressure Waterblasting System

1. **Description of Work.** Furnish a high pressure waterblasting system for removing paint, thermoplastic, epoxy and preformed tape materials from the following surfaces without causing any grooves or trenching of that surface, including asphalt, concrete, friction coarse asphalt, grooved asphalt, and grooved concrete.
2. **Materials.** Furnish surface treatment materials in accordance with Item 300, "Asphalts, Oils, and Emulsions"; Item 302, "Aggregates for Surface Treatment"; and Item 316, "Surface Treatments." Use approved patching materials for repairing damaged surfaces. Use potable water when water is required.
3. **Equipment.** Provide a high pressure water blasting system that conforms to the following.
  - A. **Variable Drive System.** The truck will be equipped with a secondary, variable speed drive system for full control of the forward and reverse movement of the unit while in work mode operation. While in work mode operation, the forward/reverse speed will be infinitely adjustable from 0 to 5 miles per hour. This auxiliary drive system will be easily controlled from both right and left hand steering positions. This alternate drive system will also accommodate easily and safely shifting from forward to reverse without bringing the vehicle to a stop. A single switch will accommodate this function there by making small mistakes on the road very easy to correct by instantly reversing your direction whether moving forward or reverse. When using the vehicles variable drive system, there will be a warning backup alarm similar to the chassis manufacturer's original equipment. This backup alarm will serve to warn bystanders or other vehicles that the subject vehicle is reversing its forward movement.
  - B. **Overall System Requirements:**
    1. The engineering and construction of the vehicle will be completed such that the chassis engine will be used to power all necessary components of the vehicle. No external engines, generators or other power sources will be necessary to adequately perform all functions.
    2. The performance of the vacuum recovery system must provide for a nearly dry surface eliminating the possibility of uncontained run-off blasting water and or debris, or the need for any secondary clean-up vehicles or operations. The equipment will be capable of removing markings from grooved asphalt or concrete surfaces without causing any significant damage to the integrity of the grooves or the pavement surface. It likewise will remove all forms of durable pavement markings (epoxy, thermoplastic, temporary tape, paint, concrete curing agents, etc.) from asphalt and concrete surfaces.

3. All components required for the complete operation of the waterblasting system – Ultra High Pressure (UHP) pump, vacuum system, clean water supply, vacuum recovery storage, primary truck mounted and optional secondary tractor mounted blasting components – will be mounted and transported on a single, fully self-contained and supporting single truck chassis, thereby eliminating the need for any additional water, vacuum, or other transport vehicles.
4. The waterblasting system will incorporate features providing for maximum maneuverability in highly congested traffic areas, ease of operating and maintenance with optimal environmental considerations having been made.

**C. System Controls/Operation:**

1. The truck mounted blasting components will be attached to the front of the truck chassis and will be entirely hydraulically controlled, maintain 180 degree flexibility in it's positing, and be fully operable from both the left and right side of the cab. The blasting component will have the capability of being remotely moved in a single action, from the far left blasting position to the far right blasting position, and all points in between. Controls for the operation of the system will be in the truck cab and designed for access from both sides of the cab. The positioning of the truck mounted blasting component will be manageable by a single, full-function joystick controller.
2. The tractor mounted blasting optional equipment component will likewise be attached to the front of the tractor or mobile blasting device and controlled by a joystick controller positioned next to the operator of the tractor. The blasting component will have the capability of being moved in a single action from the far left blasting position to the far right blasting position, and all points in between.

**D. High-Pressure Removal System:**

1. The removal system will include a 40,000 psi high pressure water pump.
2. This pump will produce a minimum of 11 US gallons per minute and a maximum of 12 US gallons per minute.
3. The fluid manifold of the pumping system will not require any specialty tools such as torque wrenches to perform the maintenance and repairs that may be necessary from time to time. To reduce the aforementioned maintenance, the pump must not exceed 520 rpm's when at maximum working level.
4. The UHP pump will have the ability to be easily converted from 12 gpm (49.5 liter) at 40,000 psi to a 24 gpm system operating at 20,000 psi for other maintenance operations that may be necessary from time to time. The high pressure pump will be of such design to allow these changes to be completed in under a one hour time frame by 2 mechanics.
5. The operating system will have low inlet pressure shutdown that disables the units operation when inlet pressure drops below 20 psi.

6. There must be 2 filtering chambers that filter inlet water prior to entering the high pressure pump. The final filter must meet a one micron absolute rating for the filter element being used.

**E. Removal Heads:**

1. The removal process will take place via high pressure nozzles attached to a fully enclosed, hydraulically controlled, blasting compartment. When in operation, this blasting component will travel along the surface, providing a safe, fully contained blasting and vacuum environment. This captive environment will ensure that the resulting debris and water are simultaneously contained and recovered without the necessity of secondary clean-up operations.
2. The removal heads must be easily and quickly changeable to include the following common widths of road markings. 6", 8", 10", and 14" heads. The heads will be changeable in less than 5 minutes by a single operator.
3. The removal apparatus must have 2 blasting heads. The heads may be attached together but must be controllable so as to run them in an inline pattern or a side by side pattern. The minimum maximum width must be 27" or greater.
4. For rubber removal application the manufacturer must supply blasting heads that contain a minimum of 46 nozzles per 27" configuration. (23 nozzles per 14" spray bar)
5. The complete operation of the blasting process will be controlled by the operator from within the cab of the truck. The blasting components will be mounted to the truck frame at the front of the chassis in a manner that allows the operator to monitor the entire process from the driver's seat. When not in use, the blasting components will have the capability of being raised into a fully retracted, upright and locked position for safe travel between work sites.

**F. Vacuum Recovery System:**

1. The vehicle will be equipped with a vacuum recovery system fully integrated with the blasting component. The vacuum pump will be adequately sized to immediately remove both spent blasting water and pulverized debris, leaving a nearly dry surface. The accepted recovery system will eliminate the need for any secondary clean-up operations. It will be plumbed in a manner that provides for the safe collection of the recovered water and debris in a truck mounted, stainless steel storage tank with a capacity of no less than 1,600 gallons. The recovery system will be designed in a manner to provide for the separation of recovered water from the recovered solid debris while yet contained in the recovery storage tank. The recovery system will be capable of retaining in some form, and providing for the convenient disposal of the recovered solid debris in a nearly dry state. This process will eliminate the need for any secondary disposal operations requiring the use of flocculates, containment areas or any similarly complicated processes to complete this separation. The system will have a safety shutdown system that prevents the blower from sucking water and debris into the filter chamber or directly into the blower itself upon filling of the vacuum cavity.

The system will have a minimum hose size of 4" leading from the vacuum cavity to the blasting heads and a 6" diameter leading from the vacuum chamber to the final filter.

2. The recovered wastewater will be easily dumped via gravity and will not require the use of external pumping systems to offload. Such wastewater will be filtered to a 100 micron nominal rating and will be dumped from a full port ball valve not under 4 in diameter.
3. Dumping the solid debris will be accomplished via a hydraulic actuator to tilt the tank. Other than opening the rear door an operator's physical assistance will not be necessary to remove the solid debris from the tank. The construction will allow for the solids to fall out by gravity alone.
4. The vacuum system will have a canister style, cyclonic action, multiple filter system to positively prohibit debris from entering into the vacuum pump.

#### **G. Water/Debris Tank:**

1. The fully self-contained design will incorporate stainless steel tanks for both the clean water supply and vacuum storage on the same chassis. No additional vehicles or equipment will be necessary for supply or storage of said materials.
2. The system will include an on-board clean water supply with a capacity no less than 2,700 gallons or an amount capable of providing 4 hours of continuous run time. The interior of the clean water tank, will be stainless steel and fully accessible via a 21" manway. The tank must provide a pressure relief valve to prevent over pressurization. A system will be provided for quick external indication of water levels for both the clean water tank and the debris storage tank.

#### **H. Secondary Tractor Mounted Blasting Unit:**

1. The high-pressure blasting system will be easily adaptable to incorporate a compact diesel powered mobile blasting unit, requiring only one additional operator and no additional trucks or trailers. This mobile unit will feature a near zero-degree turning radius offering maximum maneuverability. It will likewise feature a low profile for access to areas not serviceable by large trucks. The tractor unit will be able to operate successfully, including simultaneous vacuum recovery, at a distance of no less than 300 feet from the truck with additional hoses. The blasting component will be attached to the tractor and be fully controlled by a multi-function joystick control mounted next to the operator. When in operation, this blasting component will also travel along the surface, providing maximum safety for employees and ensuring that the resulting debris and water are simultaneously contained and recovered without secondary clean-up operations. When not in use, the blasting component will be stored in a raised, locked position. This tractor unit will have a designated area on the truck chassis for both storage and transport. The ability to load and off-load with optimum convenience will likewise be provided.

**I. Traffic Control Lighting:**

1. Four (4) 12 volt LED floodlights will be provided on the unit for night time removal operations. Two (2) lights will be located on front of the chassis cab near the top of the cab and 2 at the bumper area to completely illuminate the work area.
2. 4 high intensity strobe lights will be installed at a high point on the tank or truck body so they are plainly visible from 360 degrees around the vehicle at a distance of 100 feet.
3. Sequential flashing signboard. The striping unit will have a directional sequential signboard capable of flashing a directional arrow to either the left or right side, mounted on the rear area of the equipment platform.
4. The signboard will have minimum of 15 hooded, LED amber lamps, with a dimension of approximately 48 inches by 96 inches. It will be 12 volt with solid state circuitry and a minimum flash rate of 30 flashers per minute.
5. The board will be pivoted from a horizontal storage position to a vertical position for operation. Two 12 volt electric linear actuators will be provided to raise and lower the arrowboard from the vertical to the horizontal position. All operator controls for the board will be at the operator's fingertips in the cab.

**J. Control Center:**

1. The in cab control center will at a minimum include the following indication and controls immediately available and visible to the operator.
  - a. Both indication and control of the systems operating pressure in PSI.
  - b. Both indication and control of the vehicles operating forward speed.
  - c. Indication of "Road Mode" or "Work Mode".
  - d. Indication of the systems inlet pressure.
  - e. ON/OFF control of the blasting system.
  - f. Hydrostatic forward/reverse control.
  - g. Work lights ON/OFF.
  - h. Any and all controls necessary to operate the vehicle without exiting the cab.
4. **Construction.** Eliminate existing pavement markings on both concrete and asphaltic surfaces in such a manner that color and texture contrast of the pavement surface will be held to a minimum. Repair damage to asphaltic surfaces, such as spalling, shelling, etc., greater than ¼ in. in depth resulting from the removal of pavement markings. Dispose of markings in accordance with federal, state, and local regulations. Use High Pressure Water Blasting method for pavement marking removal.

5. **Measurement.** This Item will be measured by the foot of marking eliminated; or by any other unit shown on the plans. This is a plans quantity measurement item. The quantity to be paid is the quantity shown in the proposal unless modified by Article 9.2 “Plans Quantity Measurement.” Additional measurements or calculations will be made if adjustments of quantities are required.
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 “High Pressure Waterblasting System” of the type and width as applicable. This price is full compensation for the elimination method used and equipment, materials, tools, labor, and incidentals.

CONTRACT NO. 03214-PGB-00-CN-PM  
BOND NO. \_\_\_\_\_

IN THE STATE OF §  
TEXAS §  
§  
COUNTY OF §  
COLLIN §

**PAYMENT BOND**

**KNOW ALL PERSONS BY THESE PRESENTS:**

That we \_\_\_\_\_ as Principal, hereinafter referred to as "Principal" and \_\_\_\_\_, a corporate surety/sureties, duly authorized to do business in the State of Texas, hereinafter referred to as Surety (whether one or more), are held and firmly bound unto the North Texas Tollway Authority, a political subdivision of the State of Texas, hereinafter referred to as "the Authority" in the penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), lawful money of the United States, to be paid in Plano, Collin County, Texas, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain contract with the Authority, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, attached hereto and incorporated herein for all purposes as if fully set forth herein, to furnish all materials, equipment labor and other accessories as defined by law, in the prosecution of the work provided for in said contract.

NOW, THEREFORE, the condition of this obligation is such that if the said Principal, shall pay all sub-contractors, workmen, laborers, mechanics, furnishers of material and claimants (as defined in Chapter 2253 of the Texas Government Code, as amended) supplying labor and material to him or sub-contractor in the prosecution of the work provided for in said contract, all monies to them owing by Principal for sub-contracts, work, labor, and materials furnished for the construction of such improvements for the North Texas Tollway Authority, then this obligation shall be and become null and void, otherwise to remain in full force and effect.

PROVIDED FURTHER, that if any legal action be filed on this Bond, venue shall lie in Collin County, Texas.

AND, that said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work



performed thereunder, or the plans, specifications, drawings, etc. accompanying same shall in any way affect its obligation on this Bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work to be performed hereunder.

This bond is executed in compliance with the provisions of Chapter 2253 of the Texas Government Code, as amended.

IN WITNESS WHEREOF, the Principal and Surety have signed and sealed this instrument by duly authorized agents and officers and affixed corporate seal hereto on this the \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Principal

By: \_\_\_\_\_

Title \_\_\_\_\_

Surety (Print First Name and Seal)

Surety (Print First Name and Seal)

\*By: \_\_\_\_\_  
(Title)

\*By: \_\_\_\_\_  
(Title)

\_\_\_\_\_  
TEXAS RESIDENT AGENT

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/State/Zip

\*Note: If signed by an officer of the Surety Company, there must be on file a certified extract from the by-laws showing that this person has authority to sign such obligation. If signed by an Attorney-in-Fact, we must have a copy of the power of attorney for our files.



CONTRACT NO. 03214-PGB-00-CN-PM  
BOND NO. \_\_\_\_\_

IN THE STATE OF §  
TEXAS §  
§  
§  
COUNTY OF §  
COLLIN §

**PERFORMANCE BOND**

**KNOW ALL PERSONS BY THESE PRESENTS:**

That we \_\_\_\_\_ as Principal, hereinafter referred to as "Principal" and \_\_\_\_\_, a corporate surety/sureties, duly authorized to do business in the State of Texas, hereinafter referred to as Surety (whether one or more), are held and firmly bound unto the North Texas Tollway Authority, a political subdivision of the State of Texas, hereinafter referred to as "the Authority" in the penal sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_), lawful money of the United States, to be paid in Plano, Collin County, Texas, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Principal has entered into a certain contract with the Authority, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, attached hereto and incorporated herein for all purposes as if fully set forth herein, to furnish all materials, equipment labor and other accessories as defined by law, in the prosecution of the work provided for in said contract.

**NOW THEREFORE**, the condition of this obligation is such that if the said Principal shall faithfully perform said contract and shall in all respects duly and faithfully observe and perform all and singular the covenants, conditions, and agreements in and by said contract, agreed and covenanted by the Principal to be observed and performed, and according to the true intent and meaning of said contract and the plans and specifications therein referred to, and as well during any period of extension of said contract that may be granted on the part of the Authority, as during the original terms of same, then this obligation shall be and become null and void, otherwise to remain in full force and effect.

**PROVIDED FURTHER**, that if any legal action be filed on this Bond, venue shall lie in Collin County, Texas.



**AND**, that said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work performed thereunder, or the plans, specifications, drawings, etc. accompanying same shall in any way affect its obligation on this Bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder.

This bond is executed in compliance with the provisions of Chapter 2253 of the Texas Government Code as amended.

**IN WITNESS WHEREOF**, the principal and the surety have signed this instrument by duly authorized agents and officers and affixed corporate seals hereto on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Principal

By: \_\_\_\_\_ Title \_\_\_\_\_

Surety (Print First Name and Seal)

Surety (Print First Name and Seal)

\*By: \_\_\_\_\_  
(Title)

\*By: \_\_\_\_\_  
(Title)

\_\_\_\_\_  
TEXAS RESIDENT AGENT

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/State/Zip

\*Note: If signed by an officer of the Surety Company, there must be on file a certified extract from the by-laws showing that this person has authority to sign such obligation. If signed by an Attorney-in-Fact, we must have a copy of the power of attorney for our files.



CONTRACT NO. 03214-PGB-00-CN-PM  
BOND NO. \_\_\_\_\_

IN THE STATE OF §  
TEXAS §  
§  
§  
COUNTY OF §  
COLLIN §

**WARRANTY BOND**

**KNOW ALL PERSONS BY THESE PRESENTS:**

That we \_\_\_\_\_ as Principal, hereinafter referred to as "Principal" and \_\_\_\_\_, a corporate surety/sureties, duly authorized to do business in the State of Texas, hereinafter referred to as Surety (whether one or more), are held and firmly bound unto the North Texas Tollway Authority, a political subdivision of the State of Texas, hereinafter referred to as "the Authority" in the penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), lawful money of the United States, to be paid in Plano, Collin County, Texas, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, administrators, executors, successors, and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Principal has entered into a certain contract with the Authority, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, attached hereto and incorporated herein for all purposes as if fully set forth herein, to furnish all materials, equipment labor and other accessories as defined by law, in the prosecution of the work provided for in said contract.

**WHEREAS**, by furnishing this warranty bond, the Principal is obligated to protect the Authority against any defects in the portion of the work under said contract that is described below, expressly including, but not limited to, defects in materials and workmanship.

**THE OBLIGATION TO PAY SAME** is conditioned as follows:

The Principal shall repair or replace any defects in the work under said Contract that are discovered to be defective in materials and/or workmanship at any time within two (2) years from the date of final acceptance.

**NOW THEREFORE**, the condition of this obligation is such that if upon receiving written notice of a defect in the Warranty Work, the said Principal shall begin to correct the said defect and/or replace the defective Warranty Work within seven (7) days after the Authority gives the Principal such notice (or within such other time as may be stipulated by the Engineer in writing delivered to the Principal), and the said Principal shall



thereafter diligently and continuously prosecute such repair and/or replace such defective Warranty Work to a completion satisfactory to the Authority, then this obligation shall be and become null and void, otherwise to remain in full force and effect.

**PROVIDED, HOWEVER, IF**, the Principal shall fail so to correct and/or replace defective Warranty Work, it is agreed that the Authority may cause any and all such defective Warranty Work to be remedied and/or replaced, with all associated costs thereof being borne by the Principal and the Surety under this Warranty bond.

**AND PROVIDED FURTHER**, that if any legal action be filed on this Bond, venue shall lie in Collin County, Texas.

**AND PROVIDED FURTHER**, that this bond shall automatically be increased by the amount of any change order or supplemental agreement which increases the Contract price related to the Warranty Work or any component thereof, but in no event shall a change order or supplemental agreement which reduces the Contract price decrease the penal sum of this Bond.

**AND PROVIDED FURTHER**, that said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work performed thereunder, or the plans, specifications, drawings, etc. accompanying same shall in any way affect its obligation on this Bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder.







**CONTRACT**

This contract made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,by and between North Texas Tollway Authority, a regional tollway authority and a political subdivision of the State of Texas authorized and existing pursuant to Chapter 366 of the Texas Transportation Code, hereinafter referred to as the "Authority", and \_\_\_\_\_

\_\_\_\_\_ ,a \_\_\_\_\_, whose address is \_\_\_\_\_, hereinafter referred to as the "Contractor".

WHEREAS, the Authority desires to enter into a contract for the Project construction as shown and described in the plans, Texas Standard Specifications, Special Provisions, thereto and Special Specifications, and General Notes and Specification Data included herein and all addenda thereto, and

WHEREAS, the Contractor has been engaged in and now does such work and represents that it is fully equipped, competent, and capable of performing the desired and herein outlined work, and is ready and willing to perform such work in accordance with the prices in the proposal and the provisions of the herein included Texas Standard Specifications as amended by the special provisions and special specifications, the proposal, the plans, and all addenda thereto.

NOW THEREFORE, for and in consideration of the prices in the proposal, said proposal being made a part of this contract for all purposes, the Contractor agrees to do, at its own sole cost and expense, all the work necessary for the Project improvement shown and described in the plans and in accordance with the provisions of the Texas Standard Specifications, the Special Provisions thereto, and Special Specifications, General Notes And Specification Data, and the Proposal, and all addenda thereto, such addenda being \_\_\_\_\_ all of which are a part of this contract, and to render all services, deliver all materials and furnish all equipment and labor required for the performance thereof.

The work to be constructed under this contract shall have reached final completion (as defined in the Special Provision to Item 1) no later than four hundred twenty-five (425) calendar days from the commencement of time charges.

The Authority, in consideration of the full and true performance of said work by the Contractor, hereby agrees and binds itself to pay the Contractor for the quantities of work performed in compliance with this contract at the respective unit prices set forth in the proposal, subject to adjustment as herein provided.



The Contractor expressly warrants that (a) to the best of Contractor's knowledge, no member, employee, or agent of the Authority has any interest, direct or indirect, in this contract, and (b) it has employed no third person to solicit or obtain this contract on its behalf, or to cause or procure the same to be obtained upon compensation in any way contingent, in whole or in part, upon such procurement, or in compensation for services in connection therewith, any brokerage commission or percentage upon the amount receivable by it hereunder; and (c) in estimating the price demanded by it hereunder, it has not included any sum by reason of any such brokerage, contract, commission or percentage, and that all moneys payable to it hereunder are free from all obligations of any other person for services rendered, or supposed to have been rendered, in the procurement of this contract. It further agrees that any breach of this warranty shall constitute adequate cause for the annulment of this contract by the Authority or for the deduction from any sums due or to become due thereunder an amount equal to any brokerage, contract, commission, or percentage so paid or agreed to be paid or both.

The undersigned signatory for the Contractor hereby represents and warrants that he/she has complete authority to execute this contract on behalf of the Contractor. The above-stated representation and warranty is made for the purpose of inducing the Authority to execute this contract.

It is acknowledged and agreed by both parties hereto that this contract and the documents referenced herein constitute the entire agreement between such parties for the construction of the work contemplated herein.

Upon execution, this contract will supersede all prior discussions and agreements of the parties relating to the subject matter hereof, by and between the Authority and the Contractor. This contract (including the Plans, General Notes and Specification Data, Texas Standard Specifications, Special Provisions, Special Specifications, Proposals, and Contract Bonds referenced and all addenda and change orders herein or exhibits, schedules and other attachments hereto) constitutes the final, complete and exclusive understanding between the parties with respect to its subject matter and supersedes all prior or contemporaneous agreements, whether oral or written, in regard thereto. This contract cannot be amended or waived except by an agreement in writing signed by authorized representatives of both parties and specifically referring to this contract.

This contract shall be binding upon and inure to the benefit of the Authority, the Contractor, and their respective heirs, executors, administrators, successors, and permitted assigns, including without limitation any successor agency to the Authority.



**Standard Provisions:**

**Governing Law; Venue.** This contract shall be governed and construed in accordance with the laws of the State of Texas. The parties hereto acknowledge that venue is proper in Collin County, Texas, for all disputes arising hereunder and waive the right to sue or be sued elsewhere.

**Counterparts.** This contract may be executed in two or more counterparts, each of which shall be an original, but all of which shall constitute one and the same instrument.

**Severability.** If any provision of this contract shall be determined by any court of competent jurisdiction to be invalid and unenforceable to any extent, the remainder of said provision and of this contract shall not be affected thereby, and each provision of this contract shall be valid and shall be enforced to the fullest extent provided by law, unless such provision or the application of such provision is, in the sole determination of the Authority, essential to its rights hereunder, in which event the Authority may terminate this contract in accordance with the optional termination provisions herein.

**Non-Discrimination Policy.** The Authority is an equal opportunity employer. In conducting business with or on behalf of the Authority, the Contractor shall not discriminate against any person because of race, age, color, religion, sex, sexual orientation, gender identity, disability, veteran status, ancestry, national origin or place of birth.

**Captions Not A Part Hereof.** The captions and headings of the several sections, paragraphs, and divisions of this contract are inserted only as a matter of convenience and for reference and in no way define, limit, or describe the scope of this Agreement or the scope or content of any of its sections, paragraphs, divisions, or other provisions.



IN WITNESS WHEREOF, the parties have caused this Agreement to become effective as of the date first set forth above.

ATTEST:

\_\_\_\_\_  
Secretary

THE AUTHORITY:

North Texas Tollway Authority,  
a regional tollway authority and a political  
subdivision of the State of Texas

By: \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

THE CONTRACTOR:

Name \_\_\_\_\_

a \_\_\_\_\_

By: \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

