

Exhibit A

LGPP REQUIREMENTS

Introduction

Local Government General Requirements

For all projects with State or Federal funds, and/or all projects on the State Highway System regardless of funding source, a Local Government must either adopt the latest TxDOT Standard Specifications, Special Specifications, and required Special Provisions or request TxDOT written approval of alternate, equivalent specifications. TxDOT's "2024 Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges" are the latest TxDOT Standard Specifications. These "General Requirements" along with additional requirements specified by the particular local government, are intended as a template for Items 1-10 in TxDOT's Standard Specifications on projects let by a local government that is on the State Highway System or includes reimbursement to the local government using FHWA or TxDOT funds.

This document is intended to be used as a template that allows local governments to modify Items 1-10 to meet their particular needs while assuring that all local, state, and federal statutory requirements are addressed. As this document modifies a TxDOT publication, there may be a question about terminology. In general, the "Owner" or the "Engineer" references the local government or its representatives (Consulting Engineers, etc.). Reference to "Department" or "Engineer" in the construction and maintenance specifications refers to the local government, except when it is referencing a TxDOT specification, manual, material specification, Material Producers List or test method.

Foreword

OUTLINE OF SPECIFICATIONS

Each specification is outlined by articles and sections. The basic articles required for a specification are:

1. DESCRIPTION
2. MATERIALS
3. EQUIPMENT
4. CONSTRUCTION OR WORK METHODS
5. MEASUREMENT
6. PAYMENT

Some articles are not used in every item. Measurement and Payment articles are combined when the work described is subsidiary to bid items of the Contract.

HIERARCHY OF ORGANIZATIONAL ELEMENTS

Here "XXX" represents the item number. The hierarchy of organizational elements available below the item level is as follows:

XXX.1., Article
XXX.1.1., Section
XXX.1.1.1., Section
XXX.1.1.1.1., Section
XXX.1.1.1.1.1., Section
XXX.1.1.1.1.1.1., Section

The term section is used for all breaks below the article.

Items 1L–9L

Local Government General Requirements and Covenants

Item 1L

Abbreviations and Definitions



1. APPLICABILITY

Wherever the following terms are used in these specifications or other Contract documents, the intent and meaning will be interpreted as shown below.

2. ABBREVIATIONS

AAR	Association of American Railroads
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ACPA	American Concrete Pipe Association
AI	Asphalt Institute
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ALSC	American Lumber Standard Committee, Inc.
AMPP	Association for Materials Protection and Performance
AMRL	AASHTO Materials Reference Laboratory
ANLA	American Nursery and Landscape Association
ANSI	American National Standards Institute
APA	The Engineered Wood Association
API	American Petroleum Institute
APWA	American Public Works Association
AREMA	American Railway Engineering and Maintenance-of-Way Association
ASBI	American Segmental Bridge Institute
ASCE	American Society of Civil Engineers
ASLA	American Society of Landscape Architects
ASME	American Society of Mechanical Engineers
ASNT	American Society for Nondestructive Testing
ASTM	American Society for Testing and Materials
AWC	American Wood Council
AWG	American Wire Gage
AWPA	American Wood Protection Association
AWPI	American Wood Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
BMP	Best Management Practices
CFR	Code of Federal Regulations
CMP	Corrugated Metal Pipe
COE	U.S. Army Corps of Engineers
CRSI	Concrete Reinforcing Steel Institute
DBE	Disadvantaged Business Enterprise
DMS	Departmental Materials Specification
EIA	Electronic Industries Alliance
EPA	U.S. Environmental Protection Agency
FHWA	Federal Highway Administration, U.S. Department of Transportation
FSS	Federal Specifications and Standards (General Services Administration)
GSA	General Services Administration
HUB	Historically Underutilized Business
ICEA	Insulated Cable Engineers Association

IEEE	Institute of Electrical and Electronics Engineers
IESNA	Illuminating Engineering Society of North America
IMSA	International Municipal Signal Association
ISO	International Organization for Standardization
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation System
LG	Local Government
LRFD	Load and Resistance Factor Design
MASH	Manual for Assessing Safety Hardware
MPL	Material Producer List
NCHRP	National Cooperative Highway Research Program
NCR	Nonconformance Report
NEC	National Electrical Code (Published by NFPA)
NEMA	National Electrical Manufacturers Association
NEPA	National Environmental Policy Act
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
NIST	National Institute of Standards and Technology
NPCA	National Precast Concrete Association
NRM	Nonhazardous Recyclable Material
NRMCA	National Ready Mixed Concrete Association
NSBA	National Steel Bridge Alliance
OSHA	Occupational Safety and Health Administration, U.S. Department of Labor
PCA	Portland Cement Association
PCI	Precast/Prestressed Concrete Institute
PPI	Plastics Pipe Institute
PS&E	Plans, Specifications, and Estimates
PSL	Project Specific Location
PTI	Post-Tension Institute
QA	Quality Assurance
QC	Quality Control
RCP	Reinforced Concrete Pipe
RPLS	Registered Public Land Surveyor
RRC	Railroad Commission of Texas
SBE	Small Business Enterprise
SFPA	Southern Forest Products Association
SI	International System of Units
SPIB	Southern Pine Inspection Bureau
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TDLR	Texas Department of Licensing and Regulation
TMUTCD	Texas Manual on Uniform Traffic Control Devices
UL	Underwriters Laboratory, Inc.
USC	United States Code
WRI	Wire Reinforcement Institute
WWPA	Western Wood Products Association

3. DEFINITIONS

- 3.1. **Abrasive Blasting.** Spraying blasts of pressurized air combined with abrasive media.
- 3.2. **Actual Cost.** Contractor's actual cost to provide labor, material, equipment, and project overhead necessary for the work.
- 3.3. **Addendum.** Change in proposal forms developed between advertising and bid submittal deadline.

- 3.4. **Additive Alternate.** A bid item contained in a proposal that is not a regular item or a replacement alternate bid item. The additive alternate item(s) include work that may be added to the base bid at the time of letting.
- 3.5. **Advertisement.** The public announcement required by law inviting bids for work to be performed or materials to be furnished.
- 3.6. **Affiliates.** Two or more Bidders are affiliated if they share common officers, directors, or stockholders; a family member of an officer, director, or stockholder of one Bidder serves in a similar capacity in another of the Bidders; an individual who has an interest in, or controls a part of, one Bidder either directly or indirectly also has an interest in, or controls a part of, another of the Bidders; the Bidders are so closely connected or associated that one of the Bidders, either directly or indirectly, controls or has the power to control another Bidder; one Bidder controls or has the power to control another Bidder; or the Bidders are closely allied through an established course of dealings, including, but not limited to, the lending of financial assistance. Refer to 43 TAC § 9.12(g), "Affiliated Entities."
- 3.7. **Air Blasting.** Spraying blasts of pressurized air free of oil and moisture.
- 3.8. **Air Temperature.** The temperature measured in degrees Fahrenheit (°F) in the shade, not in the direct rays of the sun, and away from artificial heat.
- 3.9. **Anticipated Profit.** Profit for work not performed.
- 3.10. **Apparent Low Bidder.** The Bidder determined to have the numerically lowest total bid as a result of the tabulation of bids by the Owner.
- 3.11. **Architect of Record.** A person registered as an architect or licensed as a landscape architect, in conformance with State law, exercising overall responsibility for the design or a significant portion of the design and performing certain Contract administration responsibilities as described in the Contract; or a firm employed by the Owner to provide professional architectural services.
- 3.12. **Arterial Highway.** A highway used primarily for through traffic and usually on a continuous route.
- 3.13. **Available Bidding Capacity.** Not applicable to Locally Let projects.
- 3.14. **Award.** The Owner's acceptance of a Contractor's bid for a proposed Contract that authorizes the Owner to enter into a Contract.
- 3.15. **Bid.** The offer from the Bidder for performing the work described in the proposal.
- 3.16. **Bid Bond.** The security executed by the Contractor and the Surety furnished to the Owner to guarantee payment of liquidated damages if the Contractor fails to enter into an awarded Contract.
- 3.17. **Bid Error.** A mathematical mistake made by a Bidder in the unit price entered into the proposal.
- 3.18. **Bidder.** An individual, partnership, limited liability company, corporation, or joint venture submitting a bid for a proposed Contract.
- 3.19. **Bidders Questionnaire.** A prequalification form that reflects detailed equipment and experience data but waives audited financial data.
- 3.20. **Bidding Capacity.** Not applicable to Locally Let projects.
- 3.21. **Blast Cleaning.** Using one of the blasting methods including, but not limited to water blasting, low-pressure water blasting, high-pressure water blasting, abrasive blasting, water-abrasive blasting, shot blasting, slurry blasting, water -injected abrasive blasting, and brush blasting.

- 3.22. **Bridge.** A structure, including supports, erected over a depression or an obstruction (e.g., water, a highway, or a railway) with a roadway or track for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 ft. between faces of abutments, spring lines of arches, or extreme ends of the openings for multiple box culverts.
- 3.23. **Brush Blasting.** Sweeping lightly with an abrasive blast to remove loose material.
- 3.24. **Building Contract.** Not applicable to Locally Let projects.
- 3.25. **Callout Work.** Contracts, or work items in Contracts, that require a Contractor's response on an as-needed basis (e.g., see Item 351, "Flexible Pavement Structure Repair").
- 3.26. **Certificate of Insurance.** A form approved by the Owner covering insurance requirements stated in the Contract.
- 3.27. **Change Order.** Written order to the Contractor detailing changes to the specified work, item quantities, or any other modification to the Contract.
- 3.28. **Commission.** The Texas Transportation Commission or authorized representative.
- 3.29. **Concrete Construction Joint.** A joint formed by placing plastic concrete in direct contact with concrete that has attained its initial set.
- 3.30. **Concrete Repair Manual.** TxDOT manual specifying methods and procedures for concrete repair as an extension of the standard specifications.
- 3.31. **ConcreteWorks®.** TxDOT-owned software for concrete heat analysis. Software is available on the TxDOT's website.
- 3.32. **Confidential Questionnaire.** A prequalification form that reflects detailed financial and experience data.
- 3.33. **Construction Contract.** A Contract entered under state law for the construction, reconstruction, repair, or maintenance of a segment of the Owner's or State transportation highway system.
- 3.34. **Consultant.** The licensed professional engineer or engineering firm, or the architect or architectural firm, registered in the State of Texas and under Contract to the Owner to perform professional services. The consultant may be the Engineer or architect of record or may provide services through and be subcontracted to the Engineer or architect of record.
- 3.35. **Contract.** The agreement between the Owner and the Contractor establishing the obligations of the parties for furnishing of materials and performance of the work prescribed in the Contract documents.
- 3.36. **Contract Documents.** Elements of the Contract including, but not limited to, the plans, specifications incorporated by reference, special provisions, special specifications, Contract bonds, change orders, and supplemental agreements.
- 3.37. **Contract Time.** The number of working days specified for completion of the work, including authorized additional working days.
- 3.38. **Contractor.** The individual, partnership, limited liability company, corporation, or joint venture and all principals and representatives with which the Contract is made by the Owner.
- 3.39. **Control of Access.** The condition in which the right to access of owners or occupants of abutting land or other persons in connection with a highway is fully or partially controlled by public authority.

- 3.40. **Control Point.** An established point shown on the plans to provide vertical and horizontal references for geometric control for construction.
- 3.41. **Controlled Access Highway.** Any highway to or from which access is denied or controlled, in whole or in part, from or to abutting land or intersecting streets, roads, highways, alleys, or other public or private ways.
- 3.42. **Cross-Sections.** Graphic representations of the original ground and the proposed facility, at right angles to the centerline or base line.
- 3.43. **Culvert.** Any buried structure providing an opening under a roadway for drainage or other purposes. Culverts may also be classified as bridges. (See Section 1.3.22., "Bridge.")
- 3.44. **Cycle.** The activity necessary for performing the specified work within the right of way project limits once.
- 3.45. **Daily Road-User Cost.** Damages based on the estimated daily cost of inconvenience to the traveling public resulting from the work.
- 3.46. **Debar (Debarment).** Disqualification of an entity from bidding on or entering into a Contract with the Owner, from participating as a subcontractor under a Contract with the Owner, and from participating as a supplier of materials or equipment to be used under a Contract with the Owner.
- 3.47. **Department.** The Texas Department of Transportation (TxDOT).
- 3.48. **Departmental Materials Specifications.** Reference specifications for various materials published by the Materials and Tests Division.
- 3.49. **Detour.** A temporary traffic route around a closed portion of a road.
- 3.50. **Direct Traffic Culvert.** Concrete box culvert whose top slab is used as the final riding surface or is to have an overlay or other riding surface treatment.
- 3.51. **Disadvantaged Business Enterprise.** A for-profit small business certified through the Texas Unified Certification Program in accordance with 49 CFR Part 26, that is at least 51% owned by one or more socially and economically disadvantaged individuals, or in the case of a publicly owned business, in which at least 51% of the stock is owned by one or more socially and economically disadvantaged individuals, and whose management and daily business operations are controlled by one or more of the individuals who own it.
- 3.52. **Divided Highway.** A highway with separate roadways intended to move traffic in opposite directions.
- 3.53. **Easement.** A real property right acquired by one party to use land belonging to another party for a specified purpose.
- 3.54. **Electronic Vault.** The Owner's bidding system where electronic bids are stored before bid opening.
- 3.55. **Engineer.** The Chief Engineer of the Owner or the authorized representative of the Chief Engineer.
- 3.56. **Equipment Watch.** Publication containing equipment rental rates.
- 3.57. **Escalation Ladder.** A process to determine issue resolution during the course of the Contract.
- 3.58. **Expressway.** A divided arterial highway for through traffic with full or partial control of access and generally with grade separations at intersections.
- 3.59. **Family Member.** A family member of an individual is the individual's parent, parent's spouse, stepparent, stepparent's spouse, sibling, sibling's spouse, spouse, child, child's spouse, spouse's child, spouse's child's

spouse, grandchild, grandparent, uncle, uncle's spouse, aunt, aunt's spouse, first cousin, or first cousin's spouse. Refer to 43 TAC § 9.12(g), "Affiliated Entities."

- 3.60. **Force Account.** Payment for directed work based on the actual cost of labor, equipment, and materials furnished with markups for project overhead and profit.
- 3.61. **Freeway.** An expressway with full control of access.
- 3.62. **Frontage Road.** A local street or road auxiliary to and located along an arterial highway for service to abutting property and adjacent areas and for control of access (sometimes known as a service road, access road, or insulator road).
- 3.63. **Hazardous Materials or Waste.** Hazardous materials or waste include, but are not limited to, explosives, compressed gas, flammable liquids, flammable solids, combustible liquids, oxidizers, poisons, radioactive materials, corrosives, etiologic agents, and other material classified as hazardous by 40 CFR 261, or applicable state and federal regulations.
- 3.64. **High-Pressure Water Blasting.** Water blasting with pressures between 5,000 and 10,000 psi.
- 3.65. **Highway, Street, or Road.** General terms denoting a public way for purposes of and related to vehicular, pedestrian, and bicycle travel, including the entire area within the right of way including Intersections and Easements; all related structures, improvements, and appurtenances, including but not limited to the roadside and roadside facilities, drainage systems, signal systems, and other traffic in formation and control systems; or other structures or improvements that directly or indirectly serve public travel. Recommended usage in urban areas is highway or street, and in rural areas, highway or road.
- 3.66. **Historically Underutilized Business (HUB).** A corporation, sole proprietorship, partnership, or joint venture formed for the purpose of making a profit certified by the Texas Building and Procurement Commission, and 51% owned by one or more persons who are economically disadvantaged because of their identification as members of certain groups, including African Americans, Hispanic Americans, Asian-Pacific Americans, Native Americans, or women, and have a proportionate interest and demonstrate active participation in the control, operation, and management of the business' affairs. Individuals meeting the HUB definition are required to be residents of the State of Texas. Businesses that do not have their primary headquarters in the State of Texas are not eligible for HUB certification.
- 3.67. **In Writing.** Communication memorialized, including written or electronic documentation by email or letter only.
- 3.68. **Incentive and Disincentive Provisions.** An adjustment to the Contract price of a predetermined amount for each day the work is completed ahead of or behind the specified milestone, phase, or Contract completion dates. The amount of the incentive and disincentive is determined based on estimated costs for engineering, traffic control, delays to the motorists, and other items involved in the Contract.
- 3.69. **Independent Assurance Tests.** Tests used to evaluate the sampling and testing techniques and equipment used in the acceptance program. The tests are performed by the Owner and are not used for acceptance purposes.
- 3.70. **Inspector.** The person assigned by the Engineer to inspect for compliance with the Contract any or all parts of the work and the materials used.
- 3.71. **Intelligent Transportation System.** An integrated system that uses video and other electronic detection devices to monitor traffic flows.
- 3.72. **Intersection.** The general area where two or more highways, streets, or roads join or cross, including the roadway and roadside facilities for vehicular, pedestrian, and bicycle traffic movements within it.

- 3.73. **Island.** An area within a roadway from which vehicular traffic is intended to be excluded, together with any area at the approach occupied by protective deflecting or warning devices.
- 3.74. **Joint Venture.** Any combination of individuals, partnerships, limited liability companies, or corporations submitting a single bid proposal.
- 3.75. **Lane Rental.** A method to assess the Contractor daily or hourly rental fees for each lane, shoulder, or combination of lanes and shoulders taken out of service.
- 3.76. **Letting.** The receipt, opening, tabulation, and determination of the apparent low Bidder.
- 3.77. **Letting Official.** The employee empowered by the Owner to officially receive bids and close the receipt of bids at a letting.
- 3.78. **Licensed Professional Engineer.** A person who has been duly licensed by the Texas Board of Professional Engineers to engage in the practice of engineering in the State of Texas; also referred to as a Professional Engineer.
- 3.79. **Limits of Construction.** An area with established boundaries, identified within the highway right of way and easements, where the Contractor is permitted to perform the work.
- 3.80. **Local Street or Road.** A street or road primarily for access to residence, business, or other abutting property.
- 3.81. **Low-Pressure Water Blasting.** Water blasting with pressures between 3,000 and 5,000 psi.
- 3.82. **Major Item.** An item of work included in the Contract that has a total cost equal to or greater than 5% of the original Contract or \$100,000 whichever is less. A major item at the time of bid will remain a major item. An item not originally a major item does not become one through the course of the Contract.
- 3.83. **Material Producer List.** TxDOT-maintained list of approved products, materials, laboratories, service providers, manufacturers, and producers.
- 3.84. **Materially Unbalanced Bid.** A bid that generates a reasonable doubt that award to the Bidder submitting a mathematically unbalanced bid will result in the lowest ultimate cost to the Owner.
- 3.85. **Materials Contract.** Not applicable to Locally Let projects.
- 3.86. **Materials Supplier's Questionnaire.** A prequalification form that reflects basic information, such as company contact, signature authority, and other requirements, but waives financial, equipment, and experience data.
- 3.87. **Mathematically Unbalanced Bid.** A bid containing bid prices that do not reflect reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs.
- 3.88. **Median.** The portion of a divided highway separating the traffic lanes in opposite directions.
- 3.89. **Milestone Date.** The date that a specific portion of the work is to be completed before the completion date for all work under the Contract.
- 3.90. **Monolithic Concrete Placement.** The placement of plastic concrete in such manner and sequence to prevent a construction joint.
- 3.91. **National Holidays.** January 1, the last Monday in May, July 4, the first Monday in September, the fourth Thursday in November, December 24, and December 25.

- 3.92. **Nonhazardous Recyclable Material.** A material recovered or diverted from the nonhazardous waste stream for the purposes of reuse or recycling in the manufacture of products that may otherwise be produced using raw or virgin materials.
- 3.93. **Nonresident Bidder.** A Bidder whose principal place of business is not in Texas. This includes a Bidder whose ultimate parent company or majority owner does not have its principal place of business in Texas.
- 3.94. **Nonresponsive Proposal.** A proposal that does not meet the criteria for acceptance contained in the proposal form.
- 3.95. **Non-Site-Specific Contracts.** Contracts where a geographic region is specified for the work and work orders, with or without plans, detail the limits and work to be performed.
- 3.96. **Notification.** Either written or oral instruction to the Contractor. Voice mail is oral notification.
- 3.97. **Pavement.** That part of the roadway with a constructed surface for the use of vehicular traffic.
- 3.98. **Pavement Structure.** Combination of surface course and base course placed on a subgrade to support the traffic load and distribute it to the roadbed.
- 3.98.1. **Base Course.** One or more layers of specified material thickness placed on a subgrade to support a surface course.
- 3.98.2. **Subgrade.** The top surface of a roadbed upon which the pavement structure, shoulders, and curbs are constructed.
- 3.98.3. **Subgrade Treatment.** Modifying or stabilizing material in the subgrade.
- 3.98.4. **Surface Course.** Pavement structure layers designed to accommodate the traffic load. The top layer resists skidding, traffic abrasion, and the disintegrating effects of climate and is sometimes called the wearing course.
- 3.99. **Payment Bond.** The security executed by the Contractor and the Surety, furnished to the Owner to guarantee payment of all legal debts of the Contractor pertaining to the Contract.
- 3.100. **Performance Bond.** The security executed by the Contractor and the Surety, furnished to the Owner to guarantee the completion of the work in accordance with the terms of the Contract.
- 3.101. **Plans.** The drawings approved by the Engineer, including true reproductions of the drawings that may show the location, character, dimensions, and details of the work and are a part of the Contract. Documents may include drawings or digital files.
- 3.102. **Power of Attorney for Surety Bonds.** An instrument under corporate seal appointing an attorney-in-fact to act on behalf of a Surety in signing bonds.
- 3.103. **Prequalification.** The process for determining a Contractor's eligibility to bid work.
- 3.104. **Prequalification Statement.** The forms on which required information is furnished concerning the Contractor's ability to perform and finance the work.
- 3.105. **Project-Specific Location.** A material source, plant, waste site, parking area, storage area, field office, staging area, haul road, or other similar location either outside the project limits or within the project limits but not specifically addressed in the Contract.
- 3.106. **Proposal.** The offer from the Bidder submitted on the prescribed form, including addenda issued, giving unit bid prices for performing the work described in the plans and specifications.

- 3.107. **Proposal Form.** The form printed and sent to the Bidder by the Owner or printed by the Bidder from the Owner's bidding system.
- 3.108. **Proposal Guaranty.** The security furnished by the Bidder as a guarantee that the Bidder will enter into a Contract if awarded the work.
- 3.109. **Quality Assurance (QA).** Sampling, testing, inspection, and other activities conducted by the Engineer to determine payment and make acceptance decisions.
- 3.110. **Quality Control (QC).** Sampling, testing, and other process control activities conducted by the Contractor to monitor production and placement operations.
- 3.111. **Ramp.** A section of highway for the primary purpose of making connections with other highways.
- 3.112. **Recurring Maintenance Work Contracts.** Contracts or work for which maintenance is needed at the same location on more than one occasion (e.g., mowing Contracts for which mowing cycles are requested on multiple occasions).
- 3.113. **Referee Tests.** Tests requested to resolve differences between Contractor and Engineer test results.
- 3.114. **Regular Item.** A bid item contained in a proposal and not designated as an additive alternate or replacement alternate bid item.
- 3.115. **Rental Rate Blue Book for Construction Equipment.** Publication containing equipment rental rates.
- 3.116. **Repair.** Performed under Transportation Code §223, Subchapter A for Highway Improvement Contracts and includes restoration of a Highway, Street, or Road by replacing or putting together, in whole or in part, what is torn, broken, or otherwise damaged. Repair denotes the process of restoring all or part of a Highway, Street, or Road that has been subjected to decay, waste, injury, partial destruction, erosion, dilapidation, degradation, etc.
- 3.117. **Replacement Alternate.** A bid item identified the proposal form that a Bidder may substitute for a specific regular item of work.
- 3.118. **Responsive Bid.** A proposal that meets all requirements of the proposal form for acceptance.
- 3.119. **Right of Way.** A general term denoting land or property devoted to transportation purposes.
- 3.120. **Roadbed.** The graded portion of a highway prepared as foundation for the pavement structure and shoulders. On divided highways, the depressed median type and the raised median type highways are considered to have two roadbeds. Highways with a flush median are considered to have one roadbed. Frontage roads are considered separate roadbeds.
- 3.121. **Road Master.** A railroad maintenance official in charge of a division of railway.
- 3.122. **Roadside.** The areas between the outside edges of the shoulders and the right of way boundaries. Unpaved median areas between inside shoulders of divided highways and areas within interchanges are included.
- 3.123. **Roadway.** The portion of the highway (including shoulders) used by the traveling public.
- 3.124. **Routine Maintenance Contract.** Not applicable to Locally Let projects.
- 3.125. **Sandblasting, Dry.** Spraying blasts of pressurized air combined with sand.
- 3.126. **Sandblasting, Wet.** Spraying blasts of pressurized water combined with sand.

- 3.127. **Shot Blasting.** Spraying blasts of pressurized air combined with metal shot.
- 3.128. **Shoulder.** That portion of the roadway contiguous with the traffic lanes for accommodation of stopped vehicles for emergency use or for lateral support of base and surface courses.
- 3.129. **Sidewalk.** Portion of the right of way constructed exclusively for pedestrian use.
- 3.130. **Slurry Blasting.** Spraying blasts of pressurized air combined with a mixture of water and abrasive media.
- 3.131. **Small Business Enterprise.** A firm (including affiliates) whose annual gross receipts do not exceed the U.S. Small Business Administration's size standards for 4 consecutive yr.
- 3.132. **Special Provisions.** Additions or revisions to these standard specifications or special specifications.
- 3.133. **Special Specifications.** Supplemental specifications applicable to the Contract not covered by these standard specifications.
- 3.134. **Specifications.** Directives or requirements issued or made pertaining to the method and manner of performing the work or to quantities and qualities of materials to be furnished under the Contract. References to DMSs, ASTM or AASHTO specifications imply the latest standard or tentative standard in effect on the date of the proposal. The Engineer will consider incorporation of subsequent changes to these documents in accordance with Item 4, "Scope of Work."
- 3.135. **State.** The State of Texas.
- 3.136. **State Holiday.** A holiday authorized by the State Legislature excluding optional State holidays and not listed in Section 1.3.91., "National Holidays." A list of State holidays can be found on the TxDOT's website.
- 3.137. **Station.** A unit of measurement consisting of 100 horizontal ft.
- 3.138. **Subcontract.** The agreement between the Contractor and subcontractor establishing the obligations of the parties for furnishing of materials and performance of the work prescribed in the Contract documents.
- 3.139. **Subcontractor.** An individual, partnership, limited liability company, corporation, or any combination thereof that 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, a truck owner-operator, a wholly owned subsidiary, or specialty-type businesses such as security companies and rental companies.
- 3.140. **Subsidiary.** Materials, labor, or other elements that because of their nature or quantity have not been identified as a separate item and are included within the items on which they necessarily depend.
- 3.141. **Substantial Completion of Work.** The date (day) when all project work requiring lane or shoulder closures or obstructions is completed, and traffic is following the lane arrangement as shown on the plans for the finished roadway; all pavement construction and surfacing are complete; and traffic control devices and pavement markings are in their final position, unless otherwise shown on the plans. The Engineer may make an exception for permanent pavement markings provided the lack of markings does not cause a disruption to traffic flow or an unsafe condition for the traveling public, and work zone pavement markings are in place.
- 3.142. **Substructure.** The part of the structure below the bridge seats but not including bearings, drilled shafts, or piling. Parapets, back walls, wing walls of the abutments, and drainage structures are considered parts of the substructure.
- 3.143. **Superintendent.** The representative of the Contractor who is available at all times and able to receive instructions from the Engineer or authorized Owner representatives and to act for the Contractor.

- 3.144. **Superstructure.** The part of the structure above the bridge seats or above the springing lines of arches and including the bearings. Flatwork construction may be considered superstructure.
- 3.145. **Supplemental Agreement.** Written agreement entered into between the Contractor and the Owner and approved by the Surety, covering alterations and changes in the Contract. A supplemental agreement is used by the Owner whenever the modifications include assignment of the Contract from one entity to another or other cases as desired by the Owner.
- 3.146. **Surety.** The corporate body or bodies authorized to do business in Texas bound with and for the Contractor for the faithful performance of the work covered by the Contract and for the payment for all labor and material supplied in the prosecution of the work.
- 3.147. **Surplus Materials.** Any debris or material related to the Contract not incorporated into the work.
- 3.148. **Suspension.** Action taken by the Owner or federal government pursuant to regulation that prohibits a person or company from entering into a Contract, or from participating as a subcontractor, or supplier of materials or equipment used in a highway improvement Contract as defined in Transportation Code, Chapter 223, Subchapter A.
- 3.149. **Traffic Lane.** The strip of roadway intended to accommodate the forward movement of a single line of vehicles.
- 3.150. **Traveled Way.** The portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.
- 3.151. **Truck Owner-Operator.** An individual who owns and operates one truck for hire.
- 3.152. **UT-Bridge.** TxDOT-owned software for steel girder erection. Software is available on the TxDOT's website.
- 3.153. **UT-Lift.** TxDOT-owned software for steel girder erection. Software is available on the TxDOT's website.
- 3.154. **Utility.** Privately, publicly, or cooperatively owned lines, facilities, and systems for producing, transmitting, or distributing communications, power, heat, gas, oil, water, waste, or stormwater that are not connected with the highway drainage, signal systems, or other products that directly or indirectly serve the public; the utility company.
- 3.155. **Verification Tests.** Tests used to verify accuracy of QC and QA and mixture design testing.
- 3.156. **Water-Abrasive Blasting.** Spraying blasts of pressurized water combined with abrasive media.
- 3.157. **Water Blasting.** Spraying blasts of pressurized water of at least 3,000 psi.
- 3.158. **Water-Injected Abrasive Blasting.** Abrasive blasting with water injected into the abrasive and air stream at the nozzle.
- 3.159. **Wholly Owned Subsidiary.** A legal entity owned entirely by the Contractor or subcontractor.
- 3.160. **Work.** The furnishing of all labor, materials, equipment, and incidentals necessary for the successful completion of the Contract.
- 3.161. **Work Order.** Written notice to the Contractor to begin the work. The work order may include the date when work and time charges will begin, the allowable number of working days, and plan sheets providing details specific to a location or to an item of work for non-site-specific work. A work order is part of the Contract.
- 3.162. **Written Notice.** Written notice is considered to have been duly given if delivered in person to the individual or member to whom it is intended or if sent by regular, registered, or certified mail and delivered to the last

known business address; sent by facsimile to the last known phone number; or sent by email to the last known address. The date of the letter will serve as the beginning day of notice. Unclaimed mail or failure to provide current contact information will not be considered a failure to provide written notice.

Item 2L

Instructions to Bidders



1. INTRODUCTION

Instructions to the Contractor in these specifications are generally written in active voice, imperative mood. The subject of imperative sentences is understood to be "the Contractor." The Owner's responsibilities are generally written in passive voice, indicative mood. Phrases such as "as approved," "unless otherwise approved," "upon approval," "as directed," "as verified," "as ordered," and "as determined" refer to actions of the Engineer unless otherwise stated, and it is understood that the directions, orders, or instructions to which they relate are within the limitations of and authorized by the Contract.

2. ELIGIBILITY OF BIDDERS

Obtain a prequalification form from the Department's website. A Bidder must be prequalified by Confidential Questionnaire or a Bidder's Questionnaire (select one) at the time of bid opening. Comply with all technical prequalification requirements in the proposal.

- 2.1. **Confidential Questionnaire (CQ).** Submit a CQ and an audited financial statement for approval. Once prequalified, a Bidder's eligibility is valid for a period of 1 yr. from the balance sheet statement date.
- 2.2. **Bidder's Questionnaire (BQ).** Bidders prequalified with a BQ are only eligible to bid on projects identified as being waived from the requirements of Section 2L.2.1., "Confidential Questionnaire (CQ)." These projects are designated with a "W" on the Proposal Request Form. Submit a BQ for approval. Once prequalified, a Bidder's eligibility is valid for a period of 1 yr. from the date the BQ was received by the Department.

3. ISSUING PROPOSAL FORMS

The Owner will issue a proposal form to a prequalified Bidder if the Engineer's estimate is within that Bidder's available bidding capacity. Request a proposal form electronically from the Owner's website. A proposal form printed directly from the Owner's website is for informational purposes only and will not be accepted as an official proposal form. In the case of a joint venture (JV), all JV participants must be prequalified. An equally divided portion of the Engineer's estimate must be within each participant's available bidding capacity.

The Owner will not issue a proposal form if one or more of the following apply:

- the Bidder is suspended or debarred by the Commission or TxDOT,
- the Bidder has not fulfilled the requirements for prequalification,
- the Bidder does not have the available bidding capacity,
- the Bidder is prohibited from rebidding a specific proposal form due to a bid error on the original proposal form,
- the Bidder failed to enter into a Contract on the original award,
- the Bidder was defaulted or terminated on the original Contract, unless the Owner terminated in the best interest of the State or the public,
- the Bidder or a subsidiary or affiliate of the Bidder has received compensation from the Owner to participate in the preparation of the plans or specifications on which the bid or Contract is based,
- the Bidder is ineligible to bid on any proposed Contract in accordance with Article 7L.15., "Responsibility for Damage Claims,"
- the Bidder failed to attend a mandatory pre-bid conference,

- the Bidder or affiliate of the Bidder that was originally determined as the apparent low Bidder on a project but was deemed nonresponsive for failure to submit a DBE commitment as specified in Article 2L.14., “Disadvantaged Business Enterprise (DBE),” is prohibited from rebidding that specific project, or
- the Bidder or affiliate of the Bidder that was originally determined as the apparent low Bidder on a project but was deemed nonresponsive for failure to register or participate in the Department of Homeland Security (DHS) E-Verify system as specified in Article 2.15., “Department of Homeland Security (DHS) E-Verify System,” is prohibited from rebidding that specific project.

4. INTERPRETING ESTIMATED QUANTITIES

The quantities listed on the proposal form are approximate and will be used for the comparison of bids. Payments will be made for the work performed in accordance with the Contract.

5. EXAMINING DOCUMENTS AND WORK LOCATIONS

Examine the proposal form, plans, specifications, and specified work locations before submitting a bid for the work. Submitting a bid will be considered evidence that the Bidder has performed this examination. Borings, soil profiles, water elevations, and underground utilities shown on the plans were obtained for the Owner’s use in the preparation of the plans. This information is provided for the Bidder’s information only, and the Owner makes no representation as to the accuracy of the data. Be aware of the difficulty of accurately classifying all material encountered in making foundation investigations, the possible erosion of stream channels and banks after survey data have been obtained, and the unreliability of water elevations other than for the date recorded.

Oral explanations, instructions, or consideration for Contractor-proposed changes on the proposal form given during the bidding process are not binding. Only requirements included on the proposal form, associated specifications, plans, and Owner-issued addenda are binding. Request explanations of documents in adequate time to allow the Owner to reply before the bid opening.

Immediately notify the Owner of any error, omission, or ambiguity discovered in any part of the proposal form and Contract documents. The Owner will issue addenda when appropriate.

6. PREPARING THE BID

Prepare the bid on the proposal form furnished by the Owner. Informational proposal forms printed from the Owner’s website will not be accepted.

Specify a unit price in dollars and cents for each regular item and additive alternate item, or replacement alternate item for which an estimated quantity is given.

When “Working Days” is an item, submit the number of working days to be used to complete the Contract or phases of the Contract shown on the plans.

The Owner will not accept an incomplete bid. A bid that has one or more of the deficiencies listed below is considered incomplete:

- certifications were not acknowledged,
- a regular item or the additive alternate item is left blank,
- a regular item and the corresponding replacement alternate item are left blank,
- the proposal form submitted had the incorrect number of items,
- the Bidder did not acknowledge all addenda, or
- additionally, for printed bids:

- the blank spaces for each item as required on the bid form are not filled in by writing in words in ink,
- the bid was not signed in ink in the complete and correct name of the bidder making the bid, and signed by the person or persons authorized to bind the bidder, or
- unit prices were not stated in dollars and cents for each bid item listed on the bid form, except in the case of a regular bid item that has an alternate bid item.

7. NONRESPONSIVE BID

The Owner will not accept a nonresponsive bid. A bid that has one or more of the deficiencies listed below is considered nonresponsive:

- the bid was not in the hands of the Letting Official at the time and location specified in the advertisement,
- a proposal form was submitted for the same project by a Bidder or Bidders and one or more of its partners or affiliates, the Bidder was not authorized to receive a proposal form under Article 2L.3., "Issuing Proposal Forms,"
- the Bidder failed to acknowledge receipt of all addenda issued,
- the proposal form was signed by a person who was not authorized to bind the Bidder or Bidders,
- the proposal guaranty did not comply with the requirements contained in this Item,
- the bid was in a form other than the official proposal form issued by the Owner,
- the Bidder modified the bid in a manner that altered the conditions or requirements for work as stated in the proposal form,
- the Bidder bid more than the maximum or less than the minimum number of allowable working days shown on the plans when working days was an item,
- a typed proposal form does not contain the information in the format shown on the "Example of Bid Prices Submitted by Computer Printout" on the proposal form,
- the Bidder did not meet the requirements of the technical qualification,
- the Bidder failed to submit a DBE commitment as specified in Article 2L.14., "Disadvantaged Business Enterprise (DBE)," or
- the Bidder failed to participate in the DHS E-Verify system as specified in Article 2L.15., "Department of Homeland Security (DHS) E-Verify System."
- The bidder is not prequalified by TxDOT

8. ELECTRONIC BID

The Bidder is responsible for taking the appropriate measures to submit a bid. These measures include, but are not limited to acquiring hardware, software, and Internet connectivity needed for submitting a bid via the Owner's bidding system.

- 8.1. **Proposal Form.** Use the electronic proposal form in the Owner's bidding system. When regular bid items have corresponding replacement alternate items, select the bid item or group of items to be used for the bid tabulation. Acknowledge all addenda listed in the Owner's bidding system.

The electronic proposal form does not contain the special provisions, special specifications, general notes, and other Contract documents. These documents are included by reference.

- 8.2. **Proposal Guaranty.** Provide a proposal guaranty in the amount indicated on the proposal form. Use an electronic bid bond. Guaranty checks or printed bid bonds will not be accepted.

For a JV, the bond must be in the name of all JV participants. Enter the bond authorization code into the Owner's bidding system.

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

- 8.3. **Submittal of Bid.** Submit the bid to the vault using the Owner's bidding system.
- 8.4. **Revising the Proposal Form.** Make desired changes in the Owner's bidding system up until the time and date set for the opening of bids. The last bid submitted to the vault will be used for tabulation purposes.
- 8.5. **Withdrawing a Bid.** Submit an electronic or written request to withdraw a bid before the time and date set for the opening. The Owner will not accept oral requests. An electronic request must be made using the Owner's bidding system.

If a bidder is unable to withdraw an electronic bid using the Owner's bidding system, a written request may be submitted. A written request must be signed and submitted to the Letting Official conducting the letting, with proof of identification. The request must be made by a person authorized to bind the Bidder or Bidders. In the case of a JV, the Owner will accept a request from any person authorized to bind a party to the JV. The Owner may require written delegation of authority to withdraw a bid when the individual sent to withdraw the bid is not authorized to bind the Bidder or Bidders.

9. PRINTED BID

- 9.1. **Proposal Form.** Mark all entries in ink. As an alternative to hand writing the unit prices on the proposal form, submit a typed proposal form. A typed proposal form must contain the information in the format shown on the "Example of Bid Prices Submitted by Computer Printout" on the proposal form.
- When regular bid items have corresponding replacement alternate items, select the bid item or group of items to be used for the bid tabulation. Acknowledge all addenda by checking the appropriate box on the addendum acknowledgement page. Provide the complete and correct name of the Bidder submitting the bid. A person authorized to bind the Bidder must sign the proposal form. In the case of a JV, provide the complete and correct name of all Bidders submitting the bid. In the case of a JV, the person signing the proposal form must be authorized to bind all JV participants.
- 9.2. **Proposal Guaranty.** Provide a proposal guaranty in the amount indicated on the proposal form. Use either a guaranty check or a printed bid bond. An electronic bid bond may be used as the guaranty. Ensure the electronic bid bond meets the requirements of Section 2L.8.2., "Proposal Guaranty," and submit the electronic bid bond with the printed bid.
- 9.2.1. **Guaranty Check.** When used, make the check payable to the Owner. The check must be a cashier's check, money order, or teller's check drawn by or on a state or national bank, or a state or federally chartered credit union (collectively referred to as "bank"). The check must be dated on or before the date of the bid opening. Postdated checks will not be accepted. The type of check or money order must be indicated on the face of the instrument, except in the case of a teller's check, and the instrument must be no more than 90 days old. A check must be made payable at or through the institution issuing the instrument, be drawn by a bank and on a bank, or be payable at or through a bank. The Owner will not accept personal checks, certified checks, or other types of money orders.
- 9.2.2. **Bid Bond.** When a bond is used, use the bid bond form provided by the Owner. Submit the bid bond in the amount specified with the powers of attorney dated and attached. The bond must be dated on or before the date of the bid opening, bear the impressed seal of the Surety, and be signed by the Bidder or Bidders and an authorized individual of the Surety. As an alternative for JV Bidders, each Bidder may submit a separate bid bond completed as outlined in this Section. Bid bonds will only be accepted from Sureties authorized to execute a bond under and in accordance with state law.
- 9.3. **Submittal of Bid.** Place the completed proposal form and the proposal guaranty in a sealed envelope marked to indicate the contents.

When submitting by mail or delivery service, place the envelope in another sealed envelope and address as indicated in the official advertisement. It is the Bidder's responsibility to ensure that the sealed bid arrives at the location described on or before the time and date set for the bid opening. To be accepted, the bid must be in the hands of the Letting Official by that time of opening regardless of the method chosen for delivery.

- 9.4. **Revising the Proposal Form.** Make desired changes to the proposal form in ink, initial each change made, and submit the proposal to the Letting Official. Correction fluid or tape will be considered a change to the bid and requires the initials of the Bidder. The Owner will not revise a bid on behalf of a Bidder.
- 9.5. **Withdrawing a Bid.** Submit to the Letting Official conducting the letting a written request to withdraw a bid before the time and date set for the opening. The Owner will not accept oral requests. A written request must be signed and submitted to the Letting Official conducting the letting, with proof of identification. The request must be made by a person authorized to bind the Bidder or Bidders. In the case of a JV, the Owner will accept a request from any person authorized to bind a party to the JV. The Owner may require written delegation of authority to withdraw a bid when the individual sent to withdraw the bid is not authorized to bind the Bidder or Bidders.

10. OPENING AND READING OF BIDS

At the time, date, and location specified in the official advertisement, the Letting Official will publicly open and read bids.

11. TABULATING BIDS

- 11.1. **Official Total Bid Amount.** The Owner will sum the products of the quantities and the unit prices bid on the proposal form to determine the official total bid amount, except as provided in Section 2L.11.5., "Consideration of Unit Prices." The official total bid amount is the basis for determining the apparent low Bidder. The total bid amounts will be compared and the results made public.
- 11.2. **Consideration of Bid Format.** When a Bidder submits both an electronic bid and a printed bid that are responsive, the unit bid prices in the electronic bid will be used to determine the total bid amount. If the electronic bid is incomplete or nonresponsive, the printed bid will be used in the tabulation of the total bid amount.
- If a Bidder submits two or more printed bids, all responsive bids will be tabulated. The bid with the lowest tabulation will be used to determine the total bid amount.
- 11.3. **Rounding of Unit Prices.** The Owner will round off all unit bids involving fractional parts of a cent to the nearest one-tenth cent (\$0.001) 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 that contain five-hundredths of a cent (\$0.0005) or more will be rounded up to the next highest tenth of a cent, while entries that contain less than five-hundredths of a cent will be rounded down to the next lowest tenth of a cent and in accordance with Section 2L.11.5., "Consideration of Unit Prices." Bids less than one-tenth of a cent (\$0.001) will be rounded to one-tenth of a cent (\$0.001). When credit items are included (negative unit prices), rounding is performed on the absolute value.
- 11.4. **Interpretation of Unit Prices.** The Owner will make a documented determination of the unit bid price if a unit bid price is illegible or conflicting in the case of replacement alternate items. The Owner's determination will be final.
- 11.5. **Consideration of Unit Prices.** Unit bid price entries such as no dollars and no cents, zero dollars and zero cents, or numerical entries of less than \$0.001 will be tabulated as one-tenth of a cent (\$0.001). Proposals in which unit bid prices have been left blank are incomplete and nonresponsive.
- 11.5.1. **Alternate Items.** If a proposal has a regular and corresponding alternate item or group of items, the proposal will be considered complete if:

- the regular item or group of regular items has unit prices entered,
- the alternate item or group of alternate items has unit prices entered, or
- both regular item or group of regular items and alternate item or group of alternate items have unit prices entered. The Owner will use the price bid for the regular or the alternate item, or group of items, that will result in the lowest cost to the State.

The bid will be considered incomplete and nonresponsive if:

- a regular item or group of regular items is left blank, or
- a corresponding alternate item or group of alternate items is left blank.

- 11.5.2. **Additive Alternate Items.** The Owner will sum the products of the quantities and the unit prices bid for the regular items on the proposal form to determine the total bid amount for the base bid. The official total bid amount will be determined by the summation of the base bid plus a predetermined order of additive alternate items, not to exceed the Owner's budgeted amount for the Contract. An estimate of the budgeted amount may be shown on the plans.

The Contract will identify the base bid work and additive alternate work to be performed. The Owner makes no guarantee that the additive alternate work will be required.

- 11.5.3. **A + B Bidding.** The official total bid amount will be determined by the summation of the Contract amount and the time element. The Owner will use the following formula to make the calculation:

$$A + B1 + B2 + BX + \dots + BT$$

The Contract amount, equal to A in the formula, is determined by the summation of the products of the approximate quantities shown in the proposal and the unit bid prices bid, and the time element, equal to B1, B2, BX (when phases are included as bid components), and BT (substantial completion of the project when included as a bid component), of the bid is determined by multiplying the number of working days bid to substantially complete the project, or phases, by the daily road-user cost (RUC) shown on the plans. When partial days are bid, they will be rounded up to the nearest whole day.

The formula above determines the low Bidder and establishes the Contract time or time for specific phases of the Contract.

- 11.5.4. **Rubber Additives.** For proposed Contracts without federal funds, if an alternate item for "Hot Asphalt-Rubber Surface Treatments" or "Hot-Mix Asphalt Concrete Pavement" that contains ground tire rubber is shown on the proposal form and the Bidder bids that alternate item, the amounts bid for "Hot Asphalt-Rubber" and "Aggregate" or "Hot-Mix Asphalt Concrete" will be reduced to 85% of the amounts actually bid. This reduction will only be used for the purposes of determining the lowest Bidder. To qualify, the ground tire rubber used must be produced from scrap tire ground in a facility in Texas. Payment for "Hot Asphalt-Rubber" and "Aggregate" or "Hot-Mix Asphalt Concrete" will be at the actual unit prices bid.

- 11.5.5. **Home State Bidding Preference.** For the purpose of determining the apparent low Bidder on proposed Contracts without federal funds, the Owner will select the option that results in the greatest bidding preference to the resident Bidder.

- 11.5.5.1. **Reverse Application of Non-Resident Bidder's Home State Bidding Preference.** The total bid amount will be based upon the reverse application of the non-resident Bidder's home state bidding preference, if any. This will also apply to another state's preference for a Bidder that offers materials grown, produced, processed, or manufactured in that state.

Any reverse application of the home state bidding preference will be the greater of the following:

- the amount by which a resident Bidder would be required to underbid the non-resident Bidder to obtain a comparable contract in the state in which the non-resident's principal place of business is located; or

- the amount by which a resident Bidder would be required to underbid the non-resident Bidder to obtain a comparable contract in the state in which a majority of the manufacturing relating to the Contract will be performed.

11.5.5.2. **Texas Home State Bidding Preference.** A Bidder will be considered the apparent low Bidder if the Bidder's home office is located in this state and their bid does not exceed an amount equal to 105% of the apparent low bid received from a Bidder whose home office is not located in this state. This will not apply to a Bidder from a bordering state whose state does not give a preference to a Bidder in a manner similar to this Section.

12. CONSIDERATION OF BID ERRORS

The Owner will consider a claim of a bid error by the apparent low Bidder if the following requirements have been met:

- a written notification is submitted to the Owner within 5 business days after the date the bid is opened and
- the submittal identifies the items of work involved and includes bidding documentation. The Owner may request clarification of submitted documentation.

The Owner will evaluate the claim of a bid error by the apparent low Bidder by considering the following:

- the bid error relates to a material item of work,
- the bid error amount is a significant portion of the total bid,
- the bid error occurred despite the exercise of ordinary care, and
- the delay of the proposed work will not impact cost and safety to the public.

Acceptance of the bid error claim by the Owner will result in the rejection of all bids. The erring Contractor will not be allowed to bid the project when it is re-let. Rejection of bids due to the Contractor's bid error may result in the application of remedial actions by the Owner.

13. TIE BIDS

If the official total bid amount for two or more Bidders is equal and those bids are the lowest submitted, each tie Bidder will be given an opportunity to withdraw their bid. If two or more tie Bidders do not withdraw their bids, the low Bidder will be determined by a coin toss or a series of coin tosses when there are more than two Bidders. If all tie Bidders request to withdraw their bids, no withdrawals will be allowed and the low Bidder will be determined by a coin toss or a series of coin tosses when there are more than two Bidders. The Letting Official will preside over the proceedings.

14. DISADVANTAGED BUSINESS ENTERPRISE (DBE)

The apparent low bidder must submit DBE commitment information on federally funded projects with DBE goals within 5 calendar days (as defined in 49 CFR Part 26, Subpart A) of bid opening. For a submission that meets the 5-day requirement, administrative corrections will be allowed.

If the apparent low Bidder fails to submit their DBE information within the specified timeframe, they will be deemed nonresponsive. The Bidder forfeiting the proposal guaranty will not be considered in future proposals for the same work unless there has been a substantial change in the design of the work. The Owner may recommend that the Commission:

- reject all bids, or
- award the Contract to the new apparent low Bidder, if the new apparent low Bidder has already submitted DBE information to the Owner.

If the new apparent low Bidder did not submit the required DBE information:

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

15. DEPARTMENT OF HOMELAND SECURITY (DHS) E-VERIFY SYSTEM

The Owner will not award a Contract to a Contractor that is not registered in the DHS E-Verify system. Remain active in E-Verify throughout the life of the Contract. In addition, in accordance with Article 8L.2., "Subcontracting," sixth paragraph, include this requirement in all subcontracts and require that subcontractors remain active in E-Verify until their work is completed.

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

The Owner may recommend to:

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

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

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

Item 3L

Award and Execution of Contract



1. AWARD OF CONTRACT

The Owner or original award authority will award, reject, or defer the Contract within 90 days after the opening of the proposal. The Owner reserves the right to reject any or all proposals and to waive technicalities in the best interest of the Owner.

1.1. **Award.** The Owner or original award authority will award the Contract to the low Bidder as determined in accordance with Article 2L.11., "Tabulating Bids." The Owner may award a Contract to the second lowest Bidder when the following requirements have been met:

- the low Bidder withdraws their bid or fails to enter into Contract,
- the second lowest Bidder agrees to perform the work at the unit bid prices of the low Bidder,
- the Owner recommends in writing the award of the Contract to the second lowest Bidder, and
- the Owner's governing body agrees with the Owner recommendation for award to the second lowest Bidder.

1.2. **Rejection.** The Owner or original award authority will reject the Contract if:

- collusion may have existed among the Bidders. Collusion participants will not be allowed to bid future proposals for the same Contract,
- the low bid is mathematically and materially unbalanced. The Bidder will not be allowed to bid future proposals for the same Contract,
- the lowest bid is higher than the Owner's estimate, and re-advertising for bids may result in a lower bid,
- the low bid contains a bid error that satisfies the requirements and criteria in Article 2L.12., "Consideration of Bid Errors," or
- rejection of the Contract is in the best interest of the Owner.

1.3. **Deferral.** The Owner may defer the award or rejection of the Contract when deferral is in the best interest of the Owner.

2. RESCINDING OF AWARD

The Owner or original award authority reserves the right to cancel the award of any Contract before Contract execution with no compensation due when the cancellation is in the best interest of the Owner. The Owner will return the proposal guaranty to the Contractor.

3. DISADVANTAGED BUSINESS ENTERPRISE (DBE) AND SMALL BUSINESS ENTERPRISE (SBE)

Submit all DBE and SBE information in the timeframe specified when required by the proposal.

4. EXECUTION OF CONTRACT

Provide the following within 15 days after written notification of award of the Contract.

4.1. **Contract.** Execute the Contract as prescribed by the Owner.

- 4.2. **Bonds.** Execute and date the performance and payment bond in the full amount of the Contract with the powers of attorney. Provide bonds in accordance with Table 1. Furnish the payment and performance bonds as a guaranty for the protection of the claimants and the Owner for labor and materials and the faithful performance of the work.

Table 1
Bonding Requirements

Contract Amount	Required Bonds
Less than \$25,000	None
\$25,000–\$100,000	Payment
More than \$100,000	Performance and payment

- 4.3. **Insurance.** For construction and building Contracts, submit a certificate of insurance showing coverages in accordance with the Contract requirements.

Insurances must cover the work for the duration of the Contract and must remain in effect until final acceptance. Provide project-specific insurance, not listed in Table 2, until acceptance of the work covered by the project-specific insurance or as approved by the Engineer. Failure to obtain and maintain insurance for the contracted work may result in suspension of work or default of the Contract. If the insurance expires and coverage lapses for any reason, stop all work until the Owner receives an acceptable certificate of insurance.

Provide the Owner with a certificate of insurance verifying the types and amounts of coverage shown in Table 2. The certificate of insurance must be in a form approved by the Texas Department of Insurance. Certificates of insurance for commercial general liability, auto liability, and workers' compensation must include the Contractor's prequalified name in the "Insured" field. Any certificate of insurance provided must be available for public inspection.

Table 2
Insurance Requirements

Type of Insurance	Amount of Coverage
Commercial general liability insurance	Not less than: \$600,000 each occurrence
Business automobile policy	Not less than: \$600,000 combined single limit
Workers' compensation	Not less than: Statutory
All risk builder's risk insurance (for building-facilities contracts only)	100% of Contract price

By signing the Contract, the Contractor certifies compliance with all applicable laws, rules, and regulations pertaining to workers' compensation insurance. This certification includes all subcontractors. Pay all deductibles stated in the policy. Subcontractors must meet the requirements shown in Table 2, either through their own coverage or through the Contractor's coverage.

The workers' compensation policy must include a waiver of subrogation endorsement in favor of the Owner.

For building-facilities contracts, provide all risk builder's risk insurance to protect the Owner against loss by storm, fire, or extended coverage perils on work and materials intended for use on the project, including the adjacent structure. Name the Owner under the Lost Payable clause.

For contracts with railroad requirements, see project-specific details for additional insurance requirements.

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 Owner. The substitute Surety must be authorized by the laws of the Owner and acceptable to the Owner. 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.

The work performed under this Section will not be measured or paid for directly, but will be subsidiary to pertinent Items.

- 4.4. **Business Ownership Information.** Submit the names and Social Security numbers of all individuals owning 25% or more of the firm, or firms in the case of a joint venture, on the Owner's form.
- 4.5. **Railroad Documents.** Provide all required documents for satisfaction of railroad requirements for projects that have work involving railroad right of way. Comply with the requirements of Article 5L.8., "Cooperation with Railroads."

5. FAILURE TO ENTER CONTRACT

If the Contractor fails to comply with all the requirements in Article 3L.4., "Execution of Contract," the proposal guaranty will become the property of the Owner, not as a penalty, but as liquidated damages. The Contractor forfeiting the proposal guaranty will not be considered in future proposals for the same work unless there has been a substantial change in design of the work.

6. APPROVAL AND EXECUTION OF CONTRACT

The Contract will be approved and signed under authority of the Owner.

7. RETURN OF PROPOSAL GUARANTY

The proposal guaranty check of the low Bidder will be retained until after the Contract has been rejected or awarded and executed. Bid bonds will not be returned.

8. BEGINNING OF WORK

Do not begin work until authorized in writing by the Owner.

Verify all quantities of materials shown on the plans before ordering.

9. ASSIGNMENT OF CONTRACT

Do not assign, sell, transfer, or otherwise dispose of the Contract or any portion of the rights, title, or interest (including claims) without the approval of the Owner or original award authority. The Owner must deem any proposed assignment justified and legally acceptable before the assignment can take place.

10. EXCLUDED PARTIES

The Contractor certifies by signing the Contract that the Contractor will not enter into any subcontract with a subcontractor that is debarred or suspended by the Owner or any federal agency.

Item 4L

Scope of Work



1. CONTRACT INTENT

The intent of the Contract is to describe the completed work to be performed. Furnish materials, supplies, tools, equipment, labor, and other incidentals necessary for the proper prosecution and completion of the work in accordance with Contract documents.

2. PRECONSTRUCTION CONFERENCE

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. The preconstruction conference may be scheduled with the safety preconstruction meeting described in Section 7L 2.2., "Safety Preconstruction Meeting" and the railroad coordination meeting described in Article 5L 8., "Cooperation with Railroads." Work with the Engineer to resolve or escalate all issues. Execute the project pledge and establish an issue escalation ladder.

2.1. **Project Pledge.** Contractor representatives at the level of foreman and above will certify in writing they will approach the construction of this project in a manner consistent with delivering a high-quality project in a safe, cost-effective, and timely manner, and they will be committed to not allowing personality conflicts or personal interests to interfere with providing the public with a quality project. Failure to uphold this commitment may result in grounds for removal from the project.

2.2. **Issue Resolution Process.** An issue is any aspect of the Contract where parties of the Contract do not agree. The individuals identified at the lowest level of the issue escalation ladder will initiate the issue resolution process by escalating any issue that remains unresolved within the timeframe outlined in the issue escalation ladder.

Work with the Engineer to resolve all issues during the course of the Contract. Refer to Article 4L 7., "Dispute or Claims Procedure," for all unresolved issues.

3. PARTNERING

The intent of this Article is to promote an environment of trust, mutual respect, integrity, and fair dealing between the Owner and the Contractor.

Informal partnering does not make use of a facilitator and is led by the Engineer in charge of the work and the Contractor's counterpart, while formal partnering uses the services of a facilitator (internal or external).

3.1. **Procedures for Partnering Meetings and Format.** Informal partnering is required, unless formal partnering is mutually agreed upon instead of the informal partnering.

3.2. **Facilitators.** The facilitator is to act as a neutral party seeking to initiate cooperative working relationships. This individual must have the technical knowledge and ability to lead and guide discussions. Choose either an internal or external facilitator. The facilitator must be acceptable to the Engineer.

3.2.1. **Internal Facilitators.** An Owner or Contractor staff member may be selected as the facilitator at no additional cost to either party.

- 3.2.2. **External Facilitators.** A private firm or individual that is independent of the Contractor and the Owner may be selected as the facilitator. Submit the facilitator's name and estimated fees for approval before contracting with the facilitator.
- 3.3. **Meetings and Arrangements.** Coordinate with the Engineer for meeting dates and times, locations including third party facilities, and other needs and appurtenances including but not limited to audio or visual equipment. Make all meeting arrangements for formal partnering. Use Owner facilities or facilities in the vicinity of the project if available. Submit the estimated meeting costs for approval before finalizing arrangements.
- Coordinate facilitator discussions before the partnering meeting to allow the facilitator time to prepare an appropriate agenda. Prepare a list of attendees with job titles and include critical Contractor, subcontractor, and supplier staff on the list. Provide the facilitator with the list of attendees and invite the attendees listed.
- The Owner will invite and provide a list of attendees that includes, but is not limited to Owner, TxDOT, other local governments, law enforcement, railroad, and utility representatives.
- Participate in additional partnering meetings as mutually agreed upon.
- 3.4. **Payment.** Expenses for labor, Contractor equipment, or overhead will not be allowed. Markups as prescribed in Article 9L 7., "Payment for Extra Work and Force Account Method," will not be allowed.
- Informal partnering will be conducted with each party responsible for their own costs.
- For formal partnering using internal facilitators, the Contractor will be responsible for arrangements and for expenses incurred by their internal facilitator, including but not limited to meals, travel, and lodging. Owner facilitators may be used at no additional cost.
- For formal partnering using external facilitators, submit an invoice to the Engineer for reimbursement. The Owner will reimburse the Contractor for half of the eligible expenses as approved. For external facilitators not approved by the Owner but used at the Contractor's option, the Contractor will be responsible for all costs of the external facilitator.
- For meeting facilities and appurtenances, submit an invoice to the Engineer for reimbursement. The Owner will reimburse the Contractor for half of the eligible expenses as approved.

4. CHANGES IN THE WORK

The Engineer reserves the right to make changes in the work, including addition, reduction, or elimination of quantities and alterations needed to complete the Contract. Perform the work as altered. These changes will not invalidate the Contract nor release the Surety. The Contractor is responsible for notifying the sureties of any changes to the Contract.

If the changes in quantities or the alterations do not significantly change the character of the work under the Contract, the altered work will be paid for at the Contract unit price. If the changes in quantities or the alterations significantly change the character of the work, the Contract will be amended by a change order. If no unit prices exist, this will be considered extra work and the Contract will be amended by a change order. Provide cost justification as requested, in an acceptable format.

Payment will not be made for anticipated profits on work that is eliminated.

Agree on the scope of work and the basis of payment for the change order before beginning the work. If there is no agreement, the Engineer may order the work to proceed under Article 9L 7., "Payment for Extra Work and Force Account Method," or by making an interim adjustment to the Contract. In the case of an adjustment, the Engineer will consider modifying the compensation after the work is performed.

A significant change in the character of the work occurs when:

- the character of the work for any item as altered differs materially in kind or nature from that in the Contract, or
- a major item of work varies by more than 25% from the original Contract quantity,

When the quantity of work to be done under any major item of the Contract is more than 125% of the original quantity stated in the Contract, then either party to the Contract may request an adjustment to the unit price on the portion of the work that is above 125%.

When the quantity of work to be done under any major item of the Contract is less than 75% of the original quantity stated in the Contract, then either party to the Contract may request an adjustment to the unit price.

If the changes require additional working days to complete the Contract, Contract working days will be adjusted in accordance with Item 8L, "Prosecution and Progress."

5. DIFFERING SITE CONDITIONS

During the progress of the work, differing subsurface or latent physical conditions may be encountered at the site. The two types of differing site conditions are defined as:

- those that differ materially from those indicated in the Contract, and
- unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract.

Notify the Engineer in writing when differing site conditions are encountered. The Engineer will notify the Contractor in writing when the Owner discovers differing site conditions. Unless directed otherwise, suspend work on the affected items and leave the site undisturbed. The Engineer will investigate the conditions and determine whether differing site conditions exist. The Engineer will provide written notification of the determination whether or not an adjustment of the Contract is warranted. If the differing site conditions cause an increase or decrease in the cost or number of working days specified for the performance of the Contract, the Engineer will make adjustments, excluding the loss of anticipated profits, in accordance with the Contract. Additional compensation will be made only if the required written notice has been provided by either the Contractor or the Engineer.

6. REQUESTS FOR ADDITIONAL COMPENSATION AND DAMAGES

Notify the Engineer in writing of any intent to request additional compensation once there is knowledge of the basis for the request. An assessment of damages is not required to be part of this notice but is desirable. The intent of the written notice requirement is to provide the Engineer an opportunity to evaluate the request and to keep an accurate account of the actual costs that may arise. Minimize impacts and costs.

If written notice is not given, the Contractor waives the right to additional compensation unless the circumstances could have reasonably prevented the Contractor from knowing the cost impact before performing the work. Notice of the request and the documentation of the costs will not be construed as proof or substantiation of the validity of the request. Submit the request in enough detail to enable the Engineer to determine the basis for entitlement, adjustment in the number of working days specified in the Contract, and compensation.

Compensable damages occur when impacts that are the responsibility of the Owner result in additional costs to the Contractor that could not have been reasonably anticipated at the time of letting. Costs of performing additional work are not considered damages. Notify the Engineer in writing as soon as possible for Contractor damages. The intent is to reimburse the Contractor for actual expenses arising from a compensable impact. No profit or markups, other than labor burden, will be allowed. For damages, labor burden will be reimbursed at 35% unless the Contractor can justify higher actual cost. Justification for a higher percentage must be in conformance with the methodology provided by the Owner, submitted

separately for project overhead labor and direct labor, and determined and submitted by a Certified Public Accountant (CPA). Submit CPA-prepared labor burden rates directly to the Owner for approval.

The Owner will not consider fees and interest on requests for additional compensation and damages. Fees include, but are not limited to preparation, attorney, printing, shipping, and various other fees.

If the Contractor requests compensation for damages and the damages are determined to be compensable, then standby equipment costs and project overhead compensation will be based on the duration of the compensable damage and will be limited as follows.

- 6.1. **Standby Equipment Costs.** Payment will be made in accordance with Section 9L 7.1.4.3., "Standby Equipment Costs."
- 6.2. **Project Overhead.** Project overhead is defined as the administrative and supervisory expenses incurred at the work locations. When delay to project completion occurs, reimbursement for project overhead for the Contractor will be made using the following options at the Contractor's discretion:
- reimbursed at 6% (computed as daily cost by dividing 6% of the original Contract amount by the number of original Contract work days), or
 - actual documented costs for the impacted period.

Project overhead for delays impacting subcontractors will be determined from actual documented costs submitted by the Contractor.

Time extensions and suspensions alone will not be justification for reimbursement for project overhead.

- 6.3. **Home Office Overhead.** The Owner will not compensate the Contractor for home office overhead.

7. DISPUTE OR CLAIMS PROCEDURE

The dispute resolution policy promotes a cooperative attitude between the Engineer, Contractor, and Contractor's subcontractors working through the Contractor. Emphasis is placed on resolving issues while they are still current, at the Owner's office, and in an informal manner. Open sharing of information is encouraged by all parties involved so the information provided completely and accurately reflects the issues and facts. If information is not shared, decisions may be limited to relying on the documentation that is available for review.

The Owner's goal is to have a dispute settled by the Engineer before elevating it as a claim to the Owner.

If a dispute cannot be resolved, initiate the Contract claim procedure by submitting a claim to the Owner.

The Contractor, or subcontractor through the Contractor, will file a Contract claim request and a detailed report that provides the basis for the claim. The detailed report will include relevant facts of the claim, cost or other data supporting the claim, a description of any additional compensation requested, and documents supporting the claim.

The claim must include the following certification: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Owner is liable; and that I am duly authorized to certify the claim on behalf of the Contractor."

File a claim after completion of the Contract or when required for orderly performance of the Contract. For a claim resulting from enforcement of a warranty period, file the claim no later than 1 yr. after expiration of the warranty period. For all other claims, file the claim no later than 1 yr. after the date the Owner issues notice to the Contractor that they are in default, the date the Owner terminates the Contract, or the date of final acceptance of the Contract. It is the Contractor's responsibility to submit requests in a timely manner.

Item 5L

Control of the Work



1. AUTHORITY OF ENGINEER

The Engineer has the authority to observe, test, inspect, approve, and accept the work (either in writing or orally). The Engineer decides all questions about the quality and acceptability of materials, work performed, work progress, Contract interpretations, applicability of standard details, and acceptable Contract fulfillment. The Engineer has the authority to enforce and make effective these decisions.

- Unless noted elsewhere in the Contract or by the Engineer, payment for Contractor work is in accordance with the Contract requirements at that time. This payment does not eliminate the Contractor's responsibilities for the work as defined in Article 7L.17., "Contractor's Responsibility for Work," or Article 5L.12., "Final Acceptance."
- The Engineer acts as a referee in all questions arising under the terms of the Contract.
- The Engineer's decisions are final and binding.

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

- requiring the Contractor to remove and replace defective work, or reducing payment for defective work,
- removing an individual from the project,
- suspending the work without suspending working day charges,
- assessing standard liquidated damages to recover the Owner's administrative costs, including additional project-specific liquidated damages when specified in the Contract withholding estimates, and
- declaring the Contractor to be in default of the Contract

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

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

2. PLANS AND WORKING DRAWINGS

When required, provide working drawings to supplement the plans with all necessary details not included on the Contract plans. Prepare and furnish working drawings in a timely manner and obtain approval, if required, before the beginning of the associated work. For all working drawing submittal requirements, the Engineer may allow electronic and other alternative submission procedures. Have a licensed professional engineer sign, seal, and date the working drawings as shown in Table 1.

Prepare working drawings using United States standard measures in the English language. The routing of submittals for review and approval will be established at the preconstruction conference. The Contractor is responsible for the accuracy, coordination, and conformity of the various components and details of the working drawings. Owner approval of the Contractor's working drawings will not relieve the Contractor of any responsibility under the Contract. The work performed in accordance with this Article will not be measured or paid for directly, but will be subsidiary to pertinent Items.

**Table 1
Signature and Approval Requirements for Working Drawings**

Working Drawings For		Requires Licensed Professional Engineer's Signature, Seal, and Date	Requires Owner Approval
1. Alternate or optional designs submitted by Contractor		Yes	Yes
2. Supplementary shop and fabrication drawings for structural Items		No unless required on the plans	See applicable Item
3. Contractor-proposed temporary facilities that affect the public safety, not included on the plans		Yes	Yes
4. Form and falsework details	Bridges, retaining walls, and other major structures	Yes unless otherwise shown on the plans	No ¹
	Minor structures	No unless otherwise shown on the plans	No
5. Erection drawings		Yes	No ^{1,2}
6. Contractor-proposed major modifications to traffic control plan		Yes	Yes

1. The Engineer may require that the Contractor have a licensed professional engineer certify that the temporary works are constructed according to the sealed drawings.
2. Approval is required for items spanning over live traffic or where safety of the traveling public is affected, as determined by the Engineer.

Submit shop drawings electronically for the fabrication of structural items in accordance with the Owner's procedures and as directed for other items required by the Contract. References to 11 × 17-in. sheets in individual specifications for structural items imply electronic computer-aided design sheets.

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. Reasonably close conformity limits are 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 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 Owner will not pay for material rejected due to improper fabrication, excess quantity, or any other reasons within the Contractor's control.

- 3.1. **Acceptance of Defective or Unauthorized Work.** When work fails to meet Contract requirements, but is adequate to serve the design purpose, the Engineer will decide the extent to which the work will be accepted and remain in place. The Engineer will document the basis of acceptance by letter and may adjust the Contract price.
- 3.2. **Correction of Defective or Unauthorized Work.** When work fails to meet Contract requirements and is inadequate to serve the design purpose, it will be considered defective. Correct, or remove and replace, the work at the Contractor's expense, as directed.

The Owner 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.

4. COORDINATION OF PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS

The specifications, accompanying plans, special provisions, change orders, and supplemental agreements are intended to work together and be interpreted as a whole.

Numerical dimensions govern over scaled dimensions. Special provisions govern over plans (including general notes), which govern over standard specifications and special specifications. Job-specific plan sheets govern over standard plan sheets.

However, in the case of conflict between plans (including general notes) and specifications regarding responsibilities for hazardous materials and traffic control in Items 1L–10L, “Local Government General Requirements and Covenants,” and Item 502, “Barricades, Signs, and Traffic Handling,” special provisions govern over standard specifications and special specifications, which govern over the plans.

Notify the Engineer promptly of any omissions, errors, or discrepancies upon discovery so necessary corrections and interpretations can be made. Failure to promptly notify the Engineer of discovered omissions, errors, or discrepancies will constitute a waiver of all Contract claims against the Owner for misunderstandings or ambiguities that result from the errors, omissions, or discrepancies.

5. COOPERATION OF CONTRACTOR

Cooperate with the Engineer. Respond promptly to instructions from the Engineer. Provide all information necessary for the successful completion of the Contract.

Designate in writing a competent, English-speaking Superintendent employed by the Contractor. The Superintendent must be experienced in the work being performed and capable of reading and understanding the Contract. Ensure the Superintendent is available at all times and able to receive instructions from the Engineer or authorized Owner representatives and to act for the Contractor. The Engineer may suspend work without suspending working day charges if a Superintendent is not available or does not meet the above criteria.

At the written request of the Engineer, immediately remove from the project any employee or representative of the Contractor or a subcontractor who, in the opinion of the Engineer, does not perform work in a proper and skillful manner or who is disrespectful, intemperate, disorderly, uncooperative, or otherwise objectionable. Do not reinstate these individuals without the written consent of the Engineer.

Furnish suitable machinery, equipment, and construction forces for the proper prosecution of the work.

Provide adequate lighting to address quality requirements and inspection of nighttime work.

6. COOPERATING WITH UTILITIES

Use established safety practices when working near utilities. Consult with the appropriate utilities before beginning work. Notify the Engineer immediately of utility conflicts. The Engineer will decide whether to adjust utilities or adjust the work to eliminate or lessen the conflict. Unless otherwise shown on the plans, the Engineer will make necessary arrangements with the utility owner when utility adjustments are required.

Use work procedures that protect utilities or appurtenances that remain in place during construction. Cooperate with utility companies to remove and rearrange utilities to avoid service interruption or duplicate work by the utility companies. Allow utilities access to the right of way.

Immediately notify the appropriate utility of service interruptions resulting from damage due to construction activities. Cooperate with utilities until service is restored. Maintain access to fire hydrants when necessary.

7. COOPERATION BETWEEN CONTRACTORS

Cooperate and coordinate with other Contractors working within the limits or adjacent to the limits.

8. COOPERATION WITH RAILROADS

Plan and prosecute portions of the work involving a railway to avoid interference with or hindrance to the railroad company.

If the work is on railroad right of way, do not interfere with the operation of the railroad company's trains or other property.

- 8.1. **Railroad Coordination Meeting.** When shown on the plans or directed by the Engineer, schedule and attend a railroad coordination meeting with the Engineer before beginning work or as agreed upon (may be a part of the preconstruction conference described in Article 4L.2., "Preconstruction Conference"). Prepare a list of attendees and invite personnel, including, but not limited to Owner, Contractor, subcontractor, and railroad representatives.

Provide the invitation to the railroad representatives at least 21 calendar days before the railroad coordination meeting.

- 8.2. **Project-Specific Information.** Refer to project-specific plan sheets in the Contract for specific information concerning the work to be completed by the Contractor and the railroad within railroad right of way; railroad right of way locations impacted by construction; percentage of Contract work at each location; train movements at each location; and requirements for railroad insurance, flagging, and Right of Entry (ROE) Agreements.

- 8.3. **Right of Entry Agreement by the Owner.** When shown on the plans, the process for obtaining a fully executed ROE Agreement is as follows.

- The Owner will send the unexecuted ROE Agreement to the Contractor with the unexecuted Contract.
- Partially execute the ROE Agreement and return it to the Owner with the partially executed Contract and required insurance.
- The Owner will coordinate with the railroad company regarding the further execution of the ROE Agreement and associated fees. The Owner will pay any ROE Agreement fees directly to the railroad company.
- Once the Owner has received the fully executed ROE Agreement from the railroad company, the Owner will forward the fully executed ROE Agreement to the Contractor.

- 8.4. **Right of Entry Agreement by the Contractor.** When shown on the plans, contact the railroad company to obtain the ROE Agreement before beginning work on the Contract.

Provide the required insurance to the Owner before beginning work on the Contract.

Execute the ROE Agreement and pay any associated fees to the railroad company. Provide a copy of the fully executed ROE Agreement to the Owner.

9. CONSTRUCTION SURVEYING

Use Method C unless otherwise specified in the Contract. Upon request, the Engineer will allow the Contractor to copy available earthwork cross-sections, computer printouts or data files, and other information necessary to establish and control work. Preserve all control points, stakes, marks, and right of way markers. Assume cost and responsibility of replacing disturbed control points, stakes, marks, and right of way markers damaged by the Contractor's or its subcontractor's operations. If the Owner repairs disturbed control points, stakes, marks, or right of way markers, the cost of repair may be deducted from money due or to become

due to the Contractor. Replace right of way markers under the direction of an RPLS. This work performed under this Article will not be measured or paid for directly, but will be subsidiary to pertinent Items.

The Engineer reserves the right to make measurements and surveys to determine the accuracy of the work and determine pay quantities. The Engineer's measurements and surveys do not relieve the Contractor's responsibility for accuracy of work. Allow the Engineer adequate time to verify the surveying.

- 9.1. **Method A.** The Engineer will set control points for establishing lines, slopes, grades, and centerlines and for providing both vertical and horizontal control.

At minimum, provide a controlling pair of monument points at both the beginning and end of construction project for projects less than 2 mi. in length. For projects greater than 2 mi. in length, monuments will be set in pairs at a minimum of 2 mi. based on the overall length of the project. Use these control points as reference to perform the work.

Furnish materials, equipment, and qualified workforce necessary for the construction survey work. Place construction points, stakes, and marks at intervals sufficient to control work to established tolerances. Place construction stakes at intervals of no more than 100 ft., or as directed. Place stakes and marks so as not to interfere with normal maintenance operations.

- 9.2. **Method B.** The Engineer will set adequate control points, stakes, stationing, and marks to establish lines, slopes, grades, and centerlines. Furnish additional work, stakes, materials, and templates necessary for marking and maintaining points and lines.

- 9.3. **Method C.** Set adequate control points, stakes, and marks to establish lines, slopes, grades, and centerlines. Place construction points, stakes, and marks at intervals sufficient to control work to established tolerances. Place construction stakes at intervals of no more than 100 ft., or as directed. Place stakes and marks so as not to interfere with normal maintenance operations.

10. INSPECTION

Inspectors are authorized representatives of the Engineer. Inspectors are authorized to examine all work performed and materials furnished, including preparation, fabrication, and material manufacture. Inspectors inform the Contractor of failures to meet Contract requirements. Inspectors may reject work or materials and may suspend work until any issues can be referred to and decided by the Engineer. The Engineer may authorize Inspectors to adjust the traffic control. Inspectors cannot alter, add, or waive Contract provisions, issue instructions contrary to the Contract, act as foremen for the Contractor, or interfere with the management of the work. Inspection or lack of inspection will not relieve the Contractor from obligation to provide materials or perform the work in accordance with the Contract.

Provide safe access to all parts of the work and provide information and assistance to the Engineer to allow a complete and detailed inspection. Give the Engineer sufficient notice to inspect the work. Work performed without suitable inspection, as determined by the Engineer, may be ordered removed and replaced at Contractor's expense. Remove or uncover portions of finished work as directed. Once inspected, restore work to Contract requirements. If the uncovered work is acceptable, the costs to uncover, remove, and replace or make good the parts removed will be paid for in accordance with Article 4L.4., "Changes in the Work." If the work is unacceptable, assume all costs associated with repair or replacement, including the costs to uncover, remove, and replace or make good the parts removed.

When a government entity, utility, railroad company, or other entity accepts or pays a portion of the Contract, that organization's representatives may inspect the work but cannot direct the Contractor. The right of inspection does not make that entity a party to the Contract and does not interfere with the rights of the parties to the Contract.

11. FINAL CLEANUP

Upon completion of the work, remove construction project 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.

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.

The work performed under this Article will not be paid for directly, but will be subsidiary to Items of the Contract.

12. FINAL ACCEPTANCE

12.1. **Routine Maintenance Contracts.** Not applicable to Locally Let projects.

12.2. **Construction Contracts.** Final acceptance is made when all work is complete and the Engineer, in writing, accepts all work for the work locations in the Contract. Final acceptance relieves the Contractor from further Contract responsibilities.

12.2.1. **Work Completed.** Work completed must include work for vegetative establishment and maintenance, test and performance periods, and work to meet the requirements of Article 5L.11., "Final Cleanup."

12.2.2. **Final Inspection.** After all work is complete, the Engineer in charge of the work will request a final inspection by the Engineer authorized to accept the work.

The final inspection will be made as soon as possible and not later than 10 calendar days after the request. No working day charges will be made between the date of request and final inspection.

After the final inspection, if the work is satisfactory, the Engineer will notify the Contractor in writing of the final acceptance of the work. If the final inspection finds any work to be unsatisfactory, the Engineer will identify in writing all deficiencies in the work requiring correction. Correct the deficiencies identified. Working day charges will resume if these deficiencies are not corrected within 7 calendar days, unless otherwise authorized by the Engineer. Upon correction, the Engineer will inspect to verify that all deficiencies were corrected satisfactorily. The Engineer will provide written notice of the final acceptance.

12.2.3. **Final Measurement.** Final measurements and pay quantity adjustments may be made after final acceptance. Final acceptance will not be held for final measurements or pay quantity adjustments.

12.2.4. **Removal of Traffic Control Devices.** Remove any remaining construction traffic control devices and advance warning signs upon final acceptance or as directed.

12.3. **Multiple Work Orders.** Not applicable to Locally Let projects.

Item 6L

Control of Materials



1. SOURCE CONTROL

Use only materials that meet Contract requirements. Unless otherwise specified or approved, use new materials for the Work. Secure the Engineer's approval of the proposed source of materials to be used before their delivery. Materials can be approved at a supply source or staging area but may be inspected in accordance with Article 6L.4., "Sampling, Testing, and Inspection."

- 1.1. **Buy America.** Comply with the latest provisions of Buy America pertaining to steel and iron in accordance with 23 CFR § 635.410. Use steel or iron materials manufactured in the United States except when waived in accordance with Section 6L 1.2., "Buy America Exceptions."

Submit a notarized original of the TxDOT FORM D-9-USA-1 (Department Form 1818 or equivalent) with the proper attachments for verification of compliance.

Manufacturing includes any process that modifies the chemical content, physical shape or size, or final finish of a product. The manufacturing process begins with initial melting and mixing and continues through fabrication (e.g., cutting, drilling, welding, and bending) and coating (e.g., paint, galvanizing, and epoxy).

- 1.2. **Buy America Exceptions.** Use of iron and steel manufactured in the United States is required unless the material meets an exception below.

- A waiver exists exempting the material from Buy America compliance.
- The total value of foreign iron and steel products, including delivery, does not exceed 0.1% of the total Contract cost or \$2,500, whichever is greater. The Contractor must provide documentation showing under threshold in advance for the Engineer's consideration.
- Foreign iron or steel may be allowed when the Contract contains an alternate item for a foreign source iron or steel product and the Contract is awarded based on the alternate item.
- The materials are temporarily installed or are supplies, tools, and equipment not incorporated into the project. Temporarily installed means the materials and products must be removed at the end of the project or may be removed at the Contractor's convenience with the Engineer's approval.

2. MATERIAL QUALITY

Correct or remove materials that fail to meet Contract requirements or that do not produce satisfactory results. Reimburse the Owner for cost incurred if additional sampling and testing are required by a change of source.

Materials not meeting Contract requirements will be rejected unless the Engineer approves corrective actions. Upon rejection, immediately remove and replace rejected materials.

If the Contractor does not comply with this Article, the Owner may remove and replace defective material. The cost of testing, removal, and replacement will be deducted from the payments due to the Contractor.

3. MANUFACTURER WARRANTIES

Transfer to the Owner warranties and guarantees required by the Contract or received as part of normal trade practice.

4. SAMPLING, TESTING, AND INSPECTION

Incorporate into the work only material that has been inspected, tested, and accepted by the Engineer. 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.

The material requirements and standard test methods in effect at the time the proposed Contract is advertised govern. Unless otherwise specified, the Engineer will perform testing at Owner's expense. In addition to facilities and equipment required by the Contract, furnish facilities and calibrated equipment required for tests to control the manufacture of construction items. If requested, provide a complete written statement of the origin, composition, and manufacture of materials.

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 inspected 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.

Unless otherwise specified in the Contract, all testing must be performed within the United States and witnessed by the Engineer. If materials or processes require testing outside the contiguous 48 United States, reimburse the Owner for inspection expenses.

5. PLANT INSPECTION AND TESTING

The Engineer may but is not obligated to inspect materials at the acquisition or manufacturing source. Material samples will be obtained and tested for compliance with quality requirements.

If inspection is at the plant, meet the following conditions unless otherwise specified:

- cooperate fully and assist the Engineer during the inspection,
- ensure the Engineer has full access to all parts of the plant used to manufacture or produce materials,
- in accordance with pertinent items and the Contract provide a facility at the plant for use by the Engineer as an office or laboratory
- provide and maintain adequate safety measures and restroom facilities, and
- furnish and calibrate scales, measuring devices, and other necessary equipment in accordance with the Contract.

The Engineer may provide inspection for periods other than daylight hours if:

- continuous production of materials for Owner's use is necessary due to the production volume being handled at the plant, and
- the lighting is adequate to allow satisfactory inspection.

6. STORAGE OF MATERIALS

Store and handle materials to preserve their quality and fitness for the work. Store materials so that they can be easily inspected and retested. Place materials under cover, on wooden platforms, or on other hard, clean surfaces as necessary or when directed.

Obtain approval to store materials on the right of way. Storage space off the right of way is at the Contractor's expense.

7. OWNER-FURNISHED MATERIAL

The Owner will supply materials as shown on the plans. The cost of handling and placing materials supplied by the Owner will not be paid for directly, but will be subsidiary to the Item in which they are used. Assume responsibility for materials upon receipt.

8. USE OF MATERIALS FOUND ON THE RIGHT OF WAY

Material found in the excavation areas and meeting the Owner'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-specific location, replace the removed material with suitable material at no cost to the Owner as directed.

9. RECYCLED MATERIALS

The Owner will not allow hazardous wastes, as defined in 30 TAC § 335, proposed for recycling to be used on the project. Use nonhazardous recyclable materials (NRMs) only if the specification for the Item does not disallow or restrict use. Determine whether NRMs are regulated under 30 TAC §§ 312, 330, 332, 334, or 335, and comply with all general prohibitions and requirements. Use NRMs in accordance with [DMS-11000](#), "Evaluating and Using Nonhazardous Recyclable Materials Guidelines," and furnish all documentation in the manner prescribed by the Owner.

10. HAZARDOUS MATERIALS

Comply with the requirements of Article 7L.12., "Responsibility for Hazardous Materials."

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

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

10.1. Painted Steel Requirements. Coatings on existing steel contain hazardous materials unless otherwise shown on the plans. Remove paint and dispose of steel coated with paint containing hazardous materials in accordance with the following.

Removing Paint from Steel. For contracts that are specifically for painting steel, include the cleaning and painting of steel under Item 446, "Field Cleaning and Painting Steel," as a pay item. Perform work in accordance with that Item.

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

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

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

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

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

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

The Owner retains the right to determine the actual advance notice needed for the change in date to address post office business days and staff availability.

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

11. SURPLUS MATERIALS

Take ownership of surplus materials unless otherwise shown on the plans or directed. Remove and dispose of materials in conformance with federal, state, and local regulations. If requested, provide an appropriate level of documentation to verify proper disposal. When materials are disposed of on private property, provide written authorization from the property owner for the use of the property for this purpose upon request.

Item 7L

Legal Relations and Responsibilities



1. ETHICS – NOT APPLICABLE TO LOCALLY LET PROJECTS

2. SAFETY

- 2.1. **Safety Point of Contact.** Designate, in writing, a Contractor Safety Point of Contact (CSPOC). The Owner will assign an employee for their point of contact designated as Owner's Safety Point of Contact OSPOC. The Contract requires that the Contractor's and subcontractor's employees use the appropriate personal protective equipment (PPE) (e.g., hardhats, safety vests, and protective toe footwear) to meet regulations.

The Contractor will require that crew leaders and foremen (including subcontractors) have attended the required training.

- 2.2. **Safety Preconstruction Meeting.** In cooperation with the Engineer, schedule and attend a safety preconstruction meeting (may be a part of the preconstruction conference in accordance with Article 4L.2., "Preconstruction Conference"). Attendees for this safety preconstruction meeting will be:

- the Contractor,
- subcontractors,
- the Owner,
- local law enforcement, and
- other personnel who play an active role on the project.

- 2.3. **Safety Contingency.** To improve the effectiveness of traffic handling and enhance safety during the course of this project, a safety contingency fund may have been included in the project budget for traffic control plan adjustments and other safety-related improvements.

Costs associated with the adjustments or improvements will be paid for in accordance with Article 9L.7., "Payment for Extra Work and Force Account Method." Article 9L.7., "Payment for Extra Work and Force Account Method," is not intended to be used in lieu of bid items established by the Contract.

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

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

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

Store all equipment not in use in a manner and at locations that will not interfere with the safe passage of traffic.

If the Engineer determines that any of the requirements of this Article have not been met, the Engineer may take corrective action. This will not change the legal responsibilities set forth in the Contract. The cost to the Owner for this work will be deducted from any money due or to become due to the Contractor.

- 2.5. **Use of Blue Warning Lights.** Texas Transportation Code § 547.105 authorizes the use of warning lights to promote safety and provides an effective means of gaining the traveling public's attention as they drive in areas where construction crews are present. To influence the public to move over when high-risk construction activities are taking place, minimize the use of blue warning lights. These lights must be used only while performing work on or near the travel lanes or shoulder where the traveling public encounters construction crews that are not protected by a standard work zone setup, such as a lane closure, a shoulder closure, or one-way traffic control. Refrain from leaving the warning lights engaged while traveling from one work location to another or while parked on the right of way away from the pavement or a work zone.
- 2.6. **Barricades, Signs, and Traffic Handling.** Comply with the requirements of Item 502 "Barricades, Signs, and Traffic Handling," and as directed. Provide traffic control devices as shown on the plans and in accordance with the TMUTCD. When authorized or directed, provide additional signs or traffic control devices not required by the plans.
- If an unexpected situation arises that causes the Contractor to believe that the traffic control should be changed, make all reasonable efforts to promptly contact the Engineer. Take prudent actions until the Engineer can be contacted.
- The Engineer will inspect the traffic control devices. Comply with the results of the inspection in the prescribed timeframe.
- The work performed and materials furnished in accordance with this Section and Item 502 have no bearing on the prosecution of Items 1L–10L, "General Requirements and Covenants," of the Contract. This includes, but is not limited to installing, relocating, and removing project limit advance warning signs.
- 2.6.1. **Contractor Responsible Person and Alternate.** Designate in writing a Contractor's Responsible Person (CRP) and an alternate to be the representative of the Contractor who is responsible for taking or directing corrective measures regarding the traffic control. The CRP or alternate must be accessible by telephone 24 hr. per day and able to respond when notified. The CRP and alternate must comply with the requirements of Section 7L.2.6.5., "Training."
- 2.6.2. **Flaggers.** Designate, in writing, a flagger instructor who will serve as a flagging supervisor and is responsible for training and assuring that all flaggers are qualified to perform flagging duties. Certify to the Engineer that all flaggers will be trained and make available upon request a list of flaggers trained to perform flagging duties.
- Provide flaggers as directed. Flaggers must be courteous and able to effectively communicate with the public. When directing traffic, flaggers must dress appropriately; wear high-visibility safety apparel; use flags, signs, stop-slow paddles, and other hand-signaling devices; and follow the flagging procedures in the TMUTCD. Comply with the requirements of Section 7L.2.6.5., "Training."
- 2.6.3. **Law Enforcement Personnel.** Provide uniformed law enforcement personnel with patrol vehicles as directed. Document the work zone traffic services provided in the manner prescribed by the Owner. Law enforcement personnel providing work zone traffic services must be trained for the service they perform. Comply with Section 7L.2.6.5., "Training."
- 2.6.4. **Other Work Zone Personnel.** Workers involved with traffic control, including the maintenance of the traffic control, must comply with the requirements of Section 7L.2.6.5., "Training."
- 2.6.5. **Training.** Train workers involved with the traffic control using Department-approved training as shown on the "Traffic Control Training" MPL.

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

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

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

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

- printed name and signature of participant,
- name and title of trainer, and
- date of training.

2.6.5.1. **Contractor-Developed Training.** Develop and deliver Contractor-developed training meeting the minimum requirements established by the Owner. The outline for this training must be submitted to the Engineer for approval at the preconstruction meeting. The CRP or designated alternate may deliver the training instead of the TxDOT-approved training. The work performed and materials furnished to develop and deliver the training will not be measured or paid for directly, but will be subsidiary to pertinent Items.

2.6.5.1.1. **Flagger Training Minimum Requirements.** A Contractor's certified flagging instructor is permitted to train other flaggers.

2.6.5.1.2. **Other Contractor-Developed Training for Other Work Zone Personnel.** For other work zone personnel, the Contractor may provide training meeting the curriculum described below instead of TxDOT-approved training.

Minimum curriculum for Contractor-provided training is as follows.

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

- Adopt a company safety motto: "The Life You Save May Be Your Own," or similar.
- Purpose of the training includes the following.
 - "It's the Law."
 - Make work zones safer for workers and motorists.
 - Understand what is needed for traffic control.
 - Save lives including your own.
- Personal and co-worker safety includes the following.
 - **High-Visibility Safety Apparel.** Discuss compliant requirements; inspect regularly for fading and reduced reflective properties; if night operations are required, discuss the additional and appropriate required apparel in addition to special night work risks; and if moving operations are underway, discuss appropriate safety measures specific to the situation and traffic control plan.

- **Blind Areas.** A blind area is the area around a vehicle or piece of construction equipment not visible to the operators, either by line of sight or indirectly by mirrors. Discuss the “Circle of Safety” around equipment and vehicles; use of spotters; maintaining eye contact with equipment operators; and use of hand signals.
- **Runovers and Backovers.** Remain alert at all times; keep a safe distance from traffic; avoid turning your back to traffic, and if you must, then use a spotter; and stay behind protective barriers, whenever possible. It is not safe to sit on or lean against a concrete barrier; these barriers can deflect 4 ft. or more when struck by a vehicle.
- Look out for each other and warn co-workers.
- Be courteous to motorists.
- Do not run across active roadways.
- Workers must obey traffic laws and drive courteously while operating vehicles in the work zones.
- Workers must be made aware of company distracted driving policies.
- **Nighttime Operations.** Focus on projects with a nighttime element.
- **Traffic Control Training.** Basics of traffic control include the following.
 - Identify work zone traffic control supervisor and other appropriate persons to report issues to when they arise.
 - Emphasize that work zone traffic control devices must be in clean and undamaged condition. If devices have been hit but not damaged, return them to their correct place and report to the traffic control supervisor. If devices have been damaged, replace with new devices and report to the traffic control supervisor. If devices are dirty, faded, or have missing or damaged reflective tape, clean or replace them and report to the traffic control supervisor. Show examples of unacceptable device conditions. Discuss various types of traffic control devices to be used and where spacing requirements can be found.
 - **Channelizing Devices and Barricades with Slanted Stripes.** Stripes must slant in the direction in which you want traffic to stay or move; demonstrate this with a device.
 - **Traffic Queuing.** Workers must be made aware of traffic queuing and the dangers created by it. Workers must be instructed to immediately notify the traffic control supervisor and other supervisory personnel if traffic is queuing beyond advance warning sign and devices or construction limits.
 - **Signs.** Signs must be straight and not leaning. Report problems to the traffic control supervisor or other as designated for immediate repair. Covered signs must be fully covered. If covers are damaged or out of place, report to the traffic control supervisor or other as designated.

3. LAWS TO BE OBSERVED

Comply with all federal, state, and local laws, ordinances, and regulations that affect the performance of the work. The Contractor is not required to comply with city electrical ordinances not included in this Contract. Indemnify and save harmless the Owner and its representatives against any claim arising from violation by the Contractor of any law, ordinance, or regulation.

This Contract is between the Owner 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.

4. PERMITS, LICENSES, AND TAXES

Procure all permits and licenses; pay all charges, fees, and taxes; and give all notices necessary and incidental to the due and lawful prosecution of work, except for permits provided by the Owner and as specified in Article 7L.7., “Preservation of Cultural and Natural Resources and the Environment.”

5. PATENTED DEVICES, MATERIAL, AND PROCESSES

Indemnify and save harmless the Owner from any claims for infringement from the Contractor's use of any patented design, device, material, process, trademark, or copyright selected by the Contractor and used in connection with the work. Indemnify and save harmless the Owner against any costs, expenses, or damages that it may be obliged to pay, by reason of this infringement, at any time during the prosecution or after the completion of the work.

6. PERSONAL LIABILITY OF PUBLIC OFFICIALS

Owner employees are agents and representatives of the Owner and will incur no liability, personal or otherwise, in carrying out the provisions of the Contract or in exercising any power or authority granted under the Contract.

7. PRESERVATION OF CULTURAL AND NATURAL RESOURCES AND THE ENVIRONMENT

Project-specific information pertinent to cultural and natural resources is included in the plan set in the General Notes and on the Environmental Permits, Issues, and Commitments (EPIC) sheet. Adhere to all guidance, Best Management Practices (BMPs), and permits shown on the plans. Signing the Contract certifies compliance 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.

- OSHA
- TCEQ
- Texas Department of Transportation
- Texas Historical Commission
- Texas Parks and Wildlife Department
- Texas Railroad Commission
- U.S. Army Corps of Engineers (USACE)
- U.S. Department of Energy
- U.S. Department of Transportation
- EPA
- Federal Emergency Management Agency
- U.S. Fish and Wildlife Service

All subcontractors must also comply with applicable environmental laws, rules, regulations, and requirements in the Contract.

- 7.1. **Cultural Resources.** Cease all work immediately if a site, building, or location of historical, archeological, educational, or scientific interest is discovered within the right of way. The site, building, or location will be investigated and evaluated by the Owner.
- 7.2. **Protected and Imperiled Species and Wildlife.** Cease all work immediately and within 50 ft. if a protected or imperiled species, or any species assumed to be protected or imperiled, or wildlife is encountered onsite. Allow any animals to leave the area. Do not kill any wildlife. Contact Owner's environmental staff to investigate and evaluate any species or wildlife issues.
- 7.3. **Migratory Birds.** Bird and nest removal must not occur during vegetation clearing, construction, or maintenance activities on structures where birds or nests are present during the nesting season, as shown on the plans. If work will occur during the nesting season, measures to prevent nest establishment must be used before the start of nesting season or any activity. Contact Owner's environmental staff for assistance with birds and nests.

7.4. **Texas Pollutant Discharge Elimination System (TPDES) Permits and Stormwater Pollution Prevention Plans (SWP3s).**

7.4.1. Projects with Less than 1 Acre of Soil Disturbance Including Required Associated Project Specific Locations (PSLs) in Accordance with TPDES Construction General Permit (CGP) No. TXR150000. No construction site notice (CSN) posting will be required for soil disturbances within the right of way. Adhere to the requirements of the SWP3 and environmental layout as shown on the plans.

7.4.2. Projects with 1 Acre but Less than 5 Acres of Soil Disturbance Including Required Associated PSLs in Accordance with TPDES CGP No. TXR150000. The Owner and the Contractor will operate under a shared SWP3 for portions of the project in the right of way.

The Owner will be considered the primary operator with operational control over plans and specifications as defined in TPDES CGP No. TXR150000 for construction activity in the right of way. The Owner will post a small CSN and follow other requirements as defined in TPDES CGP No. TXR150000 as the entity having operational control over plans and specifications for work shown on the plans in the right of way.

The Contractor will be considered the primary operator with day-to-day operational control as defined in TPDES CGP No. TXR150000 for construction activity in the right of way. In addition to the Owner's actions, the Contractor will post a small CSN and follow other requirements as defined in TPDES CGP No. TXR150000 as the entity having day-to-day operational control of the work shown on the plans in the right of way. This is in addition to the Contractor being responsible for TPDES CGP No. TXR150000 requirements for on-right-of-way and off-right-of-way PSLs. The Contractor will adhere to all requirements of the SWP3 and environmental layout as shown on the plans. The Contractor will be responsible for implementing the SWP3 for the project site as shown on the plans, in conformance with specifications, in accordance with TPDES CGP No. TXR150000, and as directed. Notification to Municipal Separate Storm Sewer System (MS4) operators (when applicable) upon project initiation and completion must be provided in accordance with TPDES CGP No. TXR150000 requirements. A signed copy of the small CSN will be provided to MS4 operators (where applicable) at least 2 days before commencing construction.

With the Engineer's concurrence upon the completion of soil disturbing activities and achieving permanent stabilization of 70% native background vegetation cover, the CSN may be removed.

7.4.3. **Projects with 5 Acres or More of Soil Disturbance Including Required Associated PSLs in Accordance with TPDES CGP No. TXR150000.** The Owner and the Contractor will operate under a shared SWP3 for portions of the project in the right of way. The Owner will be considered the primary operator with operational control over plans and specifications as defined in TPDES CGP No. TXR150000 for construction activities in the right of way. The Owner will post a large CSN and file a Notice of Intent (NOI); Notice of Change (NOC), if applicable; and Notice of Termination (NOT), along with other requirements in accordance with TPDES CGP No. TXR150000, as the entity having operational control over plans and specifications for work shown on the plans in the right of way.

The Contractor will be considered the primary operator for day-to-day operational control as defined in TPDES CGP No. TXR150000 for construction activities in the right of way. In addition to the Owner's actions, the Contractor will file an NOI; NOC, if applicable; and NOT and post a large CSN along with other requirements as the entity having day-to-day operational control of the work shown on the plans in the right of way. This is in addition to the Contractor being responsible for TPDES CGP No. TXR150000 requirements for on-right-of-way and off-right-of way PSLs. Adhere to all requirements of the SWP3 and environmental layout as shown on the plans.

7.4.3.1. **Notice of Intent (NOI).** Contractor will submit an NOI to TCEQ in accordance with TPDES CGP No. TXR150000 requirements. NOI must be submitted at least 7 days before commencement of construction activities at the project site. Contractor must file NOI under the same Regulated Entity Number (RN) as the Owner. Provide a signed copy to the Engineer and any other MS4 operators (where applicable) at the time of submittal. The Owner will submit their NOI before Contractor submission and will provide a copy for Contractor's use in completing the Contractor's NOI form.

- 7.4.3.2. **Notice of Change (NOC).** Upon concurrence of the Engineer, submit an NOC to TCEQ within 14 days of discovery of a change or revision to the NOI as required by the CGP. Provide a signed copy of the NOC to the Engineer and any other MS4 operators (where applicable) at the time of submittal.
- 7.4.3.3. **Notice of Termination (NOT).** Upon concurrence of the Engineer, submit an NOT to TCEQ within 30 days of the Engineer's approval that 70% native background vegetative cover is met or equivalent permanent stabilization has been employed in accordance with TPDES CGP No. TXR150000. Provide a signed copy of the NOT to the Engineer and any other MS4 operators (where applicable) at the time of submittal.
- 7.4.4. **Training.** Not applicable to Locally Let Projects.
- 7.5. **Work in Waters of the United States.** For work in the right of way, the Owner will obtain any required Section 404 permits from U.S. Army Corps of Engineers USACE before work begins. Adhere to all agreements, mitigation plans, and standard BMPs required by the permit. When Contractor-initiated changes in the construction method change the impacts on Waters of the United States, obtain new or revised Section 404 permits.
- 7.6. **Work in Navigable Waters of the United States.** For work in the right of way, the Owner will obtain any required Section 9 permits from the U.S. Coast Guard before work begins. Adhere to the stipulations of the permits and associated BMPs. When Contractor-initiated changes in the construction method change the impacts on Navigable Waters of the United States, obtain new or revised Section 9 permits.
- 7.7. **Work over Recharge or Contributing Zone of Protected Aquifers.** Make every reasonable effort to minimize the degradation of water quality resulting from impacts relating to work over the recharge or contributing zones of protected aquifers, as defined and delineated by TCEQ. Use BMPs and perform work in accordance with the Contract requirements.
- 7.8. **Project Specific Locations.** For all PSLs on or off the right of way (e.g., material sources, waste sites, parking areas, storage areas, field offices, staging areas, and haul roads), comply with all applicable laws, rules, and regulations pertaining to the preservation of cultural resources, natural resources, and the environment in accordance with Section 7L 7.1., "Cultural Resources." All subcontractors must also comply with applicable environmental laws, rules, regulations, and requirements in the Contract. Maintain documentation of environmental compliance activities, including environmental consultant reports 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 on the plans. Prepare an SWP3 for all Contractor facilities, such as asphalt or concrete plants located within right of way. Comply with all TCEQ permit requirements for portable facilities, such as concrete batch plants, rock crushers, and asphalt plants. Ensure compliance with all environmental issues, such as Section 404 permits, wetland delineation, endangered species consultation requirements, or archeological and historic site impacts. Obtain all permits and clearances in advance.
- 7.9. **Contractor Responsibility.** If the Contractor initiates changes to the Contract and the Owner approves the changes, the Contractor is responsible for obtaining clearances and coordinating with the appropriate regulatory agencies.

8. 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 service provider or landowner to determine the proper time and sequence when irrigation demands will permit shutting off water flows to perform work.

Unless otherwise shown on the plans, the work performed in accordance with this Article will not be measured or paid for directly, but will be subsidiary to pertinent Items.

9. SANITARY PROVISIONS

Provide and maintain adequate, neat, and sanitary toilet accommodations for employees, including State employees, in compliance with the requirements and regulations of the Texas Department of State Health Services or other authorities having jurisdiction.

10. ABATEMENT AND MITIGATION OF EXCESSIVE OR UNNECESSARY NOISE

Minimize noise throughout all phases of the Contract. Exercise particular and special efforts to avoid the creation of unnecessary noise impact on adjacent noise-sensitive receptors in the placement of non-mobile equipment, such as air compressors, generators, and pumps. Place mobile and stationary equipment to cause the least disruption to normal adjacent activities.

All equipment associated with the work must be equipped with components to suppress excessive noise, and these components must be maintained in their original operating condition considering normal depreciation. Noise attenuation devices installed by the manufacturer, such as mufflers, engine covers, and insulation, must not be removed or rendered ineffectual, or be permitted to remain off the equipment while the equipment is in use.

11. USING EXPLOSIVES

Do not endanger life or property. When required by the plans or requested, provide a written blasting plan. The Owner retains the right to reject the blasting plan. Store all explosives securely, and clearly mark all storage places with "DANGER—EXPLOSIVES." Store, handle, and use explosives and highly flammable material in compliance with federal, state, and local laws, ordinances, and regulations. Assume liability for property damage, injury, or death resulting from the use of explosives.

Give at least 48-hr. advance notice to the appropriate railroad representative before doing any blasting work involving the use of electric blasting caps within 200 ft. of any railroad track.

12. RESPONSIBILITY FOR HAZARDOUS MATERIALS

Comply with the requirements of Article 6L.10., "Hazardous Materials." Indemnify and save harmless the Owner and its agents and employees from all suits, actions, or claims and from all liability and damages for any injury or damage to any person or property arising from the generation or disposition of hazardous materials introduced by the Contractor on any work done by the Contractor on Owner-owned or controlled sites. Indemnify and save harmless the Owner and its representatives from any liability or responsibility arising out of the Contractor's generation or disposition of any hazardous materials obtained, processed, stored, or shipped, on sites not owned or controlled by the Owner. Reimburse the Owner for all payments, fees, or restitution the Owner is required to make as a result of the Contractor's actions.

13. RESTORING SURFACES OPENED BY PERMISSION

Do not authorize anyone to make an opening in the highway for utilities, drainage, or any other reason without written permission from the Engineer. Repair all openings as directed. Payment for repair of surfaces opened by permission will be made in conformance with pertinent Items or in accordance with Article 4L.4., "Changes in the Work." Costs associated with openings made with Contractor authorization but without Owner approval will not be paid.

14. PROTECTING ADJACENT PROPERTY

Protect adjacent property from damage. If any damage results from an act or omission on the part of or on behalf of the Contractor, take corrective action to restore the damaged property to a condition similar or equal to that existing before the damage was done.

15. RESPONSIBILITY FOR DAMAGE CLAIMS

Indemnify and save harmless the Owner and its agents and employees from all suits, actions, or claims and from all liability and damages for any injury or damage to any person or property due to the Contractor's negligence in the performance of the work and from any claims arising or amounts recovered under any laws, including workers' compensation and the Texas Tort Claims Act. Indemnify and save harmless the Owner 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, neglect, 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.

Pipelines and other underground installations that may or may not be shown on the plans may be located within the right of way. Indemnify and save harmless the Owner from any suits or claims resulting from damage by the Contractor's operations to any pipeline or underground installation. Make available 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.

16. HAULING AND LOADS ON ROADWAYS AND STRUCTURES

Comply with federal and state laws concerning legal gross and axle weights. Except for the designated Interstate system, vehicles with a valid yearly overweight tolerance permit may haul materials to the work locations at the permitted load. Provide copies of the yearly overweight tolerance permits to the Engineer upon request. Construction equipment is not exempt from oversize or overweight permitting requirements on roadways open to the traveling public.

Protect existing bridges and other structures that will remain in use by the traveling public during and after the completion of the Contract. Construction traffic on roadways, bridges, and culverts within the limits of the work, including any structures under construction that will remain in service during and after completion of the Contract, is subject to legal size and weight limitations.

Additional temporary fill may be required by the Engineer for hauling purposes for the protection of certain structures. This additional fill will not be paid for directly, but will be subsidiary to pertinent Items.

Replace or restore to original condition any structure damaged by the Contractor's operations.

The Engineer may allow equipment with oversize or non-divisible overweight loads to operate without a permit within the work locations on pavement structures not open to the traveling public. Submit Contractor-proposed changes to traffic control plans for approval, in accordance with Item 502. The following Sections further address overweight allowances. The Owner will make available to the Contractor any available plans and material reports for existing structures.

- 16.1. **Overweight Construction Traffic Crossing Structures.** The Engineer may allow crossing of a structure not open to the public within the work locations when divisible or non-divisible loads exceed legal weight limitations, including limits for load-posted bridges. Obtain written permission to make these crossings. Submit for approval a structural analysis by a licensed professional engineer indicating that the excessive loads should be allowed. Provide a manufacturer's certificate of equipment weight that includes the weight distribution on the various axles and any additional parts, such as counterweights, the configuration of the axles, or other information necessary for the analysis. Submit the structural analysis and supporting documentation sufficiently in advance of the move to allow for review by the Engineer. Permission may be granted if the Engineer finds that no damage or overstresses exceeding those normally allowed for occasional overweight loads will result to structures that will remain in use after Contract completion. Provide temporary matting or other protective measures as directed.

Schedule loads so that only one vehicle is on any span or continuous unit at any time. Use barricades, fences, or other positive methods to prevent other vehicular access to structures at any time the overweight load is on any span or continuous unit.

- 16.2. **Construction Equipment Operating on Structures.** Cranes and other construction equipment used to perform construction operations that exceed legal weight limits may be allowed on structures. Before any operation that may require placement of equipment on a structure, submit for approval a detailed structural analysis prepared by a licensed professional engineer.
- Submit the structural analysis and supporting documentation sufficiently in advance of the use to allow for review by the Engineer. Include all axle loads and configurations, spacing of tracks or wheels, tire loads, outrigger placements, center of gravity, equipment weight, and predicted loads on tires and outriggers for all planned movements, swings, or boom reaches. The analysis must demonstrate that no overstresses exceeding those normally allowed for occasional overweight loads will occur.
- 16.3. **Loads on Structures.** Do not store or stockpile material on bridge structures without written permission. If required, submit a structural analysis and supporting documentation by a licensed professional engineer for review by the Engineer. Permission may be granted if the Engineer finds that no damage or overstresses exceeding those normally allowed for occasional overweight loads will result to structures that will remain in use after Contract completion. Provide temporary matting or other protective measures as directed.
- 16.4. **Hauling Divisible Overweight Loads on Pavement Within Work Locations.** The Engineer may allow divisible overweight loads on pavement structures within the work locations not open to the traveling public. Obtain written approval before hauling the overweight loads. Include calculations to demonstrate that there will be no damage or overstress to the pavement structure.

17. CONTRACTOR'S RESPONSIBILITY FOR WORK

Until final acceptance of the Contract, 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. 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.

Repair damage to all work until final acceptance. Repair damage to existing facilities in accordance with the Contract or as directed by the Engineer. Repair damage to existing facilities or work caused by Contractor operations at the Contractor's expense. Repair work for damage that was not due to the Contractor's operations will not be paid for except as provided below.

- 17.1. **Reimbursable Repair.** Except for damage to appurtenances listed in Section 7L.17.2.1., "Unreimbursed Repair," the Contractor will be reimbursed for repair of damage caused by:
- motor vehicle, watercraft, aircraft, or railroad-train incident;
 - vandalism; or
 - Acts of God, such as earthquake, tidal wave, tornado, hurricane, or other cataclysmic phenomena of nature.
- 17.2. **Appurtenances.**
- 17.2.1. **Unreimbursed Repair.** Except for destruction (not reusable) due to Acts of God, reimbursement will not be made for repair of damage to the following temporary appurtenances, regardless of cause:
- signs,
 - barricades, and
 - other work zone traffic control devices.

Crash cushion attenuators and guardrail end treatments are reimbursed in accordance with Section 7L.17.2.2., "Reimbursed Repair." Truck-mounted attenuators, trailer attenuators, and portable changeable message signs are eligible for reimbursed repair in accordance with Section 7L.17.2.2.,

“Reimbursed Repair.” Reimbursement will only be made when the Engineer directs the placement of the device in a location other than what is depicted in the Contract and the Contractor is unable to seek reimbursement from third-party insurance.

Where the Contractor retains replaced appurtenances after completion of the project, the Owner will limit the reimbursement to the cost that is above the salvage value at the end of the project.

- 17.2.2. **Reimbursed Repair.** Reimbursement will be made for repair of damage due to the causes listed in Section 7L.17.1, “Reimbursable Repair.”
- 17.3. **Roadways and Structures.** Until final acceptance, the Contractor is responsible for all work constructed under the Contract. The Owner will not reimburse the Contractor for repair work to new construction, unless the failure or damage is due to one of the causes listed in Section 7L.17.1, “Reimbursable Repair.”
- The Owner will be responsible for the cost for repair of damage to existing roadways and structures not caused by the Contractor’s operations.
- 17.4. **Detours.** The Contractor will be responsible for the cost of maintenance of detours constructed under the Contract, unless the failure or damage is due to one of the causes listed in Section 7L.17.1, “Reimbursable Repair.” In addition, the Engineer will reimburse the Contractor for repairs to detours when failures occur for reasons beyond the Contractor’s control. Reimbursement will be made for repairs to detours constructed unless the failure was due to materials and workmanship. The Owner will be responsible for the cost of maintenance of existing streets and roadways used for detours or handling traffic.
- 17.5. **Relief from Maintenance.** The Engineer may relieve the Contractor from responsibility of maintenance in accordance with this Section. This relief does not release the Contractor from responsibility for defective materials or work or constitute final acceptance. The Engineer will direct the Contractor to remove advance warning signs upon issuance of relief from maintenance.
- 17.5.1. **Isolated Work Locations.** For isolated work locations, when all work is completed, including work in accordance with Article 5L.11., “Final Cleanup,” the Engineer may relieve the Contractor from responsibility for maintenance.
- 17.5.2. **Work Except for Vegetative Establishment and Test Periods.** When all work for all or isolated work locations has been completed, including work in accordance with Article 5L.11., “Final Cleanup,” 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.
- 17.5.3. **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.
- 17.5.4. **When Directed by the Engineer.** The Engineer may relieve the Contractor from the responsibility for maintenance when directed.
- 17.6. **Basis of Payment.** When reimbursement for repair work is allowed and performed, payment will be made in conformance with pertinent Items or in accordance with Article 4L.4., “Changes in the Work.”

18. ELECTRICAL REQUIREMENTS

- 18.1. **Definitions.**
- 18.1.1. **Electrical Work.** Electrical work is work performed for:
- Item 610, “Roadway Illumination Assemblies,”
 - Item 614, “High Mast Illumination Assemblies,”
 - Item 616, “Performance Testing of Lighting Systems,”

- Item 617, "Temporary Roadway Illumination,"
- Item 618, "Conduit,"
- Item 620, "Electrical Conductors,"
- Item 621, "Tray Cable,"
- Item 622, "Duct Cable,"
- Item 628, "Electrical Services,"
- Item 680, "Highway Traffic Signals,"
- Item 681, "Temporary Traffic Signals,"
- Item 684, "Traffic Signal Cables,"
- Item 685, "Roadside Flashing Beacon Assemblies,"
- other Items that involve either the distribution of electrical power greater than 50 volts or the installation of conduit and duct banks,
- the installation of conduit and wiring associated with Item 624, "Ground Boxes" and Item 656, "Foundations for Traffic Control Devices," and
- the installation of the conduit system for communication and fiber optic cable.

Electrical work does not include the installation of communications or fiber optic cable, or the connections for low-voltage and inherently power-limited circuits, such as electronic or communications equipment. Assembly and placement of poles, structures, cabinets, enclosures, manholes, or other hardware will not be considered electrical work if no wiring, wiring connection, or conduit work is done at the time of assembly and placement.

18.1.2. **Specialized Electrical Work.** Specialized electrical work is work that includes the electrical service and feeders, sub-feeders, branch circuits, controls, raceways, and enclosures for the following:

- pump stations,
- moveable bridges,
- ferry slips,
- motor control centers,
- facilities required in accordance with Item 504, "Field Office and Laboratory,"
- rest area or other public buildings,
- weigh-in-motion stations,
- electrical services larger than 200 amps,
- electrical services with main or branch circuit breaker sizes not shown in the Contract, and
- any three-phase electrical power.

18.1.3. **Certified Person.** A certified person is a person who has passed the test from TxDOT's course TRF450, "TxDOT Roadway Illuminations and Electrical Installations," or other courses as approved by the Traffic Safety Division. Submit a current and valid TRF certification upon request. Texas A&M Engineering Extension Service (TEEX) certifications for "TxDOT Electrical Systems" course will not be accepted.

18.1.4. **Licensed Electrician.** A licensed electrician is a person with a current and valid unrestricted master electrical license, or unrestricted journeyman electrical license, who is supervised or directed by an unrestricted master electrician. An unrestricted master electrician need not be on the work locations at all times while 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 electrician 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 like 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.

18.2. **Work Requirements.** The qualifications required to perform electrical work and specialized electrical work are shown in Table 1.

**Table 1
Work Requirements**

Type of Work	Qualifications to Perform Work
Electrical work with plans	Licensed electrician, certified person, or workers directly supervised by a licensed electrician or certified person
Electrical work without plans	Licensed electrician or workers directly supervised by a licensed electrician
Specialized electrical work	Licensed electrician or workers directly supervised by a licensed electrician
Replace lamps, starting aids, and changing fixtures	Licensed electrician, certified person, or workers directly supervised by a licensed electrician or certified person
Conduit in precast section with approved working drawings	Inspection by licensed electrician or certified person
Conduit in cast-in-place section	Inspection by licensed electrician or certified person
All other electrical work (e.g., troubleshooting, repairs, and component replacement)	Licensed electrician or workers directly supervised by a licensed electrician

“Directly supervised by a licensed electrician” means that a licensed electrician is physically present during all electrical work. “Directly supervised by a licensed electrician or certified person” means that a licensed electrician or certified person is physically present during all electrical work.

A non-certified person may install conduit in cast-in-place concrete sections if the work is verified by a certified person before concrete placement.

When IMSA certification is specified on the plans, the requirements shown in Table 1 will still apply to the installation of the conduit, ground boxes, electrical services, pole grounding, and electrical conductors installed in accordance with Item 620.

19. PAYROLLS

Pay employees and contract labor no less than the predetermined wage rates shown in the Contract. Require that subcontractors pay no less than the predetermined wage rates shown in the Contract.

Payroll records must contain the information required by law. As an option, Form WH-347, “Payroll,” is provided by the U.S. Department of Labor.

Maintain payroll and related records during the course of the Contract and preserve these records for 3 yr. following the completion of the Contract or as required by law.

19.1. **Minimum Wage Requirements for Federally Funded Contracts.** Comply with the requirements of FHWA-1273, “Required Contract Provisions Federal-Aid Construction Contracts.”

For construction contracts, submit payroll records to the Engineer using the manner prescribed by the Owner.

19.2. **Minimum Wage Requirements for State-Funded Contracts.** Comply with the requirements of 29 USC § 206 unless otherwise shown in the Contract.

For construction contracts, submit payroll records to the Engineer in the manner prescribed.

20. **SECURITY INCIDENTS – NOT APPLICABLE TO LOCALLY LET PROJECTS**

Item 8L

Prosecution and Progress



1. PROSECUTION OF WORK

Begin work within 30 calendar days after the authorization date to begin 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 to the traffic control plan or if a revised traffic control plan is approved. Notify the Engineer at least 24 hr. before beginning work or before beginning any new operation. Do not start new operations to the detriment of work already begun. Minimize interference to traffic.

2. SUBCONTRACTING

Do not sublet any portion of a construction Contract without the Engineer's written approval. A subcontract does not relieve any responsibility under the Contract and bonds. Ensure that all subcontracted work complies with all governing labor provisions.

The Contractor certifies by signing the Contract that the Contractor will not enter into any subcontract with a subcontractor that is debarred or suspended by the Commission, Owner, or any federal agency.

For federally funded contracts, ensure the required federal documents are physically attached to each subcontract agreement, including all tiered subcontract agreements.

For all DBE subcontracts, including all tiered DBE subcontracts, submit a copy of the executed subcontract agreement.

Upon request, submit a copy of the executed non-DBE subcontracts, including all tiered non-DBE subcontracts.

- 2.1. **Construction Contracts and Federally Funded Maintenance Contracts.** Perform work with own organization on at least 30% of the total original Contract cost (25% if the Contractor is an SBE on a wholly State- or local-funded Contract), excluding any specialty items as determined by the Engineer. Specialty items are those that require highly specialized knowledge, abilities, or equipment not usually available in the contracting firm expected to bid on the proposed Contract as a whole.

Specialty items will be shown on the plans or as determined by the Engineer. Bid cost of specialty items performed by subcontractors will be deducted from the total original Contract cost before computing the required amount of work to be performed by the Contractor's own organization.

The term "perform work with own organization" includes only:

- workers employed and paid directly by the Contractor or wholly owned subsidiary;
- equipment owned by the Contractor or wholly owned subsidiary;
- rented or leased equipment operated by the Contractor's employees or wholly owned subsidiary's employees;
- materials incorporated into the work if the majority of the value of the work involved in incorporating the material is performed by the Contractor's own organization, including a wholly owned subsidiary's organization; and

- labor provided by staff leasing firms licensed under Chapter 91 of the Texas Labor Code for nonsupervisory personnel if the Contractor or wholly owned subsidiary maintains direct control over the activities of the leased employees and includes them in the weekly payrolls.

Mobilization is not included in calculation of 30%.

When staff leasing firms provide materials or equipment, they are considered subcontractors. In these instances, submit staff leasing firms for approval as a subcontractor.

Copies of canceled checks and certified statements may be required to verify compliance with the requirements of this Section.

- 2.2. **State-Funded Maintenance Contracts.** Not applicable to locally let projects.
- 2.3. **Payments to Subcontractors.** Report payments for DBE subcontracts, including tiered DBE subcontracts, in the manner as prescribed by the Owner by the 20th day of each month.
- 2.3.1. **Payment Records.** Make payment and related records, including but not limited to copies of canceled checks, available for inspection by the Owner. Retain payment records for a period of 3 yr. following the completion of the Contract.
- 2.4. **Payrolls.** Comply with Article 7L.19., "Payrolls."

3. COMPUTATION OF CONTRACT TIME FOR COMPLETION

The number of working days is established by the Contract. For Contracts with work orders, the number of working days is established in each work order. Working day charges will begin when work begins as prescribed in Article 8L.1., "Prosecution of Work." Working day charges will continue in accordance with the Contract.

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

- 3.1. **Working Day Charges.** Working days will be charged in accordance with Section 8L.3.1.4., "Standard Workweek," unless otherwise shown on the plans. Working days will be computed and charged in accordance with one of the following:
- 3.1.1. **Five-Day Workweek.** Working days will be charged Monday–Friday, excluding national holidays, regardless of weather conditions or material availability. The Contractor has the option of working on Saturdays. Provide sufficient advance notice to the Engineer when scheduling work on Saturdays. Work on Sundays and national holidays will not be permitted without written permission of the Engineer. If work requiring an Inspector to be present or if critical path activities are performed on a Saturday, Sunday, or national holiday, and weather and other conditions permit the performance of work for 7 hr. between 7 A.M. and 6 P.M., a working day will be charged.
- 3.1.2. **Six-Day Workweek.** Working days will be charged Monday–Saturday, excluding national holidays, regardless of weather conditions or material availability. Work on Sundays and national holidays will not be permitted without written permission of the Engineer. If work requiring an Inspector to be present or if critical path activities are performed on a Sunday or a national holiday, and weather or other conditions permit the performance of work for 7 hr. between 7 A.M. and 6 P.M., a working day will be charged.

- 3.1.3. **Seven-Day Workweek.** Working days will be charged Monday–Sunday, excluding national holidays, regardless of weather conditions or material availability. Work on national holidays will not be permitted without written permission of the Engineer. If work or critical path activities requiring an Inspector to be present are performed on any of these holidays, and weather or other conditions permit the performance of work for 7 hr. between 7 A.M. and 6 P.M., a working day will be charged.
- 3.1.4. **Standard Workweek.** Working days will be charged Monday–Friday, excluding national or State holidays, if weather or other conditions permit the performance of the principal unit of work underway, as determined by the Engineer, for a continuous period of at least 7 hr. between 7:00 A.M. and 6:00 P.M., unless otherwise shown in the Contract. The Contractor has the option of working on Saturdays or State holidays. Provide sufficient advance notice to the Engineer when scheduling work on Saturdays. Work on Sundays and national holidays will not be permitted without written permission of the Engineer. If work requiring an Inspector to be present or critical path activities are performed on a Saturday, Sunday, or holiday, and weather or other conditions permit the performance of work for 7 hr. between 7 A.M. and 6 P.M., a working day will be charged.
- 3.1.5. **Calendar Day.** Working days will be charged Sunday–Saturday, including all holidays, regardless of weather conditions, material availability, or other conditions not under the control of the Contractor.
- 3.1.6. **Other.** Working days will be charged as shown on the plans.
- 3.2. **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.
- 3.3. **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 min. after sunset to 30 min. before sunrise.
- 3.3.1. **Five-, Six-, and Seven-Day Workweeks.** Nighttime work that extends past midnight will be assigned to the following day for the purposes of approval for allowing work on Sundays or national holidays.
- 3.3.2. **Standard Workweek.**
- 3.3.2.1. **Nighttime Work Only.** When nighttime work is allowed or required and daytime work is not allowed, working day charges will be made when weather and other conditions permit the performance of the principal unit of work underway, as determined by the Engineer, for a continuous period of at least 7 hr. for the nighttime period, as defined in Section 8L.3.3., “Nighttime Work,” unless otherwise shown in the Contract.
- 3.3.2.2. **Nighttime Work and Daytime Work Requiring Inspector.** When nighttime work is performed or required and daytime work is allowed, working day charges will be made when weather and other conditions permit the performance of the principal unit of work underway, as determined by the Engineer, for a continuous period of at least 7 hr. for the nighttime period, as defined in Section 8L.3.3., “Nighttime Work,” or for a continuous period of at least 7 hr. for the alternative daytime period unless otherwise shown in the Contract. Only one day will be charged for each 24hr. period. When the Engineer agrees to restrict work hours to the nighttime period only, working day charges will be in accordance with Section 8L.3.3.2.1., “Nighttime Work Only.”
- 3.4. **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.

4. TEMPORARY SUSPENSION OF WORK OR WORKING DAY CHARGES

The Engineer may suspend the work, wholly or in part, and will provide notice and reasons for the suspension in writing. Suspend and resume work only as directed in writing.

When part of the work is suspended, the Engineer may suspend working day charges only when conditions not under the control of the Contractor prohibit the performance of critical path activities. When all of the work is suspended for reasons not under the control of the Contractor, the Engineer will suspend working day charges.

5. PROJECT SCHEDULES

Prepare, maintain, and submit project schedules for the work to be performed under this Contract. Project schedules are used to convey the Contractor's intended work plan to the Owner.

The work performed under this Article will not be measured or paid for directly, but will be subsidiary to pertinent Items.

- 5.1. **Project Scheduler.** Designate an individual who will develop and maintain the progress schedule. The project scheduler will be prepared to discuss, in detail, the proposed sequence of work and methods of operation, and how that information will be communicated through the progress schedule at the preconstruction meeting. This individual will also attend the project meetings and make site visits to prepare, develop, and maintain the progress schedules.
- 5.2. **Progress Schedule.** Before starting work, prepare and submit a progress schedule based on the sequence of work and traffic control plan shown in the Contract. Prepare the progress schedule as a bar chart or critical path method (CPM) as shown on the plans. Include all planned work activities and sequences and show Contract completion within the number of working days specified. Incorporate major material procurements, known utility relocations, and other activities that may affect the completion of the Contract in the progress schedule. Show a beginning date, ending date, and duration in whole working days for each activity. Do not use activities exceeding 20 working days, unless agreed upon with the Engineer. Show an estimated production rate per working day for each work activity, unless otherwise agreed upon with the Engineer.
- 5.3. **Schedule Format.** Format all project schedules in accordance with the following.
- Begin the project schedule on the date of the start of Contract time or start of activities affecting work on the project.
 - Show the sequence and interdependence of activities required for complete performance of the work. If using a CPM schedule, show a predecessor and a successor for each activity.
 - Ensure all work sequences are logical and show a coordinated plan of the work.
- CPM schedules must also:
- clearly and accurately identify the critical path as the longest continuous path;
 - provide a legend for all abbreviations, run date, data date, project start date, and project completion date in the title block of each schedule submittal; and
 - using calendars, incorporate seasonal weather conditions into the schedule for work (e.g., earthwork, concrete paving, structures, asphalt, and drainage) that may be influenced by temperature or precipitation. Also, incorporate non-work periods such as holidays, weekends, or other non-work days as identified in the Contract.
- 5.4. **Activity Format.** For each activity on the project schedule, provide:
- a concise description of the work represented by the activity,
 - an activity duration in whole working days, and
 - code activities so that organized plots of the schedule may be produced.

CPM schedules must also include the quantity of work and estimated production rate for major items of work. Provide enough information for review of the work being performed.

Total float is defined as the amount of time (in whole days) that an activity can be delayed before impacting the project's completion date. Total float is a shared commodity between the Owner and the Contractor.

5.5. **Schedule Types and Schedule Impacts.**

5.5.1. **Bar Chart.** Seven calendar days before the preconstruction meeting, prepare and submit a hard or electronic copy of the schedule using the bar chart method.

5.5.1.1. **Progress Schedule Reviews.** Update the project schedule and submit a hard or electronic copy when changes to the schedule occur or when requested.

5.5.2. **Critical Path Method.** Prepare and submit the schedule using the CPM. Submit an electronic copy to the Engineer within the timeframes specified. An electronic copy is defined as the scheduling software's native file, saved in a format acceptable to the Engineer. In all cases, an electronic format (.xer) of Primavera Project Planner and Enterprise Project Portfolio Management (P6) will be acceptable.

5.5.2.1. **Preliminary Schedule.** Unless otherwise agreed for a later submission, 7 calendar days before the preconstruction meeting, submit an electronic copy of the project schedule showing activities beginning with the authorization date to begin work and including activities to be performed within the first 90 calendar days from the work start date.

5.5.2.2. **Baseline Schedule.** The baseline schedule will be considered the Contractor's plan to successfully construct the project within the timeframe and construction sequencing indicated in the Contract. Submit electronic copies of the baseline schedule. When requested, submit two plots of the schedule: one organized with the activities logically grouped using the activity coding, and the other plot showing only the critical path determined by the longest path, not based on critical float.

Develop and submit the baseline schedule for review within the first 45 calendar days from the work start date unless the time for submission is extended by the Engineer.

5.5.2.2.1. **Review.** Within 15 calendar days of receipt of the schedule, the Engineer will evaluate and inform the Contractor if the schedule has been accepted. If the schedule is not accepted, the Engineer will provide comments to the Contractor for incorporation. Provide a revised schedule based on the Engineer's comments, or reasons for not doing so, within 10 calendar days. The Engineer's review and acceptance of the project schedule is for conformance to the requirements of the Contract documents only and does not relieve the Contractor of any responsibility for meeting the interim milestone dates (if specified) or the Contract completion date. Review and acceptance does not expressly or by implication warrant, acknowledge, or admit the reasonableness of the logic or durations of the project schedule. If the Contractor fails to define any element of work, activity, or logic and the Engineer's review does not detect this omission or error, the Contractor is responsible for correcting the error or omission.

Submit an acceptable baseline schedule before the 90th calendar day from the work start date unless the time for submission is extended by the Engineer.

5.5.2.3. **Progress Schedule.** Maintain and submit the progress schedule monthly for use by the Contractor and the Engineer. Submit an electronic copy as it will become an as-built record of the daily progress achieved on the project. If continuous progress of an activity is interrupted for any reason except non-work periods (e.g., holidays, weekend, or interference from temperature or precipitation), then the activity will show the actual finish date as that date of the start of the interruption and the activity will be broken into a subsequent activity (or activities, based on the number of interruptions) similarly numbered with successive alpha character as necessary. The original duration of the subsequent activity will be that of the remaining duration of the original activity. Relationships of the subsequent activity will match those of the original activity so that the integrity of the project schedule logic is maintained. Once established, the original durations and actual dates of all activities must remain unchanged. Revisions to the schedule may be made as necessary.

The project schedule must be revised when changes in construction phasing and sequencing occur or other changes that cause deviation from the original project schedule occur. Any revisions to the schedule must be

listed in the monthly update narrative with the purpose of the revision and description of the impact on the project schedule's critical path and project completion date. Create the schedule revision using the latest update before the start of the revision.

Monthly updating of the project schedule will include updating of:

- the actual start dates for activities started,
- the actual finish dates for activities completed,
- the percentage of work completed and remaining duration for each activity started but not yet completed, and
- the calendars to show days actual work was performed on the various work activities.

The cutoff day for recording monthly progress will be the last day of each month. Submit the updated project schedule no later than the 20th calendar day of the following month. The Engineer will evaluate the updated schedule within 5 calendar days of receipt and inform the Contractor if it has or has not been accepted. If the schedule is not accepted, the Engineer will provide comments to the Contractor for incorporation. Provide a revised schedule based on the Engineer's comments, or reasons for not doing so, within 5 calendar days.

Provide a brief narrative in a bulleted statement format for major items that have impacted the schedule. Notify the Engineer if resource-leveling is being used.

5.5.2.3.1. **Project Schedule Summary Report (PSSR).** When shown on the plans, provide the PSSR instead of the narrative required in Section 8L.5.5.2.3., "Progress Schedule." The PSSR includes a listing of major items that have impacted the schedule and a summary of progress in days ahead or behind schedule. Include an explanation of the project progress for the period represented on the form provided by the Owner.

5.5.3. **Notice of Potential Time Impact.** Submit a notice of potential time impact when a Contract time extension or adjustment of milestone dates may be justified or when directed.

Failure to provide this notice in the timeframes specified above will compromise the Owner's ability to mitigate the impacts, and the Contractor forfeits the right to request a time extension or adjustment of milestone dates unless the circumstances are such that the Contractor could not reasonably have had knowledge of the impact at the time.

5.5.4. **Time Impact Analysis.** When directed, provide a time impact analysis. A time impact analysis is an evaluation of the effects of impacts on the project. A time impact analysis consists of the following steps.

- **Step 1.** Establish the status of the project immediately before the impact.
- **Step 2.** Predict the effect of the impact on the schedule update used in Step 1.
- **Step 3.** Track the effects of the impact on the schedule during its occurrence.
- **Step 4.** Establish the status of the project after the impact's effect has ended and provide details identifying any mitigating actions or circumstances used to keep the project ongoing during the impact period.

Determine the time impact by comparing the status of the work before the impact (Step 1) to the prediction of the effect of the impact (Step 2), if requested, and to actual effects of the impact once it is complete (Step 4). Unless otherwise approved by the Engineer, Steps 1, 3, and 4 must be completed before consideration of a Contract time extension or adjustment of a milestone date will be provided. Time extensions will be considered only when delays that affect milestone dates or the Contract completion date are beyond the Contractor's control. Submit Step 4 no later than 15 calendar days after the impact's effects have ended or when all the information on the effect has been realized.

Submit one electronic backup copy of the complete time impact analysis and a copy of the full project schedule incorporating the time impact analysis. If the project schedule is revised after the submittal of a time impact analysis, but before its approval, indicate in writing the need for any modification to the time impact analysis.

The Engineer will review the time impact analysis upon completion of Step 4. If this review detects revisions or changes to the schedule that had not been performed and identified in a narrative, the Engineer may reject the time impact analysis. If the Engineer is in agreement with the time impact analysis, a change order may be issued to grant additional working days, or to adjust interim milestones. Once a change order has been executed, incorporate the time impact analysis into the project schedule. The time impact analysis may also be used to support the settlement of disputes and claims. Compensation related to the time impact analysis may be provided at the completion of the analysis or the completion of the project to determine the true role the impact played on the final completion.

6. FAILURE TO COMPLETE WORK ON TIME

The time established for the completion of the work is an essential element of the Contract. If the Contractor fails to complete the work within the number of working days specified, working days will continue to be charged. Failure to complete the Contract, callout work, or a work order within the number of working days specified, including any approved additional working days, will result in liquidated damages for each working day charged over the number of working days specified. The dollar amount specified in the Contract will be deducted from any money due or to become due the Contractor for each working day the Contract, callout work, or work order remains incomplete. This amount will be assessed not as a penalty but as liquidated damages. The amount assessed for non-site-specific Contracts will be based on the estimated amount for each work order unless otherwise shown in the Contract. The amount assessed for each callout will be as specified in the Contract.

7. DEFAULT OF CONTRACT

7.1. **Declaration of Default.** 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;
- is uncooperative, disruptive, or threatening;
- 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;
- makes an unauthorized assignment;
- fails to resume work that has been discontinued within a reasonable number of days after notice to do so;
- fails to conduct the work in an acceptable manner; or
- commits fraud or other unfixable conduct as determined by the Owner.

If any of these conditions occur, the Engineer will give notice in writing to the Contractor and the Surety of the intent to declare the Contractor in default. If the Contractor does not proceed as directed within 10 days after the notice, the Owner will provide written notice to the Contractor and the Surety to declare the Contractor to be in default of the Contract. If the Contractor provides the Owner written notice of voluntary default of the Contract, the Owner may waive the 10-day notice of intent to declare the Contractor in default and immediately provide written notice of default to the Contractor and the Surety. Calendar day charges will continue until completion of the Contract. The Owner may suspend work in accordance with Article 8L.4., "Temporary Suspension of Work or Working Day Charges," to investigate apparent fraud or other unfixable conduct before defaulting the Contractor. The Contractor may be subject to sanctions under the state and/or federal laws and regulations. A default may result in the application of remedial action by the Owner.

The Owner will determine the method used for the completion of the remaining work as follows.

- For Contracts without performance bonds, the Owner will determine the most expeditious and efficient way to complete the work and recover damages from the Contractor.
- For Contracts with performance bonds, the Owner will require the Contractor's Surety to 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 Owner reserves the right to approve or reject proposed subcontractors. Work may resume after the Owner receives and approves Certificates of Insurance as required in Section 3.4.3., "Insurance." 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. The Owner may complete the work using any or all materials at the work locations that it deems suitable and acceptable. Any costs incurred by the Owner for the completion of the work under the Contract will be the responsibility of the Surety.

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

The Owner 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 Owner resulting from 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 Owner the balance of these costs in excess of the Contract price. In case the costs incurred by the Owner are less than the amount that would have been payable under the Contract if the work had been completed by the Contractor, the Owner will be entitled to retain the difference.

Comply with Article 8L.2., "Subcontracting," and abide by the DBE commitments previously approved by the Owner. Section 8L.2.1., "Construction Contracts and Federally Funded Maintenance Contracts," is waived.

No markups as defined in Article 9L.7., "Payment for Extra Work and Force Account Method," will be allowed for the Surety.

- 7.2. **Wrongful Default.** If it is determined after the Contractor is declared in default, that the Contractor was not in default, the rights and obligations of all parties will be the same as if termination had been issued for the convenience of the public as provided in Article 8L.8., "Termination of Contract."

8. TERMINATION OF CONTRACT

The Owner may terminate the Contract in whole or in part whenever:

- the Contractor is prevented from proceeding with the work as a direct result of an executive order of the President of the United States or the Governor of the State;
- the Contractor is prevented from proceeding with the work due to a national emergency, or when the work to be performed under the Contract is stopped, directly or indirectly, because of the freezing or diversion of materials, equipment, or labor as the result of an order or a proclamation of the President of the United States;
- the Contractor is prevented from proceeding with the work due to an order of any federal authority;
- the Contractor is prevented from proceeding with the work by reason of a preliminary, special, or permanent restraining court order where the issuance of the restraining order is primarily caused by acts or omissions of persons or agencies other than the Contractor; or
- the Owner determines that termination of the Contract is in the best interest of the State or the public. This includes, but is not limited to, the discovery of significant hazardous material problems, right of way acquisition problems, or utility conflicts that would cause substantial delays or expense to the Contract.

- 8.1. **Procedures and Submittals.** The Owner will provide written notice to the Contractor of termination specifying the extent of the termination and the effective date. Upon notice, immediately proceed in accordance with the following:

- stop work as specified in the notice,
- place no further subcontracts or orders for materials, services, or facilities, except as necessary to complete a critical portion of the Contract, as approved by the Engineer,
- terminate all subcontracts to the extent they relate to the work terminated,
- complete performance of the work not terminated,
- settle all outstanding liabilities and termination settlement proposals resulting from the termination of the Contract,
- create an inventory report, including all acceptable materials and products obtained for the Contract that have not been incorporated in the work that was terminated (include in the inventory report a description, quantity, location, source, cost, and payment status for each of the acceptable materials and products), and
- take any action necessary, or that the Engineer may direct, for the protection and preservation of the materials and products related to the Contract that are in the possession of the Contractor and in which the Owner has or may acquire an interest.

8.2. **Settlement Provisions.** Within 60 calendar days of the date of the notice of termination, submit a final termination settlement proposal, unless otherwise approved. The Engineer will prepare a change order that reduces the affected quantities of work and adds acceptable costs for termination. No claim for loss of anticipated profits will be considered. The Owner will pay reasonable and verifiable termination costs, including:

- all work completed at the unit bid price and partial payment for incomplete work,
- the percentage of Item 500, "Mobilization," equivalent to the percentage of work complete or actual cost that can be supported by cost records, whichever is greater,
- expenses necessary for the preparation of termination settlement proposals and support data;
- the termination and settlement of subcontracts,
- storage, transportation, restocking, and other costs incurred necessary for the preservation, protection, or disposition of the termination inventory, and
- other expenses acceptable to the Owner.

Item 9L

Measurement and Payment



1. MEASUREMENT OF QUANTITIES

The Engineer will measure all completed work using United States standard measures, unless otherwise specified.

- 1.1. **Linear Measurement.** Unless otherwise specified, all longitudinal measurements for surface areas will be made along the actual surface of the roadway and not horizontally. No deduction will be made for structures in the roadway with an area of 9 sq. ft. or less. For all transverse measurements for areas of base courses, surface courses, and pavements, the dimensions to be used in calculating the pay areas will be the neat dimensions and will not exceed those shown on the plans, unless otherwise directed.
- 1.2. **Volume Measurement.** Transport materials measured for payment by volume in approved hauling vehicles. Display a unique identification mark on each vehicle. Furnish information necessary to calculate the volume capacity of each vehicle. The Engineer may require verification of volume through weight measurement. Use body shapes that allow the capacity to be verified. Load and level the load to the equipment's approved capacity. Loads not hauled in approved vehicles may be rejected.
- 1.3. **Weight Measurement.** Transport materials measured for payment by weight or truck measure in approved hauling vehicles. Furnish certified measurements, tare weights, and legal gross weight calculations for all haul units. Affix a permanent, legible number on the truck and on the trailer to correspond with the certified information. Furnish certified weights of loaded haul units transporting material if requested.

The material will be measured at the point of delivery. The cost of supplying these volume and weight capacities is subsidiary to the pertinent Item. For measurement by the ton, in the field, provide measurements in accordance with Item 520, "Weighing and Measuring Equipment," except for Items where ton measurements are measured by standard tables.

The Engineer may reject loads and suspend hauling operations for overloading.

- 1.3.1. **Hauling on Routes Accessible to the Traveling Public.** For payment purposes on haul routes accessible to the traveling public:
- If the gross vehicle weight is less than the maximum allowed by state law, including applicable yearly weight tolerance permit, the net weight of the load will be determined by deducting the tare weight of the vehicle from the gross weight.
 - If the gross vehicle weight is more than the maximum allowed by state law, including applicable yearly weight tolerance permit, the net weight of the load will be determined by deducting the tare weight of the vehicle from the maximum gross weight allowed.
- 1.3.2. **Hauling on Routes Not Accessible to the Traveling Public.** For payment purposes on haul routes that are not accessible to the traveling public where advance permission is obtained in writing from the Engineer:
- If the gross vehicle weight is less than the maximum allowed by the Engineer, including applicable yearly weight tolerance permit, the net weight of the load will be determined by deducting the tare weight of the vehicle from the gross weight.
 - If the gross vehicle weight is more than the maximum allowed by the Engineer, the net weight of the load will be determined by deducting the tare weight of the vehicle from the maximum gross weight allowed.

2. PLANS QUANTITY MEASUREMENT

Plans quantities may or may not represent the exact quantity of work performed or material moved, handled, or placed during the execution of the Contract. The estimated bid quantities are designated as final payment quantities, unless revised by the governing specifications or this Article.

If the quantity measured as outlined under "Measurement" varies by more than 5% (or as stipulated under "Measurement" for specific Items) from the total estimated quantity for an individual Item originally shown in the Contract, an adjustment may be made to the quantity of authorized work done for payment purposes.

When quantities are revised by a change in design approved by the Owner, by change order, or to correct an error on the plans, the plans quantity will be increased or decreased by the amount involved in the change, and the 5% variance will apply to the new plans quantity.

If the total Contract quantity multiplied by the unit bid price for an individual Item is less than \$250 and the Item is not originally a plans quantity Item, then the Item may be paid as a plans quantity Item if the Engineer and Contractor agree in writing to fix the final quantity as a plans quantity.

For Contracts with callout work and work orders, plans quantity measurement requirements are not applicable.

3. ADJUSTMENT OF QUANTITIES

The party to the Contract requesting the adjustment will provide field measurements and calculations showing the revised quantity. When approved, this revised quantity will constitute the final quantity for which payment will be made. Payment for revised quantity will be made at the unit price bid for that Item, except as provided for in Article 4L.4., "Changes in the Work."

4. SCOPE OF PAYMENT

Payment of the Contract unit price is full compensation for all materials, equipment, labor, tools, and supplies necessary to complete the Item of work under the Contract. Until final acceptance in accordance with Article 5L.12., "Final Acceptance," assume liability for completing the work according to the plans and specifications and any loss or damage arising from the performance of the work or from the action of the elements, infringement of patent, trademark, or copyright, except as provided elsewhere in the Contract.

The Owner will only pay for material incorporated into the work in accordance with the Contract. Payment of progress estimates will in no way affect the Contractor's obligation under the Contract to repair or replace any defective parts in the construction or to replace any defective materials used in the construction and to be responsible for all damages due to defects if the defects and damages are discovered on or before final inspection and acceptance of the work.

5. PROGRESS PAYMENTS

The Engineer will prepare a monthly estimate of the amount of work performed, including materials in place. Incomplete items of work may be paid at an agreed upon percentage approved by the Engineer. Payment of the monthly estimate is determined at the Contract item prices less any withholdings or deductions in accordance with the Contract. Progress payments may be withheld for failure to comply with the Contract.

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

6. PAYMENT FOR MATERIAL ON HAND (MOH)

If payment for MOH is desired, request compensation for the invoice cost of acceptable nonperishable materials that have not been used in the work before the request, and that have been delivered to the work location or are in acceptable storage places. Nonperishable materials are those that do not have a shelf life or whose characteristics do not materially change when exposed to the elements. Include only materials that have been sampled, tested, approved, or certified, and are ready for incorporation into the work. Only materials that are completely constructed or fabricated on the Contractor's order for a specific Contract and are so marked and on which an approved test report has been issued are eligible. Payment for MOH may include the following types of items: concrete traffic barrier, precast concrete box culverts, concrete piling, reinforced concrete pipe, and illumination poles. Any repairs required after fabricated materials have been approved for storage will require the Engineer's approval before being made and will be made at the Contractor's expense. Include only those materials and products, when cumulated under an individual item or similar bid items, that have an invoice cost of at least \$1,000 in the request for MOH payment. (E.g., for MOH eligibility, various sizes of conductor are considered similar bid items and may be cumulated to meet the threshold; for small roadside signs, the sign supports, mounting bolts, and the sign face are considered one bid item or similar bid items for more than one pay item for sign supports.) Requests for MOH are to be submitted at least 2 days before but not later than the estimate cut-off date unless otherwise agreed. If there is a need to request MOH after the established cut-off date, the Owner can make accommodation as the need arises. This needed accommodation is to be the exception, though, and not the rule.

For Contracts with callout work and work orders, payment for MOH will only be made for materials authorized for purchase by the work order or by written approval of the Engineer.

If the request is acceptable, the Engineer will include payment for MOH in a progress payment. Payment for MOH does not constitute acceptance of the materials. Payment will not exceed the actual cost of the material as established by invoice, or the total cost for the associated item less reasonable placement costs, whichever is less. Materials for which the Contractor does not have a paid invoice within 60 days will not be eligible for payment and will be removed from the estimate. Payment may be limited to a portion of the invoice cost or unit price if shown elsewhere in the Contract. Payment for precast products fabricated or constructed by the Contractor for which invoices or freight bills are not available may be made based on statements of actual cost.

Submit the request on forms provided by the Owner. These forms may be electronically reproduced, provided they are in the same format and contain all the required information and certifications. Continue to submit monthly MOH forms until the total value of MOH is \$0.

By submitting a request for MOH payment, the Contractor expressly authorizes the Owner to audit MOH records and to perform process reviews of the record-keeping system. If the Owner determines noncompliance with any of the requirements of this provision, the Owner may exclude payment for any or all MOH for the duration of the Contract.

Maintain all records relating to MOH payment until final acceptance. Provide these records to the Engineer upon request.

7. PAYMENT FOR EXTRA WORK AND FORCE ACCOUNT METHOD

Payment for extra work directed, performed, and accepted will be made in accordance with Article 4L.4., "Changes in the Work." Payment for extra work may be established by agreed unit prices or by Force Account Method.

Agreed unit prices are unit prices that include markups and are comparable to recent bid prices for the same character of work. These unit prices may be established without additional breakdown justification.

When using Force Account Method, determine an estimated cost for the proposed work and establish labor and equipment rates and material costs. Maintain daily records of extra work and provide copies of these

records daily, signed by the Contractor's representative, for the Owner's verification. Request payment for the extra work no later than the 10th day of the month following the month in which the work was performed. Include copies of all applicable invoices. If the extra work to be performed has an estimated cost of less than \$10,000, submit for approval and payment an invoice of actual cost for materials, equipment, labor, tools, and incidentals necessary to complete the extra work. When added work requires mobilization that is exclusive to the added work, mobilization may be added to the force account invoice for payment.

- 7.1. **Markups.** Payment for extra work may include markups as compensation for the use of small tools, overhead expense, and profit.
- 7.1.1. **Labor.** Compensation will be made for payroll rates for each hour that the labor and foremen or others approved by the Engineer are actually engaged in the work. In no case will the rate of wages be less than the minimum shown in the Contract for a particular category. An additional 25% of this sum will be paid as compensation for overhead, superintendence, profit, and small tools.
- 7.1.2. **Insurance and Taxes.** An additional 55% of the labor cost, excluding the 25% compensation provided in Section 9L.7.1.1., "Labor," will be paid as compensation for labor insurance and labor taxes including the cost of premiums on non-project-specific liability (excluding vehicular) insurance, workers compensation insurance, Social Security, unemployment insurance taxes, and fringe benefits.
- 7.1.3. **Materials.** Compensation will be made for materials associated with the work based on actual delivered invoice costs, less any discount. An additional 25% of this sum will be paid as compensation for overhead and profit.
- 7.1.4. **Equipment.** Payment will be made for the established equipment hourly rates for each hour that the equipment is involved in the work. An additional 15% of this sum will be paid as compensation for overhead and profit not included in the rates.

Transportation cost for mobilizing equipment will be included if the equipment is mobilized from an offsite location.

- 7.1.4.1. **Contractor-Owned Equipment.** For Contractor-owned machinery, trucks, power tools, or other equipment, use the FHWA rental rates found in Equipment Watch multiplied by the regional adjustment factor and the rate adjustment factor to establish hourly rates. Use the rates in effect for each section of Equipment Watch at the time of use.

If a rate has not been established for a particular piece of equipment in Equipment Watch, the Engineer will allow a reasonable hourly rate. This price will include operating costs.

Payment for equipment will be made for the actual hours used in the work. The Owner reserves the right to withhold payment for low production or lack of progress. Payment will not be made for time lost for equipment breakdowns, time spent to repair equipment, or time after equipment is no longer needed.

If equipment is used intermittently while dedicated solely to the work, payment will be made for the duration the equipment is assigned to the work but no more than 8 hr. will be paid during a 24-hr. day, nor more than 40 hr. per week, nor more than 176 hr. per month, except when time is computed using a 6-day or 7-day workweek. When using a 6-day workweek, no more than 8 hr. will be paid during a 24-hr. day, nor more than 48 hr. per week, nor more than 211 hr. per month. When using a 7-day workweek, no more than 8 hr. will be paid during a 24-hr. day, nor more than 56 hr. per week, nor more than 246 hr. per month.

- 7.1.4.2. **Equipment Not Owned by the Contractor.** For equipment rented from a third party not owned by the Contractor, payment will be made at the invoice daily rental rate for each day the equipment is needed for the work. The Owner reserves the right to limit the daily rate to comparable FHWA rental rates found in Equipment Watch multiplied by the regional adjustment factor and the rate adjustment factor. When the invoice specifies that the rental rate does not include fuel, lubricants, repairs, and servicing, the Equipment Watch hourly operating cost for each hour the equipment is operated will be added.

When the invoice specifies equipment operators as a component of the equipment rental, payment will be made at the invoice rate for each operator for each day the equipment is needed for the work.

- 7.1.4.3. **Standby Equipment Costs.** Payment for standby equipment will be made in accordance with Section 9L.7.1.4., "Equipment." The 15% markup will be paid when standby is associated with extra work but will not be paid when standby is associated with damages.
- 7.1.4.3.1. **Contractor-Owned Equipment.** For Contractor-owned equipment:
- Standby will be paid at 50% of the monthly Equipment Watch rate after the regional and age adjustment factors have been applied. Operating costs will not be allowed. Calculate the standby rate as follows.

Standby rate = (FHWA hourly rate - operating costs) × 50%
 - If an hourly rate is needed, divide the monthly Equipment Watch rate by 176.
 - No more than 8 hr. of standby will be paid during a 24-hr. day period, nor more than 40 hr. per week.
 - Standby costs will not be allowed during periods when the equipment would have otherwise been idle.
- 7.1.4.3.2. **Equipment Not Owned by the Contractor.** For equipment rented from a third party not owned by the Contractor:
- Standby will be paid at the invoice daily rental rate, excluding operating cost, which includes fuel, lubricants, repairs, and servicing. The Owner reserves the right to limit the daily standby rate to comparable FHWA rental rates found in Equipment Watch multiplied by the regional adjustment factor and the rate adjustment factor.
 - Standby will be paid for equipment operators when included on the invoice and equipment operators are actually on standby.
 - Standby costs will not be allowed during periods when the equipment would have otherwise been idle.
- 7.1.5. **Subcontracting.** An additional 5% of the actual invoice cost will be paid to the Contractor as compensation for administrative cost and profit.
- 7.1.6. **Law Enforcement Personnel.** An additional 5% of the actual invoice cost will be paid as compensation for administrative costs and profit.
- 7.1.7. **Railroad Flagger.** An additional 5% of the actual invoice cost will be paid as compensation for administrative cost and profit.
- 7.1.8. **Bond Cost.** An additional 1% of the total compensation provided in Article 9.7., "Payment for Extra Work and Force Account Method," will be paid for the increase in bond.

8. RETAINAGE

The Owner shall withhold 5% retainage to the Contractor based on the total contract amount and shall release retainage upon substantial completion of the project. The Contractor may withhold retainage on subcontractors in accordance with state and federal regulations.

9. 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 Engineer.

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

Pay subcontractors for work performed within 10 days after receiving payment from the Owner.

Pay any retainage on a subcontractor's work within 10 days after satisfactory completion of all 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 Owner and the subcontract for the subcontracted work, including the submittal of all information required by the Contract and the Owner, and
- the work done by the subcontractor has been inspected, approved, and paid by the Owner.

Provide a certification of prompt payment to certify that all subcontractors and suppliers were paid from the previous month's payments and retainage was released for those whose work is complete. Submit the certification in the manner prescribed by the Owner each month and the month following the month when final acceptance occurred.

The inspection and approval of a subcontractor's work does not eliminate the Contractor's responsibilities for the work as defined in Article 7L.17., "Contractor's Responsibility for Work."

10. FINAL PAYMENT

When the Contract has been completed, all work has been approved, final acceptance has been made in accordance with Article 5L.12., "Final Acceptance," and Contractor submittals have been received, the Engineer will prepare a final estimate for payment showing the total quantity of work completed and the money owed the Contractor. The final payment will reflect the entire sum due, less any sums previously paid.

**DISADVANTAGED BUSINESS ENTERPRISES
REQUIREMENTS**

PROJECT: FOR THE LEWISVILLE DCTA TRAIL SEGMENT A CONNECTION

COUNTY: DENTON

TXDOT CSJ: 0918-46-331

The following goal for disadvantaged business enterprises is established:

DBE

6.00%

Certification of DBE Goal Attainment

By signing the proposal, the Bidder certifies that the above DBE goal will be met by obtaining commitment equals to or exceeding the DBE percentage or that the Bidder will provide a good faith effort to substitute the attempt to meet the goal.

Failure to provide commitments to meet the stated goal or provide a satisfactory good faith effort will be considered a breach of the requirements of the proposal. As a result, the bid proposal guarantee of the Bidder will be property of the City of Lewisville and the Bidder will be excluded for rebidding on the project when it is re-advertised.

Buy America

§ 635.410 Buy America requirements.

(a) The provisions of this section shall prevail and be given precedence over any requirements of this subpart which are contrary to this section. However, nothing in this section shall be construed to be contrary to the requirements of § 635.409(a) of this subpart.

(b) No Federal-aid highway construction project is to be authorized for advertisement or otherwise authorized to proceed unless at least one of the following requirements is met:

(1) The project either: (i) Includes no permanently incorporated steel or iron materials, or (ii) if steel or iron materials are to be used, all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes which protect or enhance the value of the material to which the coating is applied.

(2) The State has standard contract provisions that require the use of domestic materials and products, including steel and iron materials, to the same or greater extent as the provisions set forth in this section.

(3) The State elects to include alternate bid provisions for foreign and domestic steel and iron materials which comply with the following requirements. Any procedure for obtaining alternate bids based on furnishing foreign steel and iron materials which is acceptable to the Division Administrator may be used. The contract provisions must (i) require all bidders to submit a bid based on furnishing domestic steel and iron materials, and (ii) clearly state that the contract will be awarded to the bidder who submits the lowest total bid based on furnishing domestic steel and iron materials unless such total bid exceeds the lowest total bid based on furnishing foreign steel and iron materials by more than 25 percent.

(4) When steel and iron materials are used in a project, the requirements of this section do not prevent a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or \$2,500, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the steel and iron products as they are delivered to the project.

(c)(1) A State may request a waiver of the provisions of this section if;

(i) The application of those provisions would be inconsistent with the public interest; or

(ii) Steel and iron materials/products are not produced in the United States in sufficient and reasonably available quantities which are of a satisfactory quality.

(2) A request for waiver, accompanied by supporting information, must be submitted in writing to the Regional Federal Highway Administrator (RFHWA) through the FHWA Division Administrator. A request must be submitted sufficiently in advance of the need for the waiver in order to allow time for proper review and action on the request. The RFHWA will have approval authority on the request.

(3) Requests for waivers may be made for specific projects, or for certain materials or products in specific geographic areas, or for combinations of both, depending on the circumstances.

(4) The denial of the request by the RFHWA may be appealed by the State to the Federal Highway Administrator (Administrator), whose action on the request shall be considered administratively final.

(5) A request for a waiver which involves nationwide public interest or availability issues or more than one FHWA region may be submitted by the RFHWA to the Administrator for action.

(6) A request for waiver and an appeal from a denial of a request must include facts and justification to support the granting of the waiver. The FHWA response to a request or appeal will be in writing and made available to the public upon request. Any request for a nationwide waiver and FHWA's action on such a request may be published in the **Federal Register** for public comment.

(7) In determining whether the waivers described in paragraph (c)(1) of this section will be granted, the FHWA will consider all appropriate factors including, but not limited to, cost, administrative burden, and delay that would be imposed if the provision were not waived.

(d) Standard State and Federal-aid contract procedures may be used to assure compliance with the requirements of this section.

State of Texas Child Support Business Ownership Form

County: _____

Project Name: _____

TxDOT CSJ: _____

LG Project Number: _____

Business Entity Submitting Bid: _____

Section 231.006, Family Code, requires a bid for a contract paid from state funds to include the names and social security number of individuals owning 25% or more of the business entity submitting the bid.

1. In the spaces below please provide the names and social security number of individuals owning 25% or more of the business.

Name	Social Security Number
_____	_____
_____	_____
_____	_____
_____	_____

2. Please check the box below if no individual owns 25% or more of the business.

() No individual own 25% or more of the business.

Except as provided by Section 231.302(d), Family Code, a social security number is confidential and may be disclosed only for the purpose of responding to a request for information from an agency operating under the provisions of Part A and D to Title IV of the Federal Social Security Act (42 USC Section 601-617 and 651-699).

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

The information collected on this form will be maintained by Enter Local Government Name. With few exceptions, you are entitled on request to be informed about the information collected about you. Under Sections 552.021 and 552.023 of the Texas Government Code, you also are entitled to receive and review the information. Under Section 559.004 of the Government Code, you are also entitled to have information about you corrected that you believe is incorrect.

Signature

Date

Printed Name

IF THIS PROJECT IS A JOINT VENTURE,
ALL PARTIES TO THE JOINT VENTURE MUST PROVIDE A COMPLETED FORM.

CHILD SUPPORT STATEMENT

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

OSHA Implementation Procedures

The following requirements are to be followed for this project.

§ 635.108 Health and safety.

Contracts for projects shall include provisions designed:

- (a) To insure full compliance with all applicable Federal, State, and local laws governing safety, health and sanitation; and
- (b) To require that the contractor shall provide all safeguards, safety devices, and protective equipment and shall take any other actions reasonably necessary to protect the life and health of persons working at the site of the project and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

Approved by OMB

0348-0046

(See reverse for public burden disclosure.)

1. Type of Federal Action: <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	2. Status of Federal Action: <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	3. Report Type: <input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change For Material Change Only: year _____ quarter _____ date of last report _____
4. Name and Address of Reporting Entity: <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, <i>if known</i> : Congressional District, if known:	5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: Congressional District, if known:	
6. Federal Department/Agency:	7. Federal Program Name/Description: CFDA Number, <i>if applicable</i> : _____	
8. Federal Action Number, if known:	9. Award Amount, if known: \$ _____	
10. a. Name and Address of Lobbying Registrant <i>(if individual, last name, first name, MI):</i>	b. Individuals Performing Services <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i>	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____	
Federal Use Only:		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents of all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, United States Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Organization: _____

Street address: _____

City, State, Zip: _____

CERTIFIED BY: (type or print)

TITLE:

(signature)

(date)

Disclosure of Lobbying Activities

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure)

<p>1. Type of Federal Action: a. contract _____ b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance</p>	<p>2. Status of Federal Action: a. bid/offer/application _____ b. initial award c. post-award</p>	<p>3. Report Type: a. initial filing _____ b. material change</p> <p>For material change only: Year _____ quarter _____ Date of last report _____</p>
<p>4. Name and Address of Reporting Entity: _____ Prime _____ Subawardee Tier _____, if Known:</p> <p>Congressional District, if known:</p>	<p>5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:</p> <p>Congressional District, if known:</p>	
<p>6. Federal Department/Agency:</p>	<p>7. Federal Program Name/Description:</p> <p>CFDA Number, <i>if applicable</i>: _____</p>	
<p>8. Federal Action Number, if known:</p>	<p>9. Award Amount, if known:</p> <p>\$</p>	
<p>10. a. Name and Address of Lobbying Registrant <i>(if individual, last name, first name, MI):</i></p>	<p>b. Individuals Performing Services <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i></p>	
<p>11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.</p>	<p>Signature: _____</p> <p>Print Name: _____</p> <p>Title: _____</p> <p>Telephone No.: _____ Date: _____</p>	
<p>Federal Use Only</p>	<p>Authorized for Local Reproduction Standard Form - LLL (Rev. 7-97)</p>	

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitations for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Included prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503

NON-COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that he/she has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to include anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He/She further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee gift, commission or thing of value on account of such sale.

OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES FOR PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT.

Dated this ___ day of _____, _____

(Name of Organization)

(Title of Person Signing)

(Signature)

ACKNOWLEDGEMENT

STATE OF _____)
) ss
COUNTY OF _____)

Before me, a Notary Public, personally appeared the above named and swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to me this _____ day of _____, _____.

Notary Public Signature

My Commission Expires: _____

Texas Department of Transportation INSTRUCTIONS

Form 1560-CS
Professional Provider Insurance
(Rev. 03/13)
Page 1 of 2

(Previously Known As Form 1560-CSS)

BEFORE YOU SUBMIT THIS FORM, MAKE SURE:

- ♦ You have the most current 1560-CS TxDOT form. Go to the following TxDOT Internet site: <http://www.txdot.gov/business/consultants/insurance.html> then look for the Form 1560-CS.
- ♦ You have entered the 11-digit Vendor Identification Number, which includes your nine-digit FEIN (Federal Employer Identification Number).
- ♦ You have entered each authorized agent's complete address, telephone number, policy expiration dates, sign and date.
- ♦ If more than one agent covers different types of insurance (one writes Workers' Compensation, but another writes Auto), both have issued the certificate in its entirety.
- ♦ You have provided all requested information on the forms, which may be faxed but must be followed up with the originally signed forms to the address listed below.
- ♦ The form is being submitted in connection with a professional services contract.
- ♦ For construction and maintenance contracts, go to the following TxDOT Internet site: <http://www.txdot.gov/business/contractors/contractor-insurance.html> then look for the Form 1560.

DO NOT COMPLETE THIS FORM UNLESS WORKERS' COMPENSATION IS ENDORSED WITH A WAIVER OF SUBROGATION IN FAVOR OF TxDOT.

To avoid work suspension, an updated insurance form must reach the address listed below one business day prior to the expiration date. List the contractor's legal company name, including the DBA (doing business as) name as the insured. If a staff leasing service company is providing insurance, the staff leasing company name is shown first as the named insured and then in parenthesis identify the contractor/client company (i.e. XYZ Staff 4 U, Inc.-staff leasing service company (ABC Engineering, Inc.)). Show contact information (i.e. address, phone number, and etc.) for the insured/staff leasing service company in the appropriate spaces. Show the contact information (i.e. address, phone number, and etc.) for the contractor/client company in the appropriate spaces. The certificate of insurance, once on file with the department, is adequate for subsequent department contracts provided adequate coverage is still in effect. Do not refer to specific projects or contracts on this form. Over-stamping or over-typing entries on the certificate of insurance are not acceptable if they change the provisions of the certificate in any manner. Stamped, typed, or printed signatures are not acceptable. Pre-printed limits are the minimum required; if higher limits are provided by the policy, enter the higher limit amount and strike through or cross out the pre-printed limit. Binder numbers are not acceptable for policy numbers.

WORKERS' COMPENSATION INSURANCE:

The contractor is required to have Workers' Compensation Insurance if the contractor has any employees, including relatives. The word STATUTORY, under limits of liability, means that the insurer would pay benefits allowed under the Texas Workers' Compensation Law. GROUP HEALTH or ACCIDENT INSURANCE is not an acceptable substitute for Workers' Compensation.

COMMERCIAL GENERAL LIABILITY INSURANCE:

If coverages are specified separately, they must be at least these amounts:

Bodily Injury	\$500,000 each occurrence
Property Damage	\$100,000 each occurrence
	\$100,000 for aggregate

MANUFACTURERS' or CONTRACTOR LIABILITY INSURANCE is not an acceptable substitute for Comprehensive General Liability Insurance or Commercial General Liability Insurance.

BUSINESS AUTOMOBILE POLICY:

The coverage amount for a Business Automobile Policy may be shown as a minimum of \$600,000 Combined Single Limit by a typed or printed entry and deletion of the specific amounts listed for Bodily Injury and Property Damage. Personal Automobile Liability Insurance is not an acceptable substitute for a Business Automobile Policy.

MAIL CERTIFICATES TO:
Texas Department of Transportation
Contract Services Office
125 E. 11th St.
Austin, TX 78701-2483
512-416-4620 (V) 512-416-4621 (F)



Texas Department of Transportation (TxDOT)

CERTIFICATE OF INSURANCE

This certificate of insurance is provided for informational purposes only. This certificate does not confer any rights or obligations other than the rights and obligations conveyed by the policies referenced on this certificate. The terms of the referenced policies control over the terms of this certificate.

Prior to the beginning of work, the Contractor shall obtain the minimum insurance and endorsements specified. Only the TxDOT certificate of insurance form is acceptable as proof of insurance for department contracts. Agents should complete the form providing all requested information then either fax or mail this form directly to the address listed on **page one** of this form. Copies of endorsements listed below are not required as attachments to this certificate.

Insured: _____

Street/Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone Number: _____ Vendor ID Number (11 digits): _____

Contractor/Client (if applicable): _____

Street/Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone Number: _____ Vendor ID Number (11 digits): _____

Workers' Compensation Insurance Coverage:

Endorsed with a Waiver of Subrogation in favor of TxDOT.

Carrier Name:			Carrier Phone Number:		
Address:			City:	State:	Zip:
Type of Insurance	Policy Number	Effective Date	Expiration Date	Limits of Liability	
Workers' Compensation				Not Less Than: Statutory - Texas	

Commercial General Liability Insurance:

Carrier Name:			Carrier Phone Number:		
Address:			City:	State:	Zip:
Type of Insurance	Policy Number	Effective Date	Expiration Date	Limits of Liability	
Commercial General Liability Insurance Bodily Injury Property Damage OR Commercial General Liability Insurance				Not Less Than: \$500,000 each occurrence \$100,000 each occurrence \$100,000 for aggregate OR \$600,000 combined single limit	

Automobile Liability Insurance:

Carrier Name:			Carrier Phone Number:		
Address:			City:	State:	Zip:
Type of Insurance	Policy Number	Effective Date	Expiration Date	Limits of Liability	
Business Automobile Policy Bodily Injury Property Damage				Not Less Than: \$250,000 each person \$500,000 each occurrence \$100,000 each occurrence	

Authorized Agent name, address and zip code:

THIS IS TO CERTIFY to the Texas Department of Transportation acting on behalf of the State of Texas that the insurance policies named are in full force and effect. If this form is sent by facsimile machine (fax), the sender adopts the document received by TxDOT as a duplicate original and adopts the signature produced by the receiving fax machine as the sender's original signature.

The Texas Department of Transportation maintains the information collected through this form. With few exceptions, you are entitled on request to be informed about the information that we collect about you. Under sections 555.021 and 553.023 of the Texas Government Code, you also are entitled to receive and review the information. Under section 559.004 of the Government Code, you are also entitled to have us correct information about you that is incorrect.

Area Code () _____

Authorized Agent's Phone Number _____

Original Signature of Authorized Agent _____

Date _____

CERTIFICATION OF INTEREST IN OTHER BID PROPOSALS FOR THIS WORK

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

- A. Quotation(s) have been issued in this firm's name to other firm(s) interested in this work for consideration for performing a portion of this work.

_____ YES

_____ NO

- B. If this proposal is the low bid, the bidder agrees to provide the following information prior to award of the contract.

1. Identify firms which bid as a prime contractor and from which the bidder received quotations for work on this project.
2. Identify all the firms which bid as a prime contractor to which the bidder gave quotations for work on this project.

CONTRACTOR'S ASSURANCE

(Subcontracts-Federal Aid Projects)

By signing this proposal, the contractor is giving assurances that all subcontract agreements will incorporate the Standard Specification and Special Provisions to Section 9.9., Payment Provisions for Subcontractors, all subcontract agreements exceeding \$2,000 will incorporate the applicable Wage Determination Decision, and all subcontract agreements will incorporate the following:

Special Provision	Certification of Nondiscrimination in Employment
Special Provision	Standard Federal Equal Employment Opportunity
Form FHWA 1273	Required Contract Provisions Federal-aid Construction Contracts (Form FHWA 1273 must also be physically attached to subcontracts and all lower-tier subcontracts)
Special Provision	Nondiscrimination (Include provisions of Sections 3.1 – 3.6 in all subcontracts and agreements for materials)
Special Provision	Cargo Preference Act Requirements in Federal-Aid Contracts
Special Provision	Disadvantaged Business Enterprise in Federal-Aid Contracts

CERTIFICATION TO NOT BOYCOTT ENERGY COMPANIES

Pursuant to Texas Government Code §809.051, the Department must include a provision requiring a written verification affirming that the Contractor does not boycott energy companies, as defined in Government Code §809.001, and will not boycott energy companies during the term of the contract. This provision applies to a contract that:

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

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

Violation of this certification may result in action by the Department.

CERTIFICATION TO NOT BOYCOTT ISRAEL

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

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

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

Violation of this certification may result in action by the Department.

CERTIFICATION REGARDING DISCLOSURE OF PUBLIC INFORMATION

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

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

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

By entering into Contract, the Contractor agrees to:

- provide, or make available, to TxDOT and any authorized governmental investigating or auditing agency all records, including electronic and payment records related to the contract, for the same period provided by the records retention schedule applicable to TxDOT, and
- ensure that all subcontracts include a clause requiring the same.

* As defined in Government Code §552.003, "Contracting information" means the following information maintained by a governmental body or sent between a governmental body and a vendor, contractor, potential vendor, or potential contractor:

- 1) information in a voucher or contract relating to the receipt or expenditure of public funds by a governmental body;
- 2) solicitation or bid documents relating to a contract with a governmental body;
- 3) communications sent between a governmental body and a vendor, contractor, potential vendor, or potential contractor during the solicitation, evaluation, or negotiation of a contract;
- 4) documents, including bid tabulations, showing the criteria by which a governmental body evaluates each vendor, contractor, potential vendor, or potential contractor responding to a solicitation and, if applicable, an explanation of why the vendor or contractor was selected; and
- 5) communications and other information sent between a governmental body and a vendor or contractor related to the performance of a final contract with the governmental body or work performed on behalf of the governmental body.

CERTIFICATION TO NOT DISCRIMINATE AGAINST FIREARM ENTITIES OR FIREARM TRADE ASSOCIATIONS

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

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

This provision applies to a contract that:

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

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

Violation of this certification may result in action by the Department.

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature*. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification*. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention*. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents*. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers*. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements*. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures*. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay*. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits*. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio*. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates*. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity*. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant 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 participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(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 (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

Prohibition on Certain Telecommunications Equipment or Services

The Federal Register Notice issued the Final Rule and states that the amendment to 2 CFR 200.216 is effective on August 13, 2020. The new 2 CFR 200.471 regulation provides clarity that the telecommunications and video surveillance costs associated with 2 CFR 200.216 are unallowable for services and equipment from these specific providers. [OMB's Federal Register Notice](#) includes the new 2 CFR 200.216 and 2 CFR 200.471 regulations.

Per the Federal Law referenced above, use of services, systems, or services or systems that contain components produced by any of the following manufacturers is strictly prohibited for use on this project. Therefore, for any telecommunications, CCTV, or video surveillance equipment, services or systems cannot be manufactured by, or have components manufactured by:

- Huawei Technologies Company,
- ZTE Corporation (any subsidiary and affiliate of such entities),
- Hyatera Communications Corporation,
- Hangzhou Hikvision Digital Technology Company,
- Dahua Technology Company (any subsidiary and affiliate of such entities).

Violation of this requirement will require replacement of the equipment at the contractor's expense.

The wage rates listed herein are those predetermined by the Secretary of Labor and State Statute and listed in the United States Department of Labor's (USDOL) General Decisions dated 01-03-2025 and are the minimum wages to be paid accordingly for each specified classification. To determine the applicable wage rate zone, a list entitled "TEXAS COUNTIES IDENTIFIED BY WAGE RATE ZONES" is provided in the contract. Any wage rate that is not listed in the USDOL's general decision, must be requested by the contractor through the completion of an Additional Classification and Wage Rate Request and be submitted for approval. A blank cell indicates that the classification and wage rate are not listed on the USDOL's general decision and therefore must be requested by the contractor through the completion of an Additional Classification and Wage Rate Request. IMPORTANT NOTICE FOR STATE PROJECTS: only the controlling wage rate zone applies to the contract. Effective 01-03-2025.

CLASS. #	CLASSIFICATION DESCRIPTION	ZONE TX02 *(TX20250002)	ZONE TX03 *(TX20250003)	ZONE TX04 *(TX20250004)	ZONE TX05 *(TX20250005)	ZONE TX06 *(TX20250006)	ZONE TX07 *(TX20250007)	ZONE TX08 *(TX20250008)	ZONE TX24 *(TX20250024)	ZONE TX25 *(TX20250025)	ZONE TX27 *(TX20250027)	ZONE TX28 *(TX20250028)	ZONE TX29 *(TX20250029)	ZONE TX30 *(TX20250030)	ZONE TX37 *(TX20250037)	ZONE TX38 *(TX20250038)	ZONE TX42 *(TX20250042)
1428	Agricultural Tractor Operator						\$12.69					\$12.35			\$11.75		
1300	Asphalt Distributor Operator	\$14.87	\$13.48	\$13.88	\$15.72	\$15.58	\$15.55	\$15.72	\$13.28	\$15.32	\$15.62	\$14.36	\$14.25	\$14.03	\$13.75	\$14.06	\$14.40
1303	Asphalt Paving Machine Operator	\$13.40	\$12.25	\$12.35	\$13.87	\$14.05	\$14.36	\$14.20	\$13.26	\$13.99	\$14.68	\$12.92	\$13.44	\$12.53	\$14.00	\$14.32	\$12.99
1106	Asphalt Raker	\$12.28	\$10.61	\$12.02	\$14.21	\$11.65	\$12.12	\$11.64	\$11.44	\$12.69	\$12.05	\$11.34	\$11.67	\$11.40	\$12.59	\$12.36	\$11.78
1112	Batching Plant Operator, Asphalt																
1115	Batching Plant Operator, Concrete																
1214	Blaster																
1615	Boom Truck Operator						\$18.36										
1444	Boring Machine Operator																
1305	Broom or Sweeper Operator	\$11.21	\$10.33	\$10.08	\$11.99		\$11.04	\$11.62		\$11.74	\$11.41	\$10.30		\$10.23	\$10.60	\$12.68	\$11.05
1144	Communications Cable Installer																
1124	Concrete Finisher, Paving and Structures	\$13.55	\$12.46	\$13.16	\$12.85	\$12.64	\$12.56	\$12.77	\$12.44	\$14.12	\$13.04	\$13.38	\$12.64	\$12.80	\$12.79	\$12.98	\$13.32
1318	Concrete Pavement Finishing Machine Operator				\$16.05		\$15.48			\$16.05		\$19.31				\$13.07	
1315	Concrete Paving, Curing, Float, Texturing Machine Operator											\$16.34				\$11.71	
1333	Concrete Saw Operator				\$14.67					\$14.48	\$17.33					\$13.99	
1399	Concrete/Gunite Pump Operator																
1344	Crane Operator, hydraulic 60 tons or less				\$18.22		\$18.36			\$18.12	\$18.04	\$20.21			\$18.63	\$13.86	
1345	Crane Operator, Hydraulic Over 80 Tons																
1342	Crane Operator, Lattice Boom 80 Tons or Less	\$16.82	\$14.39	\$13.85	\$17.27		\$15.87			\$17.27		\$14.67			\$16.42	\$14.97	\$13.87
1343	Crane Operator, Lattice Boom Over 80 Tons				\$20.52		\$19.38			\$20.52		\$17.49			\$25.13	\$15.80	
1306	Crawler Tractor Operator	\$13.96	\$16.63	\$13.62	\$14.26		\$15.67			\$14.07	\$13.15	\$13.38			\$14.60	\$13.68	\$13.50
1351	Crusher or Screen Plant Operator																
1446	Directional Drilling Locator						\$11.67										
1445	Directional Drilling Operator				\$20.32		\$17.24										
1139	Electrician	\$20.96		\$19.87	\$19.80		\$26.35		\$20.27	\$19.80		\$20.92				\$27.11	\$19.87
1347	Excavator Operator, 50,000 pounds or less	\$13.46	\$12.56	\$13.67	\$17.19		\$12.88	\$14.38	\$13.49	\$17.19		\$13.88			\$14.09	\$12.71	\$14.42
1348	Excavator Operator, Over 50,000 pounds		\$15.23	\$13.52	\$17.04		\$17.71			\$16.99	\$18.80	\$16.22				\$14.53	\$13.52
1150	Flagger	\$9.30	\$9.10	\$8.50	\$10.28	\$8.81	\$9.45	\$8.70		\$10.06	\$9.71	\$9.03	\$8.81	\$9.08	\$9.90	\$10.33	\$8.10
1151	Form Builder/Setter, Structures	\$13.52	\$12.30	\$13.38	\$12.91	\$12.71	\$12.87	\$12.38	\$12.26	\$13.84	\$12.98	\$13.07	\$13.61	\$12.82	\$14.73	\$12.23	\$12.25
1160	Form Setter, Paving & Curb	\$12.36	\$12.16	\$13.93	\$11.83	\$10.71	\$12.94			\$13.16	\$12.54	\$11.33	\$10.69		\$13.33	\$12.34	\$13.93
1360	Foundation Drill Operator, Crawler Mounted				\$17.99					\$17.99						\$17.43	
1363	Foundation Drill Operator, Truck Mounted		\$16.86	\$22.05	\$21.51		\$16.93			\$21.07	\$20.20	\$20.76		\$17.54	\$21.39	\$15.89	\$22.05
1369	Front End Loader Operator, 3 CY or Less	\$12.28	\$13.49	\$13.40	\$13.85		\$13.04	\$13.15	\$13.29	\$13.69	\$12.64	\$12.89			\$13.51	\$13.32	\$12.17
1372	Front End Loader Operator, Over 3 CY	\$12.77	\$13.69	\$12.33	\$14.96		\$13.21	\$12.86	\$13.57	\$14.72	\$13.75	\$12.32			\$13.19	\$13.17	\$13.02
1329	Joint Sealer																
1172	Laborer, Common	\$10.30	\$9.86	\$10.08	\$10.51	\$10.71	\$10.50	\$10.24	\$10.58	\$10.72	\$10.45	\$10.30	\$10.25	\$10.03	\$10.54	\$11.02	\$10.15
1175	Laborer, Utility	\$11.80	\$11.53	\$12.70	\$12.17	\$11.81	\$12.27	\$12.11	\$11.33	\$12.32	\$11.80	\$11.53	\$11.23	\$11.50	\$11.95	\$11.73	\$12.37
1346	Loader/Backhoe Operator	\$14.18	\$12.77	\$12.97	\$15.68		\$14.12			\$15.18	\$13.58	\$12.87		\$13.21	\$14.13	\$14.29	\$12.90
1187	Mechanic	\$20.14	\$15.47	\$17.47	\$17.74	\$17.00	\$17.10			\$17.68	\$18.94	\$18.58	\$17.00	\$16.61	\$18.46	\$16.96	\$17.47

CLASS. #	CLASSIFICATION DESCRIPTION	ZONE TX02 *(TX20250002)	ZONE TX03 *(TX20250003)	ZONE TX04 *(TX20250004)	ZONE TX05 *(TX20250005)	ZONE TX06 *(TX20250006)	ZONE TX07 *(TX20250007)	ZONE TX08 *(TX20250008)	ZONE TX24 *(TX20250024)	ZONE TX25 *(TX20240025)	ZONE TX27 *(TX20250027)	ZONE TX28 *(TX20250028)	ZONE TX29 *(TX20250029)	ZONE TX30 *(TX20250030)	ZONE TX37 *(TX20250037)	ZONE TX38 *(TX20250038)	ZONE TX42 *(TX20250042)
1380	Milling Machine Operator Motor Grader Operator,	\$15.54	\$14.64	\$12.22	\$14.29		\$14.18			\$14.32	\$14.35	\$12.86			\$14.75	\$13.53	\$12.80
1390	Fine Grade	\$17.49	\$16.52	\$16.88	\$17.12	\$18.37	\$18.51	\$16.69	\$16.13	\$17.19	\$18.35	\$17.07	\$17.74	\$17.47	\$17.08	\$15.69	\$20.01
1393	Motor Grader Operator, Rough	\$16.15	\$14.62	\$15.83	\$16.20	\$17.07	\$14.63	\$18.50		\$16.02	\$16.44	\$15.12	\$16.85	\$14.47	\$17.39	\$14.23	\$15.53
1413	Off Road Hauler			\$10.08	\$12.26		\$11.88			\$12.25		\$12.23			\$13.00	\$14.60	
1196	Painter, Structures Pavement Marking Machine Operator					\$21.29	\$18.34						\$21.29			\$18.62	
1396		\$16.42		\$13.10	\$13.55		\$19.17	\$12.01		\$13.63	\$14.60	\$13.17		\$16.65	\$10.54	\$11.18	\$13.10
1443	Percussion or Rotary Drill Operator																
1202	Piledriver															\$14.95	
1205	Pipelayer		\$11.87	\$14.64	\$13.17	\$11.17	\$12.79		\$11.37	\$13.24	\$12.66	\$13.24	\$11.17	\$11.67		\$12.12	\$14.64
1384	Reclaimer/Pulverizer Operator	\$12.85			\$11.90		\$12.88			\$11.01		\$10.46					
1500	Reinforcing Steel Worker	\$13.50	\$14.07	\$17.53	\$16.17		\$14.00			\$16.18	\$12.74	\$15.83		\$17.10		\$15.15	\$17.72
1402	Roller Operator, Asphalt	\$10.95		\$11.96	\$13.29		\$12.78	\$11.61		\$13.08	\$12.36	\$11.68			\$11.71	\$11.95	\$11.50
1405	Roller Operator, Other	\$10.36		\$10.44	\$11.82		\$10.50	\$11.64		\$11.51	\$10.59	\$10.30		\$12.04	\$12.85	\$11.57	\$10.66
1411	Scraper Operator	\$10.61	\$11.07	\$10.85	\$12.88		\$12.27		\$11.12	\$12.96	\$11.88	\$12.43		\$11.22	\$13.95	\$13.47	\$10.89
1417	Self-Propelled Hammer Operator																
1194	Servicer	\$13.98	\$12.34	\$14.11	\$14.74		\$14.51	\$15.56	\$13.44	\$14.58	\$14.31	\$13.83		\$12.43	\$13.72	\$13.97	\$14.11
1513	Sign Erector Slurry Seal or Micro-Surfacing Machine Operator																
1708																	
1341	Small Slipform Machine Operator									\$15.96							
1515	Spreader Box Operator	\$12.60		\$13.12	\$14.71		\$14.04			\$14.73	\$13.84	\$13.68		\$13.45	\$11.83	\$13.58	\$14.05
1705	Structural Steel Welder															\$12.85	
1509	Structural Steel Worker						\$19.29									\$14.39	
1339	Subgrade Trimmer																
1143	Telecommunication Technician																
1145	Traffic Signal/Light Pole Worker Trenching Machine Operator,						\$16.00										
1440	Heavy						\$18.48										
1437	Trenching Machine Operator, Light																
1609	Truck Driver Lowboy-Float	\$14.46	\$13.63	\$13.41	\$15.00	\$15.93	\$15.66			\$16.24	\$16.39	\$14.30	\$16.62	\$15.63	\$14.28	\$16.03	\$13.41
1612	Truck Driver Transit-Mix				\$14.14					\$14.14							
1600	Truck Driver, Single Axle Truck Driver, Single or Tandem Axle Dump Truck	\$12.74	\$10.82	\$10.75	\$13.04	\$11.61	\$11.79	\$13.53	\$13.16	\$12.31	\$13.40	\$10.30	\$11.61		\$11.97	\$11.46	\$10.75
1606	Truck Driver, Tandem Axle Tractor with Semi Trailer	\$11.33	\$14.53	\$11.95	\$12.95		\$11.68		\$14.06	\$12.62	\$11.45	\$12.28		\$13.08	\$11.68	\$11.48	\$11.10
1607	Tunneling Machine Operator, Heavy	\$12.49	\$12.12	\$12.50	\$13.42		\$12.81	\$13.16		\$12.86	\$16.22	\$12.50			\$13.80	\$12.27	\$12.50
1441	Tunneling Machine Operator, Light																
1706	Welder		\$14.02		\$14.86		\$15.97		\$13.74	\$14.84					\$13.78		
1520	Work Zone Barricade Servicer	\$10.30	\$12.88	\$11.46	\$11.70	\$11.57	\$11.85	\$10.77		\$11.68	\$12.20	\$11.22	\$11.51	\$12.96	\$10.54	\$11.67	\$11.76

Notes:

*Represents the USDOL wage decision.

Any worker employed on this project shall be paid at the rate of one and one half (1-1/2) times the regular rate for every hour worked in excess of forty (40) hours per week.

For reference, the titles and descriptions for the classifications listed here are detailed further in the AGC of Texas' *Standard Job Classifications and Descriptions for Highway, Heavy, Utilities, and Industrial Construction in Texas* posted on the AGC's Web site for any contractor.

**TEXAS COUNTIES IDENTIFIED BY
WAGE RATE ZONES: 2, 3, 4, 5, 6, 7, 8, 24, 25, 27, 28, 29, 30, 37, 38, 42**

County Name	Zone	County Name	Zone	County Name	Zone	County Name	Zone
Anderson	28	Donley	37	Karnes	27	Reagan	37
Andrews	37	Duval	30	Kaufman	25	Real	37
Angelina	28	Eastland	37	Kendall	7	Red River	28
Aransas	29	Ector	2	Kenedy	30	Reeves	8
Archer	25	Edwards	8	Kent	37	Refugio	27
Armstrong	2	El Paso	24	Kerr	27	Roberts	37
Atascosa	7	Ellis	25	Kimble	37	Robertson	7
Austin	38	Erath	28	King	37	Rockwall	25
Bailey	37	Falls	28	Kinney	8	Runnels	37
Bandera	7	Fannin	28	Kleberg	27	Rusk	4
Bastrop	7	Fayette	27	Knox	37	Sabine	28
Baylor	37	Fisher	37	Lamar	28	San Augustine	28
Bee	27	Floyd	37	Lamb	37	San Jacinto	38
Bell	7	Foard	37	Lampasas	7	San Patricio	29
Bexar	7	Fort Bend	38	LaSalle	30	San Saba	37
Blanco	27	Franklin	28	Lavaca	27	Schleicher	37
Borden	37	Freestone	28	Lee	27	Scurry	37
Bosque	28	Frio	27	Leon	28	Shackelford	37
Bowie	4	Gaines	37	Liberty	38	Shelby	28
Brazoria	38	Galveston	38	Limestone	28	Sherman	37
Brazos	7	Garza	37	Lipscomb	37	Smith	4
Brewster	8	Gillespie	27	Live Oak	27	Somervell	28
Briscoe	37	Glasscock	37	Llano	27	Starr	30
Brooks	30	Goliad	29	Loving	37	Stephens	37
Brown	37	Gonzales	27	Lubbock	2	Sterling	37
Burleson	7	Gray	37	Lynn	37	Stonewall	37
Burnet	27	Grayson	25	Madison	28	Sutton	8
Caldwell	7	Gregg	4	Marion	28	Swisher	37
Calhoun	29	Grimes	28	Martin	37	Tarrant	25
Callahan	25	Guadalupe	7	Mason	27	Taylor	2
Cameron	3	Hale	37	Matagorda	27	Terrell	8
Camp	28	Hall	37	Maverick	30	Terry	37
Carson	2	Hamilton	28	McCulloch	37	Throckmorton	37
Cass	28	Hansford	37	McLennan	7	Titus	28
Castro	37	Hardeman	37	McMullen	30	Tom Green	2
Chambers	38	Hardin	38	Medina	7	Travis	7
Cherokee	28	Harris	38	Menard	37	Trinity	28
Childress	37	Harrison	42	Midland	2	Tyler	28
Clay	25	Hartley	37	Milam	28	Upshur	4
Cochran	37	Haskell	37	Mills	37	Upton	37
Coke	37	Hays	7	Mitchell	37	Uvalde	30
Coleman	37	Hemphill	37	Montague	37	Val Verde	8
Collin	25	Henderson	28	Montgomery	38	Van Zandt	28
Collingsworth	37	Hidalgo	3	Moore	37	Victoria	6
Colorado	27	Hill	28	Morris	28	Walker	28
Comal	7	Hockley	37	Motley	37	Waller	38
Comanche	37	Hood	28	Nacogdoches	28	Ward	37
Concho	37	Hopkins	28	Navarro	28	Washington	28
Cooke	37	Houston	28	Newton	28	Webb	3
Coryell	7	Howard	37	Nolan	37	Wharton	27
Cottle	37	Hudspeth	8	Nueces	29	Wheeler	37
Crane	37	Hunt	25	Ochiltree	37	Wichita	5
Crockett	8	Hutchinson	37	Oldham	37	Wilbarger	37
Crosby	2	Irion	2	Orange	38	Willacy	30
Culberson	8	Jack	28	Palo Pinto	28	Williamson	7
Dallam	37	Jackson	27	Panola	28	Wilson	7
Dallas	25	Jasper	28	Parker	25	Winkler	37
Dawson	37	Jeff Davis	8	Parmer	37	Wise	25
Deaf Smith	37	Jefferson	38	Pecos	8	Wood	28
Delta	25	Jim Hogg	30	Polk	28	Yoakum	37
Denton	25	Jim Wells	27	Potter	2	Young	37
DeWitt	27	Johnson	25	Presidio	8	Zapata	30
Dickens	37	Jones	25	Rains	28	Zavala	30
Dimmit	30			Randall	2		

Prison Produced Materials

635.417 Convict produced materials.

- (a) Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if such materials have been:
 - (1) Produced by convicts who are on parole, supervised release, or probation from a prison or
 - (2) Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal-aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal-aid highway construction during the 12-month period ending July 1, 1987.
- (b) Qualified prison facility means any prison facility in which convicts, during the 12-month period ending July 1, 1987, produced materials for use in Federal-aid highway construction projects.

Differing Site Conditions

(a) Except as provided in paragraph (b) of this section, the following changed conditions contract clauses shall be made part of, and incorporated in, each highway construction project approved under [23 U.S.C. 106](#):

(1) *Differing site conditions.*

- (i) During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.
- (ii) Upon written notification, the engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of the determination whether or not an adjustment of the contract is warranted.
- (iii) No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice.
- (iv) No contract adjustment will be allowed under this clause for any effects caused on unchanged work. (This provision may be omitted by the STD's at their option.)

(2) *Suspensions of work ordered by the engineer.*

- (i) If the performance of all or any portion of the work is suspended or delayed by the engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to the engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.
- (ii) Upon receipt, the engineer will evaluate the contractor's request. If the engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the engineer will make an adjustment

(excluding profit) and modify the contract in writing accordingly. The contractor will be notified of the engineer's determination whether or not an adjustment of the contract is warranted.

- (iii) No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed.
- (iv) No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

(3) *Significant changes in the character of work.*

- (i) The engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the contractor agrees to perform the work as altered.
- (ii) If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the contractor in such amount as the engineer may determine to be fair and equitable.
- (iii) If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.
- (iv) The term "significant change" shall be construed to apply only to the following circumstances:
 - (A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
 - (B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

- (b) The provisions of this section shall be governed by the following:
- (1) Where State statute does not permit one or more of the contract clauses included in paragraph (a) of this section, the State statute shall prevail and such clause or clauses need not be made applicable to Federal-aid highway contracts.
 - (2) Where the State transportation department has developed and implemented one or more of the contract clauses included in paragraph (a) of this section, such clause or clauses, as developed by the State transportation department may be included in Federal-aid highway contracts in lieu of the corresponding clause or clauses in paragraph (a) of this section. The State's action must be pursuant to a specific State statute requiring differing contract conditions clauses. Such State developed clause or clauses, however, must be in conformance with 23 U.S.C., 23 CFR and other applicable Federal statutes and regulations as appropriate and shall be subject to the Division Administrator's approval as part of the PS&E.
- (c) In the case of a design-build project, STDs are strongly encouraged to use "suspensions of work ordered by the engineer" clauses, and may consider "differing site condition" clauses and "significant changes in the character of work" clauses which are appropriate for the risk and responsibilities that are shared with the design-builder.

County: Denton

Highway: VA

*****GENERAL NOTES*****
2024 Specification Book (Revised August 7, 2024)

This project (CSJ 0918-46-331) is approximately 1.06 miles of concrete trail from the DCTA Hebron Station parking lot to the City of Lewisville City limits at future TC Rice Park.

Access will be provided to all business and residences at all times. Materials, labor and maintenance for these temporary accesses will not be paid for directly but will be considered subsidiary to the various bid items.

The construction, operation and maintenance of the proposed project will be consistent with the state implementation plan as prepared by the Texas Commission on Environmental Quality. The disturbed area for this project, as shown on the plans is 2.06 Acres. However, the Total Disturbed Area (TDA) will establish the required authorization for storm water discharges. The TDA of this project will be determined by the sum of the disturbed area in all project locations in the contract, and all disturbed area on all Project-Specific Locations (PSL) located in the project limits and/or within 1 mile of the project limits. The department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction site as shown on the plans, according to the TDA of the project. The contractor will obtain any required authorization from the TCEQ for the discharge of storm water from any PSL for construction support activities on or off of the project row according to the TDA of the project. When the TDA for the project exceeds 1 acre, provide a copy of the appropriate application of permit (NOI, or Construction Site Notice) to the engineer, for any PSL located in the project limits or within 1 mile of the project limits. Follow the directives and adhere to all requirements set forth in the TCEQ, Texas Pollution Discharge Elimination System, Construction General Permit (TPDES, CGP).

Topographical mapping was performed by Halff. Contractor to notify engineer of any discrepancies between the plan topography and the current existing conditions.

Contractor shall verify the location, size and material of all utilities affected by construction prior to beginning construction. Contractor shall contact all affected utilities 48 hours prior to construction.

Dig Tess: 1-800-344-8377
City of Lewisville Engineering Department: 972-219-3490

Contractor to notify the owner when any discrepancy is found between plans and existing conditions. In the event a discrepancy is found the contractor will make field adjustments to correct any problem.

County: Denton

Highway: VA

The contractor is responsible for securing access to the construction site, subject to approval from the City of Lewisville, Denton County Transit Authority (DCTA), and Dallas Area Rapid Transit (DART).

Where existing utilities or service lines are cut, broken or damaged, the contractor shall replace or repair the utilities or service lines with the same type material and construction, or better, unless otherwise shown or noted on the plans, at his own cost and expense. The contractor shall immediately notify the engineer of any conflicts in grades and alignment.

Existing utilities shown are taken from available records provided by the utility owner and field locations of surface appurtenances. Locations shown are generally schematic in nature and may not accurately reflect the size and location of each particular utility. Some utility lines may not be shown. Contractor shall assume responsibility for actual field location and protection of existing facilities whether shown or not. Contractor shall also assume responsibility for repairs to existing facilities, whether shown or not, if damaged by contractor's activities. Differences in horizontal or vertical location of existing utilities shall not be a basis for additional expense.

The contractor is responsible for keeping sidewalks and roads adjacent to the project site free from mud and debris from the site construction.

The contractor shall adopt appropriate construction site management practices to prevent the discharge of oils, grease, paints, gasoline and other pollutants to storm water. Appropriate practices can include:

- Designating areas for equipment maintenance and repair;
- Regular collection of waste;
- Conveniently located trash receptacles; and
- Designating and controlling equipment wash down.

The contractor shall construct a stabilized construction entrance/exit at all traffic exit points prior to exiting onto any paved roadway.

The access and work areas shall be secured during non-working hours.

Contractor is responsible for, and must obtain prior to construction, all necessary construction permits required by the City of Lewisville, DCTA, and DART.

Adequate measures shall be taken to prevent erosion. In the event that significant erosion occurs as a result of construction, the contractor shall restore the eroded areas to original condition or better.

Prior to construction, a pre-construction meeting shall be held with representatives from all contractors, the engineer, the Texas Department of Transportation (TxDOT) and the City of

County: Denton

Highway: VA

Lewisville. Attendance is mandatory and the location, date & time shall be established upon notice of award for the project.

Barricading and traffic control during construction shall be the responsibility of the contractor and shall conform to the "Texas manual on uniform traffic control devices", part VI in particular. Traffic flow and access shall be maintained during all phases of the construction. The contractor is responsible for providing traffic safety measures for work on project.

Any damages that may occur to real property or existing improvements shall be restored by the contractor to at least the same condition that the real property or existing improvements were in prior to the damages. This restoration shall be subject to the owner's approval; moreover, this restoration shall not be a basis for additional compensation to the Contractor. Restoration shall include, but not be limited to, redressing, revegetation, replacing fences, replacing trees, etc.

Construction traffic routes shall be coordinated with City of Lewisville prior to construction. All compacted areas due to construction shall be aerated and revegetated to original condition at no expense to the client.

Prior to construction, the owner or owner's representative shall approve the location of all silt fences.

The contractor shall use the limits of silt fence as the limits of disturbance and access unless otherwise approved by the owner or owner's representative.

Existing storm sewers and utilities are shown from the best available information. Verify the location of all underground facilities prior to starting work.

All areas disturbed during construction shall receive either Bermuda sod, seed or hydromulch unless otherwise noted.

PAVEMENT MARKING AND SIGNAGE NOTES

Refer to standard detail sheets for pavement marking detail.

Signs are to be placed in accordance with the 2011 edition TMUTCD, revision 2.

TREE SURVEY/DEMOLITION NOTES

Information provided on this plan does not delineate any underground foundations or objects that currently may be covered.

The contractor shall be responsible for proper removal and disposal of materials as required by The City of Lewisville.

County: Denton

Highway: VA

Contractor shall install applicable erosion control measures prior to site work commencement.

All trees shall remain unless otherwise noted on the tree survey and demolition plan. Contractor Shall exercise extreme caution and care when grading around existing trees.

Quantities provided on the demolition sheets are estimates only. Contractor shall be responsible For complete removal and disposal of pavements, landscaping, and utilities in conflict with the Proposed improvements.

Any protected tree that is damaged or removed prior to client approval shall be mitigated per the City of Lewisville ordinances by the contractor at no additional cost to the client.

Contractor to remove existing pavement to the nearest joint. Where existing concrete and proposed Concrete meet, the contractor is to provide an expansion joint unless otherwise noted.

Contractor to notify the owner of any site elements such as trash receptacles, drinking fountains, or other site furnishings that may be in conflict with construction prior to removing any site element.

Contractor shall mark trees to be removed per plans. Contractor shall notify the landscape architect prior to removal to confirm removal of marked trees.

PLANTING NOTES

All areas disturbed during construction shall receive grass sod or seed as shown in the plans including staging areas and other areas disturbed by the contractor unless otherwise noted. Contractor to field verify all disturbed areas.

All planting shall have temporary irrigation for the first year after planting until planting is established. Contractor shall submit a temporary irrigation plan prior to the beginning of work for the landscape architect for approval. All work shall be installed in accordance with applicable local codes and requirements.

MISC. NOTES

For dimensions of right of way not shown on the plans, see right of way map on file at the City of Lewisville. Leave all right of way areas undisturbed until actual construction is to be performed in said areas.

Use established industry and utility safety practices to erect poles, luminaries, signs or structures near any overhead or underground utility. Consult with the appropriate utility company prior to beginning such work.

County: Denton

Highway: VA

Underground utilities owned by the Texas Department of Transportation, DCTA and DART may be present within the Right-Of-Way on this project. For signal, illumination, surveillance, and communication & control, call TxDOT Traffic Signal Office (817-370-6671) and (817-370-6656 for fiber optic cable prior to excavation. If city or town owned irrigation facilities are present, call the appropriate department of the local city or town a minimum of 48 hours in advance of excavation.

Existing facilities are shown schematically for Contractor's guidance only. All existing facilities may not be shown. The Contractor shall notify TXDOT, DCTA, DART or any other franchise utility companies of any existing facilities conflicting with the proposed construction and obtain direction for the proper disposition of said conflicting existing facilities from the necessary entity at least 72 hours prior to construction. The Contractor shall take any and all necessary measures to protect all existing facilities which may be encountered that do not require ultimate removal.

For the project to be deemed complete, permanently stabilize all unpaved disturbed areas of the project with a vegetative cover at a minimum of 85% density for the control of erosion.

Repair or replace any structures and utilities that might have been damaged by negligence or a failure to have utility locates performed.

--General--

- G-3 Any materials removed and not reused and determined to be salvageable shall be stored within the project limits at an approved location or delivered undamaged to the storage yard as directed. Deface traffic signs so that they will not reappear in public as signs.
- G-4 Any sign panels that are adjusted or removed and replaced, shall be done the same workday unless otherwise approved. This work shall be considered subsidiary to Item 502.
- G-6 Locate and reference all manholes and valves within the construction area with station and offset or GPS. Each manhole and valve shall be identified by its owner (SAWS, CPS, etc.). No roadwork will begin until this list has been submitted. All valves and manhole covers have to be accessible at all times, therefore; temp. CTB, material stockpiles, etc. cannot be placed over these valves or covers.
- G-8 Hurricane Evacuation

Hurricane Season is from June 1 thru November 30. As the closest metropolitan city inland from the Texas Coast, the City of San Antonio is a major shelter destination during mandatory hurricane evacuations. As such, planned work zone lane or road closures may be restricted and/or suspended during mandatory hurricane evacuation operations. The District will coordinate these restrictions at a minimum H-120 from any projected impact to the Texas Coast.

County: Denton

Highway: VA

No time charges will be made if the Engineer determines that work on the project was impacted by the hurricane.

The Engineer may order changes in the Traffic Control Plan to accommodate evacuation traffic, and may suspend the work, all or in part, to ensure timely completion of this work. All work to implement changes in the Traffic Control Plan will be paid through existing bid prices or through Item 9.5, Force Account. However, the Department will not entertain any request for delay damages, loss of efficiency that may be attributed to the restriction or suspension of road or lane closures, or to changes in the Traffic Control Plan.

- G-10 If a sanitary sewer overflow (SSO) occurs:
1. Attempt to eliminate the source of the SSO.
 2. Contain sewage from the SSO to the extent possible to prevent contamination of waterways.
 3. Call City of Lewisville Public Services at (972) 219-3510.

- G-13 In accordance with the Underground Facility Damage Prevention Act (One Call Bill) the phone number for a utility locator is 811. It is the Contractor's responsibility to plan for utility locators as needed.

- G-14 Underground utilities owned by the Texas Department of Transportation may be present within the Right-Of-Way. Call or email the TxDOT offices listed below for locates a minimum of 48 hours in advance of excavation. If city or town owned irrigation facilities are present, call the appropriate department of the local city or town a minimum of 48 hours in advance of excavation. The Contractor is liable for all damages incurred to the above-mentioned utilities when working without having the utilities located prior to excavation.

For signal and ITS locates call TransGuide at 210-731-5136 or email sat_its_locates@txdot.gov for ITS locates and signal.request@txdot.gov for signal locates.

- G-15 Contractor questions on this project are to be addressed to the following individual(s):
Area Engineer, Amanda Miller, PE, Amanda.Moser@txdot.gov
Anthony Salinas, anthony.salinas@txdot.gov

Contractor questions will be accepted through email, phone and in person by the above individuals. Questions may also be submitted via the Letting Pre-Bid Q&A web page. This webpage can be accessed from the Notice to Contractors dashboard located at the following Address:

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

All contractor questions will be reviewed by the Engineer. All questions and any corresponding responses that are generated will be posted through the same Letting Pre-Bid Q&A web page.

County: Denton

Highway: VA

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

G-16 The Contractor must measure the vertical clearance at each structure after the final surface of the roadway is completed and provide the vertical clearance measurement to the Engineer.

--Item 2--

2-1 The Contractor is to take note that this project is based off A+B bid contracting (see Item 2 Article 11.5.2). Incentive/Disincentive provisions will apply to this project as per Special Provision to Item 8 (008—XXX) for both substantial completion of work and any milestone work. See notes under Items 2 and 8 below for the number of working days for the substantial completion of the project and any additional details.

Note G-1 is required on all projects with A+B bid contracting. A+B bidding requires approval by the District Engineer.

2-2 Notes for A+B Bidding
The maximum number of days allowed for substantial completion will be ___ working days.

The minimum number of days allowed for substantial completion will be ___ working days.
The default for minimum number of days allowed is 100 days unless the maximum number of days allowed for substantial completion is 100 days or less.

Note 2-2 is required on all projects with A+B bid contracting.

Refer to, "Accelerated Construction Guidelines," on the Construction Division site at www.txdot.gov for information and guidance.

--Item 5--

5-3 Prevention of Migratory Bird Nesting

It is anticipated that migratory birds, a protected group of species, may try to nest on bridges, culverts, vegetation, or gravel substrate, at any time of the year. The preferred nesting season for migratory birds is from February 15 through October 1. When practicable, schedule construction operations outside of the preferred nesting season. Otherwise, nests containing migratory birds must be avoided and no work will be performed in the nesting areas until the young birds have fledged.

Structures

Bridge and culvert construction operations cannot begin until swallow nesting prevention is implemented, until after October 1 if it's determined that swallow nesting is actively occurring,

County: Denton

Highway: VA

or until it's determined swallow nests have been abandoned. If the State installed nesting deterrent on the bridges and culverts, maintain the existing nesting deterrent to prevent swallow nesting until October 1 or completion of the bridge and culvert work, whichever occurs earlier. If new nests are built and occupied after the beginning of the work, do not perform work that can interfere with or discourage swallows from returning to their nests. Prevention of swallow nesting can be performed by one of the following methods:

1. By February 15 begin the removal of any existing mud nests and all other mud placed by swallows for the construction of nests on any portion of the bridge and culverts. The Engineer will inspect the bridges and culverts for nest building activity. If swallows begin nest building, scrape, or wash down all nest sites. Perform these activities daily unless the Engineer determines the need to do this work more frequently. Remove nests and mud through October 1 or until bridge and culvert construction operations are completed.
2. By February 15 place a nesting deterrent (which prevents access to the bridge and culvert by swallows) on the entire bridge (except deck and railing) and culverts. This work is subsidiary to the various bid items.

No extension of time or compensation payment will be granted for a delay or suspension of work caused by nesting swallows.

- 5-4 Provide a non-intrusive back-up alarm system on all heavy equipment used in close proximity to residential areas. This item is subsidiary to various bid items.
 - 5-5 When a precast or cast-in-place concrete element is included in the plans, a precast concrete alternate may be submitted in accordance with "Standard Operating Procedure for Alternate Precast Proposal Submission" found online at <https://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/publications/bridge.html#design>. Acceptance or denial of an alternate is at the sole discretion of the Engineer. Impacts to the project schedule and any additional costs resulting from the use of alternates are the sole responsibility of the Contractor.
 - 5-6 Excavation within 5 feet of an existing CPS Energy pole will require pole bracing. Contact CPS Energy utility coordination to request pole bracing (Customer Engineering 210-353-4050). The estimated duration for the pole bracing process is approximately 10 to 15 weeks.
- Item 6--**
- 6-1 Show the stockpile lot and/or sub lot numbers on all tickets for all materials.
 - 6-3 The Buy America Material Classification Sheet is located at the below link. <https://www.txdot.gov/business/resources/materials/buy-america-material-classification-sheet.html> for clarification on material categorization.

County: Denton

Highway: VA

--Item 7--

- 7-1A The project's total disturbed area is 2.06 acres. The disturbed area in all project locations and Contractor project specific locations (PSL's), within 1/4 mile of the project limits, will further establish the authorization requirements for storm water discharges. The department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. Obtain any required authorization from the TCEQ for any PSL's on or off the ROW. When the total area disturbed on the project and PSL's within 1/4 mile of the project exceeds 5 acres, provide a copy of the Contractor NOI for PSL's to the Engineer (to the appropriate MS4 operator when the project is on an off-state system route).
- 7-2 Notify the Engineer of the disturbed acreage within one (1) mile of the project limits. Obtain authorization from the TCEQ for Contractor PSL's for construction support activities on or off ROW.
- 7-3A No significant traffic generators events identified.
- 7-4 Law Enforcement patrol vehicles must be marked as "Police".

--Item 8--

- 8-1 Working days will be computed and charged in accordance with Article 8.3.1. Standard: Five-Day work week.
- 8-3 Create and maintain a Bar Chart schedule.

--Item 100--

- 100-1 Trim and remove brush and trees within the stations noted in the plans and as needed for construction operations. Unless shown otherwise in the plans or a designated non-mow area, perform trimming or removal for areas to the ROW limits. Trim or remove to provide minimum of 5 ft. of horizontal clearance and 7 ft. of vertical clearance for the following: sidewalks, paths, guard fence, rails, signs, object markers, and structures. Trim to provide a minimum of 12 ft. vertical clearance under all trees.

Obtain approval for proposed method of tree and brush trimming and removal. Vertical flailing equipment is not allowed. Treat damaged or cut branches, roots and/or stumps of all oak trees with a commercial tree wound dressing. Disinfect all pruning tools with a solution of 70% alcohol before moving from one tree to another. Unless otherwise approved remove all resulting vegetative debris from the ROW within 24 hours. The Engineer can stop all construction operations if the dressing, cut and removal requirements are not followed.
- 100-2 Removal and disposal of existing abandoned utilities that were unable to be identified before letting required to support this project's construction shall be performed under the overall

County: Denton

Highway: VA

Preparing Right of Way. If you are uncertain whether the utility is active, contact the District Utility Section.

--Item 132--

132-1 “Embankment (Final) (Dens Cont) (TY C1)” shall be completed per the provisions of TxDOT Item 132 and the recommendations of the Geotechnical Engineering Report and payment shall be made on the basis of price bid per cubic yard (CY) and shall not be measured. Payment will be made using the plan quantities given in the Bid Proposal. The CONTRACTOR shall be satisfied as to the amount of work involved prior to submitting the bid. All grading embankment and wasting of surplus and unsuitable material are subsidiary to this bid item. All work associated with embankment for the proposed trail improvements shall be in accordance with TxDOT Item 132 “Embankment”. There shall be no compensation for any quantities in addition to what is provided in the bid documents unless the lines and grades are changed by the Engineer.

--Item 162--

162-1 Furnish and place Bermuda grass sod.

--Item 164--

164-1 Drill seeding of permanent grasses requires the use of approved grass seeding equipment capable of properly storing and metering the release of small seeds (such as Bermuda grass) separately from fluffy type seeds (such as bluestems). Equipment manufactured for planting grain crops is acceptable for planting temporary cool season seeds, but not for planting the permanent seed mix.

If performing a permanent seeding in an area with established temporary grass cover and mowing is performed instead of tilling, seed and fertilizer may be distributed simultaneously during “Broadcast Seeding” operations, provided each component is applied at the specified rate.

--Item 166--

166-1 Use a fertilizer with an analysis of 13-13-13 (50% of the total N must be sulfur coated urea) to apply 60 lbs of actual N per acre. This requires 460 lbs of 13-13-13 per acre or .095 lbs per SY of area.

--Item 168--

168-1 Apply vegetative watering as needed to supplement natural rainfall during the vegetation establishment period. Plan quantity of irrigation water is based on the application of a total of 1.3 gal of water each week for each sq. yd. of area that is sodded or seeded. Establishment time is estimated to be 12 weeks for both sod and permanent seed mixes. Temporary seeding will require less time for establishment. Provide a schedule and coordinate watering cycles and rates per cycle with the Engineer. Obtain approval if the quantity of water to be applied is expected to exceed the plan quantity. Adjust the amount of water applied with each cycle and the number of cycles each wk. according to actual site conditions. Drought or other conditions, as determined

County: Denton

Highway: VA

by the Engineer, may require the application of supplemental irrigation during hours other than normal working hours.

--Item 420--

420-1 Mass concrete will be measured in place.

420-2 Pier and Bent Concrete will be paid for as "Plans Quantity".

--Item 423--

423-1 The backfill material for precast retaining walls shall be approved before placement. Build stockpile(s) in lifts not to exceed 2 feet and a minimum working face of not less than 10 feet, but not more than 20 feet.

423-2 Use the approved Concrete Block Retaining wall systems listed at:
[Concrete block retaining wall systems \(txdot.gov\)](http://www.txdot.gov/concrete-block-retaining-wall-systems)

423-3 Use the approved Mechanically Stabilized Earth (MSE) wall systems listed at:
[Mechanically stabilized earth \(txdot.gov\)](http://www.txdot.gov/mechanically-stabilized-earth)

TxDOT does not allow the use of experimental systems on projects with over 50,000 square feet, walls over 25 ft. tall, or walls supporting or immediately adjacent to US and interstate highways.

When proprietary wall systems are used, a qualified representative of the retaining wall manufacturer must be available upon request during wall construction. As requested, or required the manufacturer's representative must be on site to assist with the initial stages of wall construction, provide training to the Contractor wall crew and ensure proper interpretation of MSE wall shop drawings and details. Specific attention must be given to nonstandard wall installation details. The Contractor's wall crew foreman must be on site for the duration of wall construction. Any change to the wall crew foreman may require additional training by the wall supplier. The Contractor will ensure that the retaining walls are installed per the details presented in the construction drawings and as per the proprietary wall system requirements. The Engineer reserves the right to suspend wall construction activities due to any construction issue encountered.

Horizontal and vertical nail spacing on temp or permanent soil nail walls shall not exceed 4 ft.

Type DS material will be required on MSE walls in the area of the reinforcement mats.

--Item 496--

496-1 The Contractor will submit a demolition plan for all structures to be replaced and/or removed in accordance with Item 496.

496-2 The structure(s) to be removed have surface coatings that contain hazardous materials as follows:

County: Denton

Highway: VA

N/A

Provide for the safety and health of employees and abide by all OSHA Standards and Regulations. All costs incurred for proper management, shall be subsidiary to this Item.

--Item 500--

500-1 "Materials on Hand" payments will not be considered in determining percentages for mobilization payments.

--Item 502--

502-1 General

502-1A In addition to providing a Contractor's Responsible Person and a phone number for emergency contact, have an employee available to respond on the project for emergencies and for taking corrective measures within 2 hours or within a reasonable time frame as specified by the Engineer.

502-1B Treat the pavement drop-offs as shown in the TCP.

502-1C Avoid placing stockpiles, equipment, and other construction materials within the roadway's horizontal clear zone or at any location that will constitute a hazard and will endanger traffic. If a stockpile is placed within the clear zone, address in accordance with the TMUTCD.

502-1D If Nighttime work is required and work is not behind positive barrier then full Class 3 reflective gear is required to be worn by all workers, hard hat halos are required to be worn by the flaggers at flagging stations, TY III barricades are required to be spaced at 500 ft, and a mandatory night work meeting is required.

502-1E The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

Required on all projects. Need to show Contractors Force Account Work "Safety Contingency". Estimated @ 2% of the total Barricades cost. \$1,000 minimum; round up to the nearest \$100 thereafter.

502-1F Mounting and moving the mailbox as needed for the various construction phases is subsidiary to Item 502.

502-1G Access to adjoining property must be maintained at all times.

County: Denton

Highway: VA

- 502-2 Barricades, Signs, and Traffic Control Devices
- 502-2A When advanced warning flashing arrow panels and/or changeable message sign is specified, have one standby unit in good condition at the job site. Standby time shall be considered subsidiary to the bid item.
- 502-2B After written notification, the time frame is provided on the Form 599 to provide properly maintained signs and barricades before considered in non-compliance with this item.
- 502-2D Moving an existing sign to a temporary location is subsidiary to Item 502. Installations with permanent supports at permanent locations will be paid for under the applicable bid item(s).
- 502-2E Cover permanent signs if not used. This is subsidiary to Item 502.
- 502-5 Hauling
- 502-5A The use of rubber-tired equipment will be required for moving dirt or other materials along or across pavement surfaces. Where the contractor desires to move any equipment not licensed for operation on public highways, on or across pavement, they shall protect the pavement from damage as directed/approved by the Engineer.
- 502-5B Throughout construction operations, the Contractor will be required to conduct their hauling operations in a manner such that vehicles will not haul over previously recompacted subgrade or compacted base material, except in short sections for dumping manipulations.
- 502-5C The Contractor shall keep the roadway clean and free of dirt or other materials during hauling operations. If the Contractor does not maintain a clean roadway, they shall cease all construction operations, when directed by the Engineer, to clean the roadway to the satisfaction of the Engineer.
- Item 506--**
- 506-1B The Storm Water Pollution Prevention Plan (SWP3) consists of temporary erosion control measures needed and provided for under this Item. The disturbed area is less than one acre and use of erosion control measures is not anticipated. If physical conditions encountered at the job site require necessary controls, BMP installation, maintenance, and removal will be paid as extra work on a force account basis per Articles 4.4 and 9.7. An Inspector will perform a regularly scheduled SW3P inspection every 7 calendar days if erosion control measures are installed.
- 506-2 Failure to address items noted on the SW3P inspection report within two report cycles may result in the Department stopping all construction operations, exclusive of time charges, or withholding that month's estimate until the SW3P deficiencies are corrected unless the Engineer determines that the area is too wet to correct SW3P deficiencies.

County: Denton

Highway: VA

506-3 Failure to correctly maintain daily monitoring reports and submitting to TxDOT on a daily/weekly basis may result in the monthly estimate being withheld.

--Item 531--

531-1 The curb ramp locations shown in the plans have considered the geometric features of the intersection, traffic signals, and the pavement markings. If anything changes during construction, the location of curb ramps must be adjusted to ensure they meet TAS requirements.

--Item 628--

628-1 Make all arrangements for electrical service, and compliance with local standards and practices for proper installations.

--Item 644--

644-1 The wedge anchor system shown on State Standard Sheet SMD (TWT) is not allowed.

644-2 Triangular Slipbase Systems with set screws are not allowed.

--Item 666--

666-1 Use TY II markings (vs. an acrylic or epoxy) on asphalt surfaces as the sealer for the TY I markings, unless otherwise approved by the Engineer.

TEXAS DEPARTMENT OF TRANSPORTATION
GOVERNING SPECIFICATIONS AND SPECIAL PROVISIONS

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

STANDARD SPECIFICATIONS

ITEMS 1 TO 9L INCLUDED

ITEM 100	Preparing Right of Way (4) (5) (6)
ITEM 104	Removing Concrete (9)
ITEM 110	Excavation (9) (132)
ITEM 132	Embankment (7) (9) (100)
ITEM 162	Sodding for Erosion Control (166) (168)
ITEM 164	Seeding for Erosion Control (162) (166) (168)
ITEM 168	Vegetative Watering
ITEM 169	Soil Retention Blanket
ITEM 423	Retaining Walls (9) (110)
ITEM 432	Riprap (420)
ITEM 450	Railing (9) (420)
ITEM 462	Concrete Box Culverts and Drains (9) (420)
ITEM 464	Reinforced Concrete Pipe (9) (420)
ITEM 467	Safety End Treatment (420) (432)
ITEM 496	Removing Structures
ITEM 500	Mobilization
ITEM 502	Barricades, Signs, and Traffic Handling (5) (9)
ITEM 506	Temporary Erosion, Sedimentation, and Environmental Controls (432)
ITEM 531	Sidewalks (104) (420) (530)
ITEM 628	Electrical Services
ITEM 644	Small Roadside Sign Assemblies (421)
ITEM 666	Reflectorized Pavement Markings (9) (678)
ITEM 678	Pavement Surface Preparation for Markings (9)

SPECIAL PROVISIONS

SP 000-001L	Nondiscrimination
SP 000-002L	Certification of Nondiscrimination in Employment
SP 000-007L	Cargo Preference Act Requirements in Federal Aid Contracts
SP 000-018L	Schedule of Liquidated Damages
SP 000-019L	Small Business Enterprise in State Funded Construction
SP 000-020L	Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)
SP 000-022L	Disadvantaged Business Enterprise in Federal Aid Contracts
SP 006-005L	Control of Materials
SP 506-001L	Temporary Erosion, Sedimentation, and Environmental Controls

SPECIAL SPECIFICATIONS

SS9606	Force Account – Safety Contingency
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END OF SECTION

Special Provision to Item 000

Nondiscrimination



1. DESCRIPTION

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

The Owner, as a recipient of federal financial assistance, and under Title VI and related statutes, ensures that no person will on the grounds of race, religion (where the primary objective of the financial assistance is to provide employment in accordance with 42 USC 2000d-3), color, national origin, sex, age, or disability be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any of Owner's programs or activities.

2. DEFINITION OF TERMS

Where the term "Contractor" appears in the following six nondiscrimination clauses, the term "Contractor" is understood to include all parties to Contracts or agreements with the Owner.

3. NONDISCRIMINATION PROVISIONS

During the performance of this Contract, the Contractor agrees as follows.

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

determine to be appropriate, including, but not limited to actions defined in Article 5.1., "Authority of Engineer."

- 3.6. **Incorporation of Provisions.** The Contractor must include the provisions of Sections 3.1–3.6 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Contractor must take such action with respect to any subcontract or procurement as the Owner may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that, in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the Owner to enter into such litigation to protect the interests of the Owner, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Special Provision to Item 000

Certification of Nondiscrimination in Employment



1. GENERAL

By signing this proposal, the Bidder certifies that it has participated in a previous Contract or subcontract subject to the equal opportunity clause, as required by Executive Order (EO) 10925, 11114, or 11246, or if it has not participated in a previous Contract of this type, or if it has had previous Contracts or subcontracts and has not filed, it will file with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity (EEO), all reports due under the applicable filing requirements.

Note—The above certification is required by the EEO Regulations of the Secretary of Labor [41 CFR 60-1.7(b)(1)], and must be submitted by Bidders and proposed subcontractors only in connection with Contracts and subcontracts that are subject to the equal opportunity clause. Contracts and subcontracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only Contracts or subcontracts of \$10,000 or less are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the EOs or their implementing regulations.

Proposed prime Contractors and subcontractors that have participated in a previous Contract or subcontract subject to the EO and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of Contracts and subcontracts unless such Contractor submits a report covering the delinquent period or such other period specified by FHWA or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

Special Provision 000

Cargo Preference Act Requirements in Federal Aid Contracts



1. DESCRIPTION

All recipients of federal financial assistance are required to comply with the U.S. Department of Transportation's Cargo Preference Act requirements, 46 CFR 381, "Use of United States-Flag Vessels."

This requirement applies to material or equipment that is acquired specifically for a federal-aid highway project. It is not applicable to goods or materials that come into inventories independent of an FHWA-funded Contract.

When oceanic shipments are necessary for materials or equipment acquired for a specific federal-aid construction project, the Contractor agrees to:

- use privately owned United States-flag commercial vessels to ship at least 50% of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this Contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels;
- furnish a legible copy of a rated, onboard commercial ocean bill of lading in English for each shipment of cargo described in Paragraph (b)(1) of 46 CFR 381, Section 7, "Federal Grant, Guaranty, Loan and Advance of Funds Agreements," within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, to both the Engineer (through the prime Contractor in the case of subcontractor bills of lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590; and
- insert the substance of the provisions of this clause in all subcontracts issued pursuant to this Contract.

Special Provision to Item 000

Schedule of Liquidated Damages



The dollar amount of daily contract administration Liquidated Damages per Working Day is \$1,000.00.

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

Special Provision to Item 000

Small Business Enterprise in State-Funded Projects



1. DESCRIPTION

The purpose of this Special Provision is to implement the Texas Department of Transportation's policy of ensuring that SBEs have an opportunity to participate in the performance of Contracts. If the SBE goal is greater than zero, Section 2.1., "Article A—SBE Goal is Greater than Zero," will apply to this Contract; otherwise, Section 2.2., "Article B—No SBE Goal," will apply. The percentage goal for SBE participation in the work to be performed under this Contract will be in accordance with the proposal.

2. DEFINITIONS

A Small Business Enterprise (SBE) is a firm certified as such by the Texas Department of Transportation. Firms certified as Historically Underutilized Businesses (HUBs) by the Texas Comptroller of Public Accounts and as Disadvantaged Business Enterprises (DBEs) by the Texas Uniform Certification Program automatically qualify as SBEs.

2.1. Article A—SBE Goal is Greater than Zero.

2.1.1. **Policy.** The Owner is committed to providing contracting opportunities for small businesses. Therefore, it is the Owner's policy to develop and maintain a program to facilitate contracting opportunities for small businesses. Consequently, the requirements of the Owner's SBE Program apply to this Contract as follows.

The Contractor will make a good faith effort to meet the SBE goal for this Contract.

The Contractor and any subcontractors will not discriminate on the basis of race, color, national origin, age, disability, or sex in the award and performance of this Contract. These nondiscrimination requirements must be incorporated into any subcontract and purchase order.

After a conditional award is made to the low Bidder, the Owner will determine the adequacy of a Contractor's efforts to meet the Contract goal, in accordance with Section 2.1.2., "Contractor's Responsibilities." If the requirements in accordance with Section 2.1.2., "Contractor's Responsibilities," are met, the Contract will be forwarded to the Contractor for execution.

The Contractor's performance in meeting the SBE goal during the construction period of the Contract will be monitored by the Owner.

2.1.2. **Contractor's Responsibilities.** These requirements must be satisfied by the Contractor. An SBE Contractor may satisfy the SBE requirements by performing at least 25% of the Contract work with their own organization in accordance with Item 8, "Prosecution and Progress."

The Contractor must complete an SBE Commitment Agreement Form for each SBE-certified firm the Contractor intends to use to satisfy the SBE goal. The SBE Commitment Agreement Form must be submitted to the Owner so as to arrive no later than 5 P.M. on the 10th business day, excluding national holidays, after the conditional award of the Contract. When requested, additional time not to exceed 7 business days, excluding national holidays, may be granted based on documentation submitted by the Contractor.

A Contractor that cannot meet the Contract goal, in whole or in part, must document the good faith efforts taken to meet the SBE goal. The Owner will consider as good faith efforts all documented explanations that are submitted and that describe a Contractor's failure to meet an SBE goal or obtain SBE participation, including:

- advertising in general circulation, trade association, and minority- or women-focused media regarding subcontracting opportunities,
- dividing the Contract work into reasonable portions in conformance with standard industry practices,
- documenting reasons for rejection or meeting with the rejected SBE to discuss the rejection,
- providing qualified SBEs with adequate information pertinent to bonding, insurance, plans, Specifications, scope of work, and the requirements of the Contract,
- negotiating in good faith with qualified SBEs, not rejecting qualified SBEs that are also the lowest responsive Bidder; and
- using the services of available minorities and women; community organizations; Contractor groups; local, state, and federal business assistance offices; and other organizations that provide support services to SBEs.

The good faith effort documentation is due to the Owner at the time and place in accordance with this Section. The Owner will evaluate the Contractor's documentation. If it is determined that the Contractor has failed to meet the good faith effort requirements, the Contractor will be given an opportunity for reconsideration by the Owner.

Should the Bidder to which the Contract is conditionally awarded refuse, neglect, or fail to meet the SBE goal or demonstrate to the Owner's satisfaction sufficient efforts to obtain SBE participation, the proposal guaranty filed with the bid will become the property of the Owner, not as a penalty, but as liquidated damages to the Owner.

The Contractor must not terminate an SBE subcontractor submitted on a commitment agreement for a Contract with an assigned goal without the prior written consent of the Owner.

The Contractor must designate an SBE contact person who will administer the Contractor's SBE program and who will be responsible for submitting reports, maintaining records, and documenting good faith efforts to use SBEs.

The Contractor must inform the Owner of the representative's name, title, and telephone number within 10 days of beginning work.

2.1.3. **Eligibility of SBEs.** The Texas Department of Transportation certifies the eligibility of SBEs.

Firms certified as SBEs are listed on the Texas Department of Transportation's online directory located at <https://txdot.txdotcms.com/>.

Only firms certified at the time of letting or at the time the commitments are submitted are eligible to be used in the information furnished by the Contractor in accordance with Section 2.1.2., "Contractor's Responsibilities."

Certified HUBs and DBEs are eligible as SBEs.

The Texas Department of Transportation's SBE Program is governed by 43 TAC, Chapter 9, Subchapter K, "Small Business Enterprise (SBE) Program."

2.1.4. **Determination of SBE Participation.** SBE participation will be counted toward meeting the SBE goal in this Contract in accordance with the following.

A Contractor will receive credit for all payments actually made to an SBE for work performed and costs incurred in accordance with the Contract, including all subcontracted work.

An SBE Contractor or subcontractor may not subcontract more than 75% of a Contract. The SBE must perform no less than 25% of the value of the Contract work with their own organization in accordance with Item 8.

An SBE may lease equipment consistent with standard industry practice. An SBE may lease equipment from the prime Contractor if a rental agreement, separate from the subcontract specifying the terms of the lease arrangement, is approved by the Owner before the SBE starting the work in accordance with the following.

- If the equipment is of a specialized nature, the lease may include the operator. If the practice is generally acceptable with the industry, the operator may remain on the lessor's payroll. The operator of the equipment must be subject to the full control of the SBE, for a short term, and involve a specialized piece of heavy equipment readily available at the jobsite.
- For equipment that is not specialized, the SBE must provide the operator and be responsible for all payroll and labor compliance requirements.

- 2.1.5. **Records and Reports.** The Contractor must submit monthly reports of SBE payments (including payments to HUBs and DBEs) to the Owner's Office after work begins. These reports will be due within 15 days after the end of a calendar month.

These reports will be required until all SBE subcontracting or supply activity is completed. The SBE Progress Report must be used for monthly reporting. Upon completion of the Contract and before receiving the final payment, the Contractor must submit the SBE Final Report to the Owner's Office. These forms may be obtained from the Owner and reproduced as necessary. The Owner may verify the amounts being reported as paid to SBEs by randomly requesting copies of invoices and cancelled checks paid to SBEs. When the SBE goal requirement is not met, documentation supporting good faith efforts, in accordance with Section 2.1.2., "Contractor's Responsibilities," must be submitted with the SBE Final Report.

SBE subcontractors and suppliers should be identified on the monthly report by SBE certification number, name, and the amount of actual payment made to each during the monthly period. These reports are required regardless of whether SBE activity has occurred in the monthly reporting period.

All such records must be retained for 3 yr. following completion of the Contract work and be available at reasonable times and places for inspection by authorized representatives of the Owner.

- 2.1.6. **Compliance of Contractor.** To ensure compliance with SBE requirements of this Contract, the Owner will monitor the Contractor's efforts to involve SBEs during the performance of this Contract. This will be accomplished by a review of monthly reports submitted by the Contractor indicating their progress in achieving the SBE Contract goal and by compliance reviews conducted by the Owner.

A Contractor's failure to comply with the requirements of this Special Provision will constitute a material breach of this Contract. In such a case, the Owner reserves the right to employ remedies as the Owner deems appropriate in the terms of the Contract.

- 2.2. **Article B—No SBE Goal.**

- 2.2.1. **Policy.** It is the Owner's policy that SBEs will have an opportunity to participate in the performance of Contracts.

- 2.2.2. **Contractor's Responsibilities.** If there is no SBE goal, the Contractor must offer SBEs an opportunity to participate in the performance of Contracts and subcontracts. If an SBE is used, the requirements in accordance with Section 2.1.4., "Determination of SBE Participation," will apply.

- 2.2.3. **Prohibit Discrimination.** The Contractor and any subcontractor will not discriminate on the basis of race, color, national origin, religion, age, disability, or sex in the award and performance of Contracts. These nondiscrimination requirements must be incorporated into any subcontract and purchase order.

- 2.2.4. **Records and Reports.** The Contractor must submit annual reports pertinent to SBEs (including HUBs and DBEs) to the Owner's Office by August 31 or at project completion, whichever comes first.

These reports will be required until all SBE subcontracting or supply activity is completed. The SBE Progress Report must be used for reporting. Upon completion of the Contract and before receiving the final payment, the Contractor must submit the SBE Final Report to the Owner's Office. These forms may be obtained from the Owner and reproduced as necessary. The Owner may verify the amounts being reported as paid to SBEs by randomly requesting copies of invoices and cancelled checks paid to SBEs.

SBE subcontractors and suppliers should be identified on the report by SBE certification number, name, and the amount of actual payment made.

All such records must be retained for 3 yr. following completion of the Contract work and be available at reasonable times and places for inspection by authorized representatives of the Owner.

Special Provision to Item 000

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)



1. GENERAL

In addition to the affirmative action requirements of the Special Provision titled “Standard Federal Equal Employment Opportunity Construction Contract Specifications” as set forth elsewhere in this proposal, the Bidder’s attention is directed to the specific requirements for use of minorities and females as set forth below.

2. GOALS

Goals for minority and female participation are hereby established in accordance with 41 CFR 60-4.

The goals for minority and female participation expressed in percentage terms for the Contractor’s aggregate workforce in each trade on all construction work in the covered area are as follows:

Goals for Minority Participation in Each Trade (%)	Goals for Female Participation in Each Trade (%)
See Table 1	6.9

These goals are applicable to all the Contractor’s construction work (whether it is federal or federally assisted or not) performed in the covered area. If the Contractor performs construction work in a geographical area located outside the covered area, it will apply the goals established for such geographical area where the work is actually performed. Regarding this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction. The Contractor’s compliance with the Executive Order (EO) and the regulations in 41 CFR 60-4 will be based on its implementation of the Standard Federal Equal Employment Opportunity Construction Contract Specifications Special Provision and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the Contract, and in each trade, and the Contractor must make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority and female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor’s goals will be a violation of the Contract, the EO, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

The overall good performance of other Contractors and subcontractors toward a goal in an approved plan does not excuse any covered Contractor’s or subcontractor’s failure to make good faith efforts to achieve the goals contained in these provisions. Contractors or subcontractors participating in the plan must be able to demonstrate their participation and document their compliance with the provisions of this plan.

3. SUBCONTRACTING

The Contractor must provide written notification to the Department within 10 working days of award of any construction subcontract more than \$10,000 at any tier for construction work under the Contract resulting from this solicitation pending concurrence of the Department in the award. The notification will list the names, address, and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and geographical area in which the Contract is to be performed.

4. COVERED AREA

As used in this Special Provision, and in the Contract resulting from this solicitation, the geographical area covered by these goals for female participation is the State of Texas. The geographical area covered by these goals for other minorities comprises the counties in the State of Texas as indicated in Table 1.

5. REPORTS

The Contractor is hereby notified that he may be subject to the Office of Federal Contract Compliance Programs (OFCCP) reporting and recordkeeping requirements as provided for under EO 11246 as amended. OFCCP will provide direct notice to the Contractor as to the specific reporting requirements that it will be expected to fulfill.

**Table 1
Goals for Minority Participation**

County	Participation, %	County	Participation, %
Anderson	22.5	Chambers	27.4
Andrews	18.9	Cherokee	22.5
Angelina	22.5	Childress	11.0
Aranas	44.2	Clay	12.4
Archer	11.0	Cochran	19.5
Armstrong	11.0	Coke	20.0
Atascosa	49.4	Coleman	10.9
Austin	27.4	Collin	18.2
Bailey	19.5	Collingsworth	11.0
Bandera	49.4	Colorado	27.4
Bastrop	24.2	Comal	47.8
Baylor	11.0	Comanche	10.9
Bee	44.2	Concho	20.0
Bell	16.4	Cooke	17.2
Bexar	47.8	Coryell	16.4
Blanco	24.2	Cottle	11.0
Borden	19.5	Crane	18.9
Bosque	18.6	Crockett	20.0
Bowie	19.7	Crosby	19.5
Brazoria	27.3	Culberson	49.0
Brazos	23.7	Dallam	11.0
Brewster	49.0	Dallas	18.2
Briscoe	11.0	Dawson	19.5
Brooks	44.2	Deaf Smith	11.0
Brown	10.9	Delta	17.2
Burleson	27.4	Denton	18.2
Burnet	24.2	DeWitt	27.4
Caldwell	24.2	Dickens	19.5
Calhoun	27.4	Dimmit	49.4
Callahan	11.6	Donley	11.0
Cameron	71.0	Duval	44.2
Camp	20.2	Eastland	10.9
Carson	11.0	Ector	15.1
Cass	20.2	Edwards	49.4
Castro	11.0	Ellis	18.2

County	Participation, %	County	Participation, %
El Paso	57.8	Kenedy	44.2
Erath	17.2	Kent	10.9
Falls	18.6	Kerr	49.4
Fannin	17.2	Kimble	20.0
Fayette	27.4	King	19.5
Fisher	10.9	Kinney	49.4
Floyd	19.5	Kleberg	44.2
Foard	11.0	Knox	10.9
Fort Bend	27.3	Lamar	20.2
Franklin	17.2	Lamb	19.5
Freestone	18.6	Lampasas	18.6
Frio	49.4	LaSalle	49.4
Gaines	19.5	Lavaca	27.4
Galveston	28.9	Lee	24.2
Garza	19.5	Leon	27.4
Gillespie	49.4	Liberty	27.3
Glasscock	18.9	Limestone	18.6
Goliad	27.4	Lipscomb	11.0
Gonzales	49.4	Live Oak	44.2
Gray	11.0	Llano	24.2
Grayson	9.4	Loving	18.9
Gregg	22.8	Lubbock	19.6
Grimes	27.4	Lynn	19.5
Guadalupe	47.8	Madison	27.4
Hale	19.5	Marion	22.5
Hall	11.0	Martin	18.9
Hamilton	18.6	Mason	20.0
Hansford	11.0	Matagorda	27.4
Hardeman	11.0	Maverick	49.4
Hardin	22.6	McCulloch	20.0
Harris	27.3	McLennan	20.7
Harrison	22.8	McMullen	49.4
Hartley	11.0	Medina	49.4
Haskell	10.9	Menard	20.0
Hays	24.1	Midland	19.1
Hemphill	11.0	Milam	18.6
Henderson	22.5	Mills	18.6
Hidalgo	72.8	Mitchell	10.9
Hill	18.6	Montague	17.2
Hockley	19.5	Montgomery	27.3
Hood	18.2	Moore	11.0
Hopkins	17.2	Morris	20.2
Houston	22.5	Motley	19.5
Howard	18.9	Nacogdoches	22.5
Hudspeth	49.0	Navarro	17.2
Hunt	17.2	Newton	22.6
Hutchinson	11.0	Nolan	10.9
Irion	20.0	Nueces	41.7
Jack	17.2	Ochiltree	11.0
Jackson	27.4	Oldham	11.0
Jasper	22.6	Orange	22.6
Jeff Davis	49.0	Palo Pinto	17.2
Jefferson	22.6	Panola	22.5
Jim Hogg	49.4	Parker	18.2
Jim Wells	44.2	Parmer	11.0
Johnson	18.2	Pecos	18.9
Jones	11.6	Polk	27.4
Karnes	49.4	Potter	9.3
Kaufman	18.2	Presidio	49.0
Kendall	49.4	Randall	9.3

County	Participation, %	County	Participation, %
Rains	17.2	Reagan	20.0
Real	49.4	Throckmorton	10.9
Red River	20.2	Titus	20.2
Reeves	18.9	Tom Green	19.2
Refugio	44.2	Travis	24.1
Roberts	11.0	Trinity	27.4
Robertson	27.4	Tyler	22.6
Rockwall	18.2	Upshur	22.5
Runnels	20.0	Upton	18.9
Rusk	22.5	Uvalde	49.4
Sabine	22.6	Val Verde	49.4
San Augustine	22.5	Van Zandt	17.2
San Jacinto	27.4	Victoria	27.4
San Patricio	41.7	Walker	27.4
San Saba	20.0	Waller	27.3
Schleicher	20.0	Ward	18.9
Scurry	10.9	Washington	27.4
Shackelford	10.9	Webb	87.3
Shelby	22.5	Wharton	27.4
Sherman	11.0	Wheeler	11.0
Smith	23.5	Wichita	12.4
Somervell	17.2	Wilbarger	11.0
Starr	72.9	Willacy	72.9
Stephens	10.9	Williamson	24.1
Sterling	20.0	Wilson	49.4
Stonewall	10.9	Winkler	18.9
Sutton	20.0	Wise	18.2
Swisher	11.0	Wood	22.5
Tarrant	18.2	Yoakum	19.5
Taylor	11.6	Young	11.0
Terrell	20.0	Zapata	49.4
Terry	19.5	Zavala	49.4

Special Provision to Item 000

Disadvantaged Business Enterprise in Federal-Aid Contracts



1. DESCRIPTION

The purpose of this Special Provision is to carry out the U.S. Department of Transportation's (DOT) policy of ensuring nondiscrimination in the award and administration of DOT-assisted Contracts and creating a level playing field on which firms owned and controlled by individuals who are determined to be socially and economically disadvantaged can compete fairly for DOT-assisted Contracts.

2. DISADVANTAGED BUSINESS ENTERPRISE IN FEDERAL-AID CONTRACTS

2.1. **Policy.** It is the policy of the DOT and the Texas Department of Transportation (Department) that DBEs, as defined in 49 CFR Part 26, Subpart A, and the Department's DBE Program, will have the opportunity to participate in the performance of Contracts financed in whole or in part with federal funds. The DBE requirements of 49 CFR Part 26, and the Department's DBE Program, apply to this Contract as follows.

The Contractor must solicit DBEs through reasonable and available means, as defined in 49 CFR Part 26, Appendix A, and the Department's DBE Program, or show a good faith effort to meet the DBE goal for this Contract.

The Contractor, subrecipient, or subcontractor will not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. Carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted Contracts. Failure to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as the Owner deems appropriate.

The requirements of this Special Provision must be physically included in any subcontract.

By signing the Contract proposal, the Bidder is certifying that the DBE goal as stated in the proposal will be met by obtaining commitments from eligible DBEs or that the Bidder will provide acceptable evidence of good faith effort to meet the commitment.

2.2. Definitions.

2.2.1. **Administrative Reconsideration.** A process by which the low bidder may request reconsideration when the Department determines the good faith effort (GFE) requirements have not been met.

2.2.2. **Commercially Useful Function (CUF).** A CUF occurs when a DBE has the responsibility for the execution of the work and carrying out such responsibilities by actually performing, managing, and supervising the work.

2.2.3. **Disadvantaged Business Enterprise (DBE).** A for-profit small business certified through the Texas Unified Certification Program in accordance with 49 CFR Part 26, that is at least 51% owned by one or more socially and economically disadvantaged individuals, or in the case of a publicly owned business, in which is at least 51% of the stock is owned by one or more socially and economically disadvantaged individuals, and whose management and daily business operations are controlled by one or more of the individuals who own it.

- 2.2.4. **DBE Joint Venture.** An association of a DBE firm and one or more other firms to carry out a single business enterprise for profit for which purpose they combine their property, capital, efforts, skills, and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the Contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.
- 2.2.5. **DOT.** The U.S. Department of Transportation, including the Office of the Secretary, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Federal Aviation Administration (FAA).
- 2.2.6. **Federal-Aid Contract.** Any Contract between the Owner and a Contractor that is paid for in whole or in part with DOT financial assistance.
- 2.2.7. **Good Faith Effort.** All necessary and reasonable steps to achieve the contract goal which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain enough DBE participation, even if not fully successful. Good faith efforts are evaluated before award and throughout performance of the Contract. For guidance on good faith efforts, see 49 CFR Part 26, Appendix A.
- 2.2.8. **North American Industry Classification System (NAICS).** A designation that best describes the primary business of a firm. The NAICS is described in the North American Industry Classification Manual—United States, which is available on the Internet at the U.S. Census Bureau website: <https://www.census.gov/naics/>.
- 2.2.9. **Race-Conscious.** A measure or program that is focused specifically on assisting only DBEs, including women-owned businesses.
- 2.2.10. **Race-Neutral DBE Participation.** Any participation by a DBE through customary competitive procurement procedures.
- 2.2.11. **Texas Unified Certification Program (TUCP) Directory.** An online directory listing all DBEs currently certified by the TUCP. The Directory identifies DBE firms whose participation on a Contract may be counted toward achievement of the assigned DBE Contract goal.
- 2.3. **Contractor's Responsibilities.**
- 2.3.1. **DBE Liaison Officer.** Designate a DBE liaison officer who will administer the Contractor's DBE program and who will be responsible for maintenance of records of efforts and contacts made to subcontract with DBEs.
- 2.3.2. **Compliance Tracking System (CTS).** This Contract is subject to Contract compliance tracking. Contractors and DBEs are required to provide any noted and requested Contract compliance-related data to the Owner. This includes, but is not limited to, commitments, payments, substitutions, and good faith efforts. Contractors and DBEs are responsible for responding by any noted response date or due date to any instructions or request for information by the Owner, and to check the system on a regular basis. A Contractor is responsible for ensuring all DBEs have completed all requested items and that their contact information is accurate and up-to-date. The Owner may require additional information related to the Contract to be provided at any time before, during, or after contract award.
- In its sole discretion, the Owner may require that contract compliance tracking data be submitted by Contractors and DBEs in an alternative format prescribed by the Owner.
- 2.3.3. **Apparent Low Bidder.** The apparent low bidder must submit DBE commitments to satisfy the DBE goal or submit good faith effort Form 2603 and supporting documentation demonstrating why the goal could not be achieved, in whole or part, no later than 5 calendar days after bid opening. The means of transmittal and the risk of timely receipt of the information will be the bidder's responsibility and no extension of the 5-calendar-day timeframe will be allowed for any reason.

2.3.4. **DBE Contractor.** A DBE Contractor may receive credit toward the DBE goal for work performed by its own forces and work subcontracted to DBEs. If a DBE subcontracts to a non-DBE, that information must be reported monthly.

2.3.5. **DBE Committal.** Only those DBEs certified by the TUCP are eligible to be used for goal attainment. The Department maintains the TUCP DBE Directory. The Directory can be accessed at the following Internet address: <https://txdot.txdotcms.com/>.

A DBE must be certified on the day the commitment is considered and at time of subcontract execution. It is the Contractor's responsibility to ensure firms identified for participation are approved certified DBE firms.

The Bidder is responsible to ensure that all submittals are checked for accuracy. Any and all omissions, deletions, and/or errors that may affect the end result of the commitment package are the sole liabilities of the bidder.

Commitments in excess of the goal are considered race-neutral commitments.

2.3.6. **Good Faith Effort Requirements.** A Contractor who cannot meet the Contract goal, in whole or in part, must make adequate good faith efforts to obtain DBE participation as so stated and defined in 49 CFR Part 26, Appendix A.

2.3.6.1. **Administrative Reconsideration.** If the Owner determines that the apparent low bidder has failed to satisfy the good faith efforts requirement, the Owner will notify the Bidder of the failure and will give the Bidder an opportunity to provide written documentation or argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so.

The Bidder must request an administrative reconsideration of that determination within 3 days of the date of receipt of the notice. The request must be submitted directly to the Owner.

If a request for administrative reconsideration is not filed within the period specified the determination made is final and further administrative appeal is barred.

If a reconsideration request is timely received, the reconsideration decision will be made by the Department's DBE liaison officer or, if the DBE liaison officer took part in the original determination, the Department's executive director will appoint a department employee to perform the administrative reconsideration. The employee will hold a senior leadership position and will report directly to the executive director.

The meeting or written documentation must be provided or held within 7 days of the date the request was submitted.

The Department will provide to the Owner a written decision, which will then be provided to the Bidder if the Bidder did or did not make adequate good faith efforts to meet the Contract goal. The reconsideration decision is final and is not administratively appealed to DOT.

2.3.7. **Determination of DBE Participation.** The work performed by the DBE must be reasonably construed to be included in the work area and NAICS work code identified by the Contractor in the approved commitment.

Participation by a DBE on a Contract will not be counted toward DBE goals until the amount of the participation has been paid to the DBE.

Payments made to a DBE that was not on the original commitment may be counted toward the Contract goal if that DBE was certified as a DBE before the execution of the subcontract and has performed a Commercially Useful Function.

The total amount paid to the DBE for work performed with its own forces is counted toward the DBE goal. When a DBE subcontracts part of the work of its Contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the subcontractor is itself a DBE.

DBE Goal credit for the DBE subcontractors leasing of equipment or purchasing of supplies from the Contractor or its affiliates is not allowed. Project materials or supplies acquired from an affiliate of the Contractor cannot directly or indirectly (second or lower tier subcontractor) be used for DBE goal credit.

If a DBE firm is declared ineligible due to DBE decertification after the execution of the DBE's subcontract, the DBE firm may complete the work and the DBE firm's participation will be counted toward the Contract goal. If the DBE firm is decertified before the DBE firm has signed a subcontract, the Contractor is obligated to replace the ineligible DBE firm or demonstrate that it has made good faith efforts to do so.

The Contractor may count 100% of its expenditure to a DBE manufacturer. According to 49 CFR 26.55(e)(1)(i), a DBE manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the Contract and of the general character described by the specifications.

The Contractor may count only 60% of its expenditure to a DBE regular dealer. According to 49 CFR 26.55(e)(2)(i), a DBE regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment of the general character described by the specifications and required under the Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. A firm may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business if the firm both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment must be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis. A long-term lease with a third-party transportation company is not eligible for 60% goal credit.

With respect to materials or supplies purchased from a DBE that is neither a manufacturer nor a regular dealer, the Contractor may count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a jobsite.

A Contractor may count toward its DBE goal a portion of the total value of the Contract amount paid to a DBE joint venture equal to the distinct, clearly defined portion of the work of the Contract performed by the DBE.

2.3.8. **Commercially Useful Function.** It is the Contractor's obligation to ensure that each DBE used on federal-assisted contracts performs a commercially useful function on the Contract.

The Owner will monitor performance during the Contract to ensure each DBE is performing a CUF.

Under the terms established in 49 CFR 26.55, a DBE performs a CUF when it is responsible for execution of the work of the Contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved.

With respect to material and supplies used on the Contract, a DBE must be responsible for negotiating price, determining quality and quantity, ordering the material, installing the material, if applicable, and paying for the material itself.

With respect to trucking, the DBE trucking firm must own and operate at least one fully licensed, insured, and operational truck used on the Contract. The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the Contract. The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE that leases trucks equipped

with drivers from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE leased trucks equipped with drivers not to exceed the value of transportation services on the Contract provided by DBE-owned trucks or leased trucks with DBE employee drivers. Additional participation by non-DBE owned trucks equipped with drivers receives credit only for the fee or commission it receives as a result of the lease arrangement.

A DBE does not perform a CUF when its role is limited to that of an extra participant in a transaction, Contract, or project through which funds are passed to obtain the appearance of DBE participation. The Owner will evaluate similar transactions involving non-DBEs to determine whether a DBE is an extra participant.

If a DBE does not perform or exercise responsibility for at least 30% of the total cost of its Contract with its own work force, or the DBE subcontracts a greater portion of the work than would be expected on the basis of normal industry practice for the type of work involved, the Owner will presume that the DBE is not performing a CUF.

If the Owner determines that a DBE is not performing a CUF, no work performed by such DBE will count as eligible participation. The denial period of time may occur before or after a determination has been made by the Owner.

In case of the denial of credit for non-performance of a CUF, the Contractor will be required to provide a substitute DBE to meet the Contract goal or provide an adequate good faith effort when applicable.

- 2.3.8.1. **Rebuttal of a Finding of No Commercially Useful Function.** Consistent with the provisions of 49 CFR 26.55(c)(4)&(5), before the Owner makes a final finding that no CUF has been performed by a DBE, the Owner will notify the DBE and provide the DBE the opportunity to provide rebuttal information.

CUF determinations are not subject to administrative appeal to DOT.

- 2.3.9. **Joint Check.** The use of joint checks between a Contractor and a DBE is allowed with Owner approval. To obtain approval, the Contractor must submit a completed Form 2178, "DBE Joint Check Approval," to the Owner.

The Owner will closely monitor the use of joint checks to ensure that such a practice does not erode the independence of the DBE nor inhibit the DBE's ability to perform a CUF. When joint checks are used, DBE credit toward the Contract goal will be allowed only when the subcontractor is performing a CUF in accordance with 49 CFR 26.55(c)(1).

Long-term or open-ended joint checking arrangements may be a basis for further scrutiny and may result in the lack of participation towards the Contract goal requirement if DBE independence cannot be established.

Joint checks will not be allowed simply for the convenience of the Contractor.

If the proper procedures are not followed or the Owner determines that the arrangements result in a lack of independence for the DBE involved, no credit for the DBE's participation as it relates to the material cost will be used toward the Contract goal requirement, and the Contractor will need to make up the difference elsewhere on the project.

- 2.3.10. **DBE Termination and Substitution.** No DBE named in the commitment submitted under Section 2.3.5. will be terminated for convenience, in whole or part, without the Owner's approval. This includes, but is not limited to, instances in which a Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

Unless consent is provided, the Contractor will not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.

The Contractor, before submitting its request to terminate, must first give written notice to the DBE of its intent to terminate and the reason for the termination. The Contractor will copy the Owner on the Notice of Intent to terminate.

The DBE has 5 calendar days to respond to the Contractor's notice and will advise the Contractor and the Owner of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Owner should not approve the prime Contractor's request for termination.

The Owner may provide a shorter response time if required in a particular case as a matter of public necessity.

The Owner will consider both the Contractor's request and DBE's stated position before approving the request. The Owner may provide a written approval only if it agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate the DBE. If the Owner does not approve the request, the Contractor must continue to use the committed DBE firm in accordance with the Contract. For guidance on what good cause includes, see 49 CFR 26.53.

Good cause does not exist if the Contractor seeks to terminate, reduce, or substitute a DBE it relied upon to obtain the Contract so that the Contractor can self-perform the work for which the DBE firm was engaged.

When a DBE subcontractor is terminated, make good faith efforts to find, as a substitute for the original DBE, another DBE to perform, at least to the extent needed to meet the established Contract goal, the work that the original DBE was to have performed under the Contract.

Submit the completed Form 2228, "DBE Termination Substitution Request," within seven (7) days, which may be extended for an additional 7 days if necessary at the request of the Contractor. The Owner will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated. If the Owner determines that good faith efforts were not demonstrated, the Contractor will have the opportunity to appeal the determination to the Department.

- 2.3.11. **Reports and Records.** By the 15th of each month and after work begins, report payments to meet the DBE goal and for DBE race-neutral participation on projects with or without goals. These payment reports will be required until all DBE subcontracting or material supply activity is completed. Negative payment reports are required when no activity has occurred in a monthly period.

Notify the Owner if payment to any DBE subcontractor is withheld or reduced.

Before receiving final payment from the Owner, the Contractor must indicate a final payment on the compliance tracking system. The final payment is a summary of all payments made to the DBEs on the project.

All records must be retained for a period of 3 years following completion of the Contract work, and must be available at reasonable times and places for inspection by authorized representatives of the Owner, the Department, or the DOT. Provide copies of subcontracts or agreements and other documentation upon request.

- 2.3.12. **Failure to Comply.** If the Owner determines the Contractor has failed to demonstrate good faith efforts to meet the assigned goal, the Contractor will be given an opportunity for reconsideration by the Department.

A Contractor's failure to comply with the requirements of this Special Provision will constitute a material breach of this Contract. In such a case, the Owner reserves the right to terminate the Contract; to deduct the

amount of DBE goal not accomplished by DBEs from the money due or to become due the Contractor; or to secure a refund, not as a penalty but as liquidated damages, to the Owner or such other remedy or remedies as the Owner deems appropriate.

2.3.13. **Investigations.** The Owner may conduct reviews or investigations of participants as necessary. All participants, including, but not limited to, DBEs and complainants using DBE Subcontractors to meet the Contract goal, are required to cooperate fully and promptly with compliance reviews, investigations, and other requests for information.

2.3.14. **Falsification and Misrepresentation.** If the Owner determines that a Contractor or subcontractor was a knowing and willing participant in any intended or actual subcontracting arrangement contrived to artificially inflate DBE participation or any other business arrangement determined by the Owner to be unallowable, or if the Contractor engages in repeated violations, falsification, or misrepresentation, the Owner may:

- refuse to count any fraudulent or misrepresented DBE participation;
- withhold progress payments to the Contractor commensurate with the violation;
- refer the matter to the Office of Inspector General of the US Department of Transportation for investigation; and/or
- seek any other available contractual remedy.

Special Provision to Item 6L

Control of Materials



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

Section 1.1. "Buy America," and Section 1.2., "Buy America Exceptions," are voided and replaced by the following.

- 1.1. **Buy America.** Comply with the latest provisions of Build America, Buy America Act (BABA Act) and applicable CFR, which restrict funds being made available from Federal financial assistance programs unless all the iron products, steel products, manufactured products, and construction materials used in the project are manufactured in the United States. Use iron or steel products, manufactured products, or construction materials manufactured in the United States for all permanently installed materials and products except when defined in Section 1.1.5., "Buy America Exceptions."

A material is solely classified based on its status at the time it is brought to the work site as either an iron or steel product, construction material, manufactured product, or excluded material. Refer to the Buy America Material Classification Sheet found at <https://www.txdot.gov/business/resources/materials/buy-america-material-classification-sheet.html> for additional clarification on material classification.

- 1.1.1. **Materials Excluded from Buy America.** Excluded Materials mean cement and cementitious material; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives. Excluded Materials do not require domestic sourcing or Buy America certification. In addition, mixtures of concrete or asphalt delivered to a job site without final form for incorporation into a project are not a manufactured product and are considered excluded.

- 1.1.2. **Iron or Steel Product.** Iron or steel products means articles, materials, or supplies that consist wholly or predominantly of iron or steel or a combination of both. For iron or steel products that are wholly or predominantly iron or steel, all manufacturing of the iron or steel must occur in the United States.

Predominantly of iron or steel or a combination of both means the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components.

For iron or steel products, manufacturing includes any process that modifies the chemical content, physical shape or size, or final finish of a product. The manufacturing process begins with initial melting and mixing and continues through fabrication (e.g., cutting, drilling, welding, bending,) and coating (e.g., paint, galvanizing, epoxy).

For iron or steel products, submit a notarized original FORM D-9-USA-1 (Department Form 1818) with the proper attachments for verification of compliance.

- 1.1.1 **Construction Materials.** Construction materials are classified as articles, materials, or supplies that consist of only one of the items listed in bullets below. Minor additions of articles, materials, supplies, or binding agents (as determined by the plans or the Engineer) to any of the items listed do not change the classification of a construction material.

- non-ferrous metals,
- plastic and polymer-based products (including polyvinyl chloride, composite building materials, and polymers used in fiber optic cables),

- glass (including optic glass),
- fiber optic cable (including drop cable),
- optical fiber,
- lumber,
- engineered wood, or
- drywall.

For construction materials, submit a Construction Material Buy America Certification Form (Department Form 2806) for verification of compliance that all manufacturing processes, as required, occurred in the United States. Each construction material has specific certification requirements stated below. Provide additional documentation as requested.

For non-ferrous metals, verification of compliance requires all manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.

For plastic and polymer-based products (including polyvinyl chloride, composite building materials, and polymers used in fiber optic cables), verification of compliance requires all manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or, where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.

For glass (including optic glass), verification of compliance requires all manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.

For fiber optic cable (including drop cable), verification of compliance requires all manufacturing processes, from the initial ribboning (if applicable), through buffering, fiber stranding and jacketing, occurred in the United States. All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastic and polymer-based products, or any others.

For optical fiber, verification of compliance requires all manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States.

For lumber, verification of compliance requires all manufacturing processes, from initial debarking through treatment and planing, occurred in the United States.

For engineered wood, verification of compliance requires all manufacturing processes from the initial combination of constituent materials until the wood product is in its final form, occurred in the United States.

For drywall, verification of compliance requires all manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.

- 1.1.3. **Manufactured Products** means articles, materials, or supplies that have been processed into a specific form and shape, or combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies. Manufactured products may include components that are iron or steel products, excluded materials, or construction materials. Any product classified as an iron or steel product, excluded material, or construction material is not a manufactured product. Mixtures of excluded materials delivered to a work site without final form for incorporation into a project are not a manufactured product.

Manufactured products do not require Buy America certification except for categories described below.

- 1.1.3.1. **Precast Concrete products** classified as a manufactured product (not predominantly of iron and steel) require iron or steel components to comply with Buy America requirements as stated in Section 6.1.1.2 Iron or Steel Product.

- 1.1.3.2. **Intelligent Transportation Systems and other electronic hardware systems** classified as a manufactured product require iron or steel cabinets or other enclosures of such systems to comply with Buy America requirements as stated in Section 6.1.1.2 Iron or Steel Products.
- 1.1.3.3. **Component** means an article, material, or supply, whether manufactured or unmanufactured, incorporated directly into a manufactured product or where applicable, an iron or steel product.
- 1.1.4. **Buy America Exceptions.** Use of iron or steel products, construction materials, and manufactured products manufactured in the United States is required unless the material meets an exception below.
- A waiver exists exempting the material from Buy America compliance.
 - The total value of the non-compliant products (other than iron or steel products) is no more than the lesser of \$1,000,000 or 5% of Total Applicable Costs for the project. Total Applicable Cost means the actual cost of all materials requiring Buy America compliance including iron, steel, or other materials that are within the scope of existing waivers. Contractor must provide documentation showing under threshold in advance for Engineer's consideration.
 - The total value of foreign iron or steel products, including delivery, does not exceed 0.1% of the total Contract cost or \$2,500, whichever is greater. The Contractor must provide documentation showing under threshold in advance for the Engineer's consideration.
 - Foreign iron or steel products may be allowed when the Contract contains an alternate item for a foreign source iron or steel product and the Contract is awarded based on the alternate item.
 - The materials are temporarily installed or are supplies, tools, and equipment not incorporated into the project. Temporarily installed means the materials and products must be removed at the end of the project or may be removed at the Contractor's convenience with the Engineer's approval.

Special Provision to Item 506

Temporary Erosion, Sedimentation, and Environmental Controls



For this project, item 506, "Temporary Erosion, Sedimentation, and Environmental Controls," of the standard specifications, is hereby voided and replaced with the following.

1. DESCRIPTION

Install, maintain, and remove erosion, sedimentation, and environmental control measures to prevent or reduce the discharge of pollutants in accordance with the Storm Water Pollution Prevention Plan (SWP3) in the plans and the Texas Pollutant Discharge Elimination System (TPDES) General Permit TXR150000.

2. MATERIALS

Furnish materials in accordance with the following:

- Item 161, "Compost"
- Item 432, "Riprap"
- Item 556, "Pipe Underdrains"

2.1. Rock Filter Dams.

2.1.1. **Aggregate.** Furnish aggregate with hardness, durability, cleanliness, and resistance to crumbling, flaking, and eroding acceptable to the Owner. Provide the following:

- Types 1, 2, and 4 Rock Filter Dams. Use 3 to 6 in. aggregate.
- Type 3 Rock Filter Dams. Use 4 to 8 in. aggregate.

2.1.2. **Wire.** Provide minimum 20 gauge galvanized wire for the steel wire mesh and tie wires for Types 2 and 3 rock filter dams. Type 4 dams require:

- a double-twisted, hexagonal weave with a nominal mesh opening of 2-1/2 in. × 3-1/4 in.;
- minimum 0.0866 in. steel wire for netting;
- minimum 0.1063 in. steel wire for selvages and corners; and
- minimum 0.0866 in. for binding or tie wire.

2.1.3. **Sandbag Material.** Furnish sandbags meeting Section 506.2.8., "Sandbags," except that any gradation of aggregate may be used to fill the sandbags.

2.2. **Temporary Pipe Slope Drains.** Provide corrugated metal pipe, polyvinyl chloride (PVC) pipe, flexible tubing, watertight connection bands, grommet materials, prefabricated fittings, and flared entrance sections that conform to the plans. Recycled and other materials meeting these requirements are allowed if approved.

Furnish concrete in accordance with Item 432, "Riprap."

2.3. **Temporary Paved Flumes.** Furnish asphalt concrete, hydraulic cement concrete, or other comparable non-erodible material that conforms to the plans. Provide rock or rubble with a minimum diameter of 6 in. and a maximum volume of 1/2 cu. ft. for the construction of energy dissipaters.

- 2.4. **Construction Exits.** Provide materials that meet the details shown on the plans and this Section.
- 2.4.1. **Rock Construction Exit.** Provide crushed aggregate for long- and short-term construction exits. Furnish aggregates that are clean, hard, durable, and free from adherent coatings such as salt, alkali, dirt, clay, loam, shale, soft or flaky materials, and organic and injurious matter. Use 4- to 8-in. aggregate for Type 1. Use 2- to 4-in. aggregate for Type 3.
- 2.4.2. **Timber Construction Exit.** Furnish No. 2 quality or better railroad ties and timbers for long-term construction exits, free of large and loose knots and treated to control rot. Fasten timbers with nuts and bolts or lag bolts, of at least 1/2 in. diameter, unless otherwise shown on the plans or allowed. Provide plywood or pressed wafer board at least 1/2 in. thick for short-term exits.
- 2.4.3. **Foundation Course.** Provide a foundation course consisting of flexible base, bituminous concrete, hydraulic cement concrete, or other materials as shown on the plans or directed.
- 2.5. **Embankment for Erosion Control.** Provide rock, loam, clay, topsoil, or other earth materials that will form a stable embankment to meet the intended use.
- 2.6. **Pipe.** Provide pipe outlet material in accordance with Item 556, "Pipe Underdrains," and details shown on the plans.
- 2.7. **Construction Perimeter Fence.**
- 2.7.1. **Posts.** Provide essentially straight wood or steel posts that are at least 60 in. long. Furnish soft wood posts with a minimum diameter of 3 in., or use nominal 2 × 4 in. boards. Furnish hardwood posts with a minimum cross-section of 1-1/2 × 1-1/5 in. Furnish T- or L-shaped steel posts with a minimum weight of 0.5 lb. per foot.
- 2.7.2. **Fence.** Provide orange construction fencing as approved.
- 2.7.3. **Fence Wire.** Provide 11 gauge or larger galvanized smooth or twisted wire. Provide 16 gauge or larger tie wire.
- 2.7.4. **Flagging.** Provide brightly-colored flagging that is fade-resistant and at least 3/4 in. wide to provide maximum visibility both day and night.
- 2.7.5. **Staples.** Provide staples with a crown at least 1/2 in. wide and legs at least 1/2 in. long.
- 2.7.6. **Used Materials.** Previously used materials meeting the applicable requirements may be used if approved.
- 2.8. **Sandbags.** Provide sandbag material of polypropylene, polyethylene, or polyamide woven fabric with a minimum unit weight of 4 oz. per square yard, a Mullen burst-strength exceeding 300 psi, and an ultraviolet stability exceeding 70%.

Use natural coarse sand or manufactured sand meeting the gradation given in Table 1 to fill sandbags. Filled sandbags must be 24 to 30 in. long, 16 to 18 in. wide, and 6 to 8 in. thick.

**Table 1
Sand Gradation**

Sieve #	Retained (% by Weight)
4	Maximum 3%
100	Minimum 80%
200	Minimum 95%

Aggregate may be used instead of sand for situations where sandbags are not adjacent to traffic. The aggregate size shall not exceed 3/8 in.

- 2.9. **Temporary Sediment Control Fence.** Provide a net-reinforced fence using woven geo-textile fabric. Logos visible to the traveling public will not be allowed.
- 2.9.1. **Fabric.** Provide fabric materials in accordance with DMS-6230, "Temporary Sediment Control Fence Fabric."
- 2.9.2. **Posts.** Provide essentially straight wood or steel posts with a minimum length of 48 in., unless otherwise shown on the plans. Furnish soft wood posts at least 3 in. in diameter, or use nominal 2 × 4 in. boards. Furnish hardwood posts with a minimum cross-section of 1-1/2 × 1-1/2 in. Furnish T- or L-shaped steel posts with a minimum weight of 1.3 lb. per foot.
- 2.9.3. **Net Reinforcement.** Provide net reinforcement of at least 12-1/2 gauge galvanized welded wire mesh, with a maximum opening size of 2 × 4 in., at least 24 in. wide, unless otherwise shown on the plans.
- 2.9.4. **Staples.** Provide staples with a crown at least 3/4 in. wide and legs 1/2 in. long.
- 2.9.5. **Used Materials.** Use recycled material meeting the applicable requirements if approved.
- 2.10. **Biodegradable Erosion Control Logs.**
- 2.10.1. **Core Material.** Furnish core material that is biodegradable or recyclable. Use compost, mulch, aspen excelsior wood fibers, chipped site vegetation, agricultural rice or wheat straw, coconut fiber, 100% recyclable fibers, or any other acceptable material unless specifically called out on the plans. Permit no more than 5% of the material to escape from the containment mesh. Furnish compost meeting the requirements of Item 161, "Compost."
- 2.10.2. **Containment Mesh.** Furnish containment mesh that is 100% biodegradable, photodegradable, or recyclable such as burlap, twine, UV photodegradable plastic, polyester, or any other acceptable material.
- Furnish biodegradable or photodegradable containment mesh when log will remain in place as part of a vegetative system.
- Furnish recyclable containment mesh for temporary installations.
- 2.10.3. **Size.** Furnish biodegradable erosion control logs with diameters shown on the plans or as directed. Stuff containment mesh densely so logs do not deform.

3. CONSTRUCTION

- 3.1. **Contractor Responsibilities.** Implement the Owner's Storm Water Pollution Prevention Plan (SWP3) for the project in accordance with the plans and specifications, TPDES General Permit TXR150000, and as directed by the Owner. Develop and implement an SWP3 for project-specific material supply plants within and outside of the Owner's right of way in accordance with the specific or general storm water permit requirements. Prevent water pollution from storm water associated with construction activity from entering any surface water or private property on or adjacent to the project site.
- 3.2. **General.**
- 3.2.1. **Phasing.** Implement control measures in the area to be disturbed before beginning construction, or as directed. Limit the disturbance to the area shown on the plans or as directed. If, in the opinion of the Owner, the Contractor cannot control soil erosion and sedimentation resulting from construction operations, the Owner will limit the disturbed area to that which the Contractor is able to control. Minimize disturbance to vegetation.
- 3.2.2. **Maintenance.** Immediately correct ineffective control measures. Implement additional controls as directed. Remove excavated material within the time requirements specified in the applicable storm water permit.

- 3.2.3. **Stabilization.** Stabilize disturbed areas where construction activities will be temporarily stopped in accordance with the applicable storm water permit. Establish a uniform vegetative cover. The project will not be accepted until a 70% density of existing adjacent undisturbed areas is obtained, unless otherwise shown on the plans. When shown on the plans, the Owner may accept the project when adequate controls are in place that will control erosion, sedimentation, and water pollution until sufficient vegetative cover can be established.
- 3.2.4. **Finished Work.** Upon acceptance of vegetative cover, remove and dispose of all temporary control measures, temporary embankments, bridges, matting, falsework, piling, debris, or other obstructions placed during construction that are not a part of the finished work, or as directed.
- 3.2.5. **Restricted Activities and Required Precautions.** Do not discharge onto the ground or surface waters any pollutants such as chemicals, raw sewage, fuels, lubricants, coolants, hydraulic fluids, bitumens, or any other petroleum product. Operate and maintain equipment on-site to prevent actual or potential water pollution. Manage, control, and dispose of litter on-site such that no adverse impacts to water quality occur. Prevent dust from creating a potential or actual unsafe condition, public nuisance, or condition endangering the value, utility, or appearance of any property. Wash out concrete trucks only as described in the TPDES General Permit TXR150000. Utilize appropriate controls to minimize the offsite transport of suspended sediments and other pollutants if it is necessary to pump or channel standing water (i.e. dewatering). Prevent discharges that would contribute to a violation of Edwards Aquifer Rules, water quality standards, the impairment of a listed water body, or other state or federal law.
- 3.3. **Installation, Maintenance, and Removal Work.** Perform work in accordance with the SWP3, according to manufacturers' guidelines, and in accordance with the TPDES General Permit TXR150000. Install and maintain the integrity of temporary erosion and sedimentation control devices to accumulate silt and debris until soil disturbing activities are completed and permanent erosion control features are in place or the disturbed area has been adequately stabilized as determined by the Owner. . If a device ceases to function as intended, repair or replace the device or portions thereof as necessary. Remove sediment, debris, and litter. When approved, sediments may be disposed of within embankments, or in the right of way in areas where the material will not contribute to further siltation. Dispose of removed material in accordance with federal, state, and local regulations.
- Remove devices upon approval or as directed. Finish-grade and dress the area upon removal. Stabilize disturbed areas in accordance with the permit, and as shown on the plans or directed. Materials removed are considered consumed by the project. Retain ownership of stockpiled material and remove it from the project when new installations or replacements are no longer required.
- 3.3.1. **Rock Filter Dams for Erosion Control.** Remove trees, brush, stumps, and other objectionable material that may interfere with the construction of rock filter dams. Place sandbags as a foundation when required or at the Contractor's option.
- Place the aggregate to the lines, height, and slopes specified, without undue voids for Types 1, 2, 3, and 5. Place the aggregate on the mesh and then fold the mesh at the upstream side over the aggregate and secure it to itself on the downstream side with wire ties, or hog rings for Types 2 and 3, or as directed. Place rock filter dams perpendicular to the flow of the stream or channel unless otherwise directed. Construct filter dams according to the following criteria unless otherwise shown on the plans:
- 3.3.1.1. **Type 1 (Non-reinforced).**
- 3.3.1.1.1. **Height.** At least 18 in. measured vertically from existing ground to top of filter dam.
- 3.3.1.1.2. **Top Width.** At least 2 ft.
- 3.3.1.1.3. **Slopes.** No steeper than 2:1.
- 3.3.1.2. **Type 2 (Reinforced).**

- 3.3.1.2.1. **Height.** At least 18 in. measured vertically from existing ground to top of filter dam.
- 3.3.1.2.2. **Top Width.** At least 2 ft.
- 3.3.1.2.3. **Slopes.** No steeper than 2:1.
- 3.3.1.3. **Type 3 (Reinforced).**
- 3.3.1.3.1. **Height.** At least 36 in. measured vertically from existing ground to top of filter dam.
- 3.3.1.3.2. **Top Width.** At least 2 ft.
- 3.3.1.3.3. **Slopes.** No steeper than 2:1.
- 3.3.1.4. **Type 4 (Sack Gabions).** Unfold sack gabions and smooth out kinks and bends. Connect the sides by lacing in a single loop–double loop pattern on 4- to 5-in. spacing for vertical filling. Pull the end lacing rod at one end until tight, wrap around the end, and twist 4 times. Fill with stone at the filling end, pull the rod tight, cut the wire with approximately 6 in. remaining, and twist wires 4 times.
- Place the sack flat in a filling trough, fill with stone, connect sides, and secure ends as described above for horizontal filling.
- Lift and place without damaging the gabion. Shape sack gabions to existing contours.
- 3.3.1.5. **Type 5.** Provide rock filter dams as shown on the plans.
- 3.3.2. **Temporary Pipe Slope Drains.** Install pipe with a slope as shown on the plans or as directed. Construct embankment for the drainage system in 8-in. lifts to the required elevations. Hand-tamp the soil around and under the entrance section to the top of the embankment as shown on the plans or as directed. Form the top of the embankment or earth dike over the pipe slope drain at least 1 ft. higher than the top of the inlet pipe at all points. Secure the pipe with hold-downs or hold-down grommets spaced a maximum of 10 ft. on center. Construct the energy dissipaters or sediment traps as shown on the plans or as directed. Construct the sediment trap using concrete or rubble riprap in accordance with Item 432, "Riprap," when designated on the plans.
- 3.3.3. **Temporary Paved Flumes.** Construct paved flumes as shown on the plans or as directed. Provide excavation and embankment (including compaction of the subgrade) of material to the dimensions shown on the plans unless otherwise indicated. Install a rock or rubble riprap energy dissipater, constructed from the materials specified above, to a minimum depth of 9 in. at the flume outlet to the limits shown on the plans or as directed.
- 3.3.4. **Construction Exits.** Prevent traffic from crossing or exiting the construction site or moving directly onto a public roadway, alley, sidewalk, parking area, or other right of way areas other than at the location of construction exits when tracking conditions exist. Construct exits for either long- or short-term use.
- 3.3.4.1. **Long-Term.** Place the exit over a foundation course as required. Grade the foundation course or compacted subgrade to direct runoff from the construction exits to a sediment trap as shown on the plans or as directed. Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed.
- 3.3.4.1.1. **Type 1.** Construct to a depth of at least 8 in. using crushed aggregate as shown on the plans or as directed.
- 3.3.4.1.2. **Type 2.** Construct using railroad ties and timbers as shown on the plans or as directed.
- 3.3.4.2. **Short-Term.**

- 3.3.4.2.1. **Type 3.** Construct using crushed aggregate, plywood, or wafer board. This type of exit may be used for daily operations where long-term exits are not practical.
- 3.3.4.2.2. **Type 4.** Construct as shown on the plans or as directed.
- 3.3.5. **Earthwork for Erosion Control.** Perform excavation and embankment operations to minimize erosion and to remove collected sediments from other erosion control devices.
- 3.3.5.1. **Excavation and Embankment for Erosion Control Features.** Place earth dikes, swales, or combinations of both along the low crown of daily lift placement, or as directed, to prevent runoff spillover. Place swales and dikes at other locations as shown on the plans or as directed to prevent runoff spillover or to divert runoff. Construct cuts with the low end blocked with undisturbed earth to prevent erosion of hillsides. Construct sediment traps at drainage structures in conjunction with other erosion control measures as shown on the plans or as directed.
- Create a sediment basin, where required, providing 3,600 cu. ft. of storage per acre drained, or equivalent control measures for drainage locations that serve an area with 10 or more disturbed acres at one time, not including offsite areas.
- 3.3.5.2. **Excavation of Sediment and Debris.** Remove sediment and debris when accumulation affects the performance of the devices, after a rain, and when directed.
- 3.3.6. **Construction Perimeter Fence.** Construct, align, and locate fencing as shown on the plans or as directed.
- 3.3.6.1. **Installation of Posts.** Embed posts 18 in. deep or adequately anchor in rock, with a spacing of 8 to 10 ft.
- 3.3.6.2. **Wire Attachment.** Attach the top wire to the posts at least 3 ft. from the ground. Attach the lower wire midway between the ground and the top wire.
- 3.3.6.3. **Flag Attachment.** Attach flagging to both wire strands midway between each post. Use flagging at least 18 in. long. Tie flagging to the wire using a square knot.
- 3.3.7. **Sandbags for Erosion Control.** Construct a berm or dam of sandbags that will intercept sediment-laden storm water runoff from disturbed areas, create a retention pond, detain sediment, and release water in sheet flow. Fill each bag with sand so that at least the top 6 in. of the bag is unfilled to allow for proper tying of the open end. Place the sandbags with their tied ends in the same direction. Offset subsequent rows of sandbags 1/2 the length of the preceding row. Place a single layer of sandbags downstream as a secondary debris trap. Place additional sandbags as necessary or as directed for supplementary support to berms or dams of sandbags or earth.
- 3.3.8. **Temporary Sediment-Control Fence.** Provide temporary sediment-control fence near the downstream perimeter of a disturbed area to intercept sediment from sheet flow. Incorporate the fence into erosion-control measures used to control sediment in areas of higher flow. Install the fence as shown on the plans, as specified in this Section, or as directed.
- 3.3.8.1. **Installation of Posts.** Embed posts at least 18 in. deep, or adequately anchor, if in rock, with a spacing of 6 to 8 ft. and install on a slight angle toward the runoff source.
- 3.3.8.2. **Fabric Anchoring.** Dig trenches along the uphill side of the fence to anchor 6 to 8 in. of fabric. Provide a minimum trench cross-section of 6 × 6 in. Place the fabric against the side of the trench and align approximately 2 in. of fabric along the bottom in the upstream direction. Backfill the trench, then hand-tamp.
- 3.3.8.3. **Fabric and Net Reinforcement Attachment.** Attach the reinforcement to wooden posts with staples, or to steel posts with T-clips, in at least 4 places equally spaced unless otherwise shown on the plans. Sewn vertical pockets may be used to attach reinforcement to end posts. Fasten the fabric to the top strand of reinforcement by hog rings or cord every 15 in. or less.

- 3.3.8.4. **Fabric and Net Splices.** Locate splices at a fence post with a minimum lap of 6 in. attached in at least 6 places equally spaced unless otherwise shown on the plans. Do not locate splices in concentrated flow areas.

Requirements for installation of used temporary sediment-control fence include the following:

- fabric with minimal or no visible signs of biodegradation (weak fibers),
- fabric without excessive patching (more than 1 patch every 15 to 20 ft.),
- posts without bends, and
- backing without holes.

- 3.3.9. **Biodegradable Erosion Control Logs.** Install biodegradable erosion control logs near the downstream perimeter of a disturbed area to intercept sediment from sheet flow. Incorporate the biodegradable erosion control logs into the erosion measures used to control sediment in areas of higher flow. Install, align, and locate the biodegradable erosion control logs as specified below, as shown in plans or as directed.

Secure biodegradable erosion control logs in a method adequate to prevent displacement as a result of normal rain events, prevent damage to the logs, and to the satisfaction of the Owner such that flow is not allowed under the logs. Temporarily removing and replacing biodegradable erosion logs as to facilitate daily work is allowed at the Contractor's expense.

- 3.3.10. **Vertical Tracking.** Perform vertical tracking on slopes to temporarily stabilize soil. Provide equipment with a track undercarriage capable of producing a linear soil impression measuring a minimum of 12 in. long × 2 to 4 in. wide × 1/2 to 2 in. deep. Do not exceed 12 in. between track impressions. Install continuous linear track impressions where the 12 in. length impressions are perpendicular to the slope. Vertical tracking is required on projects where soil disturbing activities have occurred unless otherwise approved.

4. MEASUREMENT

- 4.1. **Rock Filter Dams.** Installation or removal of rock filter dams will be measured by the foot or by the cubic yard. The measured volume will include sandbags, when used.
- 4.1.1. **Linear Measurement.** When rock filter dams are measured by the foot, measurement will be along the centerline of the top of the dam.
- 4.1.2. **Volume Measurement.** When rock filter dams are measured by the cubic yard, measurement will be based on the volume of rock computed by the method of average end areas.
- 4.1.2.1. **Installation.** Measurement will be made in final position.
- 4.1.2.2. **Removal.** Measurement will be made at the point of removal.
- 4.2. **Temporary Pipe Slope Drains.** Temporary pipe slope drains will be measured by the foot.
- 4.3. **Temporary Paved Flumes.** Temporary paved flumes will be measured by the square yard of surface area. The measured area will include the energy dissipater at the flume outlet.
- 4.4. **Construction Exits.** Construction exits will be measured by the square yard of surface area.
- 4.5. **Earthwork for Erosion and Sediment Control.**
- 4.5.1. **Equipment and Labor Measurement.** Equipment and labor used will be measured by the actual number of hours the equipment is operated and the labor is engaged in the work.
- 4.5.2. **Volume Measurement.**

- 4.5.2.1. **In Place.**
- 4.5.2.1.1. **Excavation.** Excavation will be measured by the cubic yard in its original position and the volume computed by the method of average end areas.
- 4.5.2.1.2. **Embankment.** Embankment will be measured by the cubic yard in its final position by the method of average end areas. The volume of embankment will be determined between:
- the original ground surfaces or the surface upon that the embankment is to be constructed for the feature and
 - the lines, grades and slopes of the accepted embankment for the feature.
- 4.5.2.2. **In Vehicles.** Excavation and embankment quantities will be combined and paid for under "Earthwork (Erosion and Sediment Control, In Vehicle)." Excavation will be measured by the cubic yard in vehicles at the point of removal. Embankment will be measured by the cubic yard in vehicles measured at the point of delivery. Shrinkage or swelling factors will not be considered in determining the calculated quantities.
- 4.6. **Construction Perimeter Fence.** Construction perimeter fence will be measured by the foot.
- 4.7. **Sandbags for Erosion Control.** Sandbags will be measured as each sandbag or by the foot along the top of sandbag berms or dams.
- 4.8. **Temporary Sediment-Control Fence.** Installation or removal of temporary sediment-control fence will be measured by the foot.
- 4.9. **Biodegradable Erosion Control Logs.** Installation or removal of biodegradable erosion control logs will be measured by the foot along the centerline of the top of the control logs.
- 4.10. **Vertical Tracking.** Vertical tracking will not be measured or paid for directly but is considered subsidiary to this Item.

5. PAYMENT

The following will not be paid for directly but are subsidiary to pertinent Items:

- erosion-control measures for Contractor project-specific locations (PSLs) inside and outside the right of way (such as construction and haul roads, field offices, equipment and supply areas, plants, and material sources);
- removal of litter, unless a separate pay item is shown on the plans;
- repair to devices and features damaged by Contractor operations;
- added measures and maintenance needed due to negligence, carelessness, lack of maintenance, and failure to install permanent controls;
- removal and reinstallation of devices and features needed for the convenience of the Contractor;
- finish grading and dressing upon removal of the device; and
- minor adjustments including but not limited to plumbing posts, reattaching fabric, minor grading to maintain slopes on an erosion embankment feature, or moving small numbers of sandbags.

Stabilization of disturbed areas will be paid for under pertinent Items.

Furnishing and installing pipe for outfalls associated with sediment traps and ponds will not be paid for directly but is subsidiary to the excavation and embankment under this Item.

- 5.1. **Rock Filter Dams.** 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 as follows:

5.1.1. **Installation.** Installation will be paid for as “Rock Filter Dams (Install)” of the type specified. This price is full compensation for furnishing and operating equipment, finish backfill and grading, lacing, proper disposal, labor, materials, tools, and incidentals.

5.1.2. **Removal.** Removal will be paid for as “Rock Filter Dams (Remove).” This price is full compensation for furnishing and operating equipment, proper disposal, labor, materials, tools, and incidentals.

When the Owner directs that the rock filter dam installation or portions thereof be replaced, payment will be made at the unit price bid for “Rock Filter Dams (Remove)” and for “Rock Filter Dams (Install)” of the type specified. This price is full compensation for furnishing and operating equipment, finish backfill and grading, lacing, proper disposal, labor, materials, tools, and incidentals.

5.2. **Temporary Pipe Slope Drains.** 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 “Temporary Pipe Slope Drains” of the size specified. This price is full compensation for furnishing materials, removal and disposal, furnishing and operating equipment, labor, tools, and incidentals.

Removal of temporary pipe slope drains will not be paid for directly but is subsidiary to the installation Item. When the Owner directs that the pipe slope drain installation or portions thereof be replaced, payment will be made at the unit price bid for “Temporary Pipe Slope Drains” of the size specified, which is full compensation for the removal and reinstallation of the pipe drain.

Earthwork required for the pipe slope drain installation, including construction of the sediment trap, will be measured and paid for under “Earthwork for Erosion and Sediment Control.”

Riprap concrete or stone, when used as an energy dissipater or as a stabilized sediment trap, will be measured and paid for in accordance with Item 432, “Riprap.”

5.3. **Temporary Paved Flumes.** 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 “Temporary Paved Flume (Install)” or “Temporary Paved Flume (Remove).” This price is full compensation for furnishing and placing materials, removal and disposal, equipment, labor, tools, and incidentals.

When the Owner directs that the paved flume installation or portions thereof be replaced, payment will be made at the unit prices bid for “Temporary Paved Flume (Remove)” and “Temporary Paved Flume (Install).” These prices are full compensation for the removal and replacement of the paved flume and for equipment, labor, tools, and incidentals.

Earthwork required for the paved flume installation, including construction of a sediment trap, will be measured and paid for under “Earthwork for Erosion and Sediment Control.”

5.4. **Construction Exits.** Contractor-required construction exits from off right of way locations or on-right of way PSLs will not be paid for directly but are subsidiary to pertinent Items.

The work performed and materials furnished in accordance with this Item and measured as provided under “Measurement” for construction exits needed on right of way access to work areas required by the Owner will be paid for at the unit price bid for “Construction Exits (Install)” of the type specified or “Construction Exits (Remove).” This price is full compensation for furnishing and placing materials, excavating, removal and disposal, cleaning vehicles, labor, tools, and incidentals.

When the Owner directs that a construction exit or portion thereof be removed and replaced, payment will be made at the unit prices bid for “Construction Exit (Remove)” and “Construction Exit (Install)” of the type specified. These prices are full compensation for the removal and replacement of the construction exit and for equipment, labor, tools, and incidentals.

Construction of sediment traps used in conjunction with the construction exit will be measured and paid for under "Earthwork for Erosion and Sediment Control."

5.5. **Earthwork for Erosion and Sediment Control.**

- 5.5.1. **Initial Earthwork for Erosion and Sediment Control.** 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 "Excavation (Erosion and Sediment Control, In Place)," "Embankment (Erosion and Sediment Control, In Place)," "Excavation (Erosion and Sediment Control, In Vehicle)," "Embankment (Erosion and Sediment Control, (In Vehicle)," or "Earthwork (Erosion and Sediment Control, In Vehicle)."

This price is full compensation for excavation and embankment including hauling, disposal of material not used elsewhere on the project; embankments including furnishing material from approved sources and construction of erosion-control features; and equipment, labor, tools, and incidentals.

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

- 5.5.2. **Maintenance Earthwork for Erosion and Sediment Control for Cleaning and Restoring Control Measures.** The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid under a Contractor Force Account Item from invoice provided to the Owner.

This price is full compensation for excavation, embankment, and re-grading including removal of accumulated sediment in various erosion control installations as directed, hauling, and disposal of material not used elsewhere on the project; excavation for construction of erosion-control features; embankments including furnishing material from approved sources and construction of erosion-control features; and equipment, labor, tools, and incidentals.

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

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

- 5.6. **Construction Perimeter Fence.** 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 "Construction Perimeter Fence." This price is full compensation for furnishing and placing the fence; digging, fence posts, wire, and flagging; removal and disposal; and materials, equipment, labor, tools, and incidentals.

Removal of construction perimeter fence will be not be paid for directly but is subsidiary to the installation Item. When the Owner directs that the perimeter fence installation or portions thereof be removed and replaced, payment will be made at the unit price bid for "Construction Perimeter Fence," which is full compensation for the removal and reinstallation of the construction perimeter fence.

- 5.7. **Sandbags for Erosion Control.** Sandbags will be paid for at the unit price bid for "Sandbags for Erosion Control" (of the height specified when measurement is by the foot). This price is full compensation for materials, placing sandbags, removal and disposal, equipment, labor, tools, and incidentals.

Removal of sandbags will not be paid for directly but is subsidiary to the installation Item. When the Owner directs that the sandbag installation or portions thereof be replaced, payment will be made at the unit price bid for "Sandbags for Erosion Control," which is full compensation for the reinstallation of the sandbags.

- 5.8. **Temporary Sediment-Control Fence.** 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 as follows:

- 5.8.1. **Installation.** Installation will be paid for as “Temporary Sediment-Control Fence (Install).” This price is full compensation for furnishing and operating equipment finish backfill and grading, lacing, proper disposal, labor, materials, tools, and incidentals.
- 5.8.2. **Removal.** Removal will be paid for as “Temporary Sediment-Control Fence (Remove).” This price is full compensation for furnishing and operating equipment, proper disposal, labor, materials, tools, and incidentals.
- 5.9. **Biodegradable Erosion Control Logs.** 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 as follows:
- 5.9.1. **Installation.** Installation will be paid for as “Biodegradable Erosion Control Logs (Install)” of the size specified. This price is full compensation for furnishing and operating equipment finish backfill and grading, staking, proper disposal, labor, materials, tools, and incidentals.
- 5.9.2. **Removal.** Removal will be paid for as “Biodegradable Erosion Control Logs (Remove).” This price is full compensation for furnishing and operating equipment, proper disposal, labor, materials, tools, and incidentals.
- 5.10. **Vertical Tracking.** Vertical tracking will not be measured or paid for directly but is considered subsidiary to this Item.

Special Specification 9606 7004

Force Account – Safety Contingency



1. DESCRIPTION

Provide for Safety Contingency to address unforeseen safety issues that may arise during construction or to enhance work zones or improve traffic control plans.

2. MEASUREMENT

This item will be measured on the basis of lump sum. Use of funds will be mutually agreed upon before allocation.

3. PAYMENT

The work performed and materials furnished in accordance with this Item and measured in accordance with the above "Measurement" and will be paid for at the discretion of the LG. This price is full compensation for furnishing all materials, equipment, labor, and incidentals.

STANDARD SPECIFICATIONS

The Standard Specifications for this project are per the "Public Works Construction Standards" (Fifth Edition) as published under the authority of the North Central Texas Council of Governments .

A. Special Provisions to the General Provisions of the Standard Specifications:

1. Technical specifications (Special Specifications), if included, in the Contract document package shall supersede the standard specifications.
2. Prospective offerors may submit a request in the *Messages* section in the project's Bonfire portal for clarification and alterations in the plans, specifications, and form of contract. Such request must be received by the City no later than the questions due date specified on the project calendar in Bonfire. The City will be the sole judge as to the necessity to an addendum or letter of clarification. Oral statements shall in no way be considered as part of the contract and will not be considered as binding.
3. Five (5) sets of the contract documents, exclusive of the "Public Works Construction Standards" referenced above will be furnished without charge to the CONTRACTOR for construction purposes. Additional copies may be obtained from the City at actual reproduction cost.
4. **Item 102.3 Examination of Plans, Specifications and Site of the Work:** Add the following paragraph after Paragraph 2:

In preparation of Drawings and Specifications, The ENGINEER has established and relied upon the following reports of exploration and test of subsurface conditions at the site of the work: Report dated August 7, 2024, prepared by CMJ Engineering, Inc., Fort Worth, Texas entitled: "Geotechnical Engineering Services – DCTA Trail – Segment A – Hebron Station to E. Quadrant IH-35E at SRT – Lewisville, Texas." The technical data contained in such report is the log of borings shown for Borings B-1 through B-9 provided in the Appendix of the report and it represents the conditions only at the point of the borings at the time the borings were made and furnished for general information only. A copy of this report is included in these documents. Variations from the conditions indicated by the borings shall not be used as a basis for a claim of changed conditions.

The CONTRACTOR may take borings at the site to satisfy their self as to subsurface conditions prior to bidding.

5. **Item 102.4. Preparation of Proposal:** Sentence 4 shall be changed to read: "In the cases of discrepancy between unit prices and amounts, the unit price shown in figures shall stand and the amount and total will be adjusted to correspond to the unit price shown".
6. **Item 103.3.1.1. Performance Bonds:** Paragraph (a) Performance Bond. The last sentence of this paragraph is hereby deleted and replaced with: This Bond shall provide for the repair and/or replacement of all defects due to faulty materials and workmanship that appears within a period of two years from the date of acceptance of the improvements project by the Lewisville City Council.

7. **Item 103.3.3. Sureties: The following applies to Surety Bonds:**

Texas Government Code Title 10, Chapter 2253

“(d) A bond required by this section must be executed by corporate surety in accordance with Chapter 3503, Texas Insurance Code.”

Texas Insurance Code Section 3503.005. Additional Requirements for Certain Bonds

“(a) A bond that is made, given, tendered, or filed under Chapter 53, Property Code, or Chapter 2253, Government Code, may be executed only by a surety company that is authorized to write surety bonds in this state. If the amount of the bond exceeds \$100,000, the surety company must also:

- (1) hold a certificate of authority from the United States secretary of the treasury to qualify as a surety on obligations permitted or required under federal law; or
- (2) have obtained reinsurance for any liability in excess of \$100,000 from a reinsurer that:
 - (A) is an authorized reinsurer in this state; and
 - (B) holds a certificate of authority from the United States secretary of the treasury to qualify as a surety or reinsurer on obligations permitted or required under federal law.

“(b) To determine whether the surety on the bond or the reinsurer holds a certificate of authority from the United States secretary of the treasury, a party may conclusively rely on the list published in the Federal Register by the United States Department of the Treasury, covering the date on which the bond was executed, of the companies holding certificates of authority as acceptable sureties on federal bonds and as acceptable reinsuring companies. A purchaser, insurer of title, or lender acquiring or insuring an interest in or title to real property may also conclusively rely on, and is protected by, a statement on a recorded bond or a sworn, recorded statement by the surety that refers to the specific recorded bond and states that, at the time the bond was executed, the surety complied with Subsection (a)(1) or (2).”

8. **Item 103.4. Insurance:** delete and replace with the following:

Vendor shall procure and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the vendor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Vendor’s bid.

A. MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage “occurrence” form CG 00 01 (10 01). **“Claims Made” form is unacceptable.**
2. Workers’ Compensation insurance as required by the Labor Code of the State of Texas, including Employers’ Liability Insurance.
3. Automobile Liability – as required by the State of Texas, covering all owned, hired, or non-owned vehicles. Automobile Liability is only required if vehicle(s) will be used under this contract. Coverage not required for delivery services.

B. MINIMUM LIMITS OF INSURANCE

Vendor shall maintain throughout contract limits not less than:

1. Commercial General Liability: \$500,000 per occurrence/\$1,000,000 aggregate for bodily injury, personal injury and property damage. Policy will include coverage for:
 - a. Premises – Operations
 - b. Broad Form Contractual Liability
 - c. Products and Completed Operations
 - d. Use of Contractors and Subcontractors
 - e. Personal Injury
 - f. Broad Form Property Damage
 - g. If applicable, Explosion Collapse and Underground (XCU) Coverage, Fire Damage, and Medical Expenses.

NOTE: The aggregate loss limit applies to each project.

2. Workers’ Compensation and Employer’s Liability: Workers’ Compensation Statutory limits as required by the Labor Code of the State of Texas and Employer’s Liability minimum limits of \$500,000 per injury, \$500,000 per occurrence, and \$500,000 per occupational disease.
3. Automobile Liability - \$500,000 Combined Single Limit. Limits can only be reduced if approved by the HR Director or designee.
4. Builders’ Risk Insurance (as applicable) – Completed value form, insurance carried must equal the completed value of the structure.

C. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductible or self-insured retentions must be declared to and approved by the City.

D. OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain the following provisions:

1. General Liability and Automobile Liability Coverages

- a.** The City, its officers, officials, employees, boards/commissions and volunteers are to be added as “Additional Insured” as respects liability arising out of activities performed by or on behalf of the vendor, products and completed operations of the vendor, premises owned, occupied or used by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officers, officials, employees or volunteers. It is understood that the business auto policy under “Who is an Insured” automatically provides liability coverage in favor of the City. The coverage shall include defense of claims against the City as additional insured.
- b.** The vendor’s insurance coverage shall be primary and non-contributory insurance as respects the City, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees or volunteers shall be excess of the vendor’s insurance and shall not contribute with it.
- c.** Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City, its officers, officials, and employees, Boards and Commissions or volunteers.
- d.** The vendor’s insurance shall apply separately to each insured against whose claim is made or suit is brought, except to the limits of the insured’s liability.

2. Waiver of Subrogation – All coverages

Each insurance policy required by this exhibit shall waive all rights of subrogation against the City, its officers, officials, employees, and volunteers for losses arising from work performed by the vendor for the City.

3. Notice of Cancellation - All Coverages

Each insurance policy required by this exhibit shall be endorsed to state that coverage shall not be suspended, voided, canceled or non-renewed by either party, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given the City, or ten (10) days prior written notice for non-payment of premium.

E. ACCEPTABILITY OF INSURERS

The City prefers that Insurance be placed with insurers with an A.M. Best's rating of no less than **A-:VI, or A or better** by Standard and Poors.

F. VERIFICATION OF COVERAGE

Contractor shall furnish the City with certificates of insurance affecting coverage required. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. Certificates of Insurance must be provided on forms approved by the Texas Department of Insurance. City will not accept Memorandums of Insurance or Binders as proof of insurance. The City reserves the right to require complete, certified copies of all required insurance policies at any time.

G. HOLD HARMLESS AND INDEMNIFICATION

THE CONSULTANT/CONTRACTOR AGREES TO DEFEND, INDEMNIFY AND HOLD THE CITY, ITS OFFICERS, AGENTS AND EMPLOYEES, HARMLESS AGAINST ANY AND ALL CLAIMS, LAWSUITS, JUDGMENTS, COSTS AND EXPENSES FOR PERSONAL INJURY (INCLUDING DEATH), PROPERTY DAMAGE OR OTHER HARM FOR WHICH RECOVERY OF DAMAGES IS SOUGHT, SUFFERED BY ANY PERSON OR PERSONS, THAT MAY ARISE OUT OF OR BE OCCASIONED BY CONSULTANT'S/CONTRACTOR'S BREACH OF ANY OF THESE TERMS AND CONDITIONS OR BY ANY NEGLIGENT OR STRICTLY LIABLE ACT OR OMISSION OR INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY, CONSULTANT/CONTRACTOR, ITS OFFICERS, AGENTS, EMPLOYEES OR SUBCONTRACTORS, IN THE PERFORMANCE OF THIS AGREEMENT; EXCEPT THAT THE INDEMNITY PROVIDED FOR IN THE PARAGRAPH SHALL NOT APPLY TO ANY LIABILITY RESULTING FROM THE SOLE NEGLIGENCE OR FAULT OF THE CITY, ITS OFFICERS, AGENTS, EMPLOYEES OR SEPARATE CONTRACTORS, AND IN THE EVENT OF JOINT AND CONCURRING NEGLIGENCE OR FAULT OF THE CONSULTANT/CONTRACTOR AND THE CITY, RESPONSIBILITY AND INDEMNITY, IF ANY, SHALL BE APPORTIONED IN ACCORDANCE WITH THE LAW OF THE STATE OF TEXAS, WITHOUT WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO THE CITY UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW AND THE CITY'S REASONABLE ATTORNEY'S FEES SHALL BE REIMBURSED IN PROPORTION TO THE CONSULTANT'S LIABILITY. THE PROVISIONS OF THIS PARAGRAPH ARE SOLELY FOR THE BENEFIT OF THE PARTIES HERETO AND NOT INTENDED TO CREATE OR GRANT ANY RIGHTS, CONTRACTUAL OR OTHERWISE, TO ANY OTHER PERSON OR ENTITY.

H. PROOF OF INSURANCE

Contractor is required to submit proof of insurance on a form acceptable to the City of Lewisville. Certificates of Insurance similar to the ACCORD form are acceptable. City will not accept Memorandums of Insurance or Binders as proof of insurance. City, at its own discretion, may require a copy of any policy presented to the City.

I. STATE REQUIREMENTS FOR WORKERS COMPENSATION INSURANCE

As required by 28 Tex.Admin.code §110.110(c)(7):

A. Definitions:

Certificate of coverage ("certificate")- A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (DWC-81, DWC-82, DWC-83, or DWC-84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

Duration of the project - includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project ("subcontractor" in §406.096) - includes all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

B. The contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.

C. The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.

D. If the coverage period shown on the contractor's current certificate of coverage ends during the duration of the project, the contractor must, prior to the end of the

coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

E. The contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

(1) a certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

(2) no later than seven days after receipt by the contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

F. The contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.

G. The contractor shall notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

H. The contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Department of Insurance, Division of Workers' Compensation, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

I. The contractor shall contractually require each person with whom it contracts to provide services on a project, to:

(1) provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all of its employees providing services on the project, for the duration of the project;

(2) provide to the contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;

(3) provide the contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

(4) obtain from each other person with whom it contracts, and provide to the contractor:

(a) a certificate of coverage, prior to the other person beginning work on the project; and

(b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

(5) retain all required certificates of coverage on file for the duration of the project and for one year thereafter;

(6) notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

(7) contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates of coverage to be provided to the person for whom they are providing services.

J. By signing this contract or providing or causing to be provided a certificate of coverage, the contractor is representing to the governmental entity that all employees of the contractor who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

K. The contractor's failure to comply with any of these provisions is a breach of contract by the contractor which entitles the governmental entity to declare the contract void if the contractor does not remedy the breach within ten days after receipt of notice of breach from the governmental entity.

9. **Item 105.1.1. Priority of Contract Documents** is revised as follows: Insert the words "addenda (last over first)" between "Proposal" and "Special Provision".
10. **Item 105.1.3. Contract Drawings and Specifications:** Obtaining copies of NCTCOG Public Works Construction Standards is the responsibility of the CONTRACTOR.
11. **Item 105.2.2. Special Warranty:** The first sentence of this paragraph is hereby deleted and replaced with:
"If within two years after the final acceptance of the work by the OWNER, as evidenced by the final certificate of acceptance or within a longer or shorter period of time as may be prescribed by law or by the terms of any other special warranty on designated equipment, any of the work is found to be defective or not in accordance with the contract documents,

the CONTRACTOR shall correct it promptly after receipt of a written notice from the OWNER to do so".

12. **Special Provision to Item 105.3. Shop Drawings, Product Data and Samples:** add the following:

"Review of Shop Drawings by the CITY and/or ENGINEER shall be for the sole purpose of determining the sufficiency of said drawings or schedules to result in finished improvements in conformance with the plans and specifications, and shall not relieve the CONTRACTOR of his duty as an independent contractor. It being understood and agreed that the Engineer does not assume any duty to pass upon the propriety or adequacy of such drawings or schedules or any means or methods reflected thereby in relation to the safety of either person or property during the contractor's performance hereunder."

13. **Special Provision to Item 105.4. "Construction Stakes":** is amended to the extent that the ENGINEER will provide initial horizontal and vertical control and construction staking for this project. The ENGINEER will provide the following construction staking:

- a. Verify and re-establish the design baseline and monuments set for horizontal and vertical control.
- b. Provide offset line and grade stakes at a minimum of 100-foot intervals for tangents, and at 50-foot intervals for curves. The ENGINEER will provide clearing limits, offset line and grade stakes for pavement back of curb (rough and final cut), storm drain and water lines as applicable, including appurtenances. The offset distance shall be determined by the CONTRACTOR. Lost or destroyed stakes will be replaced at the CONTRACTOR'S expense. A minimum of five (5) days notice must be given before staking.

The CONTRACTOR shall provide any additional stakes and other materials and incidentals necessary for the correct construction of all facilities at no additional charge. It is the CONTRACTOR'S sole responsibility to ensure the correctness of all stakes and that the work is constructed to the lines and grades shown on the plans.

14. **Item 105.6 Supervision by Contractor:** The CONTRACTOR shall designate a **full-time superintendent who shall be on the job site at all times during construction including times when work is being performed by subcontractors.** The OWNER'S Representative will communicate only with the superintendent. The CONTRACTOR may replace the designated superintendent by written notification to the OWNER.

15. **Special Provision to Item 105.7.1. Authority of the Engineer:** add the following:

"The Engineer shall make periodic visits to the site to familiarize himself generally with the progress of the executed work and to determine if such work generally meets the essential performance and design features and the technical and functional engineering requirements of the Contract Documents; provided and except, however, that the Engineer shall not be responsible for making any detailed, exhaustive, comprehensive or continuous on-site

inspection of the quality or quantity of the work or be in any way responsible, directly or indirectly, for the construction means, methods, techniques, sequences, quality, procedures, programs, safety precautions or lack of same incident thereto or in connection therewith. Notwithstanding any other provision of this agreement or any other Contract Document, the Engineer shall not be in any way responsible or liable for any acts, errors, omissions or negligence of the CONTRACTOR, any subcontractor or any of the CONTRACTOR'S or sub-contractor's agents, or employees or any other person, firm or corporation performing or attempting to perform any of the work."

16. **Item 106.5: Samples and Tests of Materials:** Delete the first and last paragraphs on Item 106.5 and replace with the following:

"The CONTRACTOR shall engage the services of an acceptable testing laboratory company to perform all required testing services. The CONTRACTOR (not the OWNER) shall pay all costs for these services, including any retesting after failure to pass tests. The CONTRACTOR shall obtain OWNER'S acceptance of the testing laboratory before having the services performed."

Written reports of tests and engineering data furnished by CONTRACTOR for OWNER'S review shall be submitted as specified in Item 105.3, "Shop Drawings, Product Data and Samples" and as modified by the Special Specifications.

17. **Special Provisions to Item 107.3. Indemnification:** delete Item 107.3. in its entirety and substitute the following:

"The CONTRACTOR and his sureties shall indemnify, defend and save harmless the OWNER and all of their officers, agents and employees, Engineer and all of its officers and employees from all suits, actions or claims of any character, name and description brought for or on account of any injuries, including death or damages received or sustained by any person, persons or property on account of the operations of the CONTRACTOR, his agents, employees or subcontractors; or on account of any negligent act or fault of the CONTRACTOR, his agents, employees or subcontractors in the execution of said contract; or on account of the failure of the CONTRACTOR to provide the necessary barricades, warning lights or signs; and shall be required to pay any judgment, with cost, which may be obtained against the OWNER or Engineer growing out of such injury, including death or damage."

18. **Item 107.12. Supervision and Construction Procedures:** The CONTRACTOR'S attention is drawn to paragraphs 1 and 4 of this item and paragraphs 1 and 3 of Item 105.6.

19. **Item 107.25. Project Clean-Up:** All objectionable surplus and waste material due to construction shall be removed from the site at the CONTRACTOR'S expense.

20. **Item 108.1. Progress Schedule:** add the following paragraph:

"The CONTRACTOR shall submit to the OWNER a construction schedule setting out items of construction, road closings, detours, utility interruptions, limits, times and actual dates. If the schedule is acceptable to the OWNER, the OWNER will approve it; if the schedule is unacceptable, it will be returned to the CONTRACTOR for revision and resubmittal. If the

CONTRACTOR wants to deviate from the approved schedule, he must submit a revised schedule to the OWNER for consideration. The entire work shall be prosecuted in a continuous manner in accordance with the approved schedule. Proposed stockpile locations must be approved by the OWNER prior to depositing material. The CONTRACTOR shall update this schedule on a monthly basis.”

21. **Item 108.5. Subcontracts:** add the following paragraph:

"The CONTRACTOR shall perform with his own organization and with the assistance of workmen under his immediate superintendence, work of a value not less than 50 percent of the value of all work embraced in the contract exclusive of items not commonly found in contract for similar work and exclusive of items that require highly specialized knowledge, craftsman and/or equipment not ordinarily available in the organization of CONTRACTORS performing work of the character embraced in the contract". For the purpose of evaluating the percentage of work performed by subcontractors, the cost of all equipment, supplies, and materials used or installed on the project by subcontractors shall be considered as part of the work of subcontractors. This will apply even if the contractor supplies and pays for some or all equipment, supplies, or materials used by subcontractors.

22. **Item 108.8. Delays; Extension of Time; Liquidated Damages:** Delete the first paragraph of Section 108.8. and replace with the following:

“The CONTRACTOR hereby agrees that no work will be performed on CITY holidays or on Sundays. In addition, he agrees that work will be performed between 7:00 a.m. and sunset on weekdays and between 8:00 a.m. and 6:00 p.m. on Saturdays. The only exception to the preceding will be the performance of work in response to emergency situations and/or when directed to work by the OWNER. Also, the CONTRACTOR hereby concurs that the preceding has been taken into account in setting the contract time.” The CONTRACTOR will be responsible for reimbursing the City of Lewisville for overtime charges for construction inspection services on Saturdays, Sundays and all City holidays. The overtime charges will be \$118.80 per hour and a minimum of four (4) hours will be charged for each occurrence of such service. The overtime charges will be billed on a monthly basis. Failure to pay for these services will result in delaying the final acceptance and payment.

“The CONTRACTOR shall be entitled to an extension of working time under this contract only when claim for such extension is submitted to the OWNER in writing by the CONTRACTOR within seven days from and after the time when any alleged cause of delay shall occur; and then only when such time is approved by the OWNER. In adjusting the working time for the completion of the project, the OWNER will consider delays due to acts of God, or the public enemy, acts of the OWNER, fires, floods, epidemics and quarantine restrictions. The OWNER may, but is not obligated to, take into account any unforeseeable causes of delay which the OWNER considers beyond the control and without the fault or negligence of the CONTRACTOR. It is anticipated that during the course of the contract, inclement weather (rain or freezing temperatures) will hinder or prevent work. The contract time has been established assuming that up to 20% of the contract days will be inclement weather days, during which no work can be performed. No extension of time will be granted

for such inclement weather days. The OWNER may grant an extension of time for inclement weather days beyond 20% of the contract time, but is under no obligation to do so.”

23. **Item 109.3. Payment for Extra Work:** Replace the first sentence of 109.3.1. General; with the following:

“No work shall be undertaken which requires extra payment without having executed a change order or field change approved by the CONTRACTOR and the OWNER, except when specifically ordered to do so in writing.”

24. **Item 109.5. Monthly Estimate, Partial Payments, Retainage, Final Inspection, Acceptance and Final Payment**

Delete from the first paragraph of 109.5.1: "The monthly estimate may include acceptable non-perishable materials delivered to the work; such payment shall be allowed on same percentage basis of the net invoice value as provided hereinafter."

Add in its place, the following:

The OWNER will pay for materials on hand only under the following conditions:

- a. The CONTRACTOR shall provide proof of payment for the materials.
 - b. The materials shall be secured in a manner acceptable to the OWNER.
 - c. Payment will not be made for small items, and other items not easily measured.
 - d. No payment will be made for small quantities of material on hand (less than 0.5 percent of the contract amount).
 - e. No payment for materials on hand will be made for items such as paint, mastics, cement, and other similar materials.
25. Delays associated with delivery of materials of appurtenances by the manufacturers will not be considered for any extension of contract time. It shall be the sole responsibility of the CONTRACTOR to ensure that the materials are manufactured and delivered on time.

B. Special Provisions to the Materials and Construction Methods of the Standard Specifications:

The Special Provisions for this project shall be per the TxDOT LGPP Requirements and 2024 Standard Specifications for projects let in FY 2025. Only items in the Proposal are Pay Items. Other specification items will be complied with; however, their measurement and payment provisions are hereby deleted.

The price bid shall cover all work required by the Contract Documents. All costs in connection with the proper and successful completion of the work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction plant, equipment, and tools; and performing all necessary labor and supervision to fully complete the work, shall be included in the unit and lump sum prices bid. All work not specifically set forth as a pay item in the Proposal shall be considered a subsidiary obligation of the CONTRACTOR and all costs in connection therewith shall be included in the prices bid.

Work that is subsidiary to pay items includes, but is not limited to the following: protection, adjustment, maintenance, repair or replacement of all underground public or franchise utilities and services, whether shown on the plans or not; cutting and removing and plugging existing utilities, as required; crushed stone base, embedment sand; modified flowable backfill; pipe fittings; bends; joint restraint and thrust blocks; valve stack risers, concrete valve boxes; valve extensions; grouting abandoned waterlines; cutting and plugging waterlines as required; removal or abandonment of existing valves; removal of existing fire hydrant assembly; delivery of salvaged items to 1100 North Kealy Avenue; maintaining water and sanitary sewer service to all adjacent properties; adjustment of the existing water line to avoid conflicts; trench dewatering; preventive measures of pipe flotation; installation of temporary orange polyethylene construction fencing adjacent to residences and businesses in construction areas as required; removal of existing thrust blocks; repair and replacement of landscape irrigation systems damaged during construction by a licensed irrigator; topsoil and sodding in areas outside of pay limits; placement of sod in all remaining disturbed areas after contract time has expired; concrete and/or asphalt pavement replacement (in areas outside of pay limits damaged by contractor); protection against flooding; removal of waste material from the site; replacement of property markers or monuments disturbed; sawcut and removal of existing pavement; replacement of damaged fences; clean up; additional traffic control not in plans including message boards; temporary asphalt pavement; replacement of existing traffic buttons and striping; miscellaneous grading; all other work required to complete the project and restore the areas of construction to their preconstruction condition; disposal of heavily chlorinated water main flushing water and all required testing of all the of the components of the project.

CONTRACTOR TO FURNISH COST BREAKDOWN

The CONTRACTOR shall furnish the City with a breakdown of any lump sum bid suitable for use in the preparation of progress estimates of the job to make partial payments on that lump sum item. Such a breakdown shall be in sufficient detail so as to permit its use in a manner satisfactory to the City. The breakdown shall not be unbalanced. Progress payments for materials on hand and equipment delivered will be based on invoices. The City will not recommend approval of a

progress estimate for payment until a satisfactory cost breakdown of the project has been submitted by the CONTRACTOR.

Special provisions to the materials and construction methods of the Standard Specifications as referenced above and as applicable to the Proposal Pay Items are as follows:

1. Bid Item “Preparing ROW (STA)” shall be completed per the provisions of TxDOT Item 100 and payment shall be made per 100-foot station (STA) as measured along centerline of streets right-of-way from beginning of street paving to end of street paving. It will include the area within the right-of-way and easement limits shown on the plans. Work shall include, but not be limited to: all obstructions above ground or below such as trees, shrubs, stumps, brush, roots, vegetation, logs, trash concrete, concrete driveways, culverts, curb and gutter, asphalt pavement, fences, structures, foundations, lumber, scrap metal, abandoned appliances, sprinkler systems, abandoned utility pipes or conduits and any other items not included as pay items elsewhere in the contract documents but necessary for the preparation of the easement and/or permanent or temporary easements for construction. The maintenance/relocation of street signs shall be considered as part of this item. This item shall also include the protection of any trees, shrubs, fences, structures, signs or other items that are to be preserved and/or relocated as shown on the plans. This pay item will also include removal of improvements or obstructions not specifically provided for in other pay items of the bid proposal. This pay item will include the installation and removal of temporary orange construction fencing along wetland boundaries and at other locations as indicated in the plans. This pay item will include the temporary relocation and reinstallation of mailboxes. If necessary, the CONTRACTOR shall coordinate with the U.S. Postal Service to ensure uninterrupted mail service to each property. All materials removed shall be properly disposed of offsite in a timely manner.
2. Bid Item “Removing Conc (Curb and Gutter)” shall be completed per the provisions of TxDOT Item 104 and payment shall be made on the basis of the price bid per linear foot (LF) and shall include the cost of sawcutting, removing and disposing off-site the existing pavements. Curb and Gutter shall be neatly sawcut full depth along straight lines as shown on the plans.
3. Bid Item “Removing Conc (Pav)” shall be completed per the provisions of TxDOT Item 104 and payment shall be made on the basis of the price bid per square foot (SF) and shall include the cost of sawcutting, removing and disposing off-site the existing pavements, curb and gutter, driveways, alleys, sidewalks, concrete-lined channel and riprap. Flatwork shall be neatly sawcut along straight lines as shown on the plans and to the nearest joint.
4. Bid Item “Excavation (Special)” shall be completed per the provisions of TxDOT Item 110 and payment shall be made on the basis of price bid per cubic yard (CY) and shall not be measured. Payment will be made using the plan quantities given in the Bid Proposal. The CONTRACTOR shall be satisfied as to the amount of work involved prior to submitting the bid. All street excavation, channel excavation, and wasting of surplus and unsuitable material are subsidiary to this bid item. All work associated with excavating for the proposed trail improvements shall be in accordance with TxDOT Item 110 “Excavation”. Excess material suitable as fill shall be placed within the areas where fill material is required for this project. **There shall be no compensation for any**

quantities in addition to what is provided in the bid documents unless the lines and grades are changed by the Engineer.

5. Bid Item “Embankment (Final) (Dens Cont) (TY C1)” shall be completed per the provisions of TxDOT Item 132 and the recommendations of the Geotechnical Engineering Report and payment shall be made on the basis of price bid per cubic yard (CY) and shall not be measured. Payment will be made using the plan quantities given in the Bid Proposal. The CONTRACTOR shall be satisfied as to the amount of work involved prior to submitting the bid. All grading embankment and wasting of surplus and unsuitable material are subsidiary to this bid item. All work associated with embankment for the proposed trail improvements shall be in accordance with TxDOT Item 132 “Embankment”. **There shall be no compensation for any quantities in addition to what is provided in the bid documents unless the lines and grades are changed by the Engineer.**
6. Bid Item “Block Sodding” shall be completed per the provisions of TxDOT Item 162 and payment shall be made on the basis of price bid per square yard (SY). The following modifications shall apply:
 - a. Description – The CONTRACTOR shall provide topsoil and block sod to all designated areas. The CONTRACTOR shall water, mow and protect the seeded areas until acceptance. Acceptance will not be made until all seeded areas are in full growth with a well-established root system. No on-site topsoil shall be used for establishing grass. **The CONTRACTOR shall provide imported topsoil obtained from a commercial source.**
 - b. Preparation of Areas – All areas to receive topsoil and sod shall be graded to the lines, grades and cross-sections shown on the plans and as provided for in other items of this contract, with the surface grade set four (4) inches low to allow for the placement of 4-inch depth topsoil plus sod. All rocks and foreign material shall be raked off the surface prior to the placement of topsoil.
 - c. **Imported Topsoil - Imported topsoil shall be obtained from an approved commercial source. Topsoil shall consist of natural, fertile, friable, screened, dark-colored sandy loam. It shall contain no acidity or alkalinity detrimental to plant growth. It shall contain no subsoil, lumps, stones, roots or other foreign matter.**
 - d. Grass Type –Sod shall be of the same type as on areas adjacent to the area being sodded.
 - e. Block Sodding – Sod blocks shall be carefully placed on the prepared areas. Sod shall be so placed that the entire designated area and disturbed areas shall be covered. Any voids left in the block sod shall be filled with additional sod and tamped. The entire sodded areas shall be rolled and tamped to form a thoroughly compact solid mass. When necessary, the sodded areas shall be smoothed after planting has been completed and shaped to conform to the cross-section. Any excess dirt shall be removed to give a neat appearance.
 - f. Fertilizer – Fertilizer shall conform to the requirements of Item 204.4, Fertilizer of the Standard Specifications. Fertilizer shall be applied at the rate of 400 pounds/acre and be considered subsidiary to bid item “4-Inch Topsoil and Sodding”. Section 204.4.4, Measurement and Payment is hereby deleted.

- g. Watering – Sodded areas shall be watered by the CONTRACTOR as required to promote rapid growth of grass without unnecessary delay. The CONTRACTOR shall install a temporary irrigation system to water the grass in areas not covered by the permanent irrigation systems. Re-sodding shall be performed immediately, when required, without delay. Temporary irrigation, re-sodding, and replacing eroded topsoil are incidental to the contract.
- h. Acceptance – The CITY will accept sodding as complete upon establishment of a growth of grass covering all areas requiring seeding. The CONTRACTOR shall mow and maintain the grass until accepted.
- i. Payment – Payment will be per plan quantity. No measurement will be made.

Topsoil, sod and fertilizer required in areas disturbed by the CONTRACTOR outside of the designated areas shall be incidental to the project and not paid for separately. The CONTRACTOR shall pay for all water costs until grass is accepted by the CITY

- 7. Bid Items “Broadcast Seed (Perm) (Urban) (Sandy)” and “Cell Fbr Mlch Seed (Perm) (Urban) (Clay)” shall be completed per the provisions of TxDOT Item 164 and payment shall be made on the basis of price bid per square yard (SY). Payment will be made using the plan quantities given in the Bid Schedule for this item. This item includes all costs for furnishing all materials, equipment, labor including fine grading, placing the topsoil and hydromulch seeding, rolling and tamping, fertilizing, water, disposal of waste materials, and any other incidentals necessary to complete the work. Soil retention blanket shall be installed on all side slopes where specified immediately after seeding per the provisions of TxDOT Item 169. Soil retention blanket shall be American Excelsior Company Curlex I or approved equal. Soil retention blanket shall be installed by rolling mat parallel to the direction of water flow and in accordance with manufacturer’s recommendations. No more than 50% of this item shall be paid until 100% grass coverage has been established to the satisfaction of the Owner. This pay item shall consist of all work, materials and incidentals necessary to restore grass in all disturbed areas to an equal or better condition than prior to construction. Disturbed areas along the length of the project shall be fine graded and cut to receive grass as determined by the Owner. Topsoil shall be placed in low areas to bring them to grade and shall consist of a friable surface soil reasonably free of grass, roots, weeds, sticks, stones, or other foreign materials. The topsoil shall consist of sandy loam, with soil particles within the following percentages: clay; 0-25; silt; 25-50; sand; 50-70; decomposed organic matter; 5-10. The clay content is optional. The soil shall have a soil acidity range between a pH 5.0 to pH 7.0. The soil salinity shall not exceed 3 millimhos per centimeter at 25° C (as described by USDA Circular No. 982). Unless otherwise directed by the Owner, grass matching the species that existed prior to construction and/or the species adjacent to the disturbed areas shall be placed in all disturbed areas where improved lawn or established turf existed prior to construction. Contractor shall be required to water, establish growth, and protect and repair any damaged areas until completion and final acceptance of the project by the Owner. It is the intent of the Owner that all disturbed areas along the project be restored. If there are areas outside of the project limits that are disturbed by the Contractor during the performance of this work, those additional areas shall be restored in accordance with

the requirements provided herein at the Contractor's sole expense. Work shall be in accordance with TxDOT Item 164 "Seeding for Erosion Control."

8. Bid Item "Vegetative Watering" shall be completed per the provisions of TxDOT Item 168 and payment shall be made on the basis of price bid per 1,000 gal. (TGL) of water as applied. Rate of water application shall be on the order of 169,400 gallons per acre of seeding placed.
9. Bid Item "Retaining Wall (Cast-in-Place)" shall be paid on the basis of price bid per square foot (SF) of the front surface area of the wall. This is a plans quantity measurement item and shall meet the specifications of TxDOT Item 423. 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 "Retaining Walls" of the type or special surface finish specified. This price is full compensation for excavation in back of retaining walls and for footings; furnishing and placing footings, leveling pads, copings, and traffic railing foundations; furnishing, placing, and compacting backfill (except in embankment areas), including cement for stabilization; proof rolling; furnishing and placing concrete, reinforcing steel, waterproofing material, filter material and drain pipe, joint material, water stop, and filter fabric when required; fabricating, curing, surface finish, and finishing all panels; furnishing and placing earth reinforcement, anchorage systems, and fasteners; wall erection; and equipment, labor, tools, and incidentals.
10. Bid Items "Riprap (Stone Ty R) (Dry) (24 in)" and "Bedding Material (6 in)" shall be completed per the provisions of TxDOT Item 432 and payment shall be made on the basis of the price bid per cubic yard (CY) and shall be total compensation for furnishing all labor, materials, excavation, subgrade preparation, filter fabric, stone, equipment and any other incidentals necessary to complete the work. Rock riprap shall be constructed in accordance with the plan details. Payment for excavation of toe wall trenches, for all necessary excavation below natural ground or bottom of excavated channel, and for shaping of slopes for riprap will be included in the unit price. See TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges 2024 Edition, Item No. 432, "Riprap" for specifications governing this item.
11. Bid Item "Rail (Handrail) (Decorative)" shall be completed per the provisions of TxDOT Item 450 and payment shall be made on the basis of the price bid per linear foot (LF) and shall be total compensation for furnishing all labor, materials, hardware, equipment and any other incidentals necessary to complete the work. This item shall include the furnishing and installation of decorative handrail at the locations shown in the construction plans or as determined by the Engineer in accordance with TxDOT standard details and the specifications of TxDOT Item 450. Galvanization of the rails shall be subsidiary to the unit cost of handrail. Custom pedestrian rail shall be constructed as per the structural details as shown on the plans. Contractor shall provide sealed engineering shop drawings of the decorative handrail based upon the concept drawings provided in the plans. Handrail shall conform to all applicable codes and standards. Handrail shall be hot dip galvanized. Handrail posts to match bolt pattern spacing shown on the plans and details. Contractor shall provide two in color sample mock-ups or 2 complete railing sections for review and approval by the City of Lewisville. Final color selections will be based upon approval of mock-up.

12. Bid Items for “RC Pipe (CL III)” shall be completed per the provisions of TxDOT Item 464 and payment shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all labor, materials, excavation, embedment, backfill, equipment and any other incidentals necessary to complete the work. All storm drain pipes shall be Class III unless noted otherwise. All proposed storm drain connections shall be prefabricated. Field connections can be used for connection to existing lines only. Pipe collars shall be installed at all pipe size and grade changes. This item shall include plugs, cutting and plugging existing lines, tapping, collars, fittings, wyes, supporting and protecting existing utilities and connections to adjacent structures necessary for complete installation. There shall be no separate pay item for pipe through structures, such as manholes, junction boxes, etc. Pipe joints shall be sealed with “Omni-Flex, T&G Joint Seal” or equal, at no extra pay.
13. Bid Item “Headwall (CH-PW-S) for 60” RCP” shall be completed per the provisions of TxDOT Item 466 and payment shall be made on the basis of the price bid per each (EA) and shall be total compensation for furnishing all labor, materials, excavation, form work, concrete, reinforcing steel, backfill, equipment and any other incidentals necessary to complete the work. Headwall shall be constructed in accordance with TxDOT details. Surfaces adjacent to headwalls shall be graded to provide positive drainage.
14. Bid Item “Sloped Headwall (SET – Type I) for 48” RCP” shall be completed per the provisions of TxDOT Item 467 and payment shall be made on the basis of the price bid per each (EA) and shall be total compensation for furnishing all labor, materials, excavation, form work, concrete, reinforcing steel, backfill, equipment and any other incidentals necessary to complete the work. Headwall shall be constructed in accordance with TxDOT details. Surfaces adjacent to headwalls shall be graded to provide positive drainage.
15. Bid Item “Mobilization” shall be completed per the provisions of TxDOT Item 500 and payment shall be made on the basis of the price bid per lump sum (LS).
16. Bid Item “Traffic Control” shall be per the provisions of TxDOT Item 502 and payment shall be on per month (MO) basis. This pay item shall consist of designing, furnishing, installing, maintaining, and removing the required traffic control devices during each phase of construction in accordance with the approved traffic control plan and TMUTCD. Inclusive with this pay item is the requirement for adequate notification and instruction to be given to adjacent businesses and property owners and to the traveling public regarding interruptions or changes to established traffic flow patterns to, from and along the work site.

The CONTRACTOR shall submit a Traffic Control Plan to the City for approval prior to beginning work. Any traffic control items necessary for safe facilitation of vehicular and pedestrian traffic shall be furnished by the contractor. This item shall include detours, barrels, panels, arrow boards, removing striping, temporary lane lines and/or markers, construction signing and barricades, construction pavement markers, temporary asphalt, message boards and all other work required to provide for passage of vehicular traffic for all phases of construction.

Two-way traffic on the roadways must be maintained at all times during construction. Access must be maintained at all times to all houses and businesses. If necessary, CONTRACTOR must furnish flagmen to direct traffic through work zone at no additional compensation. Any temporary asphalt or flex base necessary to maintain proper lane configurations and transitions is subsidiary to this item. Store all materials and equipment not in use in a manner and at locations that will not interfere with the safe passage of traffic. The amount bid for this item shall be paid over the duration of the project with the amount paid on each monthly progress estimate determined by the percent complete on all other bid items.

17. Bid Items “Construction Exits (Install) (Ty 1)” and “Construction Exits (Remove)” shall be completed per the provisions of TxDOT Item 506 and payment shall be made on the basis of the price bid per square yard (SY) and shall be total compensation for furnishing all labor, materials, excavation, aggregate, complete removal, backfill, equipment and any other incidentals necessary to complete the work. Upon removal of the construction exit, Contractor shall restore areas to equal or better condition prior to construction.
18. Bid Items “Temp Sedmt Cont Fence (Install)” and “Temp Sedmt Cont Fence (Remove)” shall be completed per the provisions of TxDOT Item 506 and payment shall be made on the basis of the price bid per linear foot (LF) and shall be total compensation for furnishing all labor, materials, excavation, complete removal, backfill, equipment and any other incidentals necessary to complete the work.
19. Bid Items “Biodeg Erosn Cont Logs (Install) (18”)” and “Biodeg Erosn Cont Logs (Remove)” shall be completed per the provisions of TxDOT Item 506 and payment shall be made on the basis of the price bid per linear foot (LF) and shall be total compensation for furnishing all labor, materials, excavation, complete removal, backfill, equipment and any other incidentals necessary to complete the work.
20. Bid Items “Conc Sidewalks (6”)” and “Curb Ramps (Ty 7)” shall be completed per the provisions of TxDOT Item 531 and payment shall be made on the basis of the price bid per square yard (SY) and per each (EA), respectively, and shall be total compensation for furnishing all labor, materials, equipment and any other incidentals necessary to complete the work. Concrete sidewalks shall be constructed in accordance with the plan details. Connection to existing concrete sidewalks shall be subsidiary to this item. Barrier-free ramps shall be constructed in accordance with the plan details.
21. Bid Item “In Sm Rd Sn Sup&Am Ty 10BWG(1)SA(P)” shall be completed per the provisions of TxDOT Item 644 and payment shall be made on the basis of the price bid per each (EA) and shall be total compensation for furnishing all labor, materials, hardware, equipment and any other incidentals necessary to complete the work. This item includes all costs for the installation of all permanent and regulatory signage (including pole mounted street name signs), and the relocation of existing signs. All conflicting signage shall be removed and is considered subsidiary to this bid item.
22. Bid Items “Pavement Sealer 4-inch” and “Re Pm w/Ret Req Ty I (W)4”(SLD)(100MIL)” shall be completed per the provisions of TxDOT Item 666 and payment shall be made on the basis of the price bid per linear foot (LF) and shall be total compensation for furnishing all labor, materials, hardware, equipment and any other incidentals necessary

to complete the work. This item includes all costs for the installation of all permanent pavement markings and pavement surface preparation for markings. All conflicting striping shall be removed and is considered subsidiary to this bid item.

23. Bid Item “Pav Surf Prep for Mrk (4”)” shall be completed per the provisions of TxDOT Item 678 and payment shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all labor, materials, hardware, equipment and any other incidentals necessary to complete the work. This item includes all costs for the installation of all pavement surface preparation for markings. All conflicting striping shall be removed and is considered subsidiary to this bid item.
24. Bid item “Force Account – Safet Contingency” shall be completed per the provisions of TxDOT Special Specification 9606 and payment shall be made on the basis of price bid per lump sum (LS) and shall be total compensation for furnishing all labor, materials, hardware, equipment and any other incidentals necessary to complete the work. Use of or allocation of these Safety Contingency funds shall be mutually agreed upon prior to issuance.

C. Special Specifications

1. Shop Drawings:

The CONTRACTOR shall submit three copies of shop drawings to the OWNER for all proposed materials including concrete mix designs. CONTRACTOR shall keep one (1) set of prints for making construction notes and mark-ups for submittal of as-built drawings.

2. **Property Owner Notification/Approval:**

The Contractor must notify all affected property owners 30 days prior to accessing the property. Notification must be made by certified mail with a copy of the letter, certified mail receipt and domestic return receipt submitted to the City. The CONTRACTOR shall obtain a written letter of approval from the affected property owners prior to city acceptance of the work.

3. **Construction Activities:**

The following construction activities will be limited to Monday-Thursday from 6:30 am – 5:30 pm which are the normal working hours of Public Services:

- Test Kills
- Water Line Isolation
- Taps
- Boring or Drilling
- Excavation

This is to ensure that Public Services can adequately provide the support services often needed with the work activities listed above. These services require specialized equipment and trained personnel to perform safely and effectively.

Please bear this in mind when installing the water lines and other excavation & drilling activities.

6. Inspection:

The word “inspection” or other forms of the word, as used in the contract documents for this project shall be understood as meaning the OWNER’S Representative will observe the construction on behalf of the OWNER. The OWNER’S Representative will observe and check the construction in sufficient detail to satisfy himself that the work is proceeding in general accordance with the contract documents, but he will not be a guarantor of the CONTRACTOR’S performance.

7. “Street Construction Ahead” and “End Construction” signs shall be installed in accordance with Figure 6-1 (Rural District) of the “Texas Manual on Uniform Traffic Control Devices”, latest edition and the traffic control plans. Some signs may have to be relocated during construction. The exact locations will be determined by the OWNER. The CONTRACTOR shall provide flagmen to protect the public in accordance with all governing laws and regulations. The installation of “Street Construction Ahead,” “Utility Construction Ahead” and “End Construction” signs shall be made and such approved at least 48 hours prior to any construction or the moving of any equipment or materials onto or nearby the site.
8. Construction signing shall be placed on new 4” X 4” wooden posts (two required except “Street Construction Ahead” may be on one post). Upon post removal, the holes shall be filled and compacted. Signs shall be new.
9. Street signs shall be mounted in accordance with TxDOT standard details. All posts and hardware shall be galvanized in accordance with Item 445 – Galvanizing, contained in the Standard Specifications for Construction of Highways, Streets, and Bridges, published by the Texas Department of Transportation.
10. The CONTRACTOR shall provide detour signs, barricades, barrels, vertical panels, flashing lights, construction pavement markers, construction and maintenance signs, construction lights, construction speed limit signs, channelizing devices, and flagmen as required providing for the safety of the traveling public. These items shall be in accordance with the traffic control plan and the recommended practices of the “Texas Manual on Uniform Traffic Control Devices for Streets and Highways”, latest edition.

Flashing light panel board signs or changeable message board signs shall be placed at locations to be determined by the City Inspector and moved at his discretion during construction.
11. The CONTRACTOR shall provide two (2) project signs at the site with active construction, the cost of which will be subsidiary to the various bid items. Signs will be installed as directed by the City. The City will provide the CONTRACTOR with information with regards to the size of lettering, content, and size of signs (see detail at back of spec book). The four project signs shall be relocated, as directed by the City, as the work locations progress within each stage of construction.
12. Construction signing shall not be removed from the project until approved by the OWNER.
13. No street shall be closed except upon written authority from the OWNER.

14. The CONTRACTOR shall remove all trees, stumps, vegetation, roots, brush, logs, shrubs, plants, and landscaping within the right-of-way. All trees, stumps, slashings, brush, other debris or deleterious material generated as a part of this work shall be removed from the project. Any required disposal permits shall be in the sole responsibility of the CONTRACTOR. All stumps shall be grounded to below the finished grade, using a stump grinder. Tree branches that overhang into the right-of-way shall be trimmed by the CONTRACTOR, if required, to facilitate the construction. Tree removal or trimming shall be paid for as a part of the bid item "Prepare Right of Way".

Trees to remain will be protected from damage by the CONTRACTOR. Employees of the CONTRACTOR (his subcontractors) will not park closer than ten (10) feet to any tree that is to remain.

15. The CONTRACTOR shall coordinate his activities with other CONTRACTOR'S working within, and close proximity to the project. To facilitate cooperation, regular progress meetings will be held among all CONTRACTOR'S.

16. Water and sanitary sewer service shall be maintained for all properties during construction. This includes the construction of temporary connections, if required. Temporary connections shall be considered subsidiary to the various bid items.

17. At the end of each day, the CONTRACTOR shall prepare the work to the satisfaction of the OWNER to leave a safe and accessible job site.

18. Prior to beginning construction, the CONTRACTOR shall contact all utility companies with utilities in the area and the property owners, 48 hours in advance of starting work. If necessary, test ditches will be dug to verify actual locations and conditions.

Atmos Energy.....	945-275-1335
AT&T	214-745-2976
CoServ Electric (Attn: Dean Rhea ext. 6916)	940-321-7800
Frontier Communications (formerly Verizon).....	469-978-2890
Spectrum (formerly Time Warner Cable).....	469-464-4993
Texas-New Mexico Power Company	972-353-5006
Unite Private Networks.....	972-841-5695
ONCOR	

City of Lewisville Public Services	972-219-3510
United States Post Office	800-275-8777
For line locates, call.....	811

19. Information shown on these plans concerning type and location of underground utilities is not guaranteed to be accurate or all-inclusive. The CONTRACTOR is responsible for making his own determination as to type and location of underground utilities as may be necessary to avoid damage thereto. The CONTRACTOR shall verify location of underground pipelines, conduits and structures by contacting the owners of the underground facilities and prospecting in advance of excavation operations. The CONTRACTOR shall pay for all repairs resulting from the construction of this project and no additional payment will be made by the CITY.

Furthermore, whenever the OWNER requests the CONTRACTOR to uncover any water line, sewer line or pipe line, or any other underground utility line well in advance of his construction activity in order to confirm locations of utilities, the CONTRACTOR shall comply with the OWNER'S request.

20. Boundary fences or other improvements removed to permit this construction shall be replaced in the same location or at the proposed ROW, as specified on the plans. Temporary fencing shall be installed as required. Cost of temporary fencing is incidental to contract bid items.
21. The CONTRACTOR shall at all times keep the job site as free from all material, debris and rubbish as is practical and shall remove same from any portion of the job site as construction of that portion is completed. No item of work will be considered complete for payment purposes until required cleanup has been performed.

Upon completion of the work, the CONTRACTOR shall remove from the site all plants, materials, tools and equipment belonging to him and leave the site with an acceptable appearance.

22. No material, which has been used by the CONTRACTOR for any temporary purpose whatever, is to be incorporated in the permanent structure without written consent of the CITY.

Where materials or equipment are specified by a trade or brand name, it is not the intention of the OWNER to discriminate against an equal product of another manufacturer, but rather to set a definite standard of quality of performance, and to establish an equal basis for the evaluation of bids. Where words "equivalent", "proper", or "equal to" are used, they shall be understood to mean that the thing referred to shall be proper, the equivalent to, or equal to some other thing, in the opinion or judgment of the ENGINEER. Unless otherwise specified, all materials shall be the best of their respective kinds and shall be in all cases fully equal to approved samples. Notwithstanding that the words "or equal to" or other such expressions may be used in the specifications in connection with a material, article or process specifically designated shall be used, unless a substitute shall be approved in writing by the ENGINEER, and the ENGINEER shall have the right to require the use of such specifically designated material, article or process.

23. Tree Protection

The CONTRACTOR shall be responsible for taking measures to minimize damage to tree limbs, tree trunks, and tree roots adjacent to the project unless otherwise specified in the plans to remove trees. The protected trees are identified on the demolition and paving plan and profile sheets. When the construction passes by or close to trees, the CONTRACTOR shall erect a temporary construction fence to limit activity to outside of the drip line of the tree. CONTRACTOR shall inspect the work site in advance and arrange to have any tree limbs pruned that might be damaged by equipment operations. The City shall be notified at least 24 hours prior to any tree trimming work. Nothing shall be stored or parked over the tree root system within the drip line area of any tree. The CONTRACTOR shall employ a qualified landscaper for all the work required for tree care to ensure utilization of the best agricultural practices and procedures.

24. The CONTRACTOR'S attention is directed to the requirement by Item 505.1 Open Cut – General Conduit Installation in the Standard Specifications for Public Works Construction. Specifically, the last paragraph of 505.1.6 the CONTRACTOR is required to provide, and to install at the end of each working day or when work is suspended, a temporary plug or watertight seal in the end of the utility main being installed under this contract. All caps (plugs) used shall be manufactured by the supplier of the pipe being used, or approved equal.
25. The CONTRACTOR is responsible for the preparation and proper execution of a Trench/Excavation Safety Program. This shall include submittal of a Shoring Plan prepared by a professional engineer licensed in the state of Texas. Trench safety and excavation systems must meet all the requirements of the Occupational Safety and Health Administration's Standards in effect during the construction period for the project. This work is subsidiary to all bid items unless otherwise noted.
26. The following material tests will be required for the project:
 - a. Trench Backfill Compaction: All trench backfill under roadbed areas shall be mechanically compacted as required by North Central Texas Council of Governments Specifications and these special site-specific specifications. The testing laboratory will make tests of in-place density in accordance with ASTM D 698 of points selected by the City Inspector. All trenches shall be compacted to 95% of standard Proctor maximum dry density within the range of 2% below and 2% above the material's optimum moisture content. A minimum of one density test will be made for each 100 linear feet of every 8-inch loose lift of fill for water, storm drain and sanitary sewer construction. When backfill tested fails to meet the required density, trench backfill in the vicinity of the test, i.e. for a minimum of 50 feet in both directions from the test location, shall be removed and replaced with compaction. Thereafter, three tests shall be performed on the material removed and replaced, to determine if it is in accordance with the project compaction requirements.
 - b. Pavement Subgrade: The testing laboratory will make tests of in-place subgrade density in accordance with ASTM D 2922-81 at points selected by the City Inspector. A minimum of one field density test shall be conducted per lift for each 5,000 square feet of pavement subgrade.
 - c. Roadway Embankment: The testing laboratory will make tests of in-place density in accordance with ASTM D 6938-08 of points selected by the City Inspector. A minimum of two field density tests shall be conducted per lift for each 5,000 square feet of compacted area, except that in critical areas such as around and over structures, the frequency of tests may be reduced to one test per 2,500 square feet.
 - d. Concrete: Four standard 6-inch test cylinders shall be made from each type or strength of concrete for each pouring operation, but not less than five cylinders from each 100 yards of concrete placed. For twenty-eight (28) day concrete test cylinders shall be made and cured, as prescribed by ASTM Specification C-31, and broken, one at seven (7) days, two at twenty-eight (28) days, and hold one, as prescribed by ASTM Specification C-39. For three (3) day concrete test cylinders shall be made and cured,

as prescribed by ASTM Specification C-31, and broken, two at three (3) days, one at seven (7) days, and hold one, as prescribed by ASTM Specification C-39.

- e. Pavement Thickness Test: The CONTRACTOR shall have the new pavement cored (1-inch diameter) for thickness testing. In addition to the number of cores for pavement testing, one core shall be required at each area that is hand-poured pavement. The CONTRACTOR shall pay the cost of coring pavement. A City inspector must be present when coring is performed. The OWNER shall determine the locations for taking cores.
- 27. Existing concrete pavement, sidewalks, driveways, curb, asphalt pavement, curb and gutter, or concrete channel paving to be removed, shall be sawed along neat lines where portions are to be left in place. When sidewalks must be removed, full panels shall be removed and then replaced.
 - 28. The CONTRACTOR shall furnish and install permanent pavement markings at locations as shown on the plans. The elimination of existing raised pavement markers and markings, and the surface preparation required prior to installation of new signs and markings shall be considered subsidiary to the bid item for "Pavement Markings and Signage". All pavement markings and signs will be in accordance with the Texas Department of Transportation (TxDOT) Standard Specifications for the Construction of Highways, Streets, and Bridges, as well as in accordance with TxDOT standard drawings for signs. Wood shall not be used in the construction of permanent signs or their supports.
 - 29. Valves, fire hydrants, meter boxes, and cleanouts shall be located outside the future sidewalk areas.
 - 30. Positive drainage shall be established during the initial phase of grading and maintained throughout construction. Any softening or saturation of any lift will necessitate removal and replacement of the affected area. Where surface drainage channels are blocked during construction, they shall be restored to their original grade and cross-section.
 - 31. Delays associated with delivery of materials by the manufacturer will not be considered for any extension of contract time. It shall be the sole responsibility of the CONTRACTOR to assure that the materials are manufactured and delivered on time.
 - 32. **Construction Sequencing and Temporary Traffic Control**

The CONTRACTOR shall provide a detailed construction sequencing and traffic control plan prior to beginning work. Each phase of construction shall consist of the following general items of work:

- a. Erect traffic control, warning, and detour signs
- b. Trail excavation and fill
- c. Construct storm drain lines and headwalls
- d. Construct retaining walls
- e. Construct trail pavement
- f. Install railing
- g. Construct driveways and sidewalks

- h. Clean up and restore right-of-way
- i. Install block sod and seeding
- j. Remove traffic control devices and open trail to full traffic

Prior to construction, the CONTRACTOR will be required to submit a detailed construction sequencing and temporary traffic control plan to address all phases of construction. A schedule shall also be submitted to address times of completion of each stage of the construction sequence and projected dates of road closings, detours, and utility interruptions. The CONTRACTOR shall update this schedule on a monthly basis.

The construction schedule shall address measures to be taken in the event of heavy rain or wet weather during construction. If, in the opinion of the City, wet weather renders unpaved streets or driveways impassable to traffic or prevents access to adjacent property by residents, the Contractor shall place gravel or crushed stone in the streets. The cost of furnishing or placing such materials shall be incidental to the unit cost of the various items of construction. Contractor's personnel shall be on call 24 hours a day to handle wet weather problems.

Proper notification must be given to all affected property owners at least 48 hours in advance of all construction operations **including sawcutting**.

No street shall be closed except upon written authority from the OWNER.

The Contractor shall provide all barricades, signing, and traffic control devices required for maintaining traffic flow.

At the end of each day, trenches shall be backfilled and streets maintained in an all-weather condition by the addition of asphalt millings, crushed stone or other means approved by the Engineer when permanent pavement is not in place. The temporary surface shall be maintained until permanent pavement is placed. This work shall be subsidiary to the Proposal Bid Items.

Construction signing shall not be removed from the project until approved by the OWNER. **Construction signing shall be maintained in good working condition throughout the duration of the project.**

33. **Reinforced Concrete Paving for City Streets and Sidewalk**

Reinforced concrete pavement shall be installed in accordance with the construction plans and Item 303 of the Standard Specifications. Concrete for paving streets, alleys, and driveways shall have a minimum compressive strength of 4,000 PSI at 28 days except for intersections and areas requiring hand finishing, where a minimum compressive strength of 4,500 PSI is required. If the CONTRACTOR desires, he may submit a "high early strength" design mix for use at driveways and street intersections. "High early strength" concrete should be obtained with higher cement content. Sidewalks shall have a minimum compressive strength of 3,000 PSI @ 28 days. No super plasticizers will be allowed in concrete mixes. The minimum cement ratio shall be 6.0 sacks per cubic yard for 4,000 PSI concrete and 6.5 sacks per cubic yard for 4,500 PSI concrete. Fly ash will not be permitted in street and sidewalk concrete on the project. Bar chairs area required to support

reinforcing steel and dowel bars. Hand finish of concrete pavement will not be a separate pay item on the project.

Reinforcing steel shall be 60-ksi steel, No. 4 bars placed on 18-inch center-to-center spacing each way. All work required for joints (including anchor joints), sawcutting joints and joint sealant is included in these items.

Maximum joint spacing shall be 15 feet.

The CONTRACTOR shall submit mix designs and concrete break histories for approval prior to construction.

34. **Storm Water Prevention Pollution Plan (SWPPP)**

It shall be the full responsibility of the CONTRACTOR to acquire and comply with any and all permits as may be required to avoid delay of the project.

Prior to construction, the CONTRACTOR shall comply with Federal and State storm water management regulations. The plan shall employ measures to prevent erosion and siltation from the construction disturbance from reaching stream beds, channels, storm water structures, ponds, etc. The plan shall comply with the requirements of the “Integrated Storm Water Management Design Manual for Construction” published by NCTCOG. In the event of a conflict between these requirements and Federal and State pollution control laws, rules, and regulations or other Federal, State or Local agency laws, rules, and regulations, the more restrictive shall apply. The release of the plan for construction by the CITY in no way relinquishes the CONTRACTOR of all responsibility and liability for the pollution control. The CONTRACTOR shall be solely responsible and liable for all activities at the construction site necessary for compliance with Federal and State storm water regulations and the Storm Water Pollution Prevention Plan for the site.

The SWPPP shall conform to the following City of Lewisville requirements:

- a. All site-specific information required by the TCEQ Construction General Permit (Part III, Section F) must be included in the SWPPP. Restatement of information directly from the Construction General Permit is not acceptable. The CONTRACTOR must describe specifically what measures are planned at the construction site.
- b. All signature documents must be signed and dated prior to submittal for review. This includes SWPPP certifications, Notices of Intent (NOI), Construction Site Notices, and Inspector Delegation Letters. If there are multiple Operators for the project, each Operator’s signature documents must be signed and dated. The City of Lewisville will complete its own signature documents during the review process. All forms must be signed by an appropriate signatory authority, and include the person’s job title, where required. SWPPPS without the proper signatures will be returned without review.
- c. The specific inspection schedule must be described in the SWPPP. The CONTRACTOR must clearly state whether he will be implementing the 14-day (and within 24 hours after a ½ inch rainfall) schedule, or the 7-day schedule.
- d. The CONTRACTOR must include a copy of the inspection form that will be used. The form must include the required certification statement and allow for signature by the inspector, as required by the Construction General Permit.

- e. The SWPPP must include a section in which to document the dates of the following activities: when major grading activities occur; when construction activities temporarily or permanently cease on a portion of the site; the dates when stabilization measures are initiated. If there is no section for this information, the CONTRACTOR must document the information on the inspection reports, and the CONTRACTOR must state in the SWPPP that the information will be documented in this manner.
- f. The SWPPP must describe what types of temporary and/or permanent stabilization will be implemented at the site. For example, if the plan is to seed the disturbed area and maintain it until a uniform, established vegetative growth is achieved, then this must be detailed in the SWPPP.
- g. The CONTRACTOR must identify the erosion and sediment controls that are planned at the site, including sweeping activities. All structural controls (i.e. silt fence, check dams, rock entrances) must be shown on the site map. The CONTRACTOR must also describe how he plans to maintain those erosion and sediment controls in proper working order.
- h. The SWPPP must include both a General Vicinity Map and a Detailed Site Map. The site map must include all of the information listed in Part III, Section F (g) of the Construction General Permit. The CONTRACTOR may use the Erosion Control map from the Construction Plans, provided that it includes all of the necessary information. It is recommended that a separate site map be developed for the SWPPP, to avoid deficiencies.
- i. The SWPPP must clearly state whether or not any support activities, such as concrete or batch plants, are planned. This is because support activities do not always qualify for coverage under the Construction General Permit, and separate permit coverage may be necessary.
- j. If the project disturbs 10 acres or more with a common drainage location, and a sediment basin is not employed, the rationale for this decision must be documented in the SWPPP. The equivalent erosion and sediment control devices that are to be used must be described.
- k. Allow a minimum of 2 days for review of the SWPPP.
- l. The City of Lewisville does not currently utilize electronic submittal of Notices of Intent. **Construction will not be allowed to begin until 7 days after the NOI has been signed by the signatory authority and postmarked for delivery.** For this reason, early submission of the SWPPP and NOI are highly recommended.
- m. At least two copies of the completed SWPPP must be submitted to the City. One copy will be maintained by the Storm Water Division, and one other copy will be reviewed and returned to the CONTRACTOR.

The cost to the CONTRACTOR for the preparation of the SWPPP for the project shall be incidental to the various items of erosion control. The erosion control plan included in the project construction plans shall be incorporated into the SWPPP. Items required by the SWPPP that are not included as bid items are subsidiary to the various items of erosion control. The various bid items for erosion control shall include all costs for implementing

and maintaining the Storm Water Pollution Prevention Plan, from the beginning of construction through final acceptance and establishment of grass coverage.

Any disturbed areas, whether inside or outside the project limits, where construction activities are complete or won't be worked on for 14 days, must be permanently or temporarily stabilized. **Stabilization measures must be initiated no later than one day after completing work in an area or determining that work will be temporarily stopped for more than 14 days in that area.** Temporary stabilization can include the use of erosion blankets such as Curlex or other methods approved by the City inspector. Permanent stabilization will require topsoil and sod, unless otherwise shown on the project landscaping plans.

Final acceptance of sodded areas will be granted when sod has taken root. Placement of temporary or permanent erosion control measures in unstabilized areas after contract time has expired will be considered subsidiary to this bid item. Once final acceptance of permanent stabilized areas is granted, **the Contractor shall notify the City inspector prior to removing the Construction Site Notice sign and submit the final copy to the City within one week of removal.**

35. **Water for Construction**

Water will be furnished free of charge by the OWNER to the CONTRACTOR in the amounts needed to properly fill and test the water line. The owner reserves the right, however, to charge the prevailing rate for water wasted through carelessness or neglect on the part of the CONTRACTOR. All other water required for the project will be at the CONTRACTOR'S expense. The CONTRACTOR shall obtain a temporary water meter (deposit reimbursed when the meter is returned) from the OWNER and meter all water used for the project.

36. **Rock Riprap**

- a. Scope – This section covers the furnishing of all labor, materials, and equipment required to place loose rock riprap on filter fabric at the locations shown on the drawings. The measured thickness of rock riprap in place shall not be less than 18 inches.
- b. Filter Fabric – Filter fabric shall be furnished in accordance with NCTCOG Item 803.4, Geotextile Used in Drainage and Stabilization Applications. Filter fabric shall meet the requirements of a non-protected drainage application.
- c. Riprap – Rock for riprap shall be durable, free from cracks, seams, and other defects which would tend to increase unduly its deterioration from natural causes, and reasonably well graded between the prescribed limits as hereinafter specified. Materials from certain localized areas, zones, and strata may be rejected when failing to meet the following specific requirements:
 - 1) Weight – One hundred fifty pounds per solid cubic foot minimum calculated from the bulk specific gravity (saturated surface dry) of the sample determined in accordance with procedure in ASTM Specifications C127-59, "Methods of Test for Specific Gravity and Absorption of Coarse Aggregate".

- 2) Soundness in Magnesium Sulfate – Maximum loss 20 percent weighted average 5 cycles when tested for soundness in Magnesium Sulfate in accordance with ASTM Standard C88-61T, using particles passing a 2-1/2” sieve and retained on a 1-1/2” sieve. After final drying, the material will be screened over the 1-1/2” sieve.
- 3) Resistance to Abrasion – Maximum percentage of wear 50 after 500 revolutions, as determined by ASTM Standard C535, Grading 1.
- 4) Gradation – Rock for riprap shall conform to the following gradation:

18” Stone Riprap

Sieve Size	Percent Retained On Sieve	Minimum Required Weight Per Stone Retained On Sieve Size
24”	0%	---
18”	35%	800#
15”	70%	460#
12”	100%	175#

- d. Grout – If plans require rock riprap be grouted, grout shall consist of one part of Portland cement and three parts of sand, thoroughly mixed with water. Grout shall have a consistency such that it will flow into and completely fill all joints.
- e. Foundation Preparation – The subgrade surfaces on which the riprap or bedding course is to be placed shall be cut or filled and graded to the lines and grades shown on the drawings. When fill to subgrade lines is required, it shall consist of approved materials and shall conform to the requirements of the specified class of fill. Riprap shall not be placed until the foundation preparation is completed and the subgrade surfaces have been inspected and approved by the ENGINEER.
- f. Filter Fabric Placement – Filter fabric shall be placed with a minimum overlap of 24”. Fabric shall be secured by pins and washers according to manufacturer’s recommendations. Also, a minimum lap of 24” is required onto adjacent concrete structures (headwalls, wingwalls, toewalls, etc.).
- g. Rock Placement – Riprap shall be placed in such a manner as to produce a reasonably well-graded mass of rock with the minimum practicable percentage of voids and shall be constructed to the lines, grades and elevations shown on the plans. The larger stones shall be well distributed and the finished riprap shall be free from objectionable pockets of small stones or clusters of large stones. Rearranging of individual stones by mechanical equipment or by hand will be required to the extent necessary to obtain a reasonably well-graded distribution of stone sizes as specified above. After the riprap is placed, the rocks shall be wetted thoroughly and the spaces between the rocks shall be thoroughly filled with grout. The surface of the riprap shall be swept with a stiff broom after grouting. No riprap shall be grouted in freezing weather. The work shall be protected from the sun and kept moist for at least three days after grouting. The CONTRACTOR shall maintain the riprap protection until accepted and any material displaced by any cause shall be replaced at his expense to the lines and grades shown

on the plans. Riprap shall be stockpiled and placed in a manner to prevent damage to adjacent structures. Care shall be exercised in placing stones to prevent damage to filter fabric.

- h. Testing and Reporting – Prior to delivery of rock riprap to the project site, the CONTRACTOR shall submit to the CITY test results for the following:
 - 1) Specific Gravity
 - 2) Soundness in Magnesium Sulfate
 - 3) Resistance to Abrasion
 - 4) Gradation of Riprap

In addition, the CONTRACTOR shall submit the manufacturer's specifications for the filter fabric and submit a one square foot sample of the fabric.

- i. Measurement and Payment – Rock riprap shall be measured for payment by the cubic yard of the specified minimum thickness. The unit price shall include excavation, subgrade preparation, furnishing and placing filter fabric and stone, and for all labor, tools, equipment and incidentals necessary to complete the work in accordance with the plans and specifications.

37. Prevailing Wage Rate Determination

The General Services Commission has adopted the Federal Davis-Bacon wage rates for our use.



General Services Commission

1711 San Jacinto - P.O. Box 13047

Austin, Texas 78711-3047

Web Site: www.gsc.state.tx.us

(512) 463-3035

CHAIRMAN
Alfonso Jackson
VICE-CHAIRMAN
Ramiro "Ram" Guzman
COMMISSIONERS
Ofelia de los Santos
Dionicio Vidal Flores, P.E.
Barbara Rusing
Gene Shull
EXECUTIVE DIRECTOR
Tom Treadway

Prevailing Wage Rate Determination Information

The following information from Chapter 2258 Texas Government Code Title 10 should be included in your bid specification documents and contract documents:

2258.021. Duty of Governmental Entity to Pay Prevailing Wage Rates

- (a) The state or any political subdivision of the state shall pay a worker employed by it or on behalf of it:
 - (1) not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the work is performed; and
 - (2) not less than the general prevailing rate of per diem wages for legal holiday and overtime work.
- (b) Subsection (a) does not apply to maintenance work.
- (c) A worker is employed on a public work for the purposes of this section if the worker is employed by a contractor or subcontractor in the execution of a contract for the public work with the state, a political subdivision of the state, or any officer or public body of the state or a political subdivision of the state.

2258.023. Prevailing Wage Rates to be Paid by Contractor and Subcontractor; Penalty

- (a) The contractor who is awarded a contract by a public body or a subcontractor of the contractor shall pay not less than the rates determined under Section 2258.022 to a worker employed by it in the execution of the contract.
- (b) A contractor or subcontractor who violates this section shall pay to the state or a political subdivision of the state on whose behalf the contract is made, \$60 for each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated in the contract. A public body awarding a contract shall specify this penalty in the contract.
Note: This penalty applies even if the contractor or subcontractor and the worker come to an agreement on the underpaid wages (see Attorney General Opinion DM-469).
- (c) A contractor or subcontractor does not violate this section if a public body awarding a contract does not determine the prevailing wage rates and specify the rates in the contract as provided by Section 2258.022.
- (d) The public body shall use any money collected under this section to offset the costs incurred in the administration of this chapter.
- (e) A municipality is entitled to collect a penalty under this section only if the municipality has a population of more than 10,000.

2258.051. Duty of Public Body to Hear Complaints and Withhold Payment

- (a) A public body awarding a contract, and an agent or officer of the public body, shall:
 - (1) take cognizance of complaints of all violations of this chapter committed in the execution of the contract; and
 - (2) withhold money forfeited or required to be withheld under this chapter from the payments to the contractor under the contract, except that the public body may not withhold money from other than the final payment without determination by the public body that there is good cause to believe that the contractor has violated this chapter.

END OF SECTION

LICENSE AGREEMENT

This License Agreement (“Agreement”) is made by and between DALLAS AREA RAPID TRANSIT (“DART”), a regional transportation authority created, organized, and existing pursuant to Chapter 452, Texas Transportation Code, with offices at 1401 Pacific Avenue, Dallas, Texas 75202, and CITY OF LEWISVILLE (“Licensee”), a Texas municipality located at P.O. Box 299002, Lewisville, Texas 75029.

DART and Licensee (individually referred to herein as a “Party” or collectively as “Parties”) agree as follows:

I. Definitions.

- 1.1 “Corridor” shall mean DART’s railroad corridor between Dallas and Denton, Texas.
- 1.2 “Effective Date” shall mean the date this Agreement is last signed by a Party.
- 1.3 “Permitted Improvement” shall mean a twelve (12) foot concrete shared-use path (“Shared-Use Path”) with retaining wall, pedestrian railing, fencing, signage, lighting, and drainage outfall extensions, more particularly detailed in Exhibit A-1 through A-14, attached to this Agreement and fully incorporated herein.
- 1.4 “Permitted Use” shall mean designing, constructing, installing, operating, reconstructing, maintaining, repairing, replacing, and removing the Permitted Improvement at the Property and more specifically removing any nuisances, , including but not limited to, overgrown vegetation, trash, debris and graffiti at no cost to DART..
- 1.5 The “Property” where the Permitted Improvement is located shall mean the tract of right-of-way on the Corridor located from/to:
 - From: Mile Post 740.04
 - From: Latitude: 33.007052/ Longitude: -96.956251
 - Lewisville, Denton County, Texas

 - To: Mile Post 740.28
 - Latitude: 33.004292/ Longitude: -96.954054
 - Lewisville, Denton County, Texas
- 1.6 “Railroad” shall mean “Railroad” shall mean:
 - a. Dallas, Garland and Northeastern Railroad, Inc., which presently holds the right to conduct freight operations on the Corridor; and
 - b. Denton County Transportation Authority, which presently holds the right to conduct passenger service on the Corridor;
 - c. Rio Grande Pacific Corporation, Rio Grande Pacific Technology, Inc., and Stadler US, Inc., which presently provide passenger service and railroad maintenance on the Corridor; and
 - d. Any future freight operators, passenger operators, and entities providing passenger service or railroad maintenance on the Corridor during the term of this Agreement pursuant to an agreement with DART.

II. Consideration.

- 2.1 License Fee. Licensee shall pay Ten Dollars and No/100 DOLLARS (\$10.00) on the Effective Date. No additional License Fee shall be assessed during the term of this Agreement.

III. Purpose and Term.

- 3.1 Permitted Improvement. DART hereby grants a license to Licensee for the Permitted Use so long as the Permitted Use does not interfere with the operations of DART or Railroad, and Licensee otherwise complies with the requirements of this Agreement.
- 3.2 Limitations. Licensee's right to enter upon and use the Property shall be limited solely to the Permitted Use, for the term of this Agreement, and in accordance with the conditions of this Agreement. This Agreement is not intended to convey and does not convey to Licensee any real property interest in the Property or any portion of the Corridor. This Agreement may not be recorded in the real property records. The license granted pursuant to this Agreement is non-exclusive and is subject to (a) any existing utility, drainage, or communication facility located in, on, under, or upon the Property; (b) all vested rights presently owned by any railroad, utility or communication company, or other entity located within the boundaries of the Property; and (c) any existing lease, license, easement, or other interest in the Property granted by DART or its predecessors in interest. The license granted by this Agreement is granted expressly subject and subordinate to DART's right to use the Property for any purpose whatsoever, except as expressly provided in this Agreement.
- 3.3 No Warranty. DART and Railroad make no representations as to the condition of the Property or its suitability for any particular purpose, including by example and not limitation, warranties regarding the Property's state of repair, use of the Property, access to the Property, or subsurface or aerial installations on or near the Property. The Property is available for Licensee's use on an "as is, where is, and with all faults" basis. Licensee shall, at its sole cost, conduct its own inspections of the Property and shall not rely on any information disclosed or not disclosed by DART, Railroad, or any of their respective employees, agents, or representatives.
- 3.4 Term. The term of this Agreement shall begin on the Effective Date and continue until terminated in accordance with this Agreement.

IV. Design, Construction, Operation, and Maintenance of the Permitted Improvement.

- 4.1. Construction Plans. During the design phase and prior to commencing any construction on the Property, a copy of the construction plans ("the Plans") for the Permitted Improvement showing the exact location, type, depth of the construction, the working area, and any cathodic protection measures shall be submitted for written approval to DART. No work shall commence on the Property until the Plans have been approved in writing by DART, which approval shall not be unreasonably withheld. To the extent necessary for construction of the Permitted Improvement, Licensee shall also coordinate with Railroad and obtain Railroad's approval of the Plans prior to the start of any work.
- 4.2. Safety. Licensee agrees to design, construct, and operate the Permitted Improvement in such a manner so as not to create a dangerous, unsafe, or otherwise hazardous condition on or near the Property. Licensee shall implement any cathodic protection, including stray current corrosion control measures, necessary to ensure the safety of the Permitted Improvement and maintain compliance with applicable laws, regulations, ordinances, and rules. If applicable to the Permitted Improvement, Licensee shall institute and maintain a continuous testing program to determine whether additional cathodic protection of its Permitted Improvement is needed.

- 4.3. Authority to Enter the Property. Licensee shall ensure that anyone working on the Property under Licensee's control possesses authority to be on the Property and can readily demonstrate such authority, either through photo identification issued by Licensee or Licensee's contractor ("Contractor") or immediate confirmation by the worker's on-site supervisor.
- 4.4. Foul Zone. Licensee shall not perform any activities, or permit Contractor to perform any activities, that could result in equipment, people, or materials entering within 25 feet of any railroad tracks (the "Foul Zone") unless:
- a. Flagger(s) qualified on DART and Railroad's operating and safety rules are present; and
 - b. Anyone working under Licensee's control and engaged in an activity that necessitates flaggers has, within the last 365 calendar days from the date the Work is to be performed, attended a creditable Roadway Worker Protection course, successfully passed all required examinations associated with that course, and can provide proof of course completion upon request from DART or Railroad. DART and Railroad shall determine whether the Roadway Worker Protection course is creditable.
- Licensee shall pay all costs associated with flaggers and Roadway Worker Protection courses.
- 4.5. Maintenance. Licensee shall maintain the Property and Permitted Improvement in a good, clean, and safe condition. Licensee shall use diligent care to avoid damaging any existing structures, equipment, and/or vegetation on or about the Property and any adjacent property. If Licensee, Contractor, or anyone under Licensee's control causes damage to the Property or an adjacent property, Licensee shall immediately replace or repair the damage at no cost or expense to DART or Railroad.
- 4.6. Costs and Reimbursement. Licensee agrees to pay for any damages, costs, or expenses that DART incurs by reason of Licensee's use of the Property. If Licensee fails to repair or replace damage to the Property or fails to properly maintain the Property or Permitted Improvement, DART and/or Railroad shall notify Licensee of such noncompliance with this Agreement. In the event Licensee has not remedied the failure within ten (10) days from the date of such notice, DART and Railroad, individually or collectively, shall have the right, but not the obligation, to remedy such failure at the sole cost and expense of Licensee. Licensee shall immediately reimburse DART and/or Railroad, as applicable, for all costs resulting from Licensee's failure to repair, replace, or maintain the Property and/or Permitted Improvement in accordance with this Agreement.
- 4.7. As-builts. Licensee shall provide certified final construction drawings ("As-Builts"), signed and sealed by a Texas professional engineer, to DART within ninety (90) days after the last date of construction work on the Property. The Parties agree that DART will suffer damages if As-Builts are not timely provided by Licensee and it is impossible to determine the amount of such damages in advance. Accordingly, the Parties agree, not as a penalty but as a measure of reasonable damages, that a fee of \$500 per month (prorated as applicable) until As-Builts are provided represents reasonable compensation for DART's actual damages suffered by the delay. DART shall comply with state and local laws, including Chapter 251 of the Texas Utilities Code, before performing work around the Permitted Improvement and shall not exclusively rely on As-Builts provided by Licensee pursuant to this Agreement.
- 4.8. Electrically Powered Equipment. DART and Railroad may, in compliance with applicable state and federal safety regulations, use electrically powered equipment on the Property or adjoining properties, which could result in live electrical current in proximity to the Permitted Improvement and produce corrosive effects to the Permitted Improvement. **Licensee WAIVES any claim against DART or Railroad arising from the use of electrically powered equipment pursuant to this paragraph.**

- 4.9. Governmental Approvals. Licensee, at its sole cost and expense, shall be responsible for obtaining any licenses, permits, or other approvals from any federal, state, or local agencies required to carry on any activity on the Property permitted by this Agreement.
- 4.10. Other Required Agreements. Prior to the start of any construction work on the Property, Licensee or Contractor, as applicable, shall execute any additional agreements that DART or Railroad determine are necessary in connection with such work, including but not limited to a contractor's right-of-entry agreement. Licensee shall be responsible for ensuring Contractor complies with the terms and conditions of this Agreement and any contractor's right-of-entry agreement or other agreement related to the Permitted Use. Licensee shall be responsible for obtaining a copy of any such agreement entered into by Contractor pursuant to this section.
- 4.11. Mechanic's Liens Not Permitted. Licensee shall fully pay for all labor and materials used in, on, or about the Property and, to the extent permitted by law, shall not permit or suffer any mechanic's or materialmen's liens of any nature to be affixed against the Property by reason of any work done or materials furnished to the Property on behalf of Licensee. In the event a lien is attached to the Property, Licensee shall (at DART's option) immediately seek removal of the lien or provide a bond that discharges the lien in accordance with Texas law. Licensee shall pay all costs associated with such removal, including reasonable attorney's fees.
- 4.12. Compliance with Laws and Regulations. Licensee agrees to abide by all laws, ordinances, and regulations of any governmental entity or regulatory agency with jurisdiction over the Property and/or Licensee. Licensee shall also abide by all rules, policies, and operating procedures established by DART or Railroad that are communicated to Licensee in advance, so long as such rules, policies, or operating procedures do not conflict with any rules or guidance promulgated by a regulatory agency and applicable to Licensee.

V. Insurance

- 5.1. Required Insurance. Prior to entry onto the Property, Licensee shall procure and maintain, at its sole cost and expense, commercial general liability insurance in the following form and amount:
- Per occurrence limit of at least \$5,000,000
 - Primary and non-contributory endorsement
 - Endorsement naming DART, Railroad, and their respective directors, officers, representatives, contractors, agents, and employees as additional insureds with respect to ongoing and completed operations without qualifications or restrictions
 - Endorsement waiving the issuing insurance company's rights of recovery against DART and Railroad, whether by way of subrogation or otherwise
 - Endorsement removing exclusions for operations within fifty (50) feet of a railroad or, alternatively, purchase of a Railroad Protective Policy
 - Endorsement removing exclusions for XCU hazards
 - The form of coverage and insurer(s) must be satisfactory to DART, and all policies must be provided by insurance companies with a Best's Rating of A-/ VIII, or better.
- 5.2. Proof of Insurance. Licensee shall furnish Certificates of Insurance and copies of required endorsements to DART as evidence of the coverages required. The Certificate of Insurance should name "Dallas Area Rapid Transit" as Certificate Holder, with address 1401 Pacific Avenue, #7210, Dallas TX 75202, or alternate contract address. Upon DART's request, Licensee shall also provide any additional documentation necessary to demonstrate the insurance coverage required. Licensee's insurance shall be primary and non-contributory coverage in all instances.

- 5.3. Notice of Cancellation or Nonrenewal. Licensee shall provide written notice to DART within fifteen (15) days of learning (through notice from Licensee's insurer or other means) that an insurance policy required by this Agreement will be cancelled, non-renewed, or modified in a manner that will result in Licensee's noncompliance with the terms of this Agreement.

VI. Environmental Protection

- 6.1. Licensee shall not use or permit the use of the Property for any purpose that may be in violation of any local, state, or federal laws pertaining to health or the environment, including but not limited to, the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), the Resource Conservation and Recovery Act ("RCRA"), the Clean Water Act ("CWA"), and the Clean Air Act ("CAA").
- 6.2. Licensee warrants that the Permitted Use of the Property will not result in the disposal or other release of any hazardous substance or solid waste on or to the Property, and that it will take all steps necessary to ensure that no such hazardous substance or solid waste will ever be discharged onto the Property by Licensee, Contractor, or any other person under Licensee's control.
- 6.3. The terms "hazardous substance" and "release" shall have the meanings specified in CERCLA and the terms "solid waste" and "disposal" (or "disposed") shall have the meanings specified in the RCRA; provided, however, that in the event either CERCLA or RCRA is amended so as to broaden the meaning of any term defined thereby, such broader meaning shall apply subsequent to the effective date of such amendment. To the extent that the laws of the State of Texas establish a meaning for "hazardous substance," "release," "solid waste," or "disposal," that is broader than that specified in either CERCLA or RCRA, such broader meaning shall apply.

VII. Termination and Relocation.

- 7.1. Methods of Termination. This Agreement shall terminate and be of no further force and effect: (a) if Licensee discontinues or abandons the use of the Permitted Improvement for ninety (90) days or more; (b) if either Party materially breaches this Agreement and fails to cure such breach within thirty (30) days' after receiving written notice of the breach (provided, however, if the breach cannot be cured within 30 days, the period to cure shall be extended so long as the breaching Party is promptly and diligently pursuing the cure to completion); (c) if Licensee relocates the Permitted Improvement from the Property; or (d) if DART determines, in its sole discretion, that relocation of the Permitted Improvement is necessary or useful for DART or Railroad's use of the Property and provides written notice to Licensee.
- 7.2. Restoration of the Property. Upon termination of this Agreement, Licensee shall remove all improvements and appurtenances owned by it, situated in, on, under or attached to the Property, regardless of whether or not such improvements were placed on the Property by Licensee, unless otherwise directed or permitted by DART. Licensee shall restore the Property to a condition satisfactory to DART at its sole cost (unless otherwise provided by this Agreement).
- 7.3. Relocation of the Permitted Improvement. If DART elects to terminate this Agreement by providing written notice to Licensee that relocation of the Permitted Improvement is necessary or useful for DART or Railroad's use of the Property (as addressed above), DART shall work collaboratively with Licensee to identify another property site that, in DART's sole discretion, is suitable for the relocation of the Permitted Improvement. If the Parties determine a mutually-acceptable property site owned by DART for the relocation of the Permitted Improvement, the Parties shall execute a new license agreement comprised of either the same terms and conditions contained in this Agreement or such other new terms and conditions

agreed-to by the Parties at that time. Licensee shall promptly and diligently remove or relocate the Permitted Improvement within the period of time provided in DART's relocation/termination notice (which shall be no shorter than 90 days).

- 7.4. Relocation Costs. Licensee shall pay all costs and expenses associated with any relocation of the Permitted Improvement. Licensee hereby **WAIVES** any claim that it may have regarding the payment of relocation benefits, including claims arising under Chapter 460 of the Texas Transportation Act.

VIII. INDEMNITY AND SHIFTING OF RISK.

- 8.1. **To the extent permitted by law, Licensee agrees to RELEASE, DEFEND, HOLD HARMLESS, AND INDEMNIFY DART, Railroad, and their respective directors, officers, employees, contractors, agents, and representatives (collectively "Indemnitees") from and against all liabilities, losses, damages, claims, costs, and expenses (including attorney's fees) for bodily injury or death to any person and for damage to, loss of, or loss of the use of any property arising out of or resulting from Licensee's (including Licensee's employees, contractors, subcontractors, agents, or invitees) entry onto the Property, performance under this Agreement, or breach of any of the terms of this Agreement, except to the extent proximately caused by the gross negligence or intentional misconduct of one or more Indemnitees. Additionally, Licensee shall INDEMNIFY, DEFEND, AND HOLD DART AND RAILROAD HARMLESS against all costs, expenses, claims, and liability related to any environmental contamination and related clean-up of the Property resulting from Licensee's use of the Property under this Agreement.**
- 8.2. In the event any of the provisions of this indemnification section are determined by statutory authority or judicial decision to be void or unenforceable, then this section shall not fail in its entirety, but will be enforceable to the greatest extent permitted by law. This indemnification section and all other indemnification and waiver provisions shall survive the termination of this Agreement.

IX. Miscellaneous.

- 9.1. Notice. Notices permitted or required by this Agreement shall be in writing and shall be deemed delivered when hand delivered or sent by certified mail, return receipt requested, and addressed to: Licensee at the address set out in the first paragraph of this Agreement; and DART at 1401 Pacific Avenue, Dallas Texas 75202, Attn: Railroad Management. Either Party may designate a different address for receipt of notice by giving written notice of such change of address.
- 9.2. Assignment. Licensee shall not, absent DART's prior written consent, assign or transfer its rights under this Agreement in whole or in part or permit any other person or entity to use the license granted pursuant to this Agreement.
- 9.3. Governing Law. This Agreement shall be construed under and in accordance with the laws of the State of Texas. Any action brought by a Party to enforce any provision of this License shall be commenced in a state district court of competent jurisdiction in Dallas County, Texas.
- 9.4. Entirety. This Agreement embodies the entire agreement between the Parties and supersedes all prior agreements and understandings, if any, relating to the Property and the matters addressed herein.
- 9.5. Amendments; Counterparts. This Agreement may be amended or supplemented only by a written instrument executed by the Parties. The Parties may execute this Agreement in multiple originals and when taken together, those originals constitute a whole.

- 9.6. Parties Bound; Third-Party Beneficiaries. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective heirs, personal representatives, successors and assigns. There are no third-party beneficiaries to this Agreement.
- 9.7. No Joint Enterprise. The Parties do not intend that this Agreement be construed as finding that the Parties have formed a joint enterprise. The purposes for which each Party has entered into this Agreement are separate and distinct.
- 9.8. Severability. If any provision of this Agreement is determined to be illegal or unenforceable in any respect, such determination will not affect the validity or enforceability of any other provision, each of which will be deemed to be independent and severable.
- 9.9. No Waiver of Governmental Immunity. By entering into this Agreement, DART does not waive or diminish any immunities, protections, or defenses available to it, including by example and without limitation, governmental immunity and statutory caps on damages, except as provided by Chapter 271 of the Texas Local Government Code.
- 9.10. Signature Authority. Each of the individuals signing this Agreement warrants that he or she is duly and properly authorized to execute this Agreement on behalf of his or her respective Party.

DALLAS AREA RAPID TRANSIT:

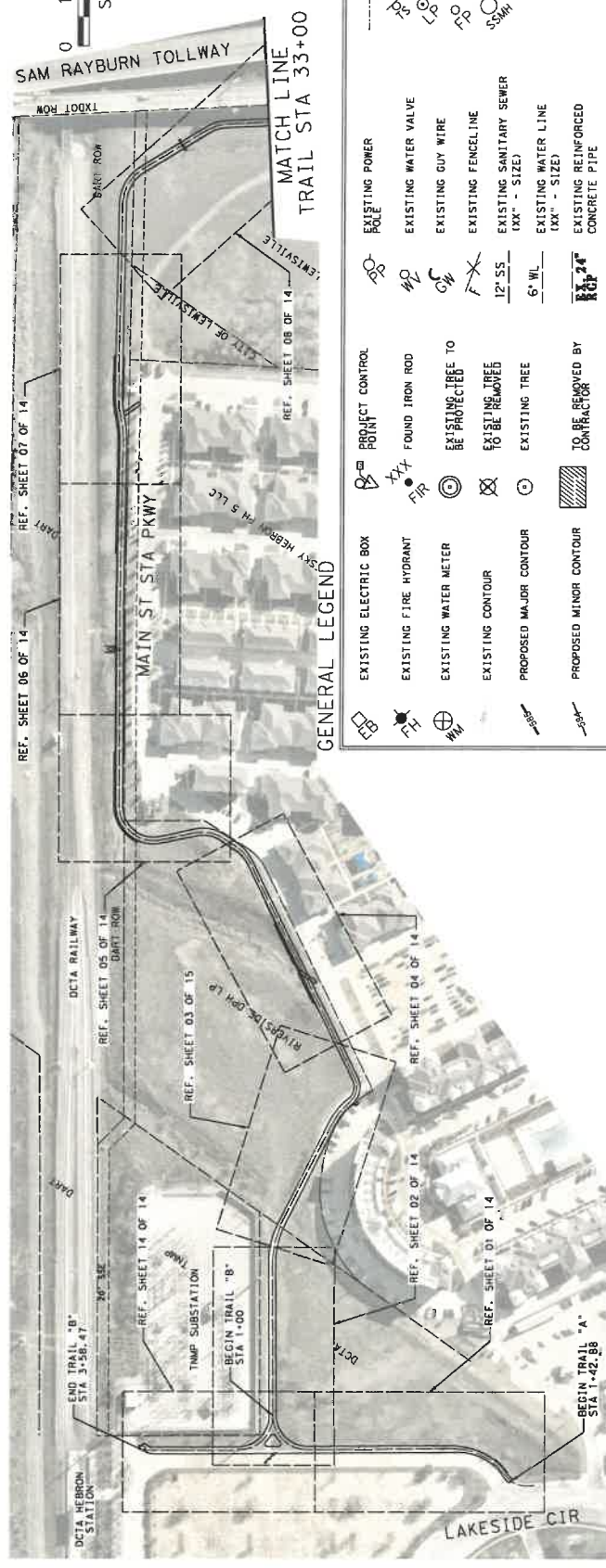
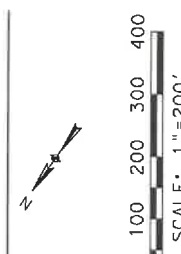
BY: Caitlin Holland
 Caitlin Holland
 Vice President, Real Estate & Economic Development
 Development Department

Date: 3-31-2025

LICENSEE:

CITY OF LEWISVILLE

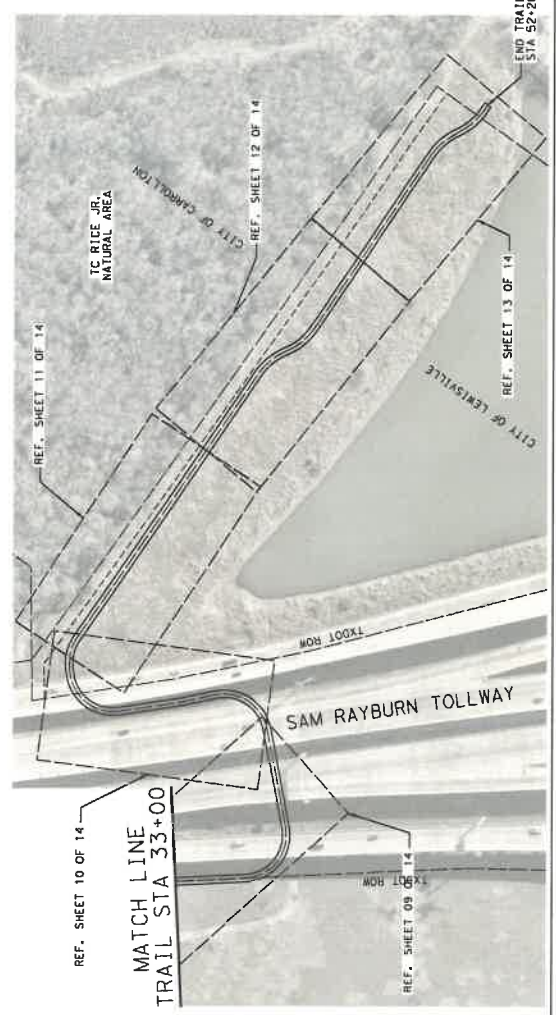
BY: Claire Powell
 Printed Name: Claire Powell
 Title: CITY MANAGER
 Date: 3-28-25



GENERAL LEGEND

	EXISTING ELECTRIC BOX		PROJECT CONTROL POINT		EXISTING POWER POLE
	EXISTING FIRE HYDRANT		FOUND IRON ROD		EXISTING WATER VALVE
	EXISTING WATER METER		EXISTING TREE TO BE PROTECTED		EXISTING GUY WIRE
	EXISTING CONTOUR		EXISTING TREE TO BE REMOVED		EXISTING FENCE LINE
	PROPOSED MAJOR CONTOUR		EXISTING TREE		EXISTING SANITARY SEWER (XX' - SIZE)
	PROPOSED MINOR CONTOUR		TREE TO BE REMOVED BY CONTRACTOR		EXISTING WATER LINE (XX' - SIZE)
			EXISTING REINFORCED CONCRETE PIPE		

!!! CAUTION UTILITIES IN THE AREA !!!
 EXTREME CARE AND CAUTION SHOULD BE TAKEN WHEN WORKING UNDERGROUND UTILITY LINES
 DIG TEST IS REQUIRED FOR THIS PROJECT PRIOR TO CONTRACTOR COMMENCING WORK!
 (800) 344-8377



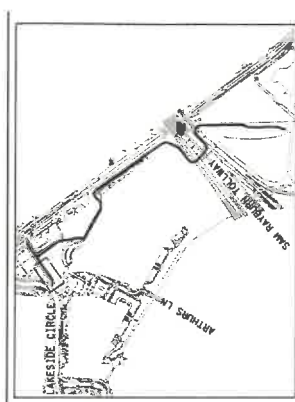
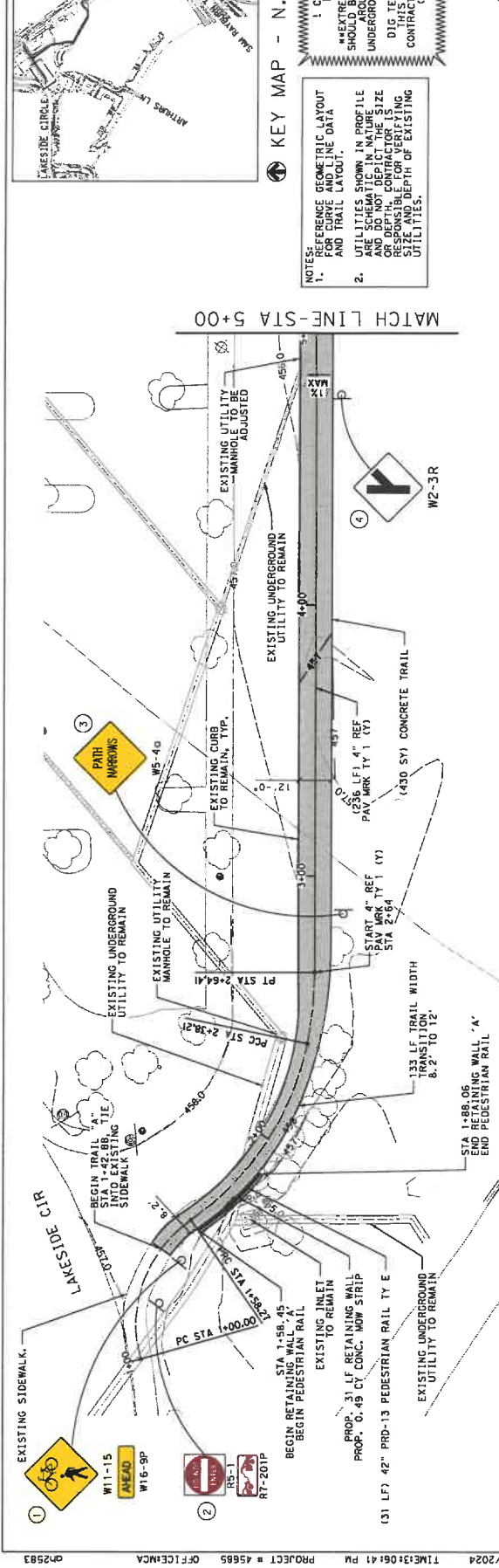
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BRISTUM D. LEK, P.E. 94759
 Name PE# AUGUST 2024
 DATE

Texas Department of Transportation
 © 2024
 DCTA TRAIL LEWISVILLE
 DCTA TRAIL LEWISVILLE SHEET LAYOUT

SCALE: AS NOTED	SHEET 01 OF 01
DISTRICT NO. 6	FEDERAL AID PROJECT NO. STP XXX(XXX) TAPS VA
GRAPHICS MC	STATE DISTRICT COUNTY SHEET NO. TEXAS DAL DENTON
CHECK XX	CONTROL SECTION JOB
CHECK XX	D918 46 331
	20

FILE:101-51-45685.dgn
 TIME: 08/27/2024 11:31:06 AM



KEY MAP - N.T.S.

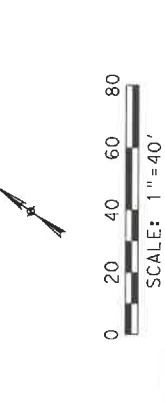
NOTES:

- REFERENCE GEOMETRIC LAYOUT FOR CURVE AND LINE DATA AND TRAIL LAYOUT.
- UTILITIES SHOWN IN PROFILE ARE SCHEMATIC IN NATURE AND DO NOT INDICATE SIZE OR DEPTH. THE DESIGNER IS RESPONSIBLE FOR VERIFYING SIZE AND DEPTH OF EXISTING UTILITIES.

CAUTION UTILITIES IN THE AREA!

EXTREME CARE AND CAUTION SHOULD BE TAKEN WHEN WORKING ON OR NEAR ANY EXISTING UNDERGROUND UTILITY LINES

DIG TESTS ARE REQUIRED FOR ALL PROPOSED TRAILING CONTRACTOR COMMENCING WORK! (800) 344-8377



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KRISTINA D. LEAL, P.E., 94759
NAME P.E.# DATE

half
1025 W. HEBRON ROAD
DENTON, TEXAS 76205
(214) 398-8200

Texas Department of Transportation
© 2024

DC TA TRAIL LEWISVILLE
DC TA TRAIL A LEWISVILLE PAVING PLAN AND PROFILE BEGIN TO STA 5+00

SCALE: AS NOTED	SHEET 01 OF 14
DATE: 08/27/2024	FEDERAL AID PROJECT NO.:
PROJECT: # 45685	STATE STP XXX(XXX) TAPS VA
DATE: 8/27/2024	DISTRICT COUNTY SHEET NO.
TIME: 3:06:41 PM	TEXAS DAL DENTON
OFFICE: MCA	CHECK CONTROL SECTION JOB
	XX 0918 46 331
	XX

STATION	ELEVATION	VERTICAL ALIGNMENT	REMARKS
1+00	435.00	PGL 457.73	BEGIN TRAIL "A" STA 1+42.88
2+00	440.00	PGL 457.78	EXIST. 48" RCP
3+00	445.00	PGL 457.72	PROPOSED GROUND AT TRAIL CENTERLINE
4+00	450.00	PGL 457.10	EXISTING GROUND AT TRAIL CENTERLINE
5+00	465.00	PGL 456.99	MATCH LINE-STA 5+00

DATE: 8/27/2024 TIME: 3:06:41 PM PROJECT: # 45685 OFFICE: MCA

DATE: 8/27/2024 TIME: 3:06:41 PM PROJECT: # 45685 OFFICE: MCA

FILE: 201-PP-45685.dgn

FILE: 201-PP-45685.dgn

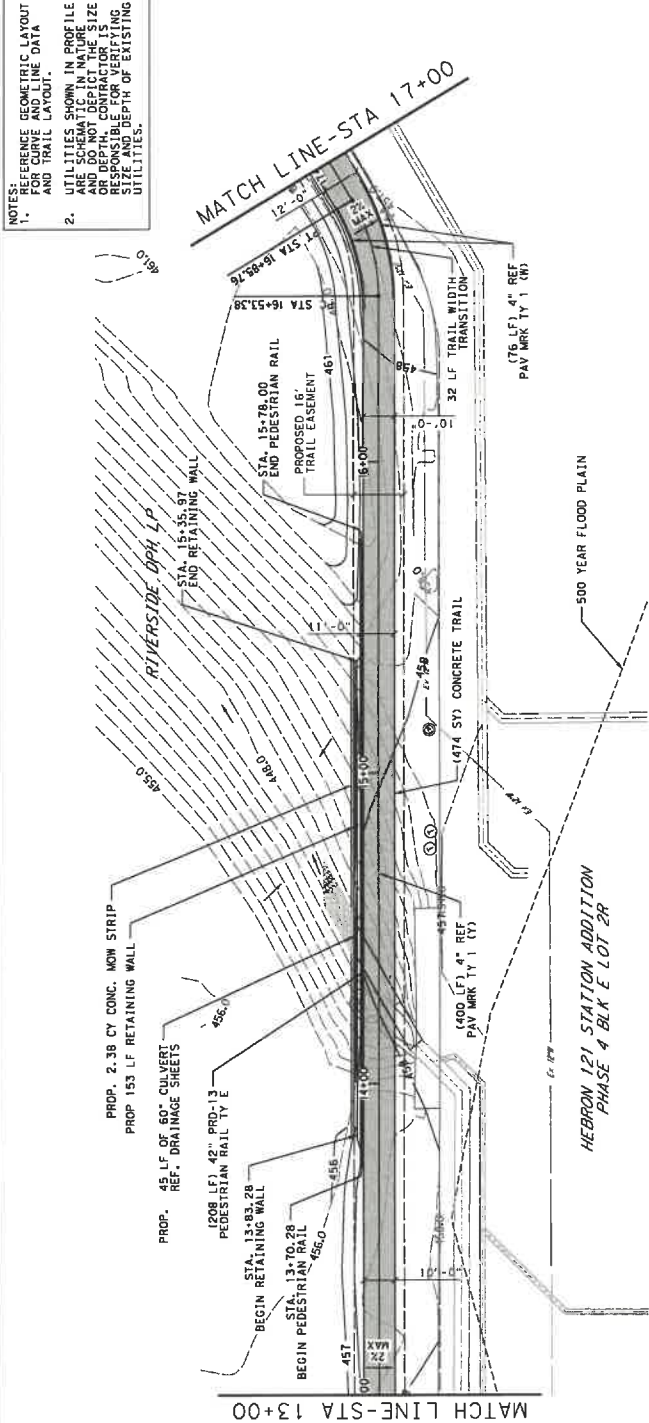
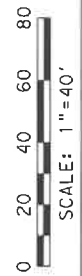
Exhibit A-2

- NOTES: REFERENCE GEOMETRIC LAYOUT FOR CURVE AND LINE DATA AND TRAIL LAYOUT.
- UTILITIES SHOWN IN PROFILE ARE SCHEMATIC IN NATURE AND DO NOT REFLECT THE SIZE AND DEPTH OF EXISTING UTILITIES.
 - RESPECTIVE RESPONSIBILITY FOR VERIFYING SIZE AND DEPTH OF EXISTING UTILITIES.

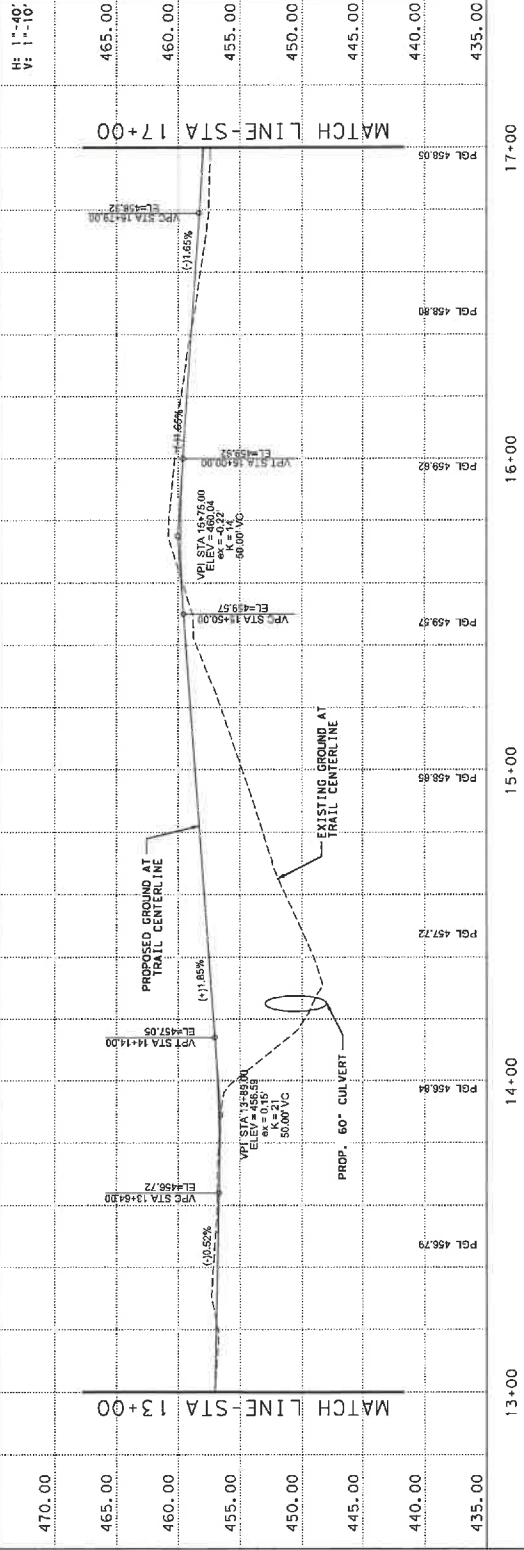


KEY MAP - N.T.S.

CAUTION UTILITIES IN THE AREA!
 *EXTREME CARE AND CAUTION SHOULD BE TAKEN WHEN DIGGING AROUND OVERHEAD AND UNDERGROUND UTILITY LINES**
 DIG TESS IS REQUIRED FOR THIS PROJECT PRIOR TO CONTRACTOR COMMENCING WORK!
 (800) 344-8317



NOTE: FROM STA 12+00 TO 17+25, TRAIL GRADING IS DICTATED BY GOING 2X UP FROM EXISTING CURB ALL THE WAY THROUGH THE TRAIL SECTION TO ACCOUNT FOR FUTURE PARALLEL PARKING ADJACENT TO THE TRAIL.



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 KRISTINA D. LEAL, P.E. 8/15/24
 NAME DATE



1201 WORTH BOWSER ROAD
 RICHMOND, TEXAS 77401-2276
 (214) 345-6620

Texas Department of Transportation

DCTA TRAIL LEWISVILLE
 DCTA TRAIL A LEWISVILLE
 PAVING PLAN AND PROFILE
 STA 13+00 TO STA 17+00

SCALE: AS NOTED	SHEET 04 OF 14
DESIGN	FEDERAL AID PROJECT NO.
MC	HIGHWAY NO.
GRAPHICS	STIP XXX (XXX) TAPS
MC	STATE COUNTY
CHECK	DISTRICT
XX	TEXAS DAL
CONTROL	SECTION
XX	0318 46
	JOB
	331
	30

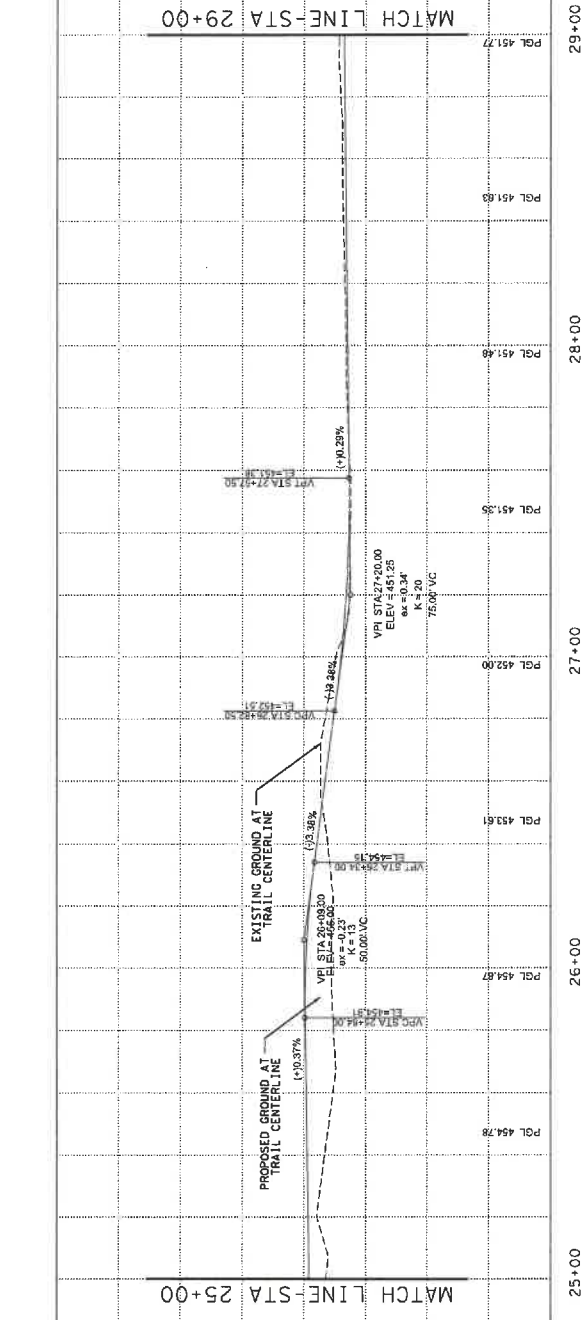
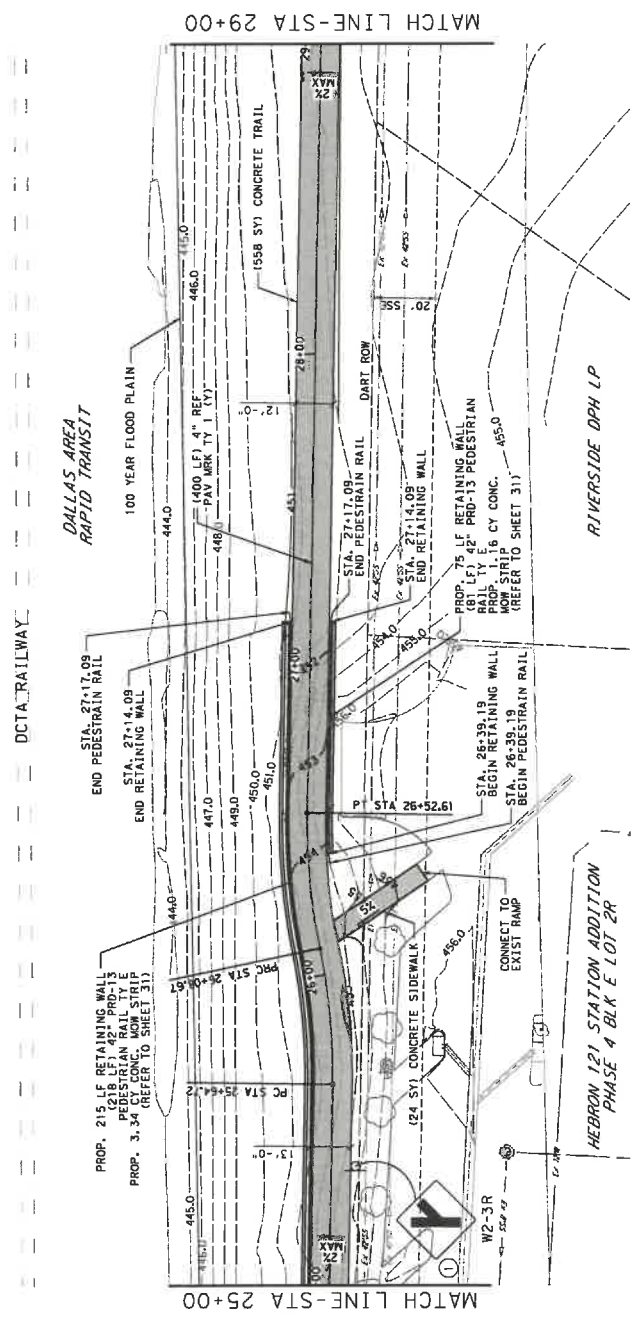
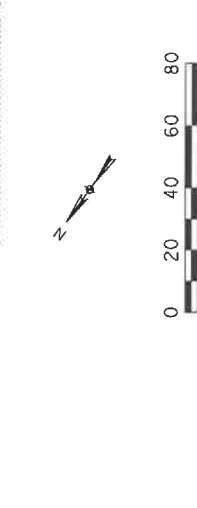
Exhibit A-5



KEY MAP - N. T. S.

NOTES:
 1. REFERENCE GEOMETRIC LAYOUT FOR CURVE AND LINE DATA AND TRAIL LAYOUT.
 2. UTILITIES SHOWN IN PROFILE ARE SCHEMATIC IN NATURE AND CONTRACTOR IS RESPONSIBLE FOR VERIFYING DEPTH OF EXISTING UTILITIES.

CAUTION UTILITIES IN THE AREA!
 EXTREME CARE AND CAUTION SHOULD BE EXERCISED IN WORKING AROUND OVERHEAD AND UNDERGROUND UTILITY LINES.
 DIG TEST IS REQUIRED FOR THIS PROJECT PRIOR TO CONTRACTOR COMMENCING WORK!
 (888) 544-8577



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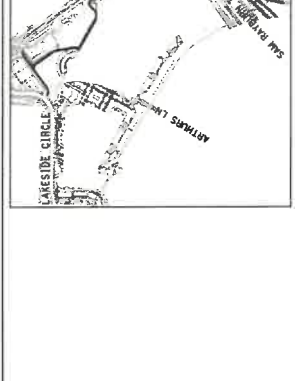
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NAME: KRISTINA D. LEAL, P.E. FILE # 84759 AUGUST 2024 DATE

half
 Texas Department of Transportation

DCTA TRAIL LEWISVILLE
 DCTA TRAIL A LEWISVILLE PAVING PLAN AND PROFILE
 STA 25+00 TO STA 29+00

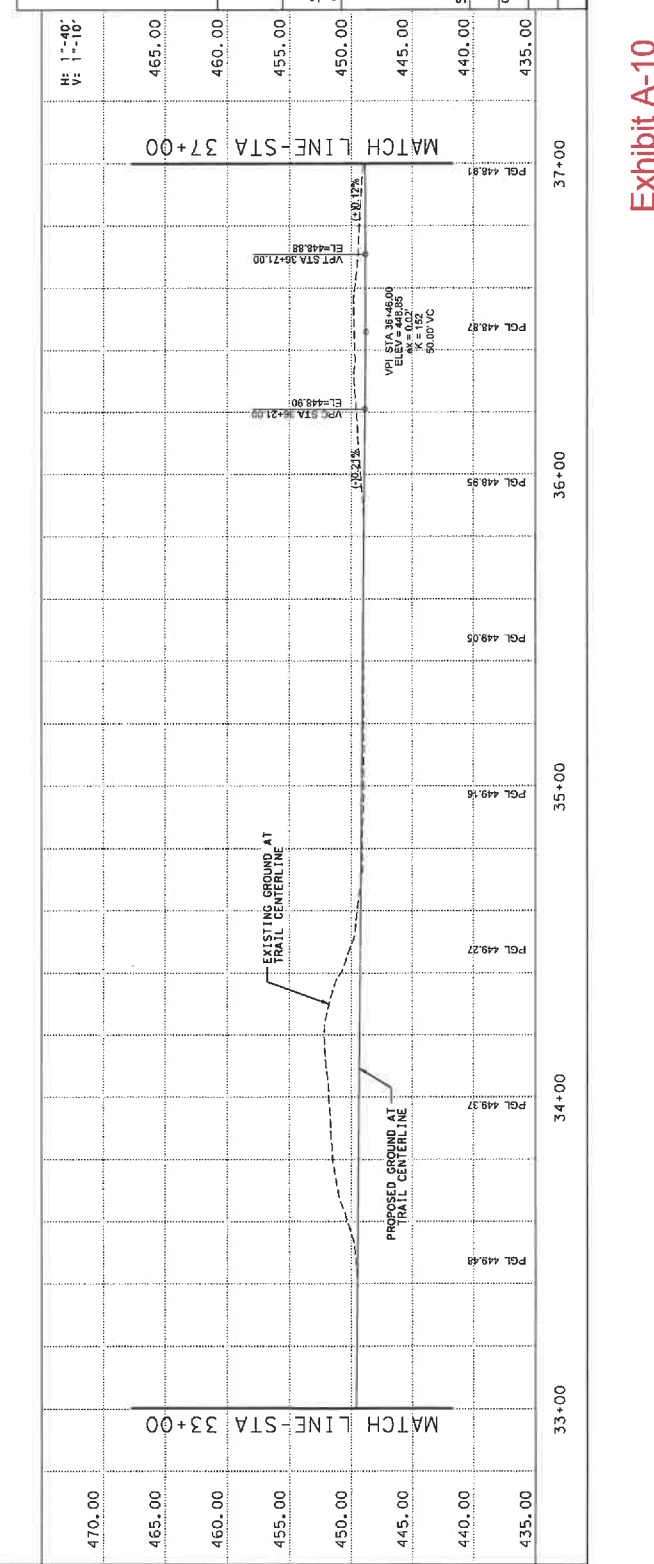
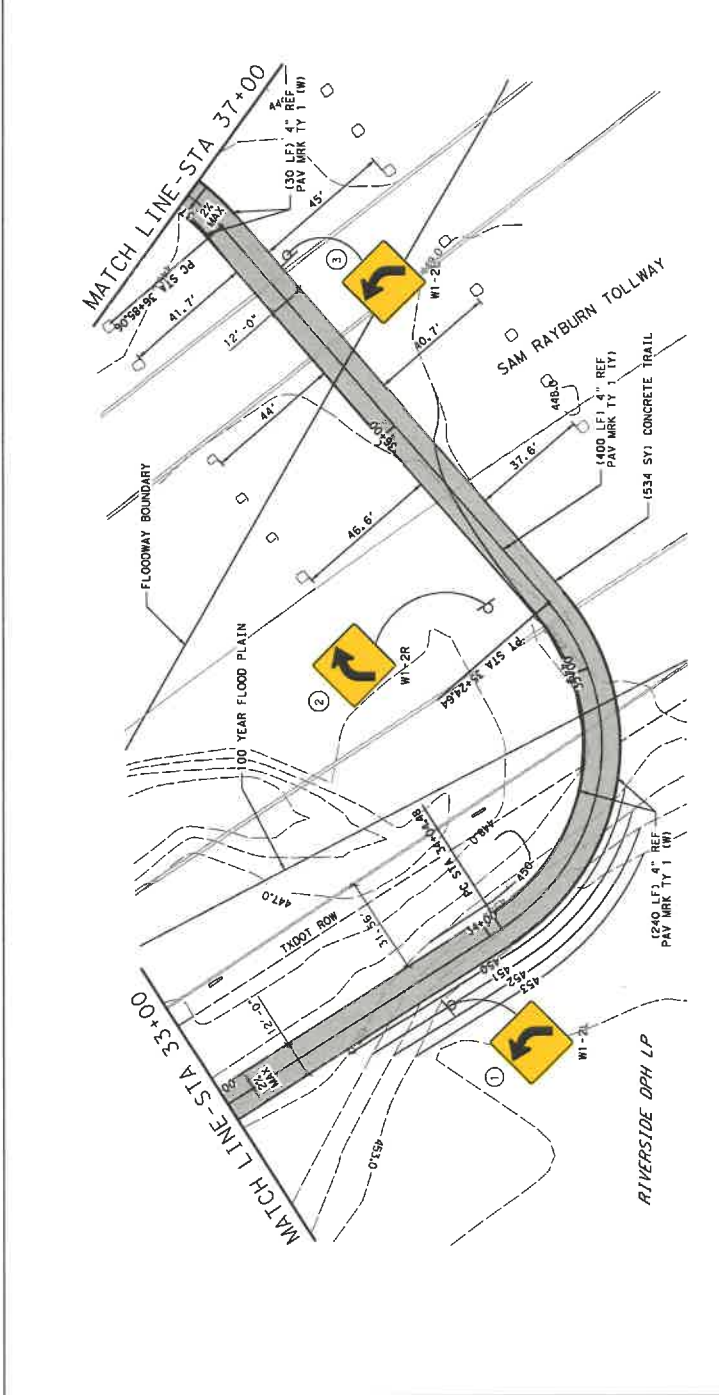
SCALE: AS NOTED SHEET 07 OF 14
 DESIGN DIV. NO. 6 FEDERAL AID PROJECT NO. HIGHWAY NO.
 GRAPHICS DIV. NO. 6 STIP XXX(XXX) TAPS VA
 COUNTY DISTRICT COUNTY STATE SHEET NO.
 CHECK TEXAS DAL DENTON JOB NO.
 XX CONTROL SECTION 33
 XX 0918 46 331



KEY MAP - N.T.S.

NOTES:
 1. REFERENCE GEOMETRIC LAYOUT FOR CURVE AND LINE DATA AND TRAIL LAYOUT.
 2. UTILITIES SHOWN IN PROFILE ARE SCHEMATIC IN NATURE AND CONTRACTOR IS RESPONSIBLE FOR VERIFYING DEPTH OF EXISTING UTILITIES.

CAUTION UTILITIES IN THE AREA!
 EXTREME CARE AND CAUTION SHOULD BE EXERCISED AROUND OVERHEAD AND UNDERGROUND UTILITY LINES
 DIG TESTS REQUIRED FOR THIS PROJECT PRIOR TO CONTRACTOR COMMENCING WORK!
 (800) 344-8377



DATE: 8/27/2024
 TIME: 5:06:50 PM
 PROJECT # 45685
 OFFICE: MCA

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 KRISTIM D. LEAL, P.E. 94759 AUGUST 2024
 Name Title Date

half
 1201 WORTHENBORSE ROAD
 ROCKWELL, TX 78767-1427
 (512) 396-8050

Texas Department of Transportation
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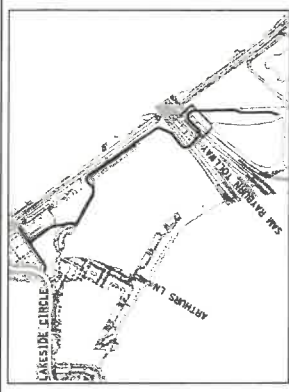
DCTA TRAIL LEWISVILLE
 DCTA TRAIL A LEWISVILLE
 PAVING PLAN AND PROFILE
 STA 33+00 TO STA 37+00

SCALE: AS NOTED
 SHEET 09 OF 14

DESIGN	FED. RD. DIST. NO.	FEDERAL AID PROJECT NO.	ROUTE NO.
MC	6	STP XXX(XXX) TAPS	VA
GRAPHICS	STATE	DISTRICT	COUNTY
MC	TEXAS	DAL	DENTON
CHECK	XX	CONTR.	SECTION
CHECK	XX	0918	46
XX			331

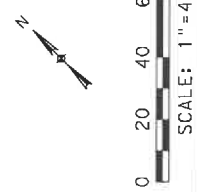
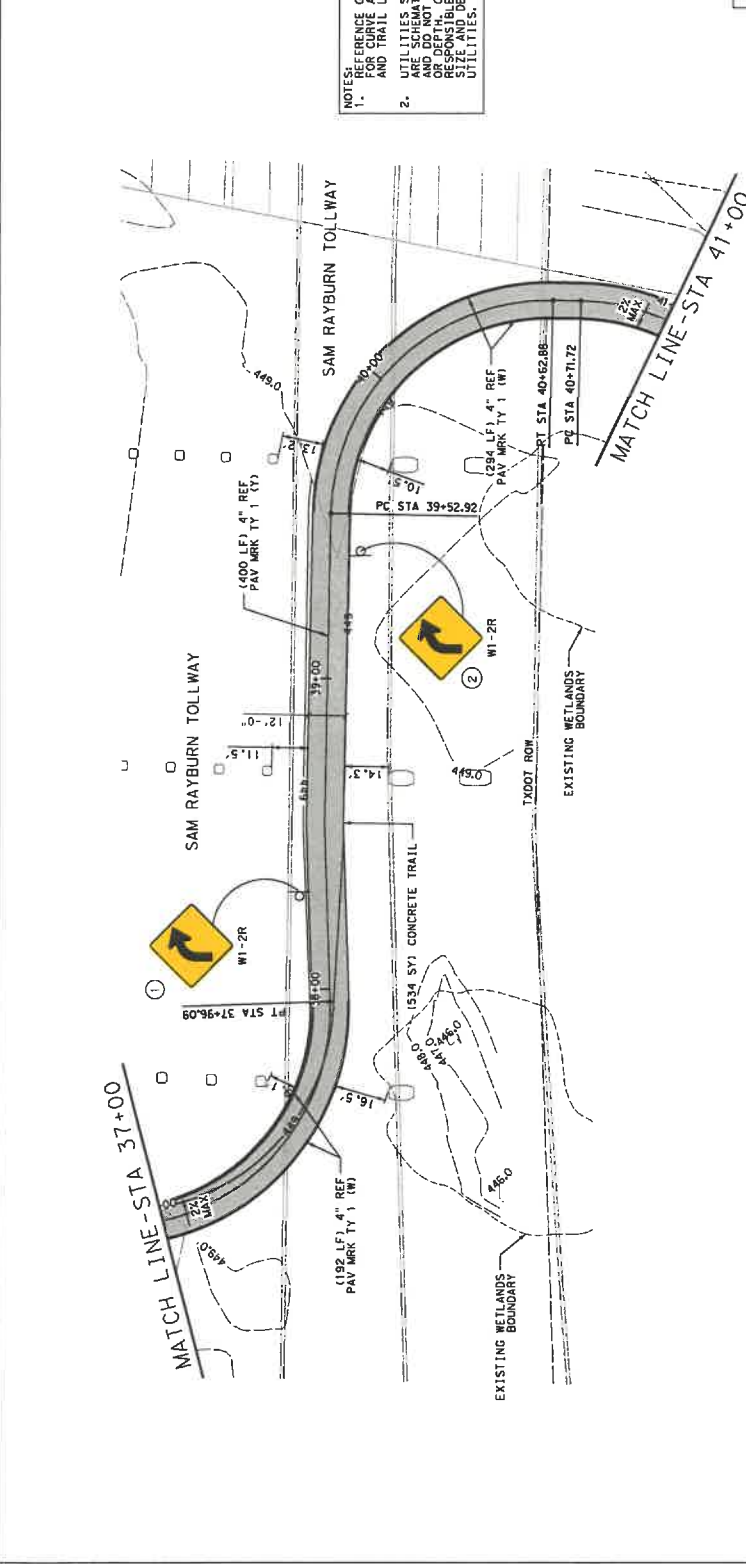
FILE: L2709-PP-45685.dgn

Exhibit A-10



KEY MAP - N.T.S.

1. CAUTION UTILITIES IN THE AREA!
 EXTREME CARE AND CAUTION SHOULD BE TAKEN WHEN WORKING UNDERGROUND UTILITY LINES
 DIG TESTS IS REQUIRED FOR THIS PROJECT PRIOR TO CONTRACTOR COMMENCING WORK!
 (800) 344-8377



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 Name: KRISTINA D. LEAL, P.E. 8/27/24 Date: AUGUST 2024

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DCTA TRAIL LEWISVILLE
 DCTA TRAIL A LEWISVILLE PAVING PLAN AND PROFILE
 STA 37+00 TO STA 41+00

SCALE: AS NOTED
 DESIGN DIVISION: FEDERAL AID PROJECT NO. 1500000456851001
 GRAPHICS: MC STP XXX (XXX) TAPS VA
 STATE: TEXAS DISTRICT: COUNTY: SHEET NO.:
 CHECK: XX TEXAS DAL DENTON JOB: 331
 CHECK: XX CONTROL SECTION: 46 FILE: L210-PP-45685.dgn

DATE: 8/27/2024 PROJECT # 45685 OFFICE: MCA TIME: 3:06:51 PM

Station	Profile Elevation	Ground Elevation	Notes
37+00	435.00	PGL 449.08	MATCH LINE - STA 37+00
38+00	440.00	PGL 449.08	
39+00	445.00	PGL 449.08	
40+00	450.00	PGL 449.28	
41+00	455.00	PGL 449.28	MATCH LINE - STA 41+00

Exhibit A-11



KEY MAP - N. T. S.

NOTES:

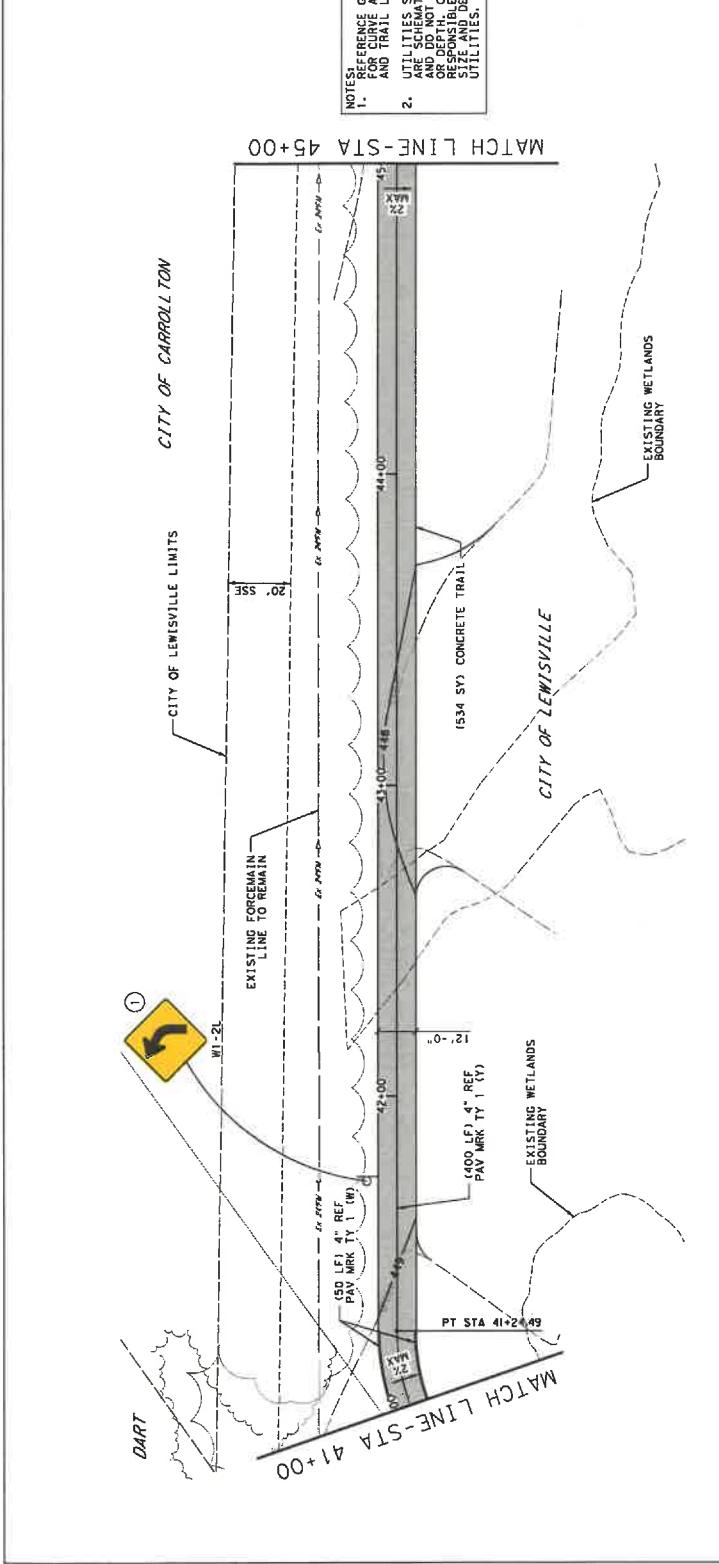
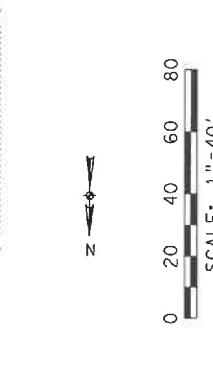
- REFERENCE GEOMETRIC LAYOUT FOR CURVE AND LINE DATA AND TRAIL LAYOUT.
- UTILITIES SHOWN IN PROFILE ARE SCHEMATIC IN NATURE AND CONTRACTOR IS RESPONSIBLE FOR VERIFYING UTILITY DEPTH OF EXISTING UTILITIES.

! CAUTION UTILITIES IN THE AREA !

****EXTREME CARE AND CAUTION SHOULD BE TAKEN WORKING AROUND OVERHEAD AND UNDERGROUND UTILITY LINES****

DIG TESTS IS REQUIRED FOR THIS PROJECT PRIOR TO CONTRACTOR COMMENCING WORK!

68001 344-8377



STATION	ELEVATION	DESCRIPTION
470.00		
465.00	465.00	
460.00	460.00	
455.00	455.00	
450.00	450.00	
445.00	445.00	
440.00	440.00	
435.00	435.00	

STATION	ELEVATION	DESCRIPTION
41+00		MATCH LINE-STA 41+00
42+00		MATCH LINE-STA 42+00
43+00		MATCH LINE-STA 43+00
44+00		MATCH LINE-STA 44+00
45+00		MATCH LINE-STA 45+00

STATION	ELEVATION	DESCRIPTION
41+00	470.00	PT STA 41+20.00 ELEV=470.00
42+00	448.98	PT STA 42+25.00 ELEV=448.98
43+00	448.04	PT STA 43+25.00 ELEV=448.04
44+00	448.25	PT STA 44+25.00 ELEV=448.25
45+00	448.42	PT STA 45+25.00 ELEV=448.42

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MISTIM D. LEAL, P.E. 84759 AUGUST 2024
 Name Date

half
 1301 NORTH BOWLER ROAD
 REYNOLDSVILLE, TX 75081-3275
 (972) 384-8200

Texas Department of Transportation
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DCTA TRAIL LEWISVILLE

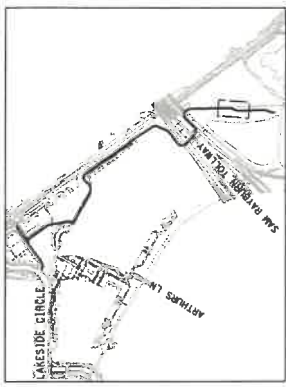
DCTA TRAIL A LEWISVILLE
 PAVING PLAN AND PROFILE
 STA 41+00 TO STA 45+00

SCALE: AS NOTED SHEET 11 OF 14

DESIGN	MC	FED. AID PROJECT NO.	HIGHWAY NO.
GRAPHICS	MC	STIP XXX(XXX) TAPS	VA
CHECK	XX	DISTRICT	COUNTY
CHECK	XX	CONTROL SECTION	JOB
CHECK	XX	091B	46
			331

TIME: 08:52 PM FILE: E:\211-PP-45685.dgn

Exhibit A-12



KEY MAP - N.T.S.

CASTORE CIRCLE
ARROYOS LN
HIGHWAY 190

NOTES:

1. REFERENCE GEOMETRIC LAYOUT FOR CURVE AND LINE DATA AND TRAIL LAYOUT.
2. UTILITIES SHOWN IN PROFILE ARE SCHEMATIC IN NATURE OR DEPTH. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TRUE DEPTH OF EXISTING UTILITIES.

! CAUTION UTILITIES IN THE AREA !

EXTREME CARE AND CAUTION SHOULD BE EXERCISED IN WORKING AROUND OVERHEAD AND UNDERGROUND UTILITY LINES

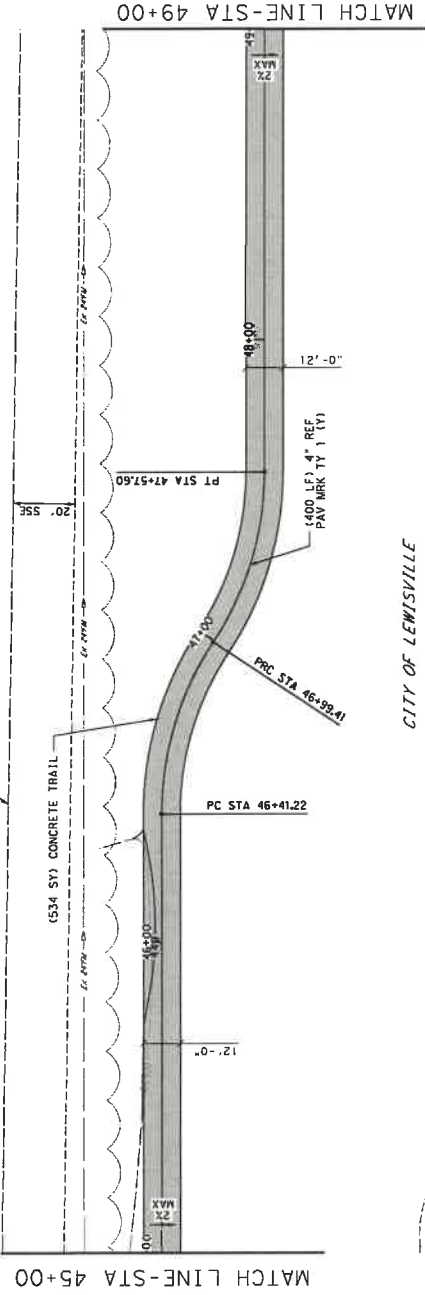
DIG TESS IS REQUIRED FOR THIS PROJECT PRIOR TO CONTRACTOR COMMENCING WORK!

18001-344-8377



CITY OF CARROLLTON

CITY OF LEWISVILLE LIMITS



CITY OF LEWISVILLE

Station	Elevation	Notes
470.00		
465.00		
460.00		
455.00		
450.00		
445.00		
440.00		
435.00		

Station	Elevation	Notes
49+00	440.00	Match Line - STA 49+00
48+00	435.00	
47+00	430.00	
46+00	425.00	
45+00	420.00	

H: 1" = 40'
V: 1" = 10'

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KRISTINA D. LEAL, P.E. 94759 AUGUST 2024
Name P.E. Date



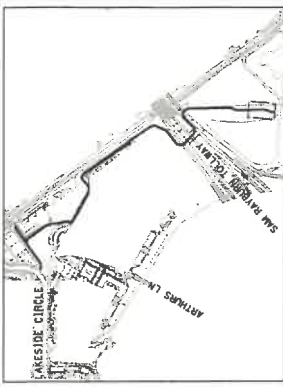
1201 COUNTY BOONER ROAD
MCKINNEY, TX 75069-1275
(972) 342-4230

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DCTA TRAIL LEWISVILLE
DCTA TRAIL A LEWISVILLE PAVING PLAN AND PROFILE STA 45+00 TO STA 49+00

DESIGN	MC	FED. AID PROJECT NO.	STATE	DISTRICT	COUNTY	SHEET NO.
GRAPHICS	MC	STP XXX (XXX) TAPS	TEXAS	DAL	DENTON	38
CHECK	XX					
CHECK	XX					

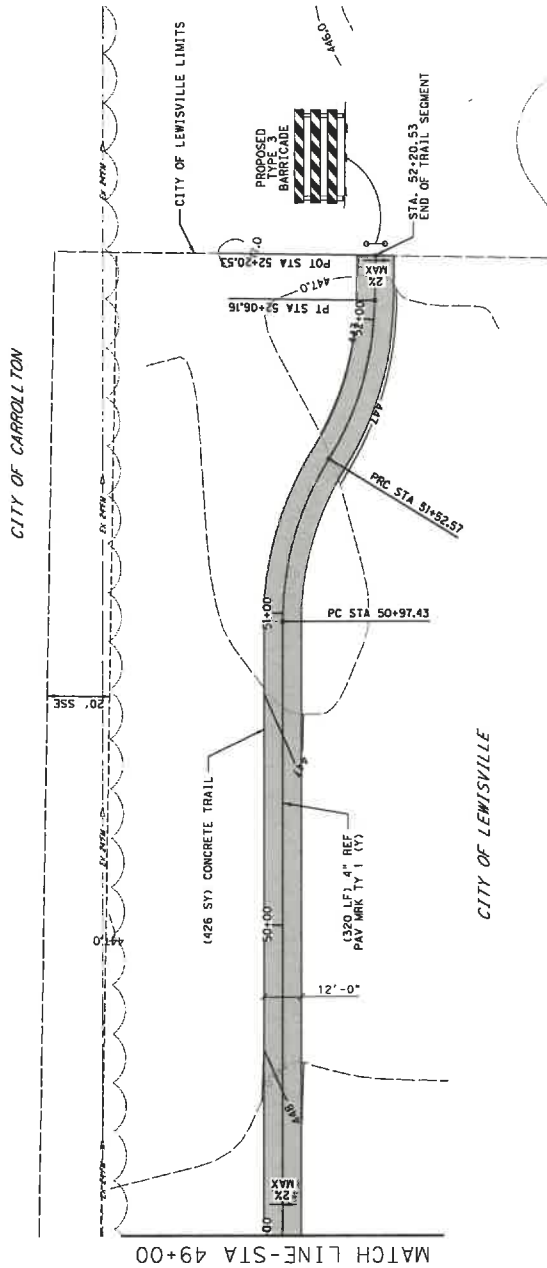
Exhibit A-13



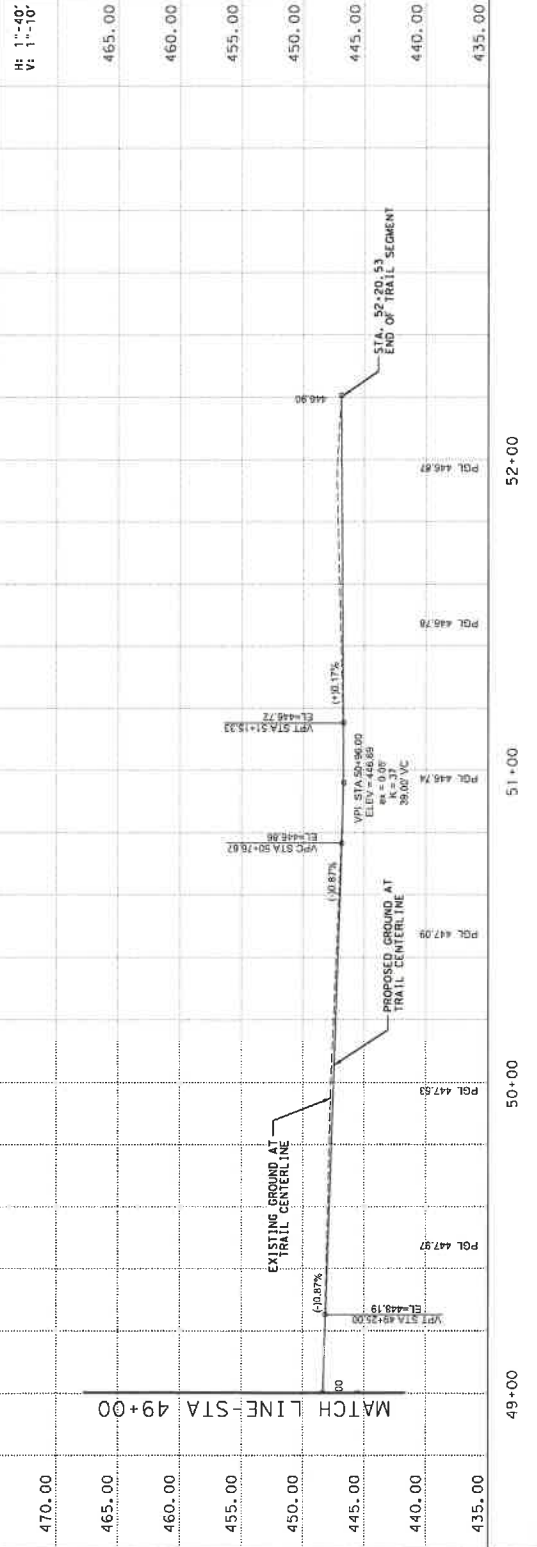
KEY MAP - N.T.S.

NOTES:
 1. REFERENCE GEOMETRIC LAYOUT FOR CURVE AND LINE DATA AND TRAIL LAYOUT.
 2. UTILITIES SHOWN IN PROFILE AND CHEMICAL IN NATURE AND SIZE OR DEPTH. CONTRACTOR IS RESPONSIBLE FOR VERIFYING DEPTH OF EXISTING UTILITIES.

CAUTION UTILITIES IN THE AREA!
 EXTREME CARE AND CAUTION SHOULD BE EXERCISED IN DIGGING AROUND OVERHEAD AND UNDERGROUND UTILITY LINES
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 KRISTINA D. LEAL, P.E. 8/15/24
 Name File Date



1201 NORTH BOWSER ROAD
 WFTL AND SOFLA, FL 32076
 (313) 384-6000
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 Texas Department of Transportation
 DCTA TRAIL LEWISVILLE

DCTA TRAIL A LEWISVILLE
 PAVING PLAN AND PROFILE
 STA 49+00 TO END

SCALE: AS NOTED SHEET 13 OF 14

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	HIGHWAY NO.
MC	6	STP XXX(XXX)	TAPS
GRAPHICS	MC	STATE	COUNTY
CHECK	XX	TEXAS	DAL
CHECK	XX	CONTROL SECTION	DENTON
CHECK	XX	JOB	331
			39

Exhibit A-14

Kevin Gronwaldt

From: Austin Frith <afrith@dcta.net>
Sent: Monday, May 5, 2025 9:54 AM
To: Stacie Anaya
Cc: CTroell@itsinc-tx.com; Kevin Gronwaldt
Subject: FW: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28
Attachments: CSJ 0918-46-331 - Lewisville DCTA Trail Segment A - 95% Preliminary Plans - Lochner
Cursory Review (4-25-25).pdf

Good morning Stacie,

Upon my investigation, most of these areas fall within the DART ROW and we (DCTA) would refer to them for final approval.

We have attached our cursory comments. Again, DCTA does not need to provide final approval on this project. We would like to be kept in the loop and advised on this project with updates as we will need some construction coordination when that starts with access to our property.

Best Regards,

Austin Frith
Vice President of Planning and Development
Denton County Transportation Authority
P.O. Box 96, Lewisville, Texas 75067
Phone: 972.316.6097



From: Easterling, Luke <leasterling@hwlochner.com>
Sent: Friday, April 25, 2025 9:59 AM
To: Austin Frith <afrith@dcta.net>
Cc: Tipton II, John <ltipton@hwlochner.com>; 23548 - DCTA TO#1 - Curve & Speed Enhancements <23548@hwlochner.com>
Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

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Good morning Austin,

John and I met this morning to go over our review comments we made yesterday on the Lewisville Trail plans and we ended up compiling our comments and also added in 2 additional sheets with comments. Please find our updated review comments attached. I also made all review comments as live comments in the PDF so that the comments can be replied to and tracked if needed.

Please let us know if you want to go over these comments.

Thanks!

Luke Easterling, P.E.



T 469.341.3875

C 469.569.8455

From: Easterling, Luke

Sent: Thursday, April 24, 2025 5:07 PM

To: Austin Frith <afrith@dcta.net>

Cc: Tipton II, John <ltipton@hwlochner.com>; 23548 - DCTA TO#1 - Curve & Speed Enhancements <23548@hwlochner.com>

Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Austin,

I added a few more review comments on top of John's comments on the attached PDF. Both John and I's comments are on this PDF and I added in a comment on the typical section sheet about adding a fence layout details.

Thanks!

Luke Easterling, P.E.



T 469.341.3875

C 469.569.8455

From: Tipton II, John <ltipton@hwlochner.com>

Sent: Thursday, April 24, 2025 11:29 AM

To: Austin Frith <afrith@dcta.net>; Easterling, Luke <leasterling@hwlochner.com>

Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Austin:

I think your comment on fencing should be shown on a typical section.

I have other comments on the attached scan.

John

John Tipton, PE

Rail and Transit Manager



12750 Merit Drive, Suite 570, Dallas, TX 75251

P: 972.865.8091 | M: 972.310.2528

jtipton@hwlochner.com

www.hwlochner.com

From: Austin Frith <afrith@dcta.net>

Sent: Thursday, April 24, 2025 9:12 AM

To: Easterling, Luke <leasterling@hwlochner.com>; Tipton II, John <ltipton@hwlochner.com>
Subject: FW: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

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See my below comments.....

Austin Frith
Vice President of Planning and Development
Denton County Transportation Authority
P.O. Box 96, Lewisville, Texas 75067
Phone: 972.316.6097



From: Austin Frith
Sent: Thursday, April 24, 2025 9:12 AM
To: Alex McGlinchey <amcglinchey@dcta.net>; Paul Cristina <pcristina@dcta.net>; Lisa Taylor <ltaylor@dcta.net>;
Karina Maldonado <kmaldonado@dcta.net>
Cc: Kisha Morris-Perkins <kmorris-perkins@dcta.net>
Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Ive provided these plans to Lochner for them to do a cursory review today/tomorrow.
We, planning, will prioritize these comments back to Stacie. We will also work on an SOP on these types of requests, as we don't want to be a bottleneck in the process.

My initial thoughts:

- Confirm ROW and easement alignment approvals with City of Lewisville and TxDOT
- I didn't see any fence layouts on the plans.....Request final fencing layout and clearance buffer dimensions for trail segments nearest to the tracks
- There needs to be coordination with the City to ensure trail maintenance responsibilities and access to DCTA facilities are clearly delineated
- I didn't see any wayfinding for the trail....should this include a trail signage and wayfinding plan, especially near Hebron Station?

Austin Frith
Vice President of Planning and Development
Denton County Transportation Authority
P.O. Box 96, Lewisville, Texas 75067
Phone: 972.316.6097



From: Alex McGlinchey <amcglinchey@dcta.net>
Sent: Thursday, April 24, 2025 8:36 AM
To: Paul Cristina <pcristina@dcta.net>; Lisa Taylor <ltaylor@dcta.net>; Austin Frith <afrith@dcta.net>; Karina Maldonado <kmaldonado@dcta.net>
Cc: Kisha Morris-Perkins <kmorris-perkins@dcta.net>
Subject: FW: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Paul,

I was able to get a copy of the plans from Halff.

Also found an email from 2023 when they were starting to ask for right of entry and asking if the trail would affect rail operations.

This is part of the Veloweb project that the COG has

planned <https://www.nctcog.org/trans/plan/bikeped/veloweb/adopted-2045-regional-veloweb> .

Thanks,

Alex

From: Alex McGlinchey

Sent: Thursday, April 24, 2025 8:24 AM

To: Paul Cristina <pcristina@dcta.net>; Lisa Taylor <ltaylor@dcta.net>; Austin Frith <afrith@dcta.net>; Karina Maldonado <kmaldonado@dcta.net>

Cc: Kisha Morris-Perkins <kmorris-perkins@dcta.net>

Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Paul,

Carlisle (Lake Dallas) is street widening only and at one point we thought it was going to affect the track enhancement project, but it won't.

Kevin Gronwaldt with Halff appears to be involved with both Carlilse and hike/bike trail extension.

I don't have any plans for the hike/bike trail extension South of Hebron. They were wanting a right of entry permit and I referred them to DART.

Thanks,

Alex

From: Paul Cristina <pcristina@dcta.net>

Sent: Thursday, April 24, 2025 7:44 AM

To: Alex McGlinchey <amcglinchey@dcta.net>; Lisa Taylor <ltaylor@dcta.net>; Austin Frith <afrith@dcta.net>; Karina Maldonado <kmaldonado@dcta.net>

Cc: Kisha Morris-Perkins <kmorris-perkins@dcta.net>

Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

So, this is not the same project as Carlisle?

Do we have plans in hand and under review for the project being questioned in this chain?

From: Alex McGlinchey <amcglinchey@dcta.net>

Sent: Wednesday, April 23, 2025 5:47 PM

To: Paul Cristina <pcristina@dcta.net>; Lisa Taylor <ltaylor@dcta.net>; Austin Frith <afrith@dcta.net>; Karina Maldonado <kmaldonado@dcta.net>
Cc: Kisha Morris-Perkins <kmorris-perkins@dcta.net>
Subject: Re: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Paul,

Last contact I had with Kevin Gronwalt was about month ago regarding Carlisle. The hike/bike trail project from Hebron on South was discussed over a year ago and they were referred to DART for ROE license. Told them when they got back to contact DCTA.

Thanks,

Alex

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From: Paul Cristina <pcristina@dcta.net>
Sent: Wednesday, April 23, 2025 5:31:05 PM
To: Lisa Taylor <ltaylor@dcta.net>; Austin Frith <afrith@dcta.net>; Alex McGlinchey <amcglinchey@dcta.net>; Karina Maldonado <kmaldonado@dcta.net>
Cc: Kisha Morris-Perkins <kmorris-perkins@dcta.net>
Subject: FW: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Good afternoon – do any of you have information about the subject trail project that is under review?

Is this tied to the same project that surfaced in January (see attached).

We need to get back with Stacie on a reply. Austin – please take the lead there and keep me copied on reply.

Kisha – for tracker.

Thanks
Paul

From: Stacie Anaya <sanaya@cityoflewisville.com>
Sent: Wednesday, April 23, 2025 4:41 PM
To: Paul Cristina <pcristina@dcta.net>
Subject: Fwd: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

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Hey Paul,

I'm looking forward to our meeting at the Perc soon but I wanted to share an email thread that just came across my inbox. Before this gets kicked up to people who tell you and I what to do, is there something

we can provide to get this ball through the last hoop with your team? This is for the trail plans south of Hebron Station. Let me know what you think.

Thanks
Stacie

----- Forwarded message -----

From: **Christina Troell** <CTroell@itsinc-tx.com>

Date: Wed, Apr 23, 2025 at 2:12 PM

Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

To: Kevin Gronwaldt <kgronwaldt@halff.com>

Cc: Stacie Anaya <sanaya@cityoflewisville.com>, Randy Simon <rsimon@cityoflewisville.com>

Thanks for touching base, Kevin. I reminded John earlier today about the need for DCTA comments. He was going to call the judge in between meetings to ask for his help in getting a response for you. Yes, we have known and done some work with Lochner over the years, but I think our best bet right now is to work through the judge. He should be able to get things rolling. Hope to have something for you soon.

Christina Troell

ITS

Innovative Transportation Solutions, Inc.

2701 Valley View Lane · Farmers Branch, TX 75234

Office: 972 · 484 · 2525 | Cell: 214 · 673 · 8224

From: Kevin Gronwaldt <kgronwaldt@halff.com>

Sent: Wednesday, April 23, 2025 11:14 AM

To: Christina Troell <CTroell@itsinc-tx.com>

Cc: Stacie Anaya <sanaya@cityoflewisville.com>; Randy Simon <rsimon@cityoflewisville.com>

Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Christina,

Any feedback from DCTA on their review yet? Through some recent meetings with DCTA staff on other projects, it appears DCTA utilizes a firm called HW Lochner for engineering design review program management. I don't know if that rings a bell for you or John, but perhaps the review is in their court via Austin Frith from DCTA?

Just wanted to check-in and provide that update, please let me know if you've hear anything.

Thanks,

Kevin Gronwaldt, PE, LGPP

Public Works Team Leader

Halff

O: 817.764.7446

E: kgronwaldt@halff.com

From: Christina Troell <CTroell@itsinc-tx.com>
Sent: Monday, March 31, 2025 4:58 PM
To: Kevin Gronwaldt <kgronwaldt@halff.com>
Cc: Stacie Anaya <sanaya@cityoflewisville.com>; Randy Simon <rsimon@cityoflewisville.com>
Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Thanks for following up, Kevin. John is working on this. I'll remind him.

Christina Troell

ITS

Innovative Transportation Solutions, Inc.

2701 Valley View Lane · Farmers Branch, TX 75234

Office: 972 · 484 · 2525 | Cell: 214 · 673 · 8224

From: Kevin Gronwaldt <kgronwaldt@halff.com>
Sent: Monday, March 31, 2025 12:25 PM
To: Christina Troell <CTroell@itsinc-tx.com>
Cc: Stacie Anaya <sanaya@cityoflewisville.com>; Randy Simon <rsimon@cityoflewisville.com>
Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Christina,

Have you heard anything from DCTA regarding their 95% review comments for this project?

Please let me know when/if you have an update.

Thanks,

Kevin Gronwaldt, PE, LGPP
Public Works Team Leader

Halff

O: 817.764.7446

E: kgronwaldt@halff.com

From: Christina Troell <CTroell@itsinc-tx.com>
Sent: Friday, March 14, 2025 12:23 PM
To: Kevin Gronwaldt <kgronwaldt@halff.com>
Cc: Stacie Anaya <sanaya@cityoflewisville.com>; Randy Simon <rsimon@cityoflewisville.com>
Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Thanks, Kevin! I'll stay on the DCTA comments. Randy or Stacie, let us know if you need anything on the COI.

Christina Troell

ITS

Innovative Transportation Solutions, Inc.

2701 Valley View Lane · Farmers Branch, TX 75234

From: Kevin Gronwaldt <kgronwaldt@halff.com>
Sent: Friday, March 14, 2025 12:14 PM
To: Christina Troell <CTroell@itsinc-tx.com>
Cc: Stacie Anaya <sanaya@cityoflewisville.com>; Randy Simon <rsimon@cityoflewisville.com>
Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Christina,

You're correct. DCTA comments are the last item of need to be able to resubmit to TxDOT. The COI for DART would be supplied from City purchasing, so not really any other items for DART to address at this time.

Thanks,

Kevin Gronwaldt, PE, LGPP
Public Works Team Leader

Halff
O: 817.764.7446
E: kgronwaldt@halff.com

From: Christina Troell <CTroell@itsinc-tx.com>
Sent: Friday, March 14, 2025 9:32 AM
To: Kevin Gronwaldt <kgronwaldt@halff.com>
Cc: Stacie Anaya <sanaya@cityoflewisville.com>; Randy Simon <rsimon@cityoflewisville.com>
Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Also, I did remind John about DCTA comments, and you were right, he did mention Andy (the judge) about helping with that as well. Judge Eads should be able to help us move this along. I sent him a few things to follow up on this morning and will make sure we get the judge to apply some pressure to DCTA to get some comments back to you.

As I understand it, what is outstanding:

1. DCTA comments
2. COI for DART

Anything else? Once we get DCTA comments, we can get this back in front of TxDOT?

Christina Troell

ITS

Innovative Transportation Solutions, Inc.
2701 Valley View Lane · Farmers Branch, TX 75234
Office: 972 · 484 · 2525 | Cell: 214 · 673 · 8224

From: Christina Troell
Sent: Friday, March 14, 2025 9:27 AM
To: Kevin Gronwaldt <kgronwaldt@halff.com>
Cc: Stacie Anaya <sanaya@cityoflewisville.com>; Randy Simon <rsimon@cityoflewisville.com>
Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Thanks for forwarding, Kevin. Has DART indicated that they were preparing, or would it be helpful if I checked in on next steps?

Christina Troell

ITS

Innovative Transportation Solutions, Inc.

2701 Valley View Lane · Farmers Branch, TX 75234

Office: 972 · 484 · 2525 | Cell: 214 · 673 · 8224

From: Kevin Gronwaldt <kgronwaldt@halff.com>
Sent: Thursday, March 13, 2025 8:29 PM
To: Christina Troell <CTroell@itsinc-tx.com>
Cc: Stacie Anaya <sanaya@cityoflewisville.com>; Randy Simon <rsimon@cityoflewisville.com>
Subject: RE: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Understood, thanks for the clarification, Christina. I have attached the email thread/follow-up with City Purchasing for reference to this group. I don't believe the COI has been prepared as of yet.

Thanks!

Kevin Gronwaldt, PE, LGPP

Public Works Team Leader

Halff

O: 817.764.7446

E: kgronwaldt@halff.com

From: Christina Troell <CTroell@itsinc-tx.com>
Sent: Thursday, March 13, 2025 8:23 PM
To: Kevin Gronwaldt <kgronwaldt@halff.com>
Cc: Stacie Anaya <sanaya@cityoflewisville.com>; Randy Simon <rsimon@cityoflewisville.com>
Subject: Re: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Thanks, Kevin. By Andy, John meant the judge, and the judge shared DART contacts, but we can touch base with DCTA as well. I'll ask him about that tomorrow. I didn't see anything you weren't copied on, but I will verify that as well to make sure we haven't missed any communications.

Christina Troell

ITS

Innovative Transportation Solutions, Inc.

Office: (972) 484-2525

Cell: (214) 673-8224

On Mar 13, 2025, at 8:19 PM, Kevin Gronwaldt <kgronwaldt@halff.com> wrote:

Christina,

Thanks for checking in on this one! I think the only outstanding items are the COI that City purchasing is working on to send to DART (unless that got sent without me being CC'd) and then as Nelda mentions the low bidder information that will be sent to complete the process, so we should be all up to speed with DART.

I think we're just waiting on feedback/plan review comments from DCTA at this point, I recall John mentioned he'd reach out to someone named Andy, possibly from DCTA, but unsure if ITS had received a response on that yet.

Thanks,



Kevin Gronwaldt, PE, LGPP
Public Works Team Leader

Halff
O: 817.764.7446
E: kgronwaldt@halff.com

Celebrating our legacy of improving lives and communities.

From: Christina Troell <CTroell@itsinc-tx.com>
Sent: Thursday, March 13, 2025 3:41 PM
To: Stacie Anaya <sanaya@cityoflewisville.com>
Cc: Randy Simon <rsimon@cityoflewisville.com>; Kevin Gronwaldt <kgronwaldt@halff.com>
Subject: FW: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Stacie,

Looks like you weren't on this. Randy and Kevin, let me know if you need anything else on this one. Seems like we're making progress.

Christina Troell

ITS

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2701 Valley View Lane · Farmers Branch, TX 75234
Office: 972 · 484 · 2525 | Cell: 214 · 673 · 8224

From: Nelda Villacana <NVillaca@dart.org>
Sent: Thursday, March 13, 2025 3:00 PM
To: Randy Simon <rsimon@cityoflewisville.com>

Cc: Gronwaldt, Kevin <kgronwaldt@half.com>; Christina Troell <CTroell@itsinc-tx.com>;
ClairePowell@cityoflewisville.com; Nelda Villacana <NVillaca@dart.org>
Subject: 222424-Lic-City of Lewisville-Trail-Hebron Pkwy-740.00-740.28

Good afternoon, everyone,
Randy, please forward this license agreement to the city of Lewisville for signature and return to my attention for final execution.

Kevin when the city of Lewisville gets a contractor for this project, please forward me their information to start on it as soon as possible. Especially if time is of the essence.

Kind regards,

Nelda Villacana
Right of Way Representative-Commuter Rail
Commuter Rail & Railroad Management
Dallas Area Rapid Transit | 1401 Pacific Ave | Dallas, Texas 75202-7210
Office 214 749-3694 | cell 972 946-5938 | nvillaca@dart.org

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Assignment Details ★ **Activity**

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CE Determination

Highway: VA
Main CSJ: 091846331
Project Limits From: DENTON TO DALLAS TRAIL FROM DCTA HEBRON
Project Limits To: STATION TO CARROLLTON CITY LIMIT

Associated CSJs:

Approved Environmental Classification: CE

Criterion: d(13)

CE Determination for project with local government project sponsor, Lead Agency is FHWA-Assigned to TxDOT

By my submittal or approval below, I confirm the following with respect to this project, and all projects which have been associated with this project in ECOS. This project or these projects:

- meet the definition of a categorical exclusion (CE) contained in 40 CFR 1508.4, and, based on past experience with similar actions, do not involve significant environmental impacts;
- do not induce significant impacts to planned growth or land use for the area;
- do not require the relocation of significant numbers of people;
- do not have a significant impact on any natural cultural recreational historic or other resource;
- do not involve significant air, noise, or water quality impacts;
- do not have significant impacts on travel patterns;
- do not otherwise, either individually or cumulatively, have any significant environmental impacts;
- do not involve unusual circumstances including substantial controversy on environmental grounds; significant impact on properties protected by section 4(f) of the DOT Act or section 106 of the National Historic Preservation Act; or inconsistencies with any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the action; and
- meet the definition and any conditions on the use of the specific CE criterion identified above.

I further confirm that this project or these projects are categorically excluded from the requirements to prepare an environmental assessment or environmental impact statement under the National Environmental Policy Act.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 9, 2019, and executed by FHWA and TxDOT.

Submittal by local government project sponsor

Submitted By: Andrea Ayala **Date:** 08/05/2024

TxDOT Approval/Disapproval

Approved By: Andrea Ayala **Date:** 08/05/2024

Last Updated By: Andrea Ayala **Last Updated Date:** 08/05/2024 12:42:08

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Notes To Designer:
1. Do not alter Sheet Design or Font style - match text attributes.
2. If additional space is needed for a numbered section, fence and adjust sections up or down
as needed for proportioning and readability but do not relocate from its relative position.
3. All areas should be addressed thoroughly and verify the necessary pay items are set up to
support actions needed.

Filed Oct. XX/XX/XXXX
Prepared By: Name/Section

I. STORMWATER POLLUTION PREVENTION PLAN-CLEAN WATER ACT SECTION 402

TPDES TXR 150000: Stormwater Discharge Permit or Construction General Permit required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 506.

List adjacent MS 4 Operator(s) that receive discharges from this project. They need to be notified prior to construction activities.

(Note: Leave blank only if no adjacent MS 4 Operator(s) are affected.)

1. CITY OF LEWISVILLE PHASE II MS4 - CONTACT JASON LONGBINE

No Action Required Required Action

Action Number:

1. Prevent stormwater pollution by controlling erosion and sedimentation in accordance with TPDES Permit TXR 150000.
2. Comply with the SW3P and revise when necessary to control pollution or required by the Engineer.
3. Post Construction Site Notice (CSN) with SW3P information on or near the site, accessible to the public and TCEQ, EPA or other inspectors.
4. When Contractor project specific locations (PSL's) increase disturbed soil area to 5 acres or more, submit NOI to TCEQ and the Engineer.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas. No equipment is allowed in any stream channel below the ordinary High Water Mark except on approved temporary stream crossings or drill pads.

The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

- No Permit Required
- Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)
- Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)
- Individual 404 Permit Required
- Other Nationwide Permit Required: NWP# 3(a)

Required Actions: List Waters of the US Permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

1. AT-GRADE SIDEWALK - STA 42+20 - UNNAMED TRIBUTARY TO LEWISVILLE LAKE - ADJACENT WETLAND NWP 14 with PCN

The elevation of the ordinary high water marks of any areas requiring work to be performed in the waters of the US requiring the use of a nationwide permit can be found on the Bridge Layouts.

Best Management Practices for applicable 401 General Conditions:

(Note: If CORP Permit not required, do not check boxes.)

Erosion

- Temporary Vegetation
- Blankets/Matting
- Mulch
- Sodding
- Interceptor Swale
- Diversion Dike
- Erosion Control Compost
- Mulch Filter Berm and Socks
- Compost Filter Berm and Socks

Sedimentation

- Silt Fence
- Rock Berm
- Triangular Filter Dike
- Sand Bag Berm
- Straw Bale Dike
- Brush Berms
- Erosion Control Compost
- Erosion Control Compost
- Mulch Filter Berm and Socks
- Compost Filter Berm and Socks
- Stone Outlet Sediment Traps
- Sediment Basins

Post-Construction TSS

- Vegetative Filter Strips
- Retention/Irrigation Systems
- Extended Detention Basin
- Constructed Wetlands
- Wet Basin
- Erosion Control Compost
- Mulch Filter Berm and Socks
- Compost Filter Berm and Socks
- Vegetation Lined Ditches
- Sand Filter Systems
- Grassy Swales

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact the Engineer immediately.

No Action Required Required Action

Action Number:

1.

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical. Contractor must adhere to Construction Specification Requirements Specs 162, 164, 192, 193, 506, 730, 751 & 752 in order to comply with requirements for invasive species, beneficial landscaping and tree/brush removal commitments.

No Action Required Required Action

Action Number:

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS TREATY ACT.

No Action Required Required Action

Action Number:

1. The following species could be present in the project area: Monarch butterfly, eastern box turtle, eastern spotted skunk, prairie skink, Spragues pipit, Streckers chorus frog, timber (canebrake) rattlesnake, Texas garter snake, western box turtle, western hog-nosed skunk, western chicken turtle, and Woodhouse's toad. Follow the special note on the EPIC sheet and the BMPs listed below to protect these species.
2. Contractor to implement the following BMPs from Beneficial Management Practices: Avoiding, Minimizing, and Mitigating Impacts of Transportation Projects on State Natural Resources available at: <https://ftp.txdot.gov/pub/txdot-info/env/toolkit/300-01-bmp.pdf>.
 - a. Section 1.2 Vegetation BMP
 - b. Section 1.4 Water Quality BMP
 - c. Section 2.6.1 Aquatic Amphibian and Reptile BMP (barrier fencing not required)
 - d. Section 2.6.2 Terrestrial Amphibian and Reptile BMP

Special Notes:

1. Avoid harming all wildlife species if encountered and allow them to safely leave the project site. Due diligence should be used to avoid killing or harming any wildlife species in the implementation of transportation projects.
2. If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediated area, and contact the Engineer immediately.
3. The Migratory Bird Act of 1918 states that it is unlawful to kill, capture, collect, possess, buy, sell, trade or transport any migratory bird, nest, young, feather or egg in part or in whole, without a federal permit issued in accordance within the Act's policies and regulations. The contractor would remove all old migratory bird nests from any structure or trees where work would be done from October 1 to February 15. In addition, the contractor would be prepared to prevent migratory birds from building nest(s) between February 15 to October 1. In the event that migratory birds are encountered on-site during project construction, efforts to avoid adverse impacts on protected birds, active nests, eggs and/or young would be observed.

LIST OF ABBREVIATIONS

BMP: Best Management Practice	SPCC: Spill Prevention Control and Countermeasure
CGP: Construction General Permit	SW3P: Storm Water Pollution Prevention Plan
DSHS: Texas Department of State Health Services	PCN: Pre-Construction Notification
FHWA: Federal Highway Administration	PSL: Project Specific Location
MOA: Memorandum of Agreement	TCEQ: Texas Commission on Environmental Quality
MOU: Memorandum of Understanding	TPDES: Texas Pollutant Discharge Elimination System
MS4: Municipal Separate Stormwater Sewer System	TPWD: Texas Parks and Wildlife Department
MBTA: Migratory Bird Treaty Act	TxDOT: Texas Department of Transportation
NOT: Notice of Termination	T&E: Threatened and Endangered Species
NWP: Nationwide Permit	USACE: U.S. Army Corp of Engineers
NOI: Notice of Intent	USFWS: U.S. Fish and Wildlife Service

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used.

Obtain and keep on-site Safety Data Sheets (SDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act. Maintain an adequate supply of on-site spill response materials, as indicated in the SDS. In the event of a spill, take actions to mitigate the spill as indicated in the SDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the Engineer if any of the following are detected:

- * Dead or distressed vegetation (not identified as normal)
- * Trash piles, drums, canisters, barrels, etc.
- * Undesirable smells or odors
- * Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation(s) or replacement(s) (bridge class structures not including box culverts)?

Yes No

If "No", then no further action is required.

If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?

Yes No

If "Yes", then TxDOT must retain a DSHS licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled demolition.

If "No", then TxDOT is still required to notify DSHS 15 working days prior to any scheduled demolition.

In either case, the Contractor is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between the Engineer and asbestos consultant in order to minimize construction delays and subsequent claims.

Any other evidence indicating possible hazardous materials or contamination discovered on site. Hazardous Materials or Contamination Issues Specific to this Project:

No Action Required Required Action

Action Number:

- 1.
- 2.
- 3.

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

No Action Required Required Action


Action Number:

1.

GENERAL NOTE:

Any change orders and/or deviations from the final design must be reported to the Engineer prior to commencement of construction activities, as additional environmental clearance may be required.

LAST REVISION: 1/15/15

© 2024  Texas Department of Transportation Dallas District			
ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)			
FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		VARIOUS
STATE	DISTRICT	COUNTY	
TEXAS	DALLAS	DENTON	
CONTROL	SECTION	JOB	SHEET NO.
0918	46	331	

Kevin Gronwaldt

From: Andrea Ayala <Andrea.Ayala@txdot.gov>
Sent: Tuesday, August 6, 2024 9:14 AM
To: Rachael Twigg; Saied Shafiye; Dhwanil Shah
Cc: Randy Simon; bcallaway@itsinc-tx.com; Justin Marston; DAL-ENV; Barry Heard; Kevin Gronwaldt; Mark Cantu; Samantha Kaschel; Cara Rouvaldt; Lindsay Vermillion; Travis Campbell; Ashton Strong; Melissa Meyer; Amanda Miller; Christopher Rocha; Kareem Doucette; Teresita Sarmiento; Juan Valera-Lema; DAL_PS&E; Tamelia Spillman; Griselda Clark-El; Ronda Derk
Subject: Environmental Clearance for 0918-46-331 DCTA Trail (Local Let- City of Lewisville)
Attachments: 0918-46-331 DCTA Trail CE Determination 8_5_2024.pdf; 0918-46-331 DCTA Trail EPIC SHEET 8_5_2024.pdf; 0918-46-331 DCTA Trail SGC 8_5_2024.pdf; 0918-46-331 DCTA Trail WPD 1 screen 8.5.24.PNG

Good Morning Rachael,

Attached for your records are the environmental NEPA clearance documents for 0918-46-, Texas. You are officially environmentally cleared as of August 6, 2024 for the next stage of project development.

Below are the outstanding EPIC commitments.

Biology:

1. The following species could be present in the project area: Monarch butterfly, eastern box turtle, eastern spotted skunk, prairie skink, Sprague's pipit, Strecker's chorus frog, timber (canebrake) rattlesnake, Texas garter snake, western box turtle, western hog-nosed skunk, western chicken turtle, and Woodhouse's toad. Follow the special note on the EPIC sheet and the BMPs listed below to protect these species.

2. Contractor to implement the following BMPs from "Beneficial Management Practices: Avoiding, Minimizing, and Mitigating Impacts of Transportation Projects on State Natural Resources" available at <https://ftp.txdot.gov/pub/txdot-info/env/toolkit/300-01-bmp.pdf>.

- a. Section 1.2 Vegetation BMP
- b. Section 1.4 Water Quality BMP
- c. Section 2.6.1 Aquatic Amphibian and Reptile BMP (barrier fencing not required)
- d. Section 2.6.2 Terrestrial Amphibian and Reptile BMP

WOUS:

At grade sidewalk - STA 42+20 - Unnamed Tributary to Lewisville Lake - Adjacent Wetland – NWP 14 with PCN

Andrea

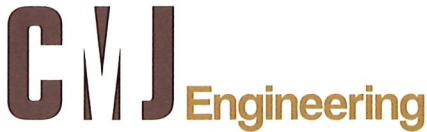
**GEOTECHNICAL ENGINEERING SERVICES
DCTA TRAIL
SEGMENT A
HEBRON STATION TO E. QUADRANT IH-35E AT SRT
LEWISVILLE, TEXAS**

Presented To:

Halff Associates, Inc.

August 2024

PROJECT NO. 117-24-358 (Revised)



August 7, 2024
Report No. 117-24-358 (Revised)

Halff Associates, Inc.
1201 N. Bowser Road
Richardson, Texas 75081-2275

Attn: Mr. Kevin Gronwaldt, P.E.

**GEOTECHNICAL ENGINEERING SERVICES
DCTA TRAIL
SEGMENT A
HEBRON STATION TO E. QUADRANT IH-35E AT SRT
LEWISVILLE, TEXAS**

Dear Mr. Gronwaldt:

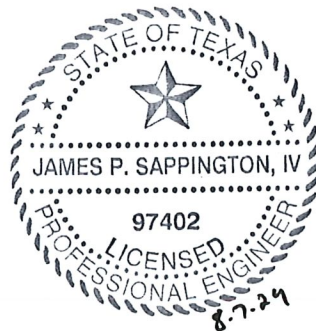
Submitted here are the results of a geotechnical engineering study for the referenced project. This study was performed in general accordance with our Proposal No. 21-8202-1 (Revision 5) dated February 5, 2024. The geotechnical services were authorized via Standard Subcontract agreement with Project Number (AVO) 045685.001 dated February 8, 2024.

Engineering analyses and recommendations are contained in the text section of the report. Results of our field and laboratory services are included in the appendix of the report. We would appreciate the opportunity to be considered for providing the construction material testing services during the construction phase of this project.

We appreciate the opportunity to be of service to Halff Associates, Inc. Please contact us if you have any questions or if we may be of further service at this time.

Respectfully submitted,
CMJ ENGINEERING, INC.
TEXAS FIRM REGISTRATION NO. F-9177

James P. Sappington IV, P.E.
President
Texas No. 97402



copies submitted: (1) Mr. Kevin Gronwaldt, P.E.; Halff Associates, Inc. (email)
(1) Ms. Gwen Hubbard, P.E.; Halff Associates, Inc. (email)

CMJ Engineering | 7636 Pebble Drive
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TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION -----	1
2.0 FIELD EXPLORATION AND LABORATORY TESTING-----	2
3.0 SUBSURFACE CONDITIONS -----	3
4.0 TRAIL PAVEMENTS -----	5
5.0 RETAINING WALL RECOMMENDATIONS -----	9
6.0 SLOPE STABILITY ANALYSIS -----	14
7.0 EXPANSIVE SOIL CONSIDERATIONS -----	16
8.0 SEISMIC CONSIDERATIONS -----	17
9.0 EARTHWORK-----	17
10.0 CONSTRUCTION OBSERVATIONS-----	20
11.0 REPORT CLOSURE -----	21

APPENDIX A

	<u>Plate</u>
Plan of Borings -----	A.1a – A.1b
Unified Soil Classification System-----	A.2
Key to Classification and Symbols -----	A.3
Logs of Borings -----	A.4 – A.11
Free Swell Test Results-----	A.12
Direct Shear Test Results -----	A.13 – A.16
Soluble Sulfate Test Results-----	A.17

APPENDIX B

	<u>Plate</u>
Slope Stability Analyses -----	B.1 – B.4

1.0 INTRODUCTION

1.1 Project Description

The project, as currently planned, will consist of a hike and bike trail segment addition to the Regional Veloweb network, located generally in the vicinity of the Interstate 35E at State Highway 121 (Sam Rayburn Tollway) interchange in Lewisville, Texas. The project trail, Segment A, extends southeast from Hebron Station along the southwest side of the DCTA rail for an approximate length of 5,100 linear feet. The trail segment will include several low height retaining structures (exposed height 5 feet, maximum), except at a proposal outfall headwall, denoted as Wall B, with an exposed height of 9½ feet. Plates A.1A and A.1B, Plan of Borings, presents the project vicinity and approximate locations of the exploration borings.

1.2 Purpose and Scope

The purpose of this geotechnical engineering study has been to determine the general subsurface conditions, evaluate the engineering characteristics of the subsurface materials encountered, develop recommendations for the type or types of foundations suitable for the project, provide pavement subgrade preparation and design guidelines, and provide earthwork recommendations.

To accomplish its intended purposes, the study has been conducted in the following phases: (1) drilling sample borings to determine the general subsurface conditions and to obtain samples for testing; (2) performing laboratory tests on appropriate samples to determine pertinent engineering properties of the subsurface materials; and (3) performing engineering analyses, using the field and laboratory data to develop geotechnical recommendations for the proposed construction.

The design is currently in progress and the locations and/or elevations of the structures could change. The recommendations contained in this report are based on data supplied by Half Associates, Inc. Once the final design is near completion (80-percent to 90-percent stage), it is recommended that CMJ Engineering, Inc. be retained to review those portions of the construction documents pertaining to the geotechnical recommendations, as a means to determine that our recommendations have been interpreted as intended.

1.3 Report Format

The text of the report is contained in Sections 1 through 11. All plates and large tables are contained in Appendix A. The alpha-numeric plate and table numbers identify the appendix in which they appear. Small tables of less than one page in length may appear in the body of the text and are numbered according to the section in which they occur.

Units used in the report are based on the English system and may include tons per square foot (tsf), kips (1 kip = 1,000 pounds), kips per square foot (ksf), pounds per square foot (psf), pounds per cubic foot (pcf), and pounds per square inch (psi).

2.0 FIELD EXPLORATION AND LABORATORY TESTING

2.1 Field Exploration

Subsurface materials at the project site were explored by eight (8) vertical soil borings. Borings B-2, B-3, and B-5 were drilled to a depth of 20 feet in the area of the proposed retaining structures along the trail. The remaining borings are associated with the proposed trail and were drilled to a depth of 10 feet. Boring B-4 was not drilled due to utility conflicts in the area. The borings were drilled using continuous flight augers at the approximate locations shown on the Plan of Borings, Plates A.1A and A.1B. The boring logs are included on Plates A.4 through A.11 and keys to classifications and symbols used on the logs are provided on Plates A.2 and A.3.

Undisturbed samples of cohesive soils were obtained with nominal 3-inch diameter thin-walled (Shelby) tube samplers at the locations shown on the logs of borings. The Shelby tube sampler consists of a thin-walled steel tube with a sharp cutting edge connected to a head equipped with a ball valve threaded for rod connection. The tube is pushed into the soil by the hydraulic pulldown of the drilling rig. The soil specimens were extruded from the tube in the field, logged, tested for consistency with a hand penetrometer, sealed, and packaged to limit loss of moisture.

The consistency of cohesive soil samples was evaluated in the field using a calibrated hand penetrometer. In this test a 0.25-inch diameter piston is pushed into the relatively undisturbed sample at a constant rate to a depth of 0.25 inch. The results of these tests, in tsf, are tabulated at respective sample depths on the logs. When the capacity of the penetrometer is exceeded, the value is tabulated as 4.5+.

Ground-water observations during and after completion of the borings are shown on the upper right of the boring log. Upon completion of the borings, the bore holes were backfilled with soil cuttings and plugged at the surface by hand tamping.

2.2 Laboratory Testing

Laboratory soil tests were performed on selected representative samples recovered from the borings. In addition to the classification tests (liquid limits, plastic limits and percent passing No. 200 sieve tests), moisture content, unit weight, and unconfined compressive strength tests were performed. Results of the laboratory classification tests, moisture content, unit weight, and unconfined compressive strength tests conducted for this project are included on the boring logs.

Three swell tests were performed on specimens from selected samples of the clays. These tests were performed to help in evaluating the swell potential of soils in the area of the proposed retaining structures. The results of the swell tests are presented on Plate A.12.

Direct shear tests were performed within the overburden soils. The shear tests were performed in order to obtain strength parameters of the in-situ soils. The results of the direct shear tests are presented on Plates A.13 through A.16.

Soluble sulfate tests were conducted on selected soil samples. The sulfate testing was conducted to help identify lime-induced heaving potential of the soils. Lime-induced heaving can cause detrimental volumetric changes to a calcium based stabilized modified subgrade. The results of these tests are presented on Plate A.17.

The above laboratory tests were performed in general accordance with applicable ASTM procedures, or generally accepted practice.

3.0 SUBSURFACE CONDITIONS

3.1 Site Geology

According to the Sherman Sheet of the Geologic Atlas of Texas, the project sites are geologically located in the Alluvium and Fluvial Terrace Deposits overlying the Eagle Ford Formation. The alluvial and terrace deposits are generally a mixture of fine-grained and coarse materials, which are typically layered with grain sizes increasing with depth. At the surface the clay portions of

these deposits can be moderately to highly active. Ground-water is typically present in these deposits, especially in the proximity of a river or creek.

3.2 Soil Conditions

Specific types and depths of subsurface strata encountered at the boring locations are shown on the boring logs in Appendix A. The generalized subsurface stratigraphies encountered in the borings are discussed below. Note that depths on the borings refer to the depth from the existing grade or ground surface present at the time of the investigation, and the boundaries between the various soil types are approximate.

Soils encountered consist of dark brown, brown, and light brown silty clays and clays of moderate to high plasticity. Calcareous nodules and ironstone nodules are frequently present within the soils encountered. Fill and possible fills are noted in Borings B-1 through B-3, B-5, and B-6 to depths varying from 1 to 9 feet. The fills contain various pebbles, limestone gravel, and occasional concrete fragments and sand. All borings were terminated in the various clays at depths of 10 to 20 feet.

The clayey soils encountered are generally firm to hard (soil basis) with pocket penetrometer readings of 1.0 to over 4.5 tsf. Tested Liquid Limit (LL) and Plasticity Index (PI) values ranged from 42 to 84 and 24 to 58, respectively. Tested unconfined compressive strength and unit dry weight varied from 1,990 to 6,380 psf and 92 to 114 pcf, respectively. Select strength tests failed along slickensided planes, indicating high in-situ strengths than the tested values.

The Atterberg Limits tests indicate the clays encountered are active to highly active with respect to moisture induced volume changes. Active clays can experience volume changes (expansion or contraction) with fluctuations in their moisture content.

3.3 Ground-Water Observations

The borings were drilled using continuous flight augers in order to observe ground-water seepage during drilling. Ground-water seepage was not encountered during drilling and all borings were dry at drilling completion. While it is not possible to accurately predict the magnitude of subsurface water fluctuation that might occur based upon these short-term observations, it should be recognized that ground-water conditions will vary with fluctuations in rainfall.

Fluctuations of the ground-water level can occur due to seasonal variations in the amount of rainfall; site topography and runoff; hydraulic conductivity of soil strata; and other factors not evident at the time the borings were performed. During wet periods of the year seepage can occur in the more permeable zones or joints in the clays. The possibility of ground-water level fluctuations should be considered when developing the design and construction plans for the project.

4.0 TRAIL PAVEMENTS

4.1 General Pavement Considerations

Pavement performance is impacted by many factors far beyond what is normally included in engineering design. Wherein pavement analyses should include establishing an appropriate thickness of concrete and appropriate subgrade remediation/ stabilization, other factors such as location of trees adjacent to the existing paving and water conditions in grassed areas adjacent to the paving impact the performance of the pavement. In addition, the activity of the soil below the pavement can cause differential expansive soil conditions under the pavement.

4.2 Lime-Induced Heaving

Lime-induced heaving is caused when hydrated lime is added to a soil with a high sulfate concentration. The lime reacts with the sulfates to cause potentially large volumetric changes in the soil.

Soluble sulfate levels in soils on the order of 2,000 parts-per-million (ppm) or less are usually of low concern and warrant only observation of the subgrade during the stabilization process. Soluble sulfate levels on the order of 2,000 to 6,000 ppm usually warrant a double lime process, with the first treatment of lime consisting of $\frac{1}{2}$ the recommended concentration and a second lime treatment consisting of the full recommended concentration. Sulfate levels on the order of 6,000+ ppm may require a double-lime process, with the two full concentration lime treatments.

Recovered samples were tested for soluble sulfate levels and these results are presented on Plate A.17. Tested soluble sulfate levels were less than 100 ppm. As these levels are less than 2,000 ppm, a typical lime treatment process is recommended at this time. The single-lime treatment is described in Section 4.3. We recommend once the subgrade is established, additional sulfate testing should be performed on the actual subgrade to verify low soluble sulfate concentration and

any special measures identified on a case-by-case basis. In addition, it is recommended that during the curing period of the lime treatment, the subgrade be supplied with ample moisture and it should be checked for any volumetric changes that may indicate a lime-induced heaving condition.

4.3 Pavement Subgrade Preparation

Surface soils encountered at this site consist of moderately to highly plasticity clays. Higher plasticity clays, those with a PI of 20 or greater, are subject to loss in support value with the moisture increases which occur beneath pavement sections. They react with hydrated lime, which serves to improve and maintain their support value. Treatment of these soils with hydrated lime will improve their subgrade characteristics to support area paving. Most trails are lightly loaded and do not require lime-stabilization for strength. Scarification, moistening as required, and recompaction will suffice in areas where vehicular traffic is not expected.

In lieu of a lime stabilized subgrade in areas where vehicular traffic is expected, concrete pavement sections recommended in Section 4.4 may be increased in thickness by 2 inches and placed atop a properly compacted subgrade. Alternatively, a flexible base meeting TxDOT Item 247, Type A, Grade 1/2 may be utilized in lieu of lime stabilization on an equal basis. The option of using a flexible base in lieu of lime stabilizing the subgrade presents a relatively quick, straight forward solution to preparing the materials prior to pavement placement and alleviates any lime-induced heaving concerns.

Prior to lime stabilization or compaction, the subgrade should be proofrolled with heavy pneumatic equipment, with particular attention given to areas of existing fill. Any soft or pumping areas should be undercut to a firm subgrade and properly backfilled as described in the Earthwork section. The subgrade, stabilized or unstabilized, should be scarified to a minimum depth of 6 inches and uniformly compacted to a minimum of 95 percent of ASTM D698 to -2 to +4 percentage points of the optimum moisture content determined by that test. It then should be protected and maintained in a moist condition until the pavement is placed. The presence of calcareous nodules, ironstone nodules, pebbles, and limestone gravel in surface soils can complicate mixing of the soil and lime.

We recommend a minimum of 8 percent hydrated lime be used to modify the clay subgrade soils. The estimated amount of hydrated lime required to stabilize the subgrade should be on the order of 36 pounds per square yard for a 6-inch depth. The hydrated lime should be thoroughly mixed and blended with the upper 6 inches of the clay subgrade (TxDOT Item 260). The hydrated lime should

meet the requirements of Item 260 (Type A) in the Texas Department of Transportation (TxDOT) Standard Specifications for Construction of Highways, Streets and Bridges, 2004 Edition. Lime treatment should extend beyond exposed pavement edges to reduce the effects of shrinkage and associated loss of subgrade support.

We recommend that subgrade stabilization extend to at least one foot beyond pavement edges to aid in reducing pavement movements and cracking along the curb line due to seasonal moisture variations after construction. Each construction area should be shaped to allow drainage of surface water during earthwork operations, and surface water should be pumped immediately from each construction area after each rain and a firm subgrade condition maintained. Water should not be allowed to pond in order to prevent percolation and subgrade softening, and lime should be added to the subgrade after removal of all surface vegetation and debris. Sand should be specifically prohibited beneath pavement areas, since these more porous soils can allow water inflow, resulting in heave and strength loss of subgrade soils (lime stabilized soil will be allowed for fine grading). After fine grading each area in preparation for paving, the subgrade surface should be lightly moistened, as needed, and recompacted to obtain a tight non-yielding subgrade.

Surface drainage is critical to the performance of this pavement. Water should be allowed to exit the pavement surface quickly. All pavement construction should be performed in accordance with the following procedures.

4.4 Pavement Sections

The project includes the construction of a hike and bike trail. It is typical that emergency vehicles may occasionally utilize the trail or select portions of the trail. Therefore, several rigid pavement sections are presented for a 20-year design life in areas where vehicular traffic is expected based on our experience with similar facilities for Light-Duty Drives and Medium-Duty Drives. In general, these areas are defined as follows:

Light-Duty Drives are those drives/lots subjected almost exclusively to passenger cars, with an occasional light- to medium-duty truck (2 to 3 per week)

Medium-Duty Drives are those drives/lots subjected to a variety of light-duty vehicles to medium-duty vehicles and an occasional heavy-duty truck or 85 kip fire truck (1 to 2 per week).

We recommend that rigid pavements be utilized at this project whenever possible, since they tend to provide better long-term performance when subjected to significant slow-moving and turning

traffic. For Portland cement concrete pavement is used, a minimum thickness of 5 inches of concrete is recommended for light-duty drives and 6 inches for medium-duty drives.

A California Bearing Ratio or other strength tests were not performed because they were not within the scope of our services on this project. A subgrade modulus of 100 psi was considered appropriate for the near-surface soils. If heavier vehicles are planned, the above cross sections can be confirmed by performing strength tests on the subgrade materials once the traffic characteristics are established. Periodic maintenance of pavement structures normally improves the durability of the overall pavement and enhances its expected life.

The above sections should be considered minimum pavement thicknesses and higher traffic volumes and heavier trucks may require thicker pavement sections. Additional recommendations can be provided after traffic volumes and loads are known. Periodic maintenance should be anticipated for minimum pavement thickness. This maintenance should consist of sealing cracks and timely repair of isolated distressed areas.

4.5 Pavement Material Requirements

Reinforced Portland Cement Concrete: Reinforced Portland cement concrete pavement should consist of Portland cement concrete having a 28-day compressive strength of at least 3,500 psi. The mix should be designed in accordance with the ACI Code 318 using 3 to 6 percent air entrainment. The pavement should be adequately reinforced with temperature steel and all construction joints or expansion/contraction joints should be provided with load transfer dowels. The spacing of the joints will depend primarily on the type of steel used in the pavement. We recommend using No. 3 steel rebar spaced at 18 inches on center in both the longitudinal and transverse direction. Control joints formed by sawing are recommended every 12 to 15 feet in both the longitudinal and transverse direction. The cutting of the joints should be performed as soon as the concrete has “set-up” enough to allow for sawing operations.

Lime Stabilized Subgrade: Lime treatment for base course (road mix) - Item 260, Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges, 2014 Edition.

4.6 General Pavement Considerations

The design of the pavement drainage and grading should consider the potential for differential ground movement due to future soil swelling of up to 6¾ inches. In order to minimize rainwater infiltration through the pavement surface, and thereby minimizing future upward movement of the pavement slabs, all cracks and joints in the pavement should be sealed on a routine basis after construction. If movement reduction measures are desired, contact this office for additional recommendations on a case-by-case basis.

Where mature trees and water-intensive shrubs exist adjacent to the roadway, consideration may be given to installation of a vertical moisture barrier along the curb line in order to reduce the potential for moisture-induced volume change of the subgrade soils and restrict root systems from penetrating below the pavement. Such barriers can be accomplished by excavating narrow trench lines adjacent to the curb to depths on the order of 3 to 4 feet, and filling this zone with lean concrete or flowable fill. This zone also can be filled with a geomembrane and proper backfilling using flowable fill or comparable material.

5.0 RETAINING WALL RECOMMENDATIONS

5.1 General Retaining Wall Considerations

Five geotechnical design criteria must be satisfied in the selection of the type and configuration of the retaining walls. These criteria are; the wall must have an acceptable factor of safety with respect to (1) overturning failure, (2) a sliding (translation) failure, (3) a bearing capacity failure, and (4) a global (deep-seated) slope failure. In addition, (5) the deformation of the wall caused by deflection from earth pressure, and from settlement or heave of the foundation soils or backfill soils, must be within tolerable limits during the functional life of the structure.

5.2 Retaining Wall Foundations

Retaining walls founded on shallow footings will be subject to movements as discussed in Section 4.6. If retaining walls are sensitive to movements, a deep foundation system is recommended. Contact this office for deep foundation system recommendations if such a system is desired.

If differential movement can be tolerated, the retaining wall foundations should be founded into the natural soils, below the existing fill soils at least 3 feet below the lowest existing grade into stiff to

very stiff clay soils. The retaining wall foundations may be designed for an allowable bearing pressure of 2.5 ksf. It should be noted that retaining wall foundations are typically subjected to non-uniform pressure across the foundation, and possibly negative pressure (separation of foundation from soil) under a portion of the foundation, due to the overturning moment induced by the lateral earth pressures. The allowable foundation pressures given above are for the maximum pressure induced by the foundation loads, and not the average pressure under the foundation base.

The horizontal base of the footings will develop resistance to sliding by means of a combination of friction and adhesion (for cohesive foundation materials). Given the nature of the foundation materials, an adhesion of 400 psf may be used for earth formed footings. An ultimate friction factor of 0.3 may be used to calculate sliding resistance of the footings bearing on site soils. Sliding resistance may be increased in areas where keyways are present beneath the wall footings. The vertical earth-formed sides of keyways will resist lateral forces by developing passive earth pressures. A passive lateral earth pressure coefficient of 2.0 should be used for passive resistance calculations where passive resistance is developed against a vertical earth-formed side of a keyway, based on a soil unit weight of 120 pcf, per foot of footing height.

Foundations for the retaining walls designed in accordance with these recommendations will have a minimum factor of safety of 3 with respect to a bearing capacity failure, and should experience a total settlement of 1 inch or less and a differential settlement of ½ inch or less, after construction.

5.3 Foundation Construction

Mat type or spread foundation construction should be monitored by a representative of the geotechnical engineer to observe, among other things, the following items:

- Identification of bearing material
- Adequate penetration of the foundation excavation into the bearing layer
- The base and sides of the excavation are clean of loose cuttings
- When seepage is encountered, whether it is sufficient amount to require the use of excavation dewatering methods

Precautions should be taken during the placement of reinforcing steel and concrete to prevent loose, excavated soil from falling into the excavation. Concrete should be placed as soon as practical after completion of the excavating, cleaning, reinforcing steel placement and observation. Excavation for a shallow foundation should be filled with concrete before the end of the workday, or

sooner if required, to prevent deterioration of the bearing material. Prolonged exposure or inundation of the bearing surface with water will result in changes in strength and compressibility characteristics. If delays occur, the excavation should be deepened as necessary and cleaned, in order to provide a fresh bearing surface. If more than 24 hours of exposure of the bearing surface is anticipated in the excavations, a "mud slab" should be used to protect the bearing surfaces. If a mud slab is used, the foundation excavations should initially be over-excavated by approximately 4 inches and a lean concrete mud slab of approximately 4 inches in thickness should be placed in the bottom of the excavations immediately following exposure of the bearing surface by excavation. The mud slab will protect the bearing surface, maintain more uniform moisture in the subgrade, facilitate dewatering of excavations if required, and provide a working surface for the placement of formwork and reinforcing steel.

The concrete should be placed in a manner that will prevent the concrete from striking the reinforcing steel or the sides of the excavation in a manner that would cause segregation of the concrete.

5.4 Lateral Earth Pressures

5.4.1 General

The retaining walls must be designed for lateral pressures including, but not necessarily limited to, earth, water, surcharge, swelling, and vibration. In addition, the lateral pressures will be influenced by whether the backfill is drained or undrained, and above or below the ground-water table.

5.4.2 Equivalent Fluid Pressures

Lateral earth pressures on retaining walls will depend on a variety of factors, including the type of soils behind the wall, the condition of the soils, and the drainage conditions behind the wall. Recommended lateral earth pressures expressed as equivalent fluid pressures, per foot of wall height, are presented in Table 5.4.2-1 for a wall with a level backfill behind the top of the wall. It is understood sloped backfill of 3.5H:1V are planned behind the top of the wall in select areas. For backslopes of 3.5H:1V, the values shown in Table 5.4.2-1 should be increased by 28 percent. The equivalent fluid pressure for an undrained condition should be used if a drainage system is not present to remove water trapped in the backfill and behind the wall. Pressures are provided for at-rest and active earth pressure conditions. In order to allow for an active condition the top of the wall(s) must deflect on the order of 0.4 percent.

TABLE 5.4.2-1 – Equivalent Fluid Pressures				
Backfill Material	At-Rest Equivalent Fluid Pressure (pcf)		Active Equivalent Fluid Pressure (pcf)	
	Drained	Undrained	Drained	Undrained
Excavated on-site soils or clay fill material ($\phi=13^\circ$, $c=200$ pcf, $\gamma_T = 115$ pcf)	110	100	85	100
Select fill or on-site soils meeting material specifications ($\phi=24^\circ$, $c=400$ pcf, $\gamma_T = 125$ pcf)	65	90	50	85
Free draining granular backfill material ($\phi=35^\circ$, $\gamma_T = 135$ pcf)	50	90	35	80

For the select fill or free draining granular backfill these values assume that a “full” wedge of the material is present behind the wall. The wedge is defined where the wall backfill limits extend outward at least 2 feet from the base of the wall and then upward on a 1H:2V slope. For narrower backfill widths of granular or select fill soils, the equivalent fluid pressures for the on-site soils should be used.

5.4.3 Additional Lateral Pressures

The location and magnitude of permanent surcharge loads (if present) should be determined, and the additional pressure generated by these loads such as the weight of construction equipment and vehicular loads that are used at the time the structures are being built must also be considered in the design. The effect of this or any other surcharge loading may be accounted for by adding an additional uniform load to the full depth of the side walls equivalent to one-half of the expected vertical surcharge intensity for select backfill materials, or equal to the full vertical surcharge intensity for clay backfill. The equivalent fluid pressures, given here, do not include a safety factor. Analysis of surcharge loads (if any) should be performed on a case-by-case basis. This is not included in the scope of this study. These services can be provided as additional services upon request.

5.5 Wall Backfill Material Requirements

Excavated On-Site Soil Backfill: For wall backfill areas with site-excavated materials or similar imported materials, all oversized fragments larger than four inches in maximum dimension should be removed from the backfill materials prior to placement. The backfill should be free of all organic and deleterious materials, and should be placed in maximum 8-inch compacted lifts at a minimum

of 95 percent of Standard Proctor density (ASTM D698) within a moisture range of plus to minus 3 percentage points of optimum moisture. Compaction within five feet of the walls should be accomplished using hand compaction equipment and should be between 90 and 95 percent of the Standard Proctor density.

Select Fill: All wall select backfill should consist of clayey sand and/or sandy clay material with a plasticity index of 16 or less, with a liquid limit not exceeding 35. The select fill should be placed in maximum 8-inch lifts and compacted to between 95 and 100 percent of Standard Proctor density (ASTM D698) within a moisture range of plus to minus 3 percentage points of the optimum moisture. Compaction within five feet of the walls should be accomplished using hand compaction equipment and should be compacted between 90 and 95 percent of the Standard Proctor density.

Free Draining Granular Backfill: All free draining granular wall backfill material should be a crushed stone, sand/gravel mixture, or sand/crushed stone mixture. The material should have less than 3 percent passing the No. 200 sieve and less than 30 percent passing the No. 40 sieve. The minus No. 40 sieve material should be non-plastic. Granular wall backfill should not be water jetted during installation.

5.6 Below-Grade Drainage Requirements

The design recommendations presented above assume hydrostatic pressure will not develop behind the retaining wall. In order to achieve the “drained” condition for lateral earth pressure for low-permeability walls (concrete, masonry, etc.), a vertical drainage blanket or geocomposite drainage member must be installed adjacent to the wall on the backfill side. Drainage could be provided using a collector pipe or weep holes near the base of the retaining wall or connected to an outlet drain at the base of the wall. Drains should be properly filtered to minimize the potential for erosion through these drains, and /or the plugging of drain lines. Design or specific recommendations for drainage members is beyond the scope for this study. These services can be provided as an additional service upon request. In order to achieve the “drained” condition, the entire backfill material must be free draining. It is recommended the backfill-wall geometry be such that the backfill will not become saturated from rainfall, ground water, adjacent water courses, or other sources.

6.0 SLOPE STABILITY ANALYSIS

6.1 General Comments

An additional focus of this study was to determine if there exists an ample safety factor for construction of the proposed retaining wall structures planned in the vicinity of Borings B-3 and B-5. With respect to these sections with retaining walls, the analysis herein checks only for global slope failure for the proposed retaining wall and side slopes. The internal stability, overturning, and sliding failure check must be performed by the wall designer, based on specific soil and product information.

6.2 Slope Stability Analysis System-Computer Solutions

CMJ Engineering, Inc. selected GEOSTASE to perform the slope stability analyses for this project. GEOSTASE software is a recent update from GSTABL7, an off shoot based on the original PCSTABL6-1986 developed at Purdue University. It is a two-dimensional, limit equilibrium slope stability program developed and enhanced by Garry H. Gregory, P.E. and Harold W. VanAller, P.E. CMJ Engineering, Inc. utilized GEOSTASE, Version 4.30.24.

This slope stability analysis utilizes Modified Bishop, Simplified Janbu, or the Spencer Method of Slices for analysis. Circular, random, and sliding block search routines are available for analysis. Analysis also allows the utilization of anisotropic soil strength parameters which aid in modeling tension cracks or bedding planes as well as different soil strength in different directions. The system overall allows analyses of hundreds of search options and potential failure surfaces and results in a print out showing the geometry, soil parameter summary, and listing of the ten most critical failure surfaces analyzed, focusing and highlighting the most critical surface with the lowest safety factor.

6.3 Analyses/Input Parameters

Numerous analyses were conducted by CMJ Engineering, Inc. to identify the worst-case methodology to use in analysis as well as the appropriate soil parameters, which affect the slope stability. Slope stability analyses were conducted based on topographic and typical cross section information as shown on the "Schematic Alignment" prepared by Halff Associates dated June 6, 2023, and preliminary "Retaining Wall Plan and Profile" Sheets 51 through 56 dated August 2024. The tallest wall section planned is the outfall structure, denoted as Wall B, with a maximum

exposed wall height of approximately 9½ feet. Otherwise, wall section exposed retaining wall heights of approximately 5 feet or less are planned.

The assumed soil properties utilized for analysis are denoted in the table in the upper left on Plates B.1 through B.4. The presence of vehicles on the trail located near the top of the retaining structure was modeled as a 300 psf surcharge load, denoted as DL1 and DL2 on Plates B.1 through B.4. The soil type below each profile line is denoted with a color that corresponds to the table in the upper left. The table lists the assumed unit weight and strength properties for each soil type. The method for determining the strength of the slope soils was laboratory soil testing. The strength tests consisted of both unconfined compressive tests and direct shear tests.

The soil zones selected for modeling consist of the following:

- Clay fill soils. Existing fills selected to have a cohesion value of 200 psf and friction angle of 13 degrees and planned fills, properly placed and tested, selected to have a cohesion value of 400 psf and friction angle of 20 degrees.
- In-situ clays. Selected to have a cohesion value of 500 psf and friction angle of 16 degrees.

6.4 Slope Stability Results

Multiple analyses were performed in order to obtain the factors of safety for the investigation geometry considered. The following cross sections were investigated:

- Plates B.1 and B.2 simulate the Wall F section, with approximate height of 4 feet, placed on an existing slope, and with presence of trail vehicles as a uniform load of 300 psf.

- Plates B.3 and B.4 simulate the Wall B section, with approximate height of 9½ feet with in-situ clay soils representing the primary material component, and with presence of trail vehicles as a uniform load of 300 psf.

The analyses utilized circular arc failure and sliding block failure with Spencer's Method on Plates B.1/B.3 and B.2/B.4, respectively.

Readers should understand that a factor of safety of 1.0 implies impending failure and a factor of safety of less than 1.0 implies the slope would fail based on the input parameters. Common practice in the geotechnical industry requires that a long-term safety factor on the order of 1.5 or greater be established for the safety of a slope. This essentially means that the resisting forces to sliding will be 50 percent greater than the driving forces for long-term conditions.

As seen from the analyses on Plates B.1 through B.4 the global slope stability results in safety factors ranging from 1.67 to 3.58. As these results are in excess of 1.5, the long-term global slope stability for the considered planned wall geometries is satisfactory. Thus, the wall geometries considered above should remain globally stable as planned, and provided the earthwork recommendations presented below are followed.

It should be noted that these analyses are conducted for global slope stability. Internal stability of the retaining structures should be evaluated by the structural engineer. While CMJ's analyses indicate these geometries to have a global slope stability safety factor that is satisfactory, the slope atop which Wall F will rest may be subject to periodic shallow skin slides. Such slides are characterized by a relatively shallow failure plane with surficial material sloughing, occurring especially during or immediately after prolonged rain events. This could be an ongoing maintenance issue and if the slopes are not properly maintained in a timely manner can impact the soils supporting the trail. Recommended maximum side slopes with corresponding slope heights are presented in Section 9.2 below.

7.0 EXPANSIVE SOIL CONSIDERATIONS

7.1 Site Drainage

An important feature of the project is to provide positive drainage away from the proposed structures. If water is permitted to stand next to or below the structure, excessive soil movements (heave) can occur. This could result in differential foundation movement.

A well-designed site drainage plan is of utmost importance and surface drainage should be provided during construction and maintained throughout the life of the structures. Consideration should be given to the design and location of planting areas or other features which would produce moisture concentration adjacent to or beneath the structure or paving. Joints next to the structures should be sealed with a flexible joint sealer to prevent infiltration of surface water. Proper maintenance should include periodic inspection for open joints and cracks and resealing as necessary. Backfill for utility lines or along the perimeter beams should consist of on-site material so that they will be stable. If the backfill is too dense or too dry, swelling may form a mound along the ditch line. If the backfill is too loose or too wet, settlement may form a sink along the ditch line. Either case is undesirable since several inches of movement is possible and floor cracks are likely to result. The soils should be processed using the compaction criteria discussed below.

8.0 SEISMIC CONSIDERATIONS

Based on the conditions encountered in the borings for the above referenced project the IBC-2021 site classification is TYPE D for seismic evaluation.

9.0 EARTHWORK

9.1 Site Preparation

The proposed construction areas should be stripped of vegetation, roots, old construction debris, and other organic material. It is estimated that the depth of stripping will be on the order of 4 to 6 inches. The actual stripping depth should be based on field observations with particular attention given to old drainage areas, uneven topography, and excessively wet soils. The stripped areas should be observed to determine if additional excavation is required to remove weak or otherwise objectionable materials that would adversely affect the fill placement or other construction activities.

The subgrade should be firm and able to support the construction equipment without displacement. Soft or yielding subgrade should be corrected and made stable before construction proceeds. The subgrade should be proof rolled to detect soft spots, which if exist, should be excavated to provide a firm and otherwise suitable subgrade. Proof rolling should be performed using a heavy pneumatic tired roller, loaded dump truck, or similar piece of equipment. The proof rolling operations should be observed by the project geotechnical engineer or his/her representative.

9.2 Placement and Compaction

Fill material should be placed in loose lifts not exceeding 8 inches in uncompacted thickness. The uncompacted lift thickness should be reduced to 4 inches for structure backfill zones requiring hand-operated power compactors or small self-propelled compactors. The fill material should be uniform with respect to material type and moisture content. Clods and chunks of material should be broken down and the fill material mixed by disking, blading, or plowing, as necessary, so that a material of uniform moisture and density is obtained for each lift. Water required for sprinkling to bring the fill material to the proper moisture content should be applied evenly through each layer.

The on-site soils are suitable for use in general site grading. Imported general fill material should be clean soil with a Liquid Limit less than 60 and no rock greater than 4 inches in maximum dimension. The fill materials should be free of vegetation and debris.

The fill material should be compacted to a density ranging from 95 to 100 percent of maximum dry density as determined by ASTM D698, Standard Proctor. In conjunction with the compacting operation, the fill material should be brought to the proper moisture content. The moisture content for general earth fill should range from 2 percentage points below optimum to 5 percentage points above optimum (-2 to +5). These ranges of moisture contents are given as maximum recommended ranges. For some soils and under some conditions, the contractor may have to maintain a more narrow range of moisture content (within the recommended range) in order to consistently achieve the recommended density.

Field density tests should be taken as each lift of fill material is placed. As a guide, one field density test per lift for each 5,000 square feet of compacted area is recommended. For small areas or critical areas the frequency of testing may need to be increased to one test per 2,500 square feet. A minimum of 2 tests per lift should be required. The earthwork operations should be observed and tested on a continuing basis by an experienced geotechnician working in conjunction with the project geotechnical engineer.

Each lift should be compacted, tested, and approved before another lift is added. The purpose of the field density tests is to provide some indication that uniform and adequate compaction is being obtained. The actual quality of the fill, as compacted, should be the responsibility of the contractor and satisfactory results from the tests should not be considered as a guarantee of the quality of the contractor's filling operations.

If fill is to be placed on existing slopes that are steeper than five horizontal to one vertical, then the fill materials should be benched into the existing slopes in such a manner as to provide a good contact between the two materials and allow relatively horizontal lift placement.

Permanent slopes at the site should be as flat as practical to reduce creep and occurrence of shallow slides. The following slope angles are recommended as maximums.

Height (ft.)	Horizontal to Vertical
0 – 3	1:1
3 – 6	2:1
6 – 9	3:1
> 9	4:1

The above angles refer to the total height of a slope. Site improvement should be maintained away from the top of the slope to reduce the possibility of damage due to creep or shallow slides.

9.3 Trench Backfill

Trench backfill for pipelines or other utilities should be properly placed and compacted. Overly dense or dry backfill can swell and create a mound along the completed trench line. Loose or wet backfill can settle and form a depression along the completed trench line. Distress to overlying structures, pavements, etc. is likely if heaving or settlement occurs. On-site soil fill material is recommended for trench backfill. Care should be taken not to use free draining granular material, to prevent the backfilled trench from becoming a french drain and piping surface or subsurface water beneath structures, pipelines, or pavements. If a higher class bedding material is required for the pipelines, a lean concrete bedding will limit water intrusion into the trench and will not require compaction after placement. The soil backfill should be placed in approximately 4- to 6- inch loose lifts. The density and moisture content should be as recommended for fill in Section 9.2, Placement and Compaction, of this report. A minimum of one field density test should be taken per lift for each 150 linear feet of trench, with a minimum of 2 tests per lift.

9.4 Excavation Considerations

The side slopes of excavations through the overburden soils should be made in such a manner to provide for their stability during construction. Existing structures, pipelines or other facilities, which are constructed prior to or during the currently proposed construction and which require excavation, should be protected from loss of end bearing or lateral support.

Temporary construction slopes and/or permanent embankment slopes should be protected from surface runoff water. Site grading should be designed to allow drainage at planned areas where erosion protection is provided, instead of allowing surface water to flow down unprotected slopes.

Trench safety recommendations are beyond the scope of this report. The contractor must comply with all applicable safety regulations concerning trench safety and excavations including, but not limited to, OSHA regulations.

9.5 Acceptance of Imported Fill

Any soil imported from off-site sources should be tested for compliance with the recommendations for the particular application and approved by the project geotechnical engineer prior to the materials being used. The owner should also require the contractor to obtain a written, notarized certification from the landowner of each proposed off-site soil borrow source stating that to the best of the landowner's knowledge and belief there has never been contamination of the borrow source site with hazardous or toxic materials. The certification should be furnished to the owner prior to proceeding to furnish soils to the site. Soil materials derived from the excavation of underground petroleum storage tanks should not be used as fill on this project.

9.6 Soil Corrosion Potential

Specific testing for soil corrosion potential was not included in the scope of this study. However, based upon past experience on other projects in the vicinity, the soils at this site may be corrosive. Standard construction practices for protecting metal pipe and similar facilities in contact with these soils should be used.

9.7 Erosion and Sediment Control

All disturbed areas should be protected from erosion and sedimentation during construction, and all permanent slopes and other areas subject to erosion or sedimentation should be provided with permanent erosion and sediment control facilities. All applicable ordinances and codes regarding erosion and sediment control should be followed.

10.0 CONSTRUCTION OBSERVATIONS

In any geotechnical investigation, the design recommendations are based on a limited amount of information about the subsurface conditions. In the analysis, the geotechnical engineer must assume the subsurface conditions are similar to the conditions encountered in the borings. However, quite often during construction anomalies in the subsurface conditions are revealed. Therefore, it is recommended that CMJ Engineering, Inc. be retained to observe earthwork and foundation installation and perform materials evaluation during the construction phase of the

project. This enables the geotechnical engineer to stay abreast of the project and to be readily available to evaluate unanticipated conditions, to conduct additional tests if required and, when necessary, to recommend alternative solutions to unanticipated conditions. Until these construction phase services are performed by the project geotechnical engineer, the recommendations contained in this report on such items as final foundation bearing elevations, proper soil moisture condition, and other such subsurface related recommendations should be considered as preliminary.

It is proposed that construction phase observation and materials testing commence by the project geotechnical engineer at the outset of the project. Experience has shown that the most suitable method for procuring these services is for the owner or the owner's design engineers to contract directly with the project geotechnical engineer. This results in a clear, direct line of communication between the owner and the owner's design engineers and the geotechnical engineer.

11.0 REPORT CLOSURE

The boring logs shown in this report contain information related to the types of soil encountered at specific locations and times and show lines delineating the interface between these materials. The logs also contain our field representative's interpretation of conditions that are believed to exist in those depth intervals between the actual samples taken. Therefore, these boring logs contain both factual and interpretive information. Laboratory soil classification tests were also performed on samples from selected depths in the borings. The results of these tests, along with visual-manual procedures were used to generally classify each stratum. Therefore, it should be understood that the classification data on the logs of borings represent visual estimates of classifications for those portions of each stratum on which the full range of laboratory soil classification tests were not performed. It is not implied that these logs are representative of subsurface conditions at other locations and times.

With regard to ground water conditions, this report presents data on ground-water levels as they were observed during the course of the field work. In particular, water level readings have been made in the borings at the times and under conditions stated in the text of the report and on the boring logs. It should be noted that fluctuations in the level of the ground-water table can occur with passage of time due to variations in rainfall, temperature and other factors. Also, this report does not include quantitative information on rates of flow of ground water into excavations, on

pumping capacities necessary to dewater the excavations, or on methods of dewatering excavations. Unanticipated soil conditions at a construction site are commonly encountered and cannot be fully predicted by mere soil samples, test borings or test pits. Such unexpected conditions frequently require that additional expenditures be made by the owner to attain a properly designed and constructed project. Therefore, provision for some contingency fund is recommended to accommodate such potential extra cost.

The analyses, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of our field investigation and further on the assumption that the exploratory borings are representative of the subsurface conditions throughout the site; that is, the subsurface conditions everywhere are not significantly different from those disclosed by the borings at the time they were completed. If, during construction, different subsurface conditions from those encountered in our borings are observed, or appear to be present in excavations, we must be advised promptly so that we can review these conditions and reconsider our recommendations where necessary. If there is a substantial lapse of time between submission of this report and the start of the work at the site, if conditions have changed due either to natural causes or to construction operations at or adjacent to the site, or if structure locations, structural loads or finish grades are changed, we urge that we be promptly informed and retained to review our report to determine the applicability of the conclusions and recommendations, considering the changed conditions and/or time lapse.

Further, it is urged that CMJ Engineering, Inc. be retained to review those portions of the plans and specifications for this particular project that pertain to earthwork and foundations as a means to determine whether the plans and specifications are consistent with the recommendations contained in this report. In addition, we are available to observe construction, particularly the compaction of structural fill, or backfill and the construction of foundations as recommended in the report, and such other field observations as might be necessary.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic materials in the soil, surface water, ground water or air, on or below or around the site.

This report has been prepared for use in developing an overall design concept. Paragraphs, statements, test results, boring logs, diagrams, etc. should not be taken out of context, nor utilized

without a knowledge and awareness of their intent within the overall concept of this report. The reproduction of this report, or any part thereof, supplied to persons other than the owner, should indicate that this study was made for design purposes only and that verification of the subsurface conditions for purposes of determining difficulty of excavation, trafficability, etc. are responsibilities of the contractor.

This report has been prepared for the exclusive use of Halff Associates, Inc. for specific application to design of this project. The only warranty made by us in connection with the services provided is that we have used that degree of care and skill ordinarily exercised under similar conditions by reputable members of our profession practicing in the same or similar locality. No other warranty, expressed or implied, is made or intended.

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CMJ Engineering
 CMJ Project No. 117-24-358

PLAN OF BORINGS
 DCTA Trail - Segment A
 Lewisville, Texas

*Plate
 A.1a*



Major Divisions		Grp. Sym.	Typical Names	Laboratory Classification Criteria			
Coarse-grained soils (more than half of the material is larger than No. 200 sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (Little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3		
		GP	Poorly graded gravels, gravel-sand mixtures, little or no fines	Not meeting all gradation requirements for GW			
		Gravels with fines (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures	Liquid and Plastic limits below "A" line or P.I. greater than 4	Liquid and plastic limits plotting in hatched zone between 4 and 7 are borderline cases requiring use of dual symbols	
			GC	Clayey gravels, gravel-sand-clay mixtures	Liquid and Plastic limits above "A" line with P.I. greater than 7		
	Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (Little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3		
			SP	Poorly graded sands; gravelly sands, little or no fines		Not meeting all gradation requirements for SW	
		Sands with fines (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures	Liquid and Plastic limits below "A" line or P.I. less than 4	Liquid and plastic limits plotting between 4 and 7 are borderline cases requiring use of dual symbols	
			SC	Clayey sands, sand-clay mixtures	Liquid and Plastic limits above "A" line with P.I. greater than 7		
		Determine percentages of sand and gravel from grain size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows: Less than 5 percent.....GW, GP, SW, SP More than 12 percent.....GM, GC, SM, SC 5 to 12 percent..... <i>Borderline</i> cases requiring dual symbols					
		Fine-grained soils (More than half of material is smaller than No. 200 sieve)	Sils and clays (Liquid limit less than 50)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity		
CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, and lean clays						
OL	Organic silts and organic silty clays of low plasticity						
Sils and clays (Liquid limit greater than 50)	MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts				
	CH		Inorganic clays of high plasticity, fat clays				
	OH		Organic clays of medium to high plasticity, organic silts				
Highly Organic soils	Pt		Peat and other highly organic soils				

SOIL OR ROCK TYPES											
	GRAVEL		LEAN CLAY		LIMESTONE						
	SAND		SANDY		SHALE						
	SILT		SILTY		SANDSTONE						
	CLAYEY		HIGHLY PLASTIC CLAY		CONGLOMERATE						

TERMS DESCRIBING CONSISTENCY, CONDITION, AND STRUCTURE OF SOIL

Fine Grained Soils (More than 50% Passing No. 200 Sieve)

Descriptive Item	Penetrometer Reading, (tsf)
Soft	0.0 to 1.0
Firm	1.0 to 1.5
Stiff	1.5 to 3.0
Very Stiff	3.0 to 4.5
Hard	4.5+

Coarse Grained Soils (More than 50% Retained on No. 200 Sieve)

Penetration Resistance (blows/foot)	Descriptive Item	Relative Density
0 to 4	Very Loose	0 to 20%
4 to 10	Loose	20 to 40%
10 to 30	Medium Dense	40 to 70%
30 to 50	Dense	70 to 90%
Over 50	Very Dense	90 to 100%

Soil Structure

Calcareous	Contains appreciable deposits of calcium carbonate; generally nodular
Slickensided	Having inclined planes of weakness that are slick and glossy in appearance
Laminated	Composed of thin layers of varying color or texture
Fissured	Containing cracks, sometimes filled with fine sand or silt
Interbedded	Composed of alternate layers of different soil types, usually in approximately equal proportions

TERMS DESCRIBING PHYSICAL PROPERTIES OF ROCK

Hardness and Degree of Cementation

Very Soft or Plastic	Can be remolded in hand; corresponds in consistency up to very stiff in soils
Soft	Can be scratched with fingernail
Moderately Hard	Can be scratched easily with knife; cannot be scratched with fingernail
Hard	Difficult to scratch with knife
Very Hard	Cannot be scratched with knife
Poorly Cemented or Friable	Easily crumbled
Cemented	Bound together by chemically precipitated material; Quartz, calcite, dolomite, siderite, and iron oxide are common cementing materials.

Degree of Weathering

Unweathered	Rock in its natural state before being exposed to atmospheric agents
Slightly Weathered	Noted predominantly by color change with no disintegrated zones
Weathered	Complete color change with zones of slightly decomposed rock
Extremely Weathered	Complete color change with consistency, texture, and general appearance approaching soil

Project No. 117-24-358	Boring No. B-1	Project Lewisville DCTA Trail Segment A - Lewisville, Texas
Location See Plate A.1		Water Observations Dry during drilling; dry at completion
Completion Depth 10.0'	Completion Date 3-4-24	

Depth, Ft.	Symbol	Samples	Surface Elevation	Type	REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.
			B-53, w/ CFA											
Stratum Description														
0							4.5+	76	63	24	39	19		
1							2.5					16	114	3660
2							1.5					19		
3							2.75					18		
4							3.0					20		
5														
6														
7														
8														
9							2.5					22		
10							3.25					37		

CLAY, brown and light brown, w/ occasional sand and pebbles, stiff to very stiff (possible fill)
 -hard above 1'
 -w/ calcareous nodules and ironstone nodules below 1'

CLAY, dark brown, w/ calcareous nodules and ironstone nodules, very stiff



LOG OF BORING 117-24-358.GPJ CMJ.GDT 4/25/24

Project No. 117-24-358		Boring No. B-2		Project Lewisville DCTA Trail Segment A - Lewisville, Texas											
Location See Plate A.1			Water Observations Dry during drilling; dry at completion												
Completion Depth 20.0'		Completion Date 3-4-24													
Depth, Ft.	Symbol	Samples	Surface Elevation	Type	REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.	
			B-53, w/ CFA												Stratum Description
			CLAY , dark brown and light brown, w/ limestone gravel, calcareous nodules, and ironstone nodules, stiff to hard (FILL)				4.5+		52	18	34	16	96		
			CLAY , dark brown, w/ calcareous nodules and ironstone nodules, stiff				3.5						19	105	5260
			CLAY , brown, w/ ironstone nodules and calcareous nodules, very stiff to hard				2.5							25	
5							1.75							33	
							2.75							26	
							4.5+							19	
10							3.0		53	16	37		20		
15					-stiff to very stiff below 14'		3.0							25	
20							2.5					24			

LOG OF BORING 117-24-358.GPJ CMJ.GDT 4/25/24

Project No. 117-24-358	Boring No. B-3	Project Lewisville DCTA Trail Segment A - Lewisville, Texas
Location See Plate A.1		Water Observations Dry during drilling; dry at completion
Completion Depth 20.0'	Completion Date 3-4-24	

Depth, Ft.	Symbol	Samples	Surface Elevation	Type	REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.
				B-53, w/ CFA										
				CLAY , dark brown, w/ limestone gravel, calcareous nodules, and ironstone nodules, stiff to hard (FILL)			4.5+					14		
				CLAY , dark brown, w/ calcareous nodules and ironstone nodules, stiff to very stiff			2.0					12		
							4.25					19	111	6380
							2.0		51	17	34	22	104	
							2.25					23	104	3470
5														
							2.5		61	18	43	23	104	
							3.0		70	20	50	25	99	
10				-blocky, slickensided below 9'										
							2.75					25		
							2.25					27	98	3440
20														

LOG OF BORING 117-24-358.GPJ CMJ.GDT 4/25/24


Project No. 117-24-358	Boring No. B-5	Project Lewisville DCTA Trail Segment A - Lewisville, Texas
Location See Plate A.1		Water Observations Dry during drilling; dry at completion
Completion Depth 20.0'	Completion Date 3-4-24	

Depth, Ft.	Symbol	Samples	Surface Elevation	Type	REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.
				B-53, w/ CFA										
				CLAY , dark brown, w/ limestone gravel, calcareous nodules, and ironstone nodules, stiff to very stiff (FILL)			3.0					20		
				CLAY , dark brown, w/ calcareous nodules and ironstone nodules, slickensided, stiff to very stiff			2.75					23		
							2.25		63	22	41	30	92	
							2.0					34		
5							2.0					31	93	2590
				-grades brown below 7'										
				-blocky below 9'										
10														
							3.5					23		
							2.75		58	19	39	22	106	
							2.75					25	102	4220
							2.25					29		
20														


LOG OF BORING 117-24-358.GPJ CMJ.GDT 4/25/24

Project No. 117-24-358		Boring No. B-6		Project Lewisville DCTA Trail Segment A - Lewisville, Texas										
Location See Plate A.1			Water Observations Dry during drilling; dry at completion											
Completion Depth 10.0'		Completion Date 3-4-24												
Surface Elevation		Type B-53, w/ CFA												
Depth, Ft.	Symbol	Stratum Description			REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.
		SILTY CLAY , brown and dark brown, w/ concrete fragments, limestone gravel, calcareous nodules and ironstone nodules, stiff to very stiff (FILL)					3.5		43	19	24	15		
		SANDY SILTY CLAY , dark brown, w/ ironstone nodules and calcareous nodules, slickensided, firm to stiff					1.5					24		
							1.75					28	96	1990
							1.5					37		
							2.5	70	42	16	26	20		
							1.0					24		



LOG OF BORING 117-24-358.GPJ_CMJ.GDT 4/25/24

Project No. 117-24-358		Boring No. B-7		Project Lewisville DCTA Trail Segment A - Lewisville, Texas													
Location See Plate A.1			Water Observations Dry during drilling; dry at completion														
Completion Depth 10.0'		Completion Date 3-4-24															
Surface Elevation		Type B-53, w/ CFA															
Depth, Ft.	Symbol	Stratum Description			REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.			
5		CLAY / SILTY CLAY , dark brown, stiff to very stiff -w/ calcareous nodules and ironstone nodules, hard above 1'					4.5+		52	21	31	19					
									3.25						20	106	3500
									1.75						25		
									1.5						34		
									2.25						26		
													23				
													25				
10							4.0					25					

LOG OF BORING 117-24-358.GPJ CMJ.GDT 4/25/24

Project No. 117-24-358		Boring No. B-8		Project Lewisville DCTA Trail Segment A - Lewisville, Texas													
Location See Plate A.1			Water Observations Dry during drilling; dry at completion														
Completion Depth 10.0'		Completion Date 3-4-24															
Surface Elevation		Type B-53, w/ CFA															
Depth, Ft.	Symbol	Stratum Description			REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.			
5		CLAY , dark brown, stiff to very stiff -w/ ironstone nodules and calcareous nodules, hard above 1'					4.5+		63	22	41	21					
										4.25					23	101	4070
										2.25					28		
										1.75					35		
										2.75		84	26	58	31		
										2.75					31		
10							2.5					30					

LOG OF BORING 117-24-358.GPJ CMJ.GDT 4/25/24

Project No. 117-24-358		Boring No. B-9		Project Lewisville DCTA Trail Segment A - Lewisville, Texas										
Location See Plate A.1			Water Observations Dry during drilling; dry at completion											
Completion Depth 10.0'		Completion Date 3-4-24												
Surface Elevation		Type B-53, w/ CFA												
Depth, Ft.	Symbol	Stratum Description			REC %	RQD %	Blows/Ft. or Pen Reading, T.S.F.	Passing No 200 Sieve, %	Liquid Limit, %	Plastic Limit, %	Plasticity Index	Moisture Content, %	Unit Dry Wt. Lbs./Cu. Ft.	Unconfined Compression Pounds/Sq. Ft.
5		CLAY , dark brown, w/ calcareous nodules and ironstone nodules, stiff -w/ pebbles above 1'					2.25		63	24	39	33		
							2.5					31	92	2620
							1.75					36		
							2.25					34		
							2.25					32		
							2.5					34		
							4.5+					19		
10		-hard below 9'												

LOG OF BORING 117-24-358.GPJ CMJ.GDT 4/25/24

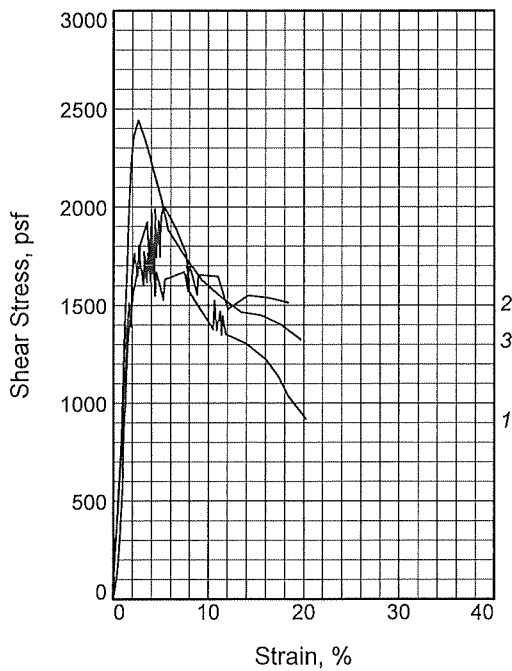
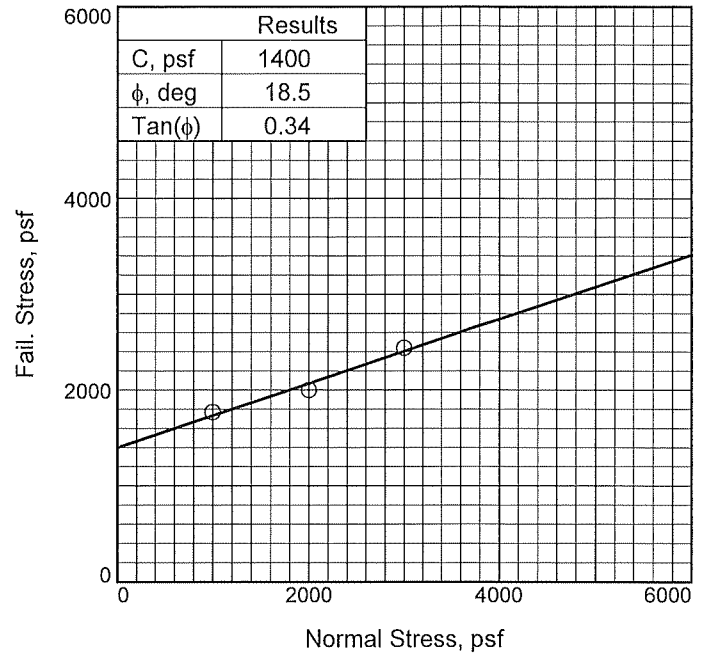
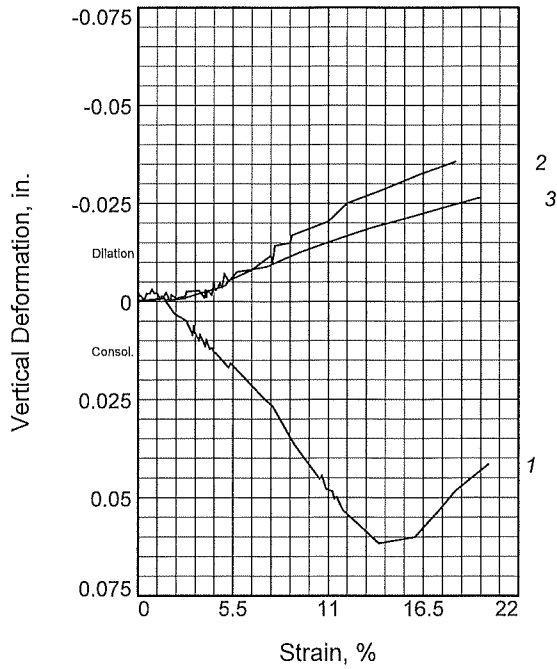
FREE SWELL TEST RESULTS

Project: Lewisville DCTA Trail
Segment A - Lewisville, Texas

Project No.: 117-24-358

Boring No.	Depth Interval (ft.)	Sample Description	Liquid Limit	Plastic Limit	Plasticity Index	Moisture Content %		Percent Swell (%)
			LL	PL	PI	Initial	Final	
B-3	3 – 4	Clay	51	17	34	22.1	24.1	0.2
B-3	7 – 8	Clay	61	18	43	23.0	-	0.3
B-5	9 – 10	Clay	58	19	39	22.2	-	0.6

Free swell tests performed at approximate overburden pressure



Sample No.	1	2	3	
Initial	Water Content, %	25.2	25.2	25.2
	Dry Density, pcf	98.9	99.1	98.8
	Saturation, %	99.2	99.6	98.9
	Void Ratio	0.6725	0.6695	0.6742
	Diameter, in.	2.47	2.47	2.47
	Height, in.	0.96	0.96	0.96
At Test	Water Content, %	30.5	32.3	28.4
	Dry Density, pcf	91.4	89.0	94.1
	Saturation, %	99.7	99.6	99.3
	Void Ratio	0.8103	0.8591	0.7579
	Diameter, in.	2.47	2.47	2.47
	Height, in.	1.04	1.07	1.01
Normal Stress, psf	1000	2000	3000	
Fail. Stress, psf	1769	2002	2440	
Strain, %	3.2	5.2	2.6	
Ult. Stress, psf				
Strain, %				
Strain rate, in./min.	0.01	0.01	0.01	

Sample Type:

Description:

LL= 70 PL= 20 PI= 50

Assumed Specific Gravity= 2.65

Remarks:

Client: Halff Associates, Inc.

Project: DCTA Trail - Lewisville, TX

Sample Number: B-3 **Depth:** 9-10

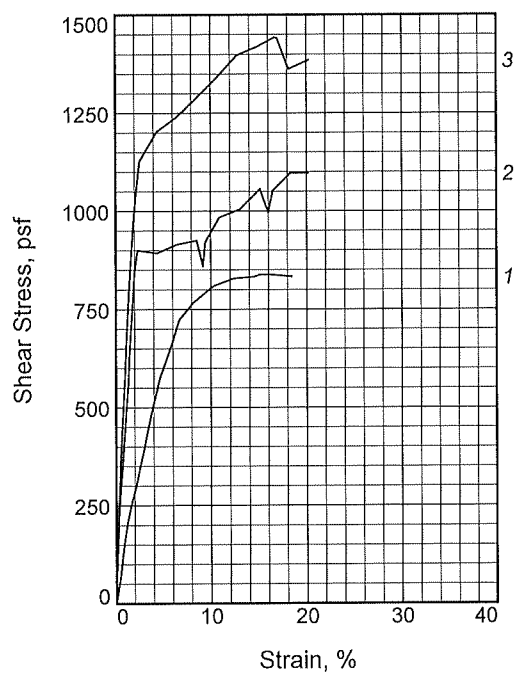
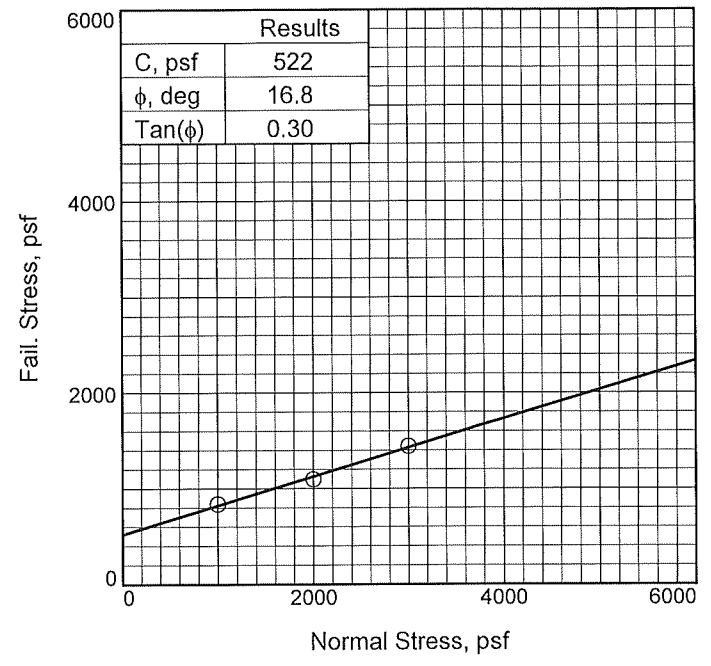
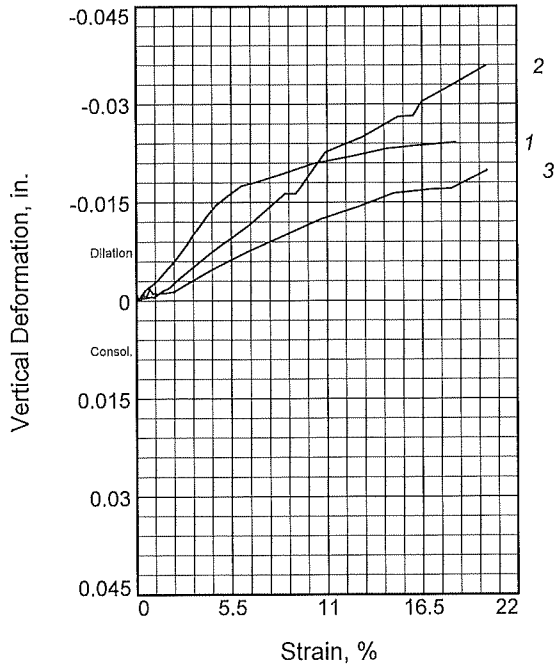
Proj. No.: 117-24-358

DIRECT SHEAR TEST REPORT

CMJ ENGINEERING, INC.

Fort Worth, Texas

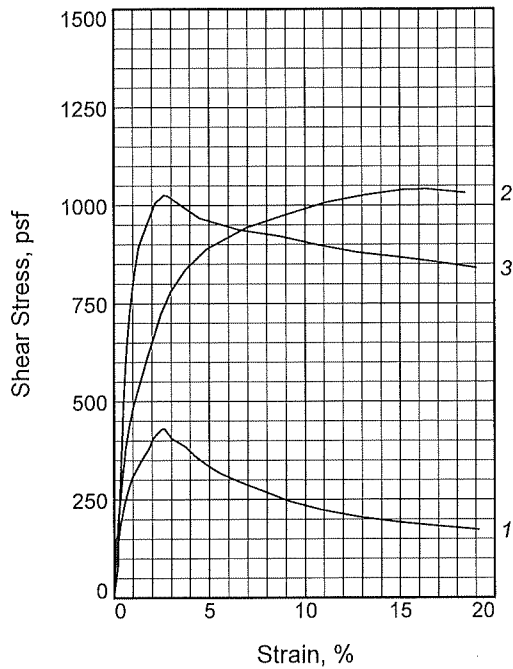
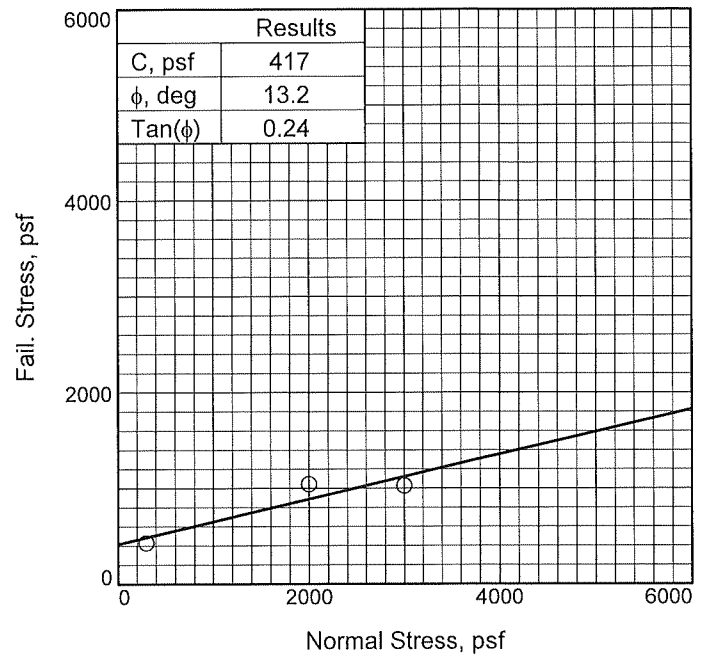
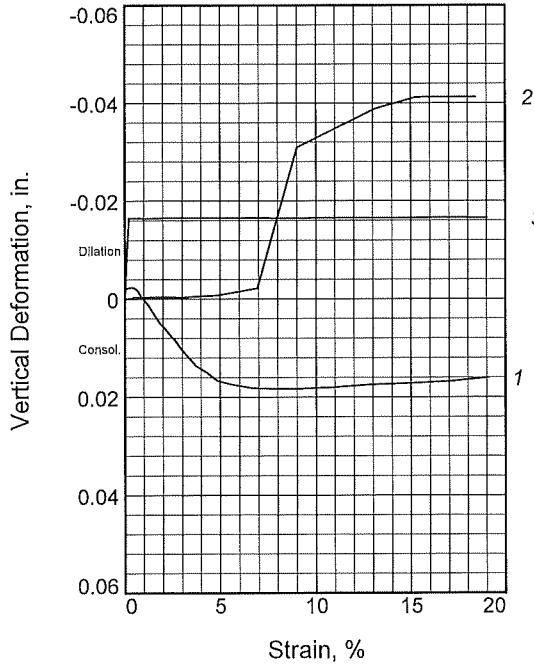
PLATE A.13



Sample No.	1	2	3
Water Content, %	25.2	25.2	N/A
Dry Density, pcf	98.9	99.1	N/A
Saturation, %	99.2	99.6	N/A
Void Ratio	0.6725	0.6695	N/A
Diameter, in.	2.47	2.47	2.47
Height, in.	0.96	0.96	0.96
Water Content, %	30.5	32.3	N/A
Dry Density, pcf	91.4	89.0	
Saturation, %	99.7	99.6	
Void Ratio	0.8103	0.8591	
Diameter, in.	2.47	2.47	
Height, in.	1.04	1.07	
Normal Stress, psf	1000	2000	3000
Fail. Stress, psf	838	1097	1443
Strain, %	15.1	20.2	16.7
Ult. Stress, psf			
Strain, %			
Strain rate, in./min.	0.03	0.03	0.03

Sample Type:
Description:
 LL= 70 PL= 20 PI= 50
 Assumed Specific Gravity= 2.65
Remarks:

Client: Halff Associates, Inc.
Project: DCTA Trail - Lewisville, TX
Sample Number: B-3 **Depth:** 9-10 RES
Proj. No.: 117-24-358
 DIRECT SHEAR TEST REPORT
 CMJ ENGINEERING, INC.
 Fort Worth, Texas **PLATE A.14**



Sample No.	1	2	3	
Initial	Water Content, %	30.3	30.3	30.3
	Dry Density, pcf	91.7	91.3	91.7
	Saturation, %	99.7	98.8	99.8
	Void Ratio	0.8050	0.8128	0.8044
	Diameter, in.	2.47	2.47	2.47
	Height, in.	0.96	0.96	0.96
At Test	Water Content, %	34.9	35.5	31.0
	Dry Density, pcf	85.6	84.9	90.7
	Saturation, %	99.1	99.0	99.7
	Void Ratio	0.9337	0.9492	0.8236
	Diameter, in.	2.47	2.47	2.47
	Height, in.	1.03	1.03	0.97
Normal Stress, psf	300	2000	3000	
Fail. Stress, psf	431	1042	1025	
Strain, %	2.6	16.3	2.6	
Ult. Stress, psf				
Strain, %				
Strain rate, in./min.	0.01	0.01	0.01	

Sample Type:

Description:

LL= 63 PL= 22 PI= 41

Assumed Specific Gravity= 2.65

Remarks:

Client: Half Associates, Inc.

Project: DCTA Trail - Lewisville, TX

Sample Number: B-5 **Depth:** 2-3

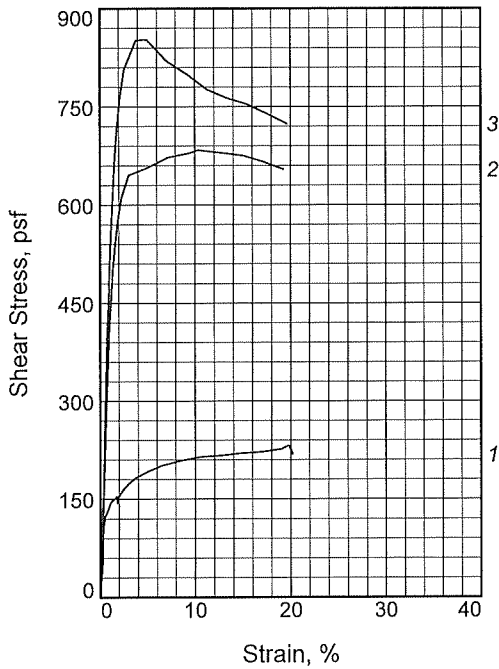
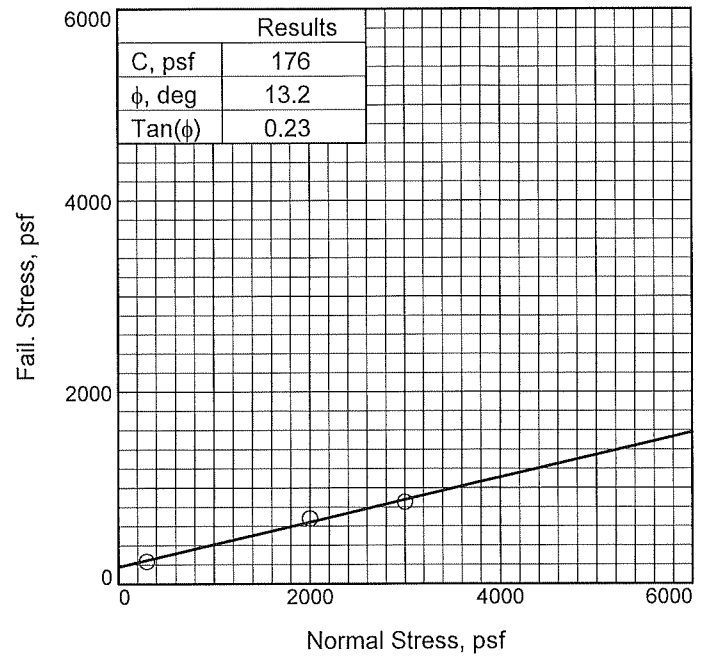
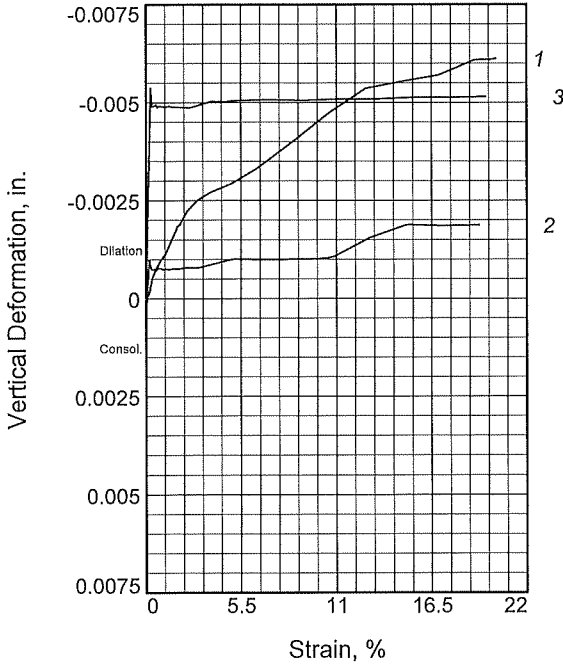
Proj. No.: 117-24-358

DIRECT SHEAR TEST REPORT

CMJ ENGINEERING, INC.

Fort Worth, Texas

PLATE A.15



Sample No.	1	2	3
Initial			
Water Content, %	30.3	30.3	30.3
Dry Density, pcf	91.7	91.3	91.7
Saturation, %	99.7	98.8	99.8
Void Ratio	0.8050	0.8128	0.8044
Diameter, in.	2.47	2.47	2.47
Height, in.	0.96	0.96	0.96
At Test			
Water Content, %	34.9	35.5	31.0
Dry Density, pcf	85.6	84.9	90.7
Saturation, %	99.1	99.0	99.7
Void Ratio	0.9337	0.9492	0.8236
Diameter, in.	2.47	2.47	2.47
Height, in.	1.03	1.03	0.97
Normal Stress, psf	300	2000	3000
Fail. Stress, psf	232	683	853
Strain, %	19.7	10.4	4.6
Ult. Stress, psf			
Strain, %			
Strain rate, in./min.	0.03	0.03	0.03

Sample Type:

Description:

LL= 63 PL= 22 PI= 41

Assumed Specific Gravity= 2.65

Remarks:

Client: Half Associates, Inc.

Project: DCTA Trail - Lewisville, TX

Sample Number: B-5 **Depth:** 2-3 RES

Proj. No.: 117-24-358

DIRECT SHEAR TEST REPORT

CMJ ENGINEERING, INC.

Fort Worth, Texas

PLATE A.16

SOLUBLE SULFATE TEST RESULTS

Project: Lewisville DCTA Trail
Segment A - Lewisville, Texas

Project No.: 117-24-358

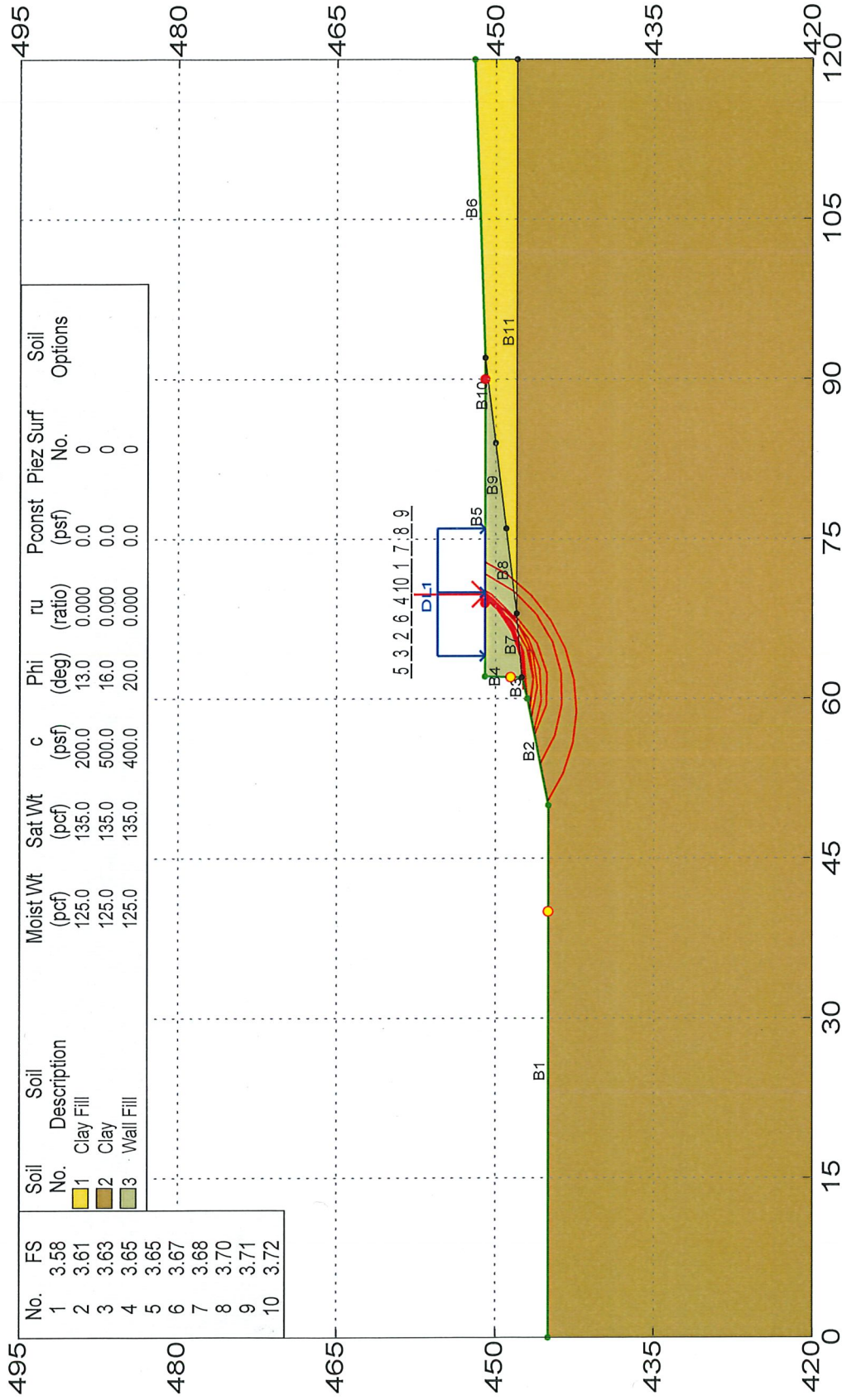
Boring No.	Depth (ft.)	Material	Soluble Sulfates (ppm)
B-1	0 - 1	Clay	<100
B-2	0 - 1	Clay	<100
B-3	0 - 1	Clay	<100
B-5	0 - 1	Clay	<100
B-6	0 - 1	Silty Clay	<100
B-7	0 - 1	Clay/Silty Clay	<100
B-8	0 - 1	Clay	<100
B-9	0 - 1	Clay	<100

Note: Test Method TxDOT Tex 145-E.

DCTA Trail - Segment A Wall F

V117-24-358A Circular.gsd

CMJ Engineering



GEOSTASE FS = 3.58

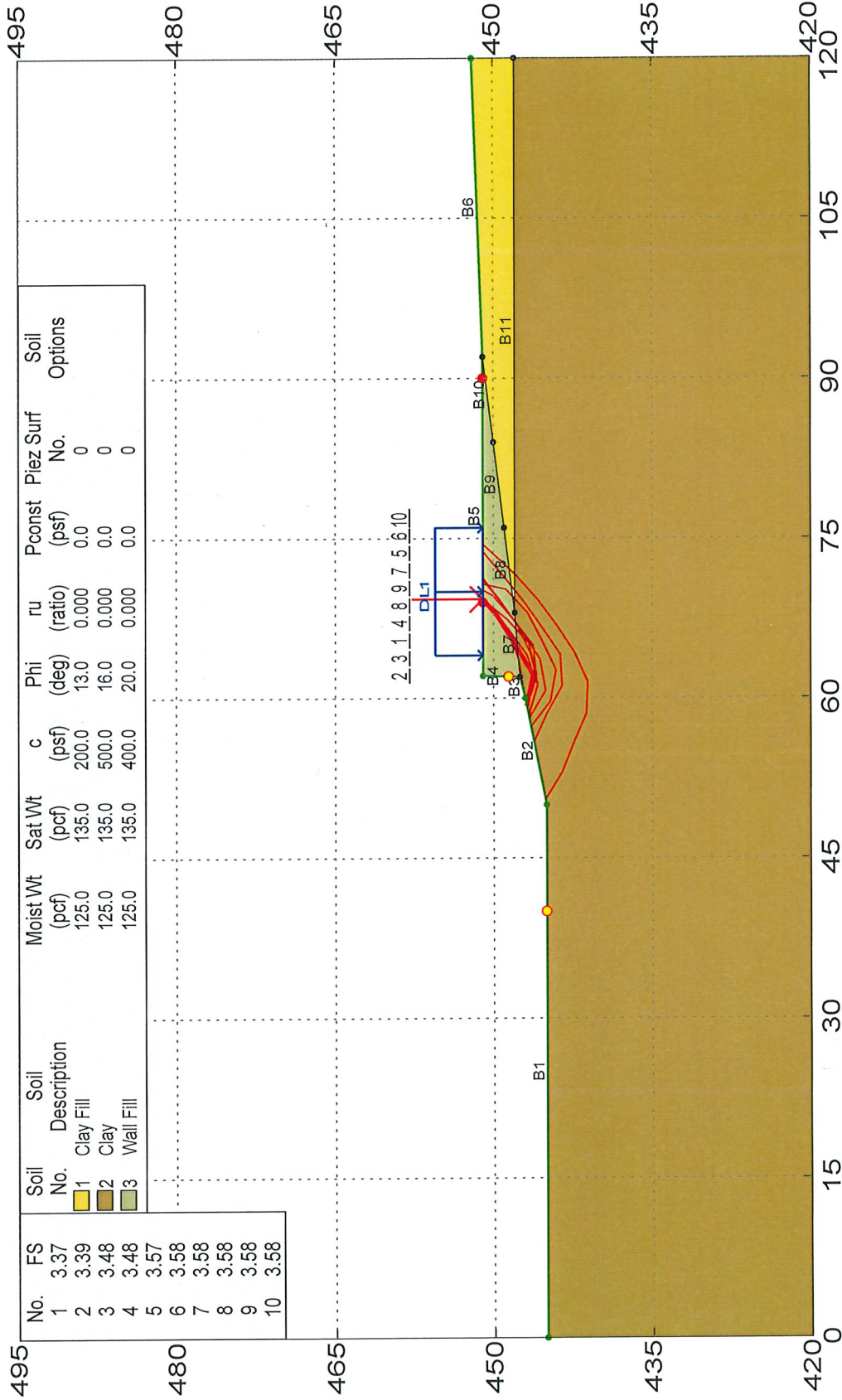
Spencer Method



DCTA Trail - Segment A Wall F

CMJ Engineering

\117-24-358A.gsd



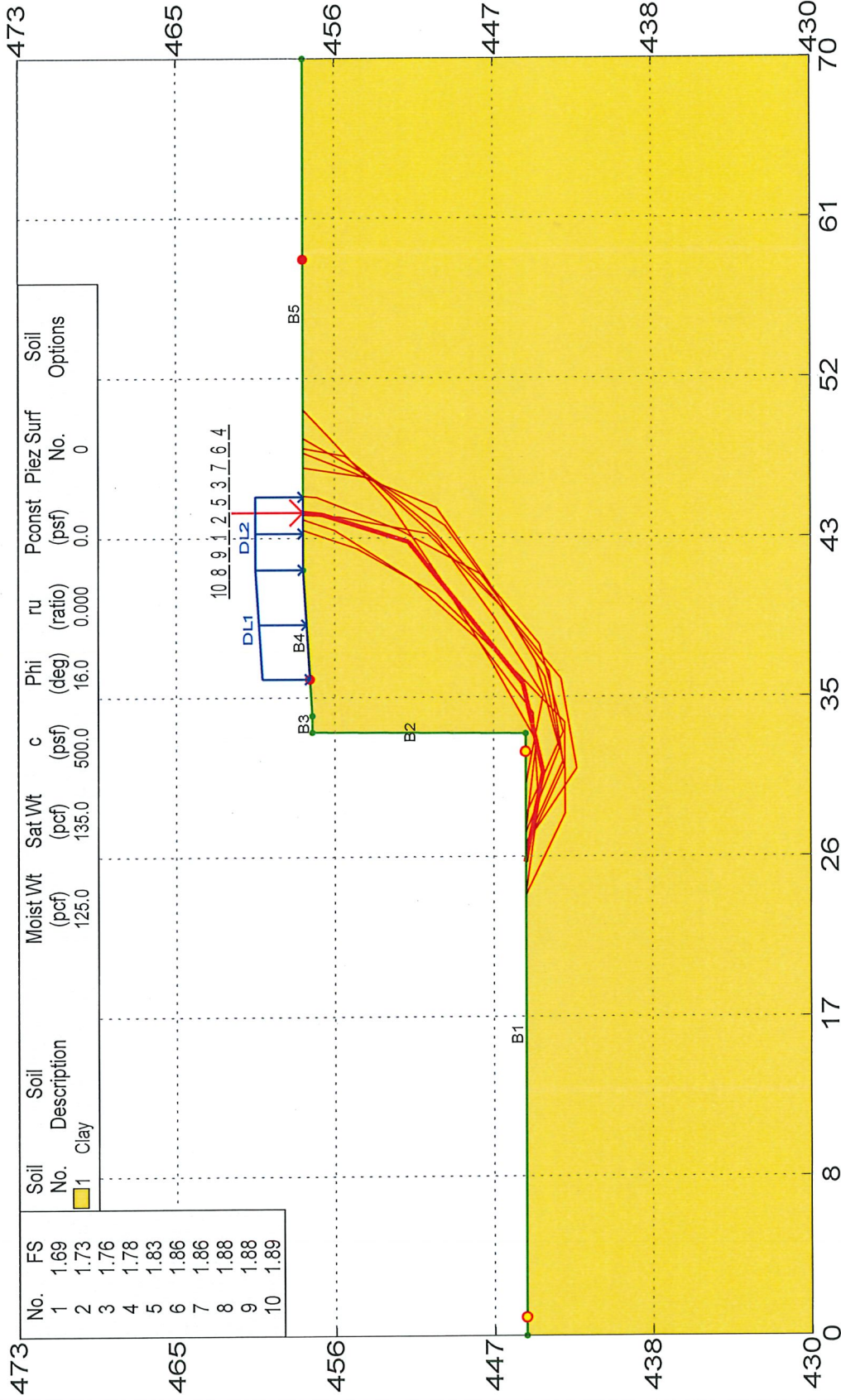
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Spencer Method

DCTA Trail - Segment A Wall B

CMJ Engineering, Inc.

\\Wall B - 1.gsd



GEOSTASE FS = 1.69

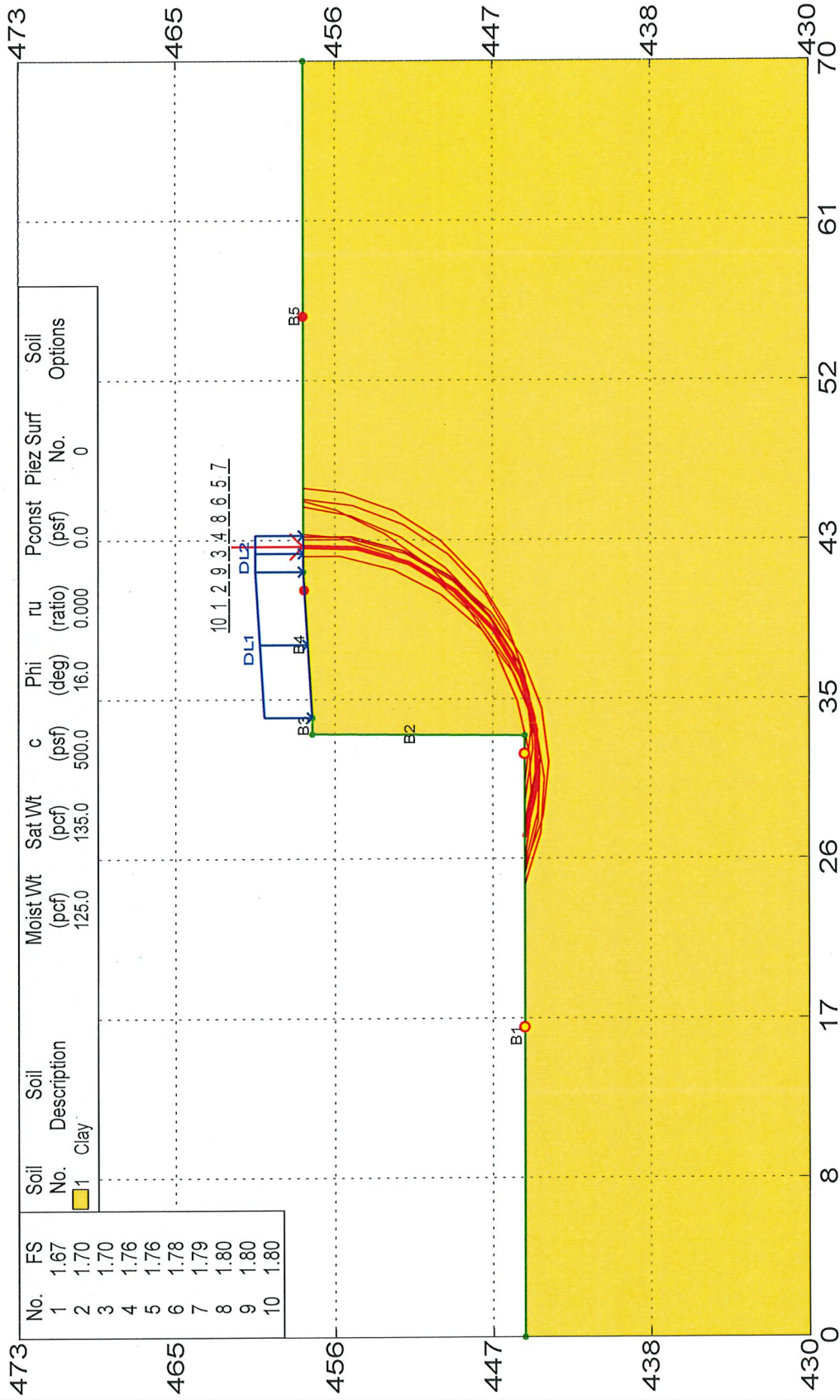
Spencer Method



DCTA Trail - Segment A Wall B

CMJ Engineering, Inc.

\\Wall B - 2.gsd



GEOSTASE FS = 1.67

Spencer Method



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