GENERAL SHORING NOTES:
1. All dimensions are measured perpendicular to the Track.
2. Prior to commencing any work subject to approval by the Railroad, detailed plans indicating the nature and extent of the temporary shoring system shall be submitted to the Railroad for approval.
3. Excavations shall be contained within Zone A or B. Excavation plans and design calculations shall be submitted to the Railroad for approval by the Railroad's Designated Representative.

RAILROAD GENERAL NOTES:
1. All design and construction shall be in accordance with TxDOT Standard Specifications.
2. All submittals are to be submitted in accordance with the Railroad's Guidelines and Project Specific Requirements as applicable.
3. Design and construction of shoring must be designed for OSHA requirements.
4. Submit a proposed method of erosion and sediment control design, including all shoring systems.
5. Design and construct all shoring systems that impact the Railroad prior to construction.
6. Verify the elevation of the existing top-of-rail profile before construction.
7. Coordinate construction work windows with the Railroad's Designated Representative.

TYPICAL FENCE ON BARRIER DETAIL
1. Shoring must be designed for Railroad live load in addition to OSHA and/or TxDOT standard loads.
2. Elevation of the existing top-of-rail profile must be verified before construction.
3. Shoring shall comply with OSHA requirements.
4. VERIFY THE ELEVATION OF THE EXISTING TOP-OF-RAIL PROFILE BEFORE CONSTRUCTION.

FOR THE FOLLOWING INFORMATION PLEASE REFER TO THE PLAN AND ELEVATION DRAWINGS OF THE PROJECT AS SHOWN ON THE DRAWINGS.

MINIMUM CONSTRUCTION CLEARANCE ENVELOPE
1. Centerline of bridge and/or centerline of project.
2. Track layout and limits of Railroad right-of-way with respect to centerline of main lines.
3. Horizontal clearance at right angle from centerline of near track.
4. Horizontal clearance at right angle from centerline of existing or future track.
5. Horizontal clearance at right angle from centerline of nearest existing or future track to the face of foundation such as superstructure above grade.
6. Limits of construction work along centerlines of existing or future track.
7. Limits of right-of-way and distance at right angle from centerline of nearest track.
8. Limits of shoring and approach distance at right angle from centerline of near track.
9. Elevation of utilities and their proposed location, if required.
10. Top of ramp or earth slope and/or limits of retaining wall.
11. Existing and proposed contours, including absence of drainage structures.

GENERAL SHORING REQUIREMENTS:
1. All temporary shoring shall be designed and constructed in accordance with the Railroad's Guidelines.
2. Excavation plans and design calculations shall be submitted to the Railroad for approval by the Railroad's Designated Representative.
3. Erection and demolition plans and design calculations shall be submitted to the Railroad for approval by the Railroad's Designated Representative.
4. Submit a proposed method of erosion and sediment control design.
5. Design and construct all shoring systems that impact the Railroad.

GENERAL NOTES:
1. Design and Construction for Railroad Projects shall be in accordance with the AARMP Manual for Railway Engineering and the BNSF/UPRR Guidelines for Railroad Grade Separation Projects.
2. See BNSF/UPRR Guidelines for Grade Separation Projects Plan Sheet No. 71188B and E00088D Rail Fence Details Sheet for additional information.
3. Design and Construction of Overpasses and Underpasses, or DART Light Rail Project Design Criteria Manual, and the TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges shall be subject to revision as applicable to the Railroad Company involved.

EXCavaTicH PerMitted

Contractor submittal is required to cause no interruption to the Railroad's operation, enabling the Railroad's operations and/or support the Railroad's requirements.

For more information, please refer to Sheets 2 and 3 and the TxDOT Standard Specifications.
PART 1 - GENERAL
1.01 DESCRIPTION
This project includes construction work within the right of way and/or
property of the Railroad Company and adjacent to railroad tracks.

A. These references apply to the Railroad hereinafter called the "Railroad"
or railroad and its agents or employees. These references shall be construed
in accordance with the Railroad's Rules and Regulations. The Contractor
when working upon, over or under Railroad Right of Way, or upon
property of the Railroad, while performing the work outlined herein, and
publish the Railroad's flags and signals, and if the Contractor is not
cooperating with the Railroad as directed in writing by the Railroad
Designated Representative.

For purposes of this project the Railroad Designated Representative
is the person or persons designated by the Railroad Manager of Industry
and Public Projects to handle specific tasks related to the project.

1.02 REQUEST FOR INFORMATION / CLARIFICATION
Submit Requests for Information ("RFI") involving work within any
Railroad Right of Way to the Railroad Designated Representative.
The RFI will be submitted to the Railroad Designated Representative for
review and approval. The ("RFI") corresponding to work within Railroad
Right of Way may be built by the Railroad. If applicable, the Contractor
will submit the RFI to the Railroad Designated Representative for
review. Allow six (6) weeks total time for review and approval,
which includes four (4) weeks for review and approval by the Railroad.

1.03 PLANS / SPECIFICATIONS
The Contractor has been provided written Railroad approval of the plans
and specifications for this project. Any revisions or changes in the
plans and specifications must be approved by the Railroad Designated
Representative before commencing work in connection with approved
work projects.

PART 2 - UTILITIES AND FIBER OPTIC
Construct all utility installations in accordance with current
electricity, gas, water, telecommunications, fiber optic, and internet
specifications and requirements. Railroad specific guidelines can be
found on the Railroad's website or by contacting the Railroad
Designated Representative.

PART 3 - CONSTRUCTION
3.01 GENERAL
A. Perform all work in compliance with all applicable Railroad,
Railroad operations, railroad schedules, and railroad utility
specifications and requirements. Contractor must coordinate
efforts with the Railroad and railroad utilities as needed.

B. Give advance notice to the Railroad as required in the "Contractor's
Right of Entry Agreement" before commencing work in connection with
approved work projects. A railroad flag person will be required
for construction activities requiring an Absolute Work Window.

C. Do not commence work involving an approved infringement until
receiving written assurance from the Railroad Designated
Representative.

D. Submit any proposed infringement on the specified minimum
railroad clearances to the Railroad's Designated Representative
for review. The Railroad has the right to order
such provisions are insufficient, the Railroad Designated Representative may
require Contractor to provide additional protection to the
property and/or operations of the Railroad.

3.02 RAILROAD OPERATIONS
A. Trains and/or equipment are expected on any track, at any
time, and the Contractor must take due consideration of
the train schedules in this location and structure bid assuming
railroad track(s) will be inactive for train movements and
railroad operations. During this time frame, the designated
flag person will be required for train operations.

B. 22' - 0" (KCS) and 21' - 6" (UPRR & BNSF) vertically above top of rail.
Centerline of track

Abide by the following minimum temporary clearances during the course
of the project:

1. All railroad track(s) will be inactive for train movements and
railroad operations. During this time frame, the designated
flag person will be required for train operations.

2. The days and hours that work will be performed.

3. The exact location of work, and proximity to the tracks.

At the direction of the Railroad's flag person, upon approach of
a train, and when the trains are active, railroad flags shall be
required. If a train is approaching, a railroad flag person will be
required. It is the Contractor's responsibility to ensure
the flagging and sign requirements are met in a timely
manner. The Contractor must coordinate with TxDOT and the Railroad
in the event of train operations resulting from Contractor's construction or
other railroad work.

3.03 RIGHT OF ENTRY, ADVANCE NOTICE AND WORK STOPPAGES
A. Do not perform any work within Railroad Right of Way without a
valid executed Right of Entry Agreement if required on this project.

B. Provide 48 hours advance notice, to the Railroad's Designated
Representative, before commencing work in connection with
specified clearances. Do not commence work involving an
approved infringement until receiving written assurance from the Railroad
Designated Representative.

C. Do not perform any work within Railroad Right of Way without a
valid executed Right of Entry Agreement if required on this project.

3.04 INSURANCE
Do not begin work upon or over Railroad Right of Way until furnishing
the Railroad with the insurance policies, bonds, certificates and
endorsements required by this agreement prior to beginning work.
The Contractor shall maintain adequate insurance in accordance with
TxDOT's and the Railroad's requirements. The Contractor shall advise TxDOT
that such insurance is in accordance with the agreement,
specified in Section 3.07.

3.05 RAILROAD SAFETY ORIENTATION
A. Complete the Railroad's safety orientation for Contractor's safety,
and maintain current registration prior to working on the Railroad's
property. This course is required to be completed by
Contractor and Subcontractor personnel working on the Railroad.

3.06 COOPERATION
The Railroad will cooperate with Contractor so that work may be conducted
in an efficient manner, and will cooperate with Contractor in enabling
railroad track(s) or Right of Way reservations for the Project as indicated
in the "Contractor's Right of Entry Agreement".

3.07 MINIMUM CONSTRUCTION CLEARANCES FOR FALSEWORK AND OTHER
TEMPORARY STRUCTURES
A. The following minimum temporary clearances during the course
of the project:

B. 21' - 0" (KCS) and 20' - 0" (UPRR & BNSF) vertically above top of rail.

C. For construction clearance less than listed above, obtain local
Railroad Operating Office written review and approval.

3.08 APPROVAL OF REDUCED CLEARANCES
A. Melissa minimum track clearances during construction as
specified in Section 3.07.

B. Submit any proposed infringement on the specified minimum
railroad clearances to the Railroad's Designated Representative.

C. Do not commence work involving any proposed infringement
until receiving written assurance from the Railroad's Designated
Representative that such clearance have been made for any
necessary flagging service.
3.09 CONSTRUCTION AND AS-BUILT SUBMITTALS

A. Provide TxDOT submittals for construction drawings and as-built drawings to the Railroad Manager of Industry and Public Projects unless otherwise directed by the Railroad. In addition, the Contractor shall provide copies of as-built drawings showing the final bridge design to the Railroad. Submit Items in Table 1 for both railroad overpass and underpass projects. Items in Table 2 for railroad underpass projects only.

3.10 APPROVAL OF DETAILS

Supply original set of drawings reflecting affected Railroad’s work and proposed work, including supporting documentation for these submittals, which includes the Railroad’s review and written approval before such work is undertaken. As an alternative, TxDOT and the Engineer of Record may approve these submittals.

3.11 MAINTENANCE OF RAILROAD FACILITIES

A. Maintain all bridge elements and rail systems free of ice or other obstructions resulting from Contractor’s operations. Repair any damage to the bridge elements and rail systems resulting from Contractor’s work. Contractor shall also be responsible for any other damage to the property of the Railroad, or its tenants. Such damages shall be repaired to the satisfaction of the Railroad as outlined below and indicated in TxDOT Guidelines for Temporary Works.

3.12 SITE INSPECTIONS BY RAILROAD DESIGNATED REPRESENTATIVE

A. In addition to the office review of construction submittals, site inspections may be performed by the Railroad Designated Representative at significant points during construction, including the following if applicable:

1. Shoring design and details or other such telecommunications systems that require consideration prior to the construction of a project Plan, are included in project plans. It requires the Railroad to ensure that the construction is done in a manner that will not interfere with the normal operation of the Railroad.

3.13 RAILROAD REPRESENTATIVE

B. The project plans indicate whether there are fiber optic lines or other such telecommunications systems that require consideration prior to the construction of a project Plan. It requires the Railroad to ensure that the construction is done in a manner that will not interfere with the normal operation of the Railroad.

3.15 COMMUNICATION AND SIGNAL LINES

A. Take special precaution and care in connection with excavating or drilling. Contractor shall notify the Railroad of anticipated operations that may affect the Railroad, including:

- The project plans indicate whether there are fiber optic lines or other such telecommunications systems that require consideration prior to the construction of a project Plan. It requires the Railroad to ensure that the construction is done in a manner that will not interfere with the normal operation of the Railroad.

3.16 TRAFFIC CONTROL

A. Maintain all railroad crossings free of ice or other obstructions resulting from Contractor’s operations. Repair any damage to the railroad crossings resulting from Contractor’s work. Contractor shall also be responsible for any other damage to the property of the Railroad, or its tenants. Such damages shall be repaired to the satisfaction of the Railroad as outlined below and indicated in TxDOT Guidelines for Temporary Works.

3.17 CONSTRUCTION EXCAVATIONS AND BORING ACTIVITIES UNDER TRACK

A. Take special precaution and care in connection with excavating or drilling. Contractor shall notify the Railroad of anticipated operations that may affect the Railroad, including:

- The project plans indicate whether there are fiber optic lines or other such telecommunications systems that require consideration prior to the construction of a project Plan. It requires the Railroad to ensure that the construction is done in a manner that will not interfere with the normal operation of the Railroad.

3.19 CLEANSING OF RIGHT-OF-WAY

A. Take special precaution and care in connection with excavating or drilling. Contractor shall notify the Railroad of anticipated operations that may affect the Railroad, including:

- The project plans indicate whether there are fiber optic lines or other such telecommunications systems that require consideration prior to the construction of a project Plan. It requires the Railroad to ensure that the construction is done in a manner that will not interfere with the normal operation of the Railroad.

3.20 CLOSING OF RAILROAD BOXES

A. Take special precaution and care in connection with excavating or drilling. Contractor shall notify the Railroad of anticipated operations that may affect the Railroad, including:

- The project plans indicate whether there are fiber optic lines or other such telecommunications systems that require consideration prior to the construction of a project Plan. It requires the Railroad to ensure that the construction is done in a manner that will not interfere with the normal operation of the Railroad.

3.22 RAILROAD INSTALLATIONS

A. Take special precaution and care in connection with excavating or drilling. Contractor shall notify the Railroad of anticipated operations that may affect the Railroad, including:

- The project plans indicate whether there are fiber optic lines or other such telecommunications systems that require consideration prior to the construction of a project Plan. It requires the Railroad to ensure that the construction is done in a manner that will not interfere with the normal operation of the Railroad.

3.23 RAILROAD INSTALLATIONS, CONT.

A. Take special precaution and care in connection with excavating or drilling. Contractor shall notify the Railroad of anticipated operations that may affect the Railroad, including:

- The project plans indicate whether there are fiber optic lines or other such telecommunications systems that require consideration prior to the construction of a project Plan. It requires the Railroad to ensure that the construction is done in a manner that will not interfere with the normal operation of the Railroad.

3.24 RAILROAD INSTALLATIONS, CONT.

A. Take special precaution and care in connection with excavating or drilling. Contractor shall notify the Railroad of anticipated operations that may affect the Railroad, including:

- The project plans indicate whether there are fiber optic lines or other such telecommunications systems that require consideration prior to the construction of a project Plan. It requires the Railroad to ensure that the construction is done in a manner that will not interfere with the normal operation of the Railroad.

3.25 RAILROAD INSTALLATIONS, CONT.

A. Take special precaution and care in connection with excavating or drilling. Contractor shall notify the Railroad of anticipated operations that may affect the Railroad, including:

- The project plans indicate whether there are fiber optic lines or other such telecommunications systems that require consideration prior to the construction of a project Plan. It requires the Railroad to ensure that the construction is done in a manner that will not interfere with the normal operation of the Railroad.