



## Iowa Department of Transportation

**SPECIAL PROVISIONS  
FOR  
CONSTRUCTION WORK ON RAILROAD RIGHT-OF-WAY WITH A+B FOR BIDDING RAILROAD  
FLAGGERS (BURLINGTON NORTHERN SANTA FE RAILWAY)**

**Adams County  
City of Corning  
BROS-1590(602)—8J-02**

**Effective Date  
March 20, 2012**

**THE STANDARD SPECIFICATIONS, SERIES 2009, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.**

**094003.01 DESCRIPTION.**

This specification applies to projects on the Interstate, Primary, Secondary, and Local Road systems involving construction or maintenance of roadways and structures requiring additional property rights or facility adjustments from the Burlington Northern Santa Fe Railway (BNSF).

This specification describes the following:

- Requirements when work is within the Right-of-way (ROW) or properties of the BNSF Railway Company and adjacent to tracks, wire lines, and other facilities.
- Coordination with BNSF when work by the Contractor will be performed upon, over, or under the BNSF ROW, or may impact current or future BNSF operations.
- A+B for bidding provisions for railroad flagging.

The BNSF representative will be the person or persons identified by the BNSF Manager of Industry and Public Projects to handle specific tasks related to the project. The contract documents will specify the contact information for this individual(s).

Prior to advertising the project for letting, the Contracting Authority will negotiate and obtain an agreement with the BNSF for the work on BNSF ROW. The Contractor is not required to enter into an agreement with the BNSF except for the sole purpose of a temporary crossing (Article SP-094003.23) that is not included in the contract documents.

The Contractor shall provide track protection for all equipment operating within 25 feet (7.62 m) from nearest rail.

**094003.02 REQUESTS FOR INFORMATION.**

All requests for information involving work within any BNSF ROW shall be in accordance with the procedures listed in the contract documents. All requests shall be submitted to the Engineer. The Engineer will forward the request to the BNSF as necessary.

**094003.03 A + B BIDDING FOR RAILROAD FLAGGING.**

**A. General.**

The determination of the low bidder on this project will involve a combination of the contract sum and the bidder's proposed time to complete all work requiring the use of railroad flaggers. Railroad flagging will be required whenever the conditions in Article SP-094003.06 are encountered.

A Critical Path Method schedule will be required according to Section 1110 of the Standard Specifications.

**B. Definitions.**

**1. Daily Railroad Flagging Cost.**

The amount that represents the average daily cost of a single railroad flagger. The daily railroad flagger cost will be shown on the proposal form.

**2. Railroad Flagger Day**

Any calendar day that a railroad flagger is required according to Article SP-094003.06. The need for railroad flaggers at multiple sites per calendar day will result in the Contractor being charged an additional number of railroad flagger days.

**C. Preparation of Proposal.**

The bidder shall establish the number of days they propose to use to complete all work requiring the use of railroad flagging services under this proposal. The proposal form may state a maximum number of railroad flagger days allowable. Bids showing railroad flagger days in excess of the maximum amount will be considered non-responsive and will not be considered.

**D. Consideration of Bids.**

Each bid submitted shall consist of two parts:

(A) = Contract sum.

(B) = Total number of railroad flagger days proposed by the bidder to complete all work requiring the use of railroad flaggers. The bidder shall enter the number of railroad flagger days on the proposal form.

The successful bid will be determined by the lowest combination of (A) and (B) according to the following formula:

$(A) + [(B) \times (\text{Daily Railroad Flagging Cost})] = \text{Bid amount for award consideration.}$

**E. Charging of Railroad Flagger Days.**

A Railroad flagger day will be charged whenever railroad flaggers are required as described in Article SP-094003.06. Railroad flagger days will be only charged in whole days.

The Contractor shall submit to the Engineer a log of railroad flagger usage that identifies all railroad flagger requests to begin, modify, and end work activities; and number of railroad flaggers provided. This report shall be submitted to the Engineer weekly (reporting the previous week's activities). This report shall also include a written statement of any objections to railroad flagger days charged by the Engineer.

**F. Railroad Flagger Payment or Assessment.**

Railroad flagger incentive payment or disincentive assessment will be as follows:

**1. Incentive Payment.**

The Contractor will be paid an amount equal to the Daily Railroad Flagging Cost multiplied by the number of railroad flagger days remaining after all work requiring railroad flagging services have been completed.

**2. Disincentive Assessment.**

The Contractor will be assessed an amount equal to the Daily Railroad Flagging Cost multiplied by the number of railroad flagger days used in excess of the total number of days entered on the Proposal Form. There will be no maximum amount for disincentive assessment.

**G. Consideration for Extra Work or Delays During Railroad Flagging Periods.****1. Railroad Flaggers.**

No consideration for additional railroad flagger days will be considered for the first two consecutive days of delay for each extraordinary circumstance. The Contractor will be responsible for obtaining necessary weather forecasts prior to ordering railroad flagging services.

**2. Additional Time.**

Additional time will be given by the Engineer for extra work, overruns of contract items, or extraordinary circumstances meeting the following requirements:

- a. Approved extra work or overruns of contract items that extend the duration of the railroad flagging period shall be documented and included in the critical path of the project. The revised critical path diagram shall be submitted to the Engineer for approval.
- b. Non-weather related extraordinary circumstances that delay the Contractor during the railroad flagging periods shall be documented by the Contractor and a written request for additional time shall be submitted to the Engineer within 72 hours of the beginning of the delay. The Engineer will approve or deny all requests for additional closure time resulting from non-weather related extraordinary circumstances.

Non-weather related extraordinary circumstances will be limited to the following:

1. **Strikes:** Strikes which are not directed against the Contractor.
2. **Legal Stoppages:** Legal Stoppages will be allowed if they result from legal action against the Contracting Authority or against the Contractor if not based on a specification violation.
3. **Late Delivery of Material:** Procurement of material for a project is the sole responsibility of the Contractor. Late delivery will be considered an extraordinary circumstance only when the Contractor can show that orders were placed with a reliable supplier in sufficient time for materials to be delivered when needed and only when there is:
  - a. A nationwide shortage; or
  - b. An industry wide strike; or
  - c. Transportation strike which delays the delivery of material; or
  - d. Delays due to a change in material commitments when caused by a Federal emergency or order.

- 4. **Natural Disaster:** A suspension order may be issued on any project in a declared disaster area, if the disaster causes conditions that do not allow productive work.
- c. Adverse weather including rain, snow, wind, flood, extreme heat, and the results thereof, such as inaccessibility or non-workability of materials, is only considered as extraordinary circumstance if the Contractor is working or ready to work on the contract and the adverse weather conditions do not allow productive work on the critical path. Adverse weather that delays the Contractor during the critical closure activity shall be documented by the Contractor and a written request for additional closure days shall be submitted to the Engineer within ten calendar days of the beginning of the delay. Some delays for weather have been included in the number of closure days allowed. Therefore, additional closure days for adverse weather will not be allowed for the first five consecutive closure days of each delay.

**094003.04 CONSTRUCTION AND AS-BUILT SUBMITTALS.**

- A. Submittals are required for construction materials and procedures as outlined below. The submittals shall include all review comments from the Engineer. All design submittals shall be stamped and signed by a Professional Engineer registered in the State of Iowa.
- B. The tables below provide BNSF’s minimum submittal requirements for the construction items noted. Submittal requirements are in addition to those specified elsewhere in the contract documents. The minimum review times indicated below represent BNSF’s requirements only. The Contractor shall allow additional time for the BNSF’s review time as stated elsewhere in the contract documents.

For this specification the following definitions shall apply:

Overpass: when the roadway bridges over the railroad.  
 Underpass: when the roadway crosses under the railroad.

- C. Submittals will be made by the Engineer to the BNSF. Items in Table SP-094003.04-1 shall be submitted for both railroad overpass and underpass projects, as applicable. Items in Table SP-094003.04-2 shall be submitted for underpass projects only.

Prior to or during construction of underpass structures, the BNSF requires the review of drawings, reports, test data, and material data sheets to determine compliance with the specifications. Product information for items noted in Table SP-094003.04-2 shall be submitted to BNSF through the Engineer for their review and approval. The signed submittal and the Engineer’s review comments will be reviewed by BNSF. Review of the submittals will not be conducted until after review by the Engineer.

**Table SP-094003.04-1: Review Sets and Minimum Time for Review**

Description	Sets Required	BNSF’s Minimum Review Time
Shoring design and details	4	4 weeks
Falsework design and details	4	4 weeks
Drainage design provisions	4	4 weeks
Erection diagrams and sequence	4	4 weeks
Demolition diagram and sequence	4	4 weeks

Table SP-094003.04-2: Sets Required

Description	Sets Required	Notes
Shop drawings	4	Steel and Concrete members
Bearings	4	For entire structures
Concrete Mix Designs	4	For entire structures
Rebar & Strand certifications	4	For superstructure only
28 day concrete strength	4	For superstructure only
Waterproofing material certifications and installation procedure	4	Waterproofing & protective boards
Structural steel certifications	4	All fracture critical members & other members requiring improved notch toughness
Fabrication and Test reports	4	All fracture critical members & other members requiring improved notch toughness.
Welding Procedures and Welder Certification	4	AWS requirements
Foundation Construction Reports	4	Pile driving, drilled shaft construction, bearing pressure test reports for spread footings.
Compaction testing reports for backfill at abutments	4	Must meet 95% maximum dry density, Modified Proctor ASTM D 1557.

D. As-Built Records will be submitted to the BNSF within 1 year of completion of the structures. These records shall consist of the following items:

**1. Overpass Projects:**

- Electronic files of all structure design drawings with as-constructed modifications shown in Microstation J or Acrobat .PDF format.
- Hard copies of all structure design drawings with as-constructed modifications shown.

**2. Underpass Projects:**

- Electronic files of all structure design drawings with as-constructed modifications shown, in Microstation J or Acrobat .PDF format.
- Hard copies of all structure design drawings with as-constructed modifications shown.
- Final approved copies of shop drawings for concrete and steel members.
- Foundation Construction Reports
- Compaction testing reports for backfill at abutments

**094003.05 SITE INSPECTIONS BY THE BNSF.**

Site inspections may be performed by the BNSF at significant points during construction, including but not limited to the following:

- Preconstruction meetings
- Pile driving, drilling of caissons or drilled shafts
- Reinforcement & concrete placement for railroad bridge substructure or superstructure
- Erection of precast concrete or steel bridge superstructure
- Placement of waterproofing (prior to placing ballast on bridge deck)
- Completion of the bridge structure

A detailed construction schedule, including the proposed temporary horizontal and vertical clearances and construction sequence for all work to be performed, shall be provided to the Engineer for submittal to the BNSF for review prior to commencement of work. This schedule shall also include the anticipated dates when the above listed events will occur. This schedule shall be updated for the above listed events as necessary, but at least monthly so that site visits may be scheduled.

**094003.06 BNSF REPRESENTATIVES.**

BNSF representatives will be provided at the expense of the Contracting Authority to protect BNSF facilities, property, and movements of its trains or engines. In general, BNSF will furnish such personnel or other protective services as follows:

- When any part of any equipment is standing or being operated within 25 feet (7.62 m), measured horizontally, from centerline of any track on which trains may operate, or when any object is off the ground and any dimension thereof could extend inside the 25 foot (7.62 m) limit, or when any erection or construction activities are in progress within such limits, regardless of elevation above or below track.
- For any excavation below elevation of track subgrade if, in the opinion of BNSF, track or other BNSF facilities may be subject to settlement or movement.
- During any clearing, grubbing, excavation, or grading in proximity to BNSF facilities, which, in the opinion of BNSF, may endanger BNSF facilities or operations.
- During the Contractor's operations when, in the opinion of BNSF, BNSF facilities, including, but not limited to, tracks, buildings, signals, wire lines, or pipe lines, may be endangered.
- The Contractor shall arrange with the BNSF to provide the adequate number of flag persons to accomplish the work.

**094003.07 INSURANCE.**

The Contractor shall not begin work upon or over BNSF's ROW until the Engineer and BNSF have been furnished the insurance policies, binders, certificates, and endorsements required by the contract documents and the BNSF has notified the Engineer that such insurance provisions are in accordance with the contract documents. The insurance shall be kept in full force and effect during the performance of work and thereafter until the Contractor removes all tools, equipment, and material from BNSF's property and cleans the premises in a manner reasonably satisfactory to BNSF.

In addition to providing to BNSF the insurance binders, endorsements, and certificates described below, the Contractor shall also provide the subcontractor insurance endorsements that are described in Article SP-094003.08; ASSIGNMENT, SUBCONTRACTING, AND INSURANCE ENDORSEMENTS.

The Contractor shall provide the following kinds of insurance in addition to the requirements of Article 1107.02 of the Standard Specifications.

**A. Commercial General Liability Insurance.**

Commercial general liability (CGL) with a limit of not less than \$5,000,000 each occurrence and an aggregate limit of not less than \$10,000,000. CGL insurance shall be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy shall also contain the following endorsement, which shall be stated on the certificate of insurance:

- Contractual Liability Railroads ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Railroad Company Property" as the Designated Job Site.
- Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage) showing the project on the form schedule.

**B. Business Automobile Coverage Insurance.**

Business auto coverage written on ISO form CA 00 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less \$5,000,000 for each accident.

The policy shall contain the following endorsements, which shall be stated on the certificate of insurance:

- Coverage For Certain Operations In Connection With Railroads ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Property" as the Designated Job Site.
- Motor Carrier Act Endorsement - Hazardous materials clean up (MCS-90), if required by law.

**NOTE:** Alternate Liability Insurance Limits: The BNSF will accept Contractor's Commercial General Liability insurance limits of at least \$2,000,000 each occurrence or claim and an aggregate limit of at least \$2,000,000, and will accept Business Automobile Insurance containing a combined single limit of at least \$2,000,000 per occurrence or claim if the Contractor secures Railroad Protective Liability Insurance coverage with a combined single limit of \$5,000,000 per occurrence with a \$10,000,000 aggregate instead of the limits described in Article 1112.02, B, of the Standard Specifications.

**C. Workers Compensation and Employers Liability Insurance.**

Coverage shall include, but not limited to:

- The Contractor's statutory liability under the workers' compensation laws of the State of Iowa.
- Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit, \$500,000 each employee.

If the Contractor is self-insured, evidence of the State of Iowa's approval and excess workers compensation coverage shall be provided. Coverage shall include liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

The policy shall contain the following endorsement, which shall be stated on the certificate of insurance:

Alternate Employer endorsement ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing BNSF in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

**D. Umbrella or Excess Insurance.**

If the Contractor utilizes umbrella or excess policies, these policies shall "follow form" and afford no less coverage than the primary policy.

**E. Pollution Liability Insurance.**

Pollution liability coverage shall be written on ISO form Pollution Liability Coverage Form Designated Sites CG 00 39 12 04 (or a substitute form providing equivalent liability coverage), with limits of at least \$1,000,000 per occurrence and an aggregate limit of \$2,000,000.

If the scope of work as defined in this contract includes the disposal of any hazardous or non-hazardous materials from the job site, Contractor shall furnish to BNSF evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising from the insured facility accepting the materials, with coverage in minimum amounts of \$1,000,000 per loss, and an annual aggregate of \$2,000,000.

- F. All policy(ies) required above (except worker's compensation and employers liability shall include the BNSF as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage). The coverage provided to the BNSF as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for the BNSF's negligence whether sole or partial, active or passive, and shall not be limited by Contractor's liability under the indemnity provisions contained in the specifications.
- G. Punitive damages exclusion, if any, shall be deleted (and the deletion indicated on the certificate of insurance), unless the law governing prohibits all punitive damages that might arise in connection with this contract.
- H. The Contractor waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against Railroad and its agents, officers, directors, and employees. This waiver shall be stated on the certificate of insurance.
- I. Prior to commencing the work, the Contractor shall furnish Railroad with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements in this contract.
- J. All insurance policies shall be written by a reputable insurance company acceptable to the BNSF or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the State of Iowa.
- K. The fact that insurance is obtained by the Contractor or by the BNSF on behalf of the Contractor shall not be deemed to release or diminish the liability of the Contractor, including, without limitation, liability under the indemnity provisions of this contract. Damages recoverable by the BNSF from the Contractor or any third party shall not be limited by the amount of the required insurance coverage.

**094003.08 ASSIGNMENT, SUBCONTRACTING, AND INSURANCE ENDORSEMENTS.**

The Contractor shall not assign or subcontract the provisions of this specification, or any interest therein, without the written consent of the Engineer. The Contractor shall be responsible for the acts and omissions of all subcontractors. Before the Contractor commences any work, they shall, except to the extent prohibited by law; (1) require each subcontractor to include the Contractor as "Additional Insured" in the subcontractor's Commercial General Liability policy and Business Automobile policies with respect to all liabilities arising out of the subcontractor's performance of work on behalf of the Contractor by endorsing these policies with ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage; (2) require each subcontractor to endorse their Commercial General Liability Policy with "Contractual Liability Railroads" ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) for the job site; and (3) require each subcontractor to endorse their Business Automobile Policy with "Coverage For Certain Operations In Connection With Railroads" ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) for the job site.

**094003.09 ADDITIONAL SAFETY REQUIREMENTS.**

Personnel employed by the Contractor or subcontractors shall complete the BNSF course "Orientation for Contractor's Safety", and be registered prior to working on BNSF property. This orientation is available at: [www.contractororientation.com](http://www.contractororientation.com). This course shall be completed annually.

The Contractor shall require its employees to be suitably dressed to perform their duties safely. The Contractor shall require workers to wear personal protective equipment as specified by BNSF rules and regulations. Protective equipment shall include, but not be limited to the following: protective headgear meeting ANSI 289.1; eye protection meeting ANSI 287.1, however additional eye protection shall be provided to meet specific job situations such as welding, grinding, burning, etc.; and hearing protection which affords enough attenuation to give protection from noise levels that will be occurring on the job site.



Only waist length shirts with sleeves and trousers covering the entire leg shall be worn. Flare-legged trouser bottoms shall be tied to prevent catching.

Heavy equipment operating within BNSF ROW shall be equipped with audible back-up warning devices. If in the opinion of the BNSF the Contractor's equipment is unsafe for use on the BNSF's ROW, the Contractor shall remove such equipment from the BNSF ROW.

The Contractor shall promptly notify the BNSF of any U.S. OSHA reportable injuries occurring to any employee that arises during the work performed on the work site within BNSF ROW.

If at any time the Engineer or the BNSF are of the opinion that any work of the Contractor is being or is about to be done or prosecuted without due regard and precaution for safety and security, the Engineer will suspend the work until proper protective measures are adopted and provided.

#### **094003.10 SAFETY MEASURES-PROTECTION OF OPERATIONS.**

The Contractor shall perform work in a safe manner and in conformity with the following standards:

##### **A. Explosives.**

The Contractor shall not discharge any explosives on or in the vicinity of the BNSF's property without the prior consent of the BNSF, which shall not be given if, in the sole discretion of the BNSF, such discharge would be dangerous or would interfere with the BNSF's property or facilities. For the purposes hereof, the "vicinity of the BNSF's property" shall be deemed to be any place on the BNSF's property or in such close proximity to the BNSF's property that the discharge of explosives could cause injury to the BNSF's employees or other persons, or cause damage to or interference with the facilities or operations on the BNSF's property. The BNSF reserves the right to impose limitations on the transportation, handling, storage, security, and use of explosives as the BNSF, in the BNSF's sole discretion, may deem to be necessary, desirable, or appropriate. In addition to any limitations as may be specifically imposed:

1. The Contractor shall provide no less than 48 hours written notice, excluding weekends and holidays, before discharging any explosives.
2. Any explosives loaded in holes, placed or otherwise readied for discharge, they shall be discharged the same day during daylight hours, and at mutually acceptable times.
3. The Contractor, at its own expense, shall take all precautionary measures and construct all temporary shelters necessary to guard against danger of damage, destruction, or interference arising out of or connected with any blasting or any transportation, handling, storage, security, or use of explosives.

##### **B. Obstructions to View.**

Except as otherwise provided herein, the Contractor shall not cause or permit the view along the tracks of the BNSF to be obstructed, nor place any combustible material on the crossing area, nor erect any structures thereon except as allowed by the contract documents.

##### **C. Excavation.**

The Contractor shall not excavate from existing slopes nor construct new slopes which are excessive and may create hazards of slides or falling rock, impair, or endanger the clearance between existing or new slopes and the tracks of the BNSF. The Contractor shall not perform any work that may disturb the stability of any area or adversely affect the BNSF's tracks or facilities. The Contractor, at its own expense, shall install and maintain adequate shoring and cribbing for all excavation or trenching performed by them in connection with construction, maintenance, or other work. The shoring and cribbing shall be constructed and maintained with materials and in a manner approved by the BNSF to withstand all stresses likely to be encountered, including any stresses resulting from vibrations caused by the BNSF's operations in the vicinity.

**D. Drainage.**

The Contractor, at its expense, shall provide and maintain suitable facilities for draining the highway and its appurtenances, and shall not suffer or permit drainage water to flow or collect upon property of the BNSF that may adversely affect any of the BNSF's operations, equipment or any third parties with permitted facilities on the BNSF's ROW. The Contractor, at its own expense, shall provide adequate passageway for the waters of any streams, bodies of water, and drainage facilities (either natural or artificial, and including water from the BNSF's culverts and drainage facilities), so that said waters may not, because of any facilities or work of the Contractor, be impeded, obstructed, diverted or caused to back up, overflow or damage the property of the BNSF or any part thereof, or property of others. The Contractor shall not obstruct or interfere with existing ditches or drainage facilities.

**E. Clearances.**

The Contractor shall provide a minimum vertical clearance of 21.0 feet (6.40 m) above top of rails and a minimum lateral clearance of 15.0 feet (4.58 m) from centerline of track nearest temporary construction falsework.

Proposed changes to the specified minimum clearances shall be submitted to BNSF, through the Engineer, at least 30 calendar days in advance of the work. No work shall commence until the Engineer receives concurrence, in writing, from BNSF that approval is given and that arrangements have been made for flagging service, as may be necessary. The BNSF will have two weeks to respond to the request.

**F. Demolition of Existing Structures.**

The Contractor shall submit demolition plans to the Engineer for review and approval. The Engineer will forward to the BNSF as identified in the project agreement. Demolition shall not be undertaken until the Contractor has received the Engineer's written approval of such demolition plans. All such reviews and approvals or rejections will be completed by the Engineer within 45 calendar days of receipt from the Contractor.

**094003.11 WALKWAYS.**

Along the outer side of each exterior track of multiple operated track, and on each side of single operated track, an unobstructed continuous space suitable for BNSF's use in walking along trains, extending to a line not less than 12 feet (3.66 m) from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while BNSF's flagging service is provided shall be removed before the close of each work day. Walkways with railings shall be constructed by Contractor over open excavations when in close proximity of track, and railings shall not be closer than 8.5 feet (2.59 m) horizontally from center line of tangent track or 9.5 feet (2.9 m) horizontally from centerline of curved track.

**094003.12 EXCAVATIONS IN CLOSE PROXIMITY TO BNSF FACILITIES.**

The Contractor shall take special precaution in connection with excavating and shoring. Excavations for construction of footings, piers, columns, walls, or other facilities that require shoring shall comply with the following requirements: OSHA, AREMA, and BNSF "Guidelines for Temporary Shoring".

The Contractor shall contact BNSF's "Call Before Your Dig" at least 48 hours prior to commencing work at 1.800.533.2891 during normal business hours (6:30 a.m. to 8:00 p.m. C.S.T., Monday through Friday, except holidays - also a 24 hour, seven day a week number for emergency calls) to determine location of fiber optics. If a telecommunications system is buried anywhere on or near BNSF property, the Contractor shall coordinate with BNSF and the telecommunication company to arrange for relocation or other protection of the system prior to beginning any work on or near BNSF property.

**094003.13 NO INTERFERENCE WITH BNSF'S OPERATION.**

The Contractor shall not interfere with the constant, continuous, and uninterrupted use of the tracks, property, and facilities of the BNSF its lessees, licensees, or others, unless specifically permitted by this specification, or specifically authorized in advance by the BNSF. When not in use, the Contractor's

machinery and materials shall be kept at least 50 feet (15.24 m) from the centerline of BNSF's nearest active track, and there shall be no crossings of BNSF's tracks except at existing open public crossings or as provided by agreement.

**094003.14 TRAFFIC CONTROL.**

The Contractor's operations that control traffic across or around BNSF facilities shall be coordinated with and approved by the BNSF.

**094003.15 INDEMNITY.**

As used in this Article, "BNSF" includes other railroad companies using the BNSF's property at or near the location of the Contractor's work and their officers, agents, and employees; "Loss" includes loss, damage, claims, demands, actions, causes of action, penalties, costs, and expenses of whatsoever nature, including court costs and attorneys' fees, which may result from the following:

- Injury to or death of persons whomsoever (including the BNSF's officers, agents, and employees, the Contractor's officers, agents, and employees, as well as any other person); and
- Damage to or loss or destruction of property whatsoever (including Contractor property, damage to the roadbed, tracks, equipment, or other property of the BNSF, or property in its care or custody).

The Contractor shall indemnify, hold harmless, and defend to the extent allowed by law the BNSF from any loss which is due to or arises from any cause and is associated in whole or in part with the work, a breach of the contract or the failure to observe the health and safety provisions herein, or any activity or omission arising out of performance or nonperformance; except when caused by the sole negligence of the BNSF, or except to the extent caused by the gross negligence or willful misconduct of the BNSF.

**094003.16 MAINTENANCE OF BNSF FACILITIES.**

The Contractor shall maintain all ditches and drainage structures free of silt or other obstructions which may result from its operations, promptly repair eroded areas within BNSF's ROW, and repair any other damage to BNSF property, or its tenants; at no additional cost to the BNSF.

**094003.17 COMMUNICATIONS AND SIGNAL LINES.**

If required, BNSF will rearrange its communications and signal lines, grade crossing warning devices, train signals and tracks, and facilities that are in use and maintained by BNSF's forces in connection with its operation at the expense of the Contracting Authority. This work will be performed by the BNSF and it is not a part of the contract.

**094003.18 FIBER OPTIC CABLE SYSTEMS.**

Fiber optic cable systems may be buried on the BNSF's property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. The Contractor shall contact the BNSF (1.800.533.2891 (a 24-hour number)) to determine if fiber optic cable is buried anywhere on the BNSF's Crossing Area to be used by the Contractor. If it is, the Contractor shall telephone the telecommunications company involved, arrange for a cable locator, and make arrangements for relocation or other protection of the fiber optic cable prior to beginning any work on the BNSF's Crossing Area.

In addition to the liability terms elsewhere in this specification, the Contractor shall indemnify and hold harmless the BNSF against and from all cost, liability, and expense whatsoever (including, without limitation, attorney's fees, court costs, and expenses) arising out of or in any way contributed to by any act or omission of the Contractor, agents, or employees, that causes or contributes to (1) any damage to or destruction of any telecommunications system on BNSF's property, and (2) any injury to or death of any person employed by or on behalf of any telecommunications company, its contractor, agents, or employees, on BNSF's property in the crossing area. The Contractor shall not have or seek recourse against BNSF for any claim or cause of action for alleged loss of profits, revenue, loss of service, or other consequential damage to a telecommunication company using BNSF's property or a customer or user of services of the fiber optic cable on BNSF's property.

**094003.19 COOPERATION.**

The BNSF will cooperate with the Contractor so that work may be conducted in an efficient manner, and will cooperate with the Contractor in enabling use of BNSF's ROW in performing the work.

**094003.20 WAIVER OF BREACH.**

The waiver by the BNSF of the breach of any condition, covenant, or specification herein contained to be kept, observed and performed by the Contractor shall in no way impair the right of the BNSF to avail itself of any subsequent breach thereof.

**094003.21 BNSF OPERATIONS.**

The Contractor shall be advised that trains or equipment are expected on any track, at any time, in either direction. Contractor shall become familiar with the train schedules in this location and structure its bid assuming intermittent track windows in this period, as defined below.

All railroad tracks within and adjacent to the work are active and rail traffic over these tracks shall be maintained throughout the contract. Activities may include both through moves and switching moves to local customers. Railroad traffic and operations may occur continuously throughout the day and night on these tracks and shall be maintained at all times. The Contractor shall coordinate and schedule the work so that construction activities do not interfere with BNSF operations.

Work windows for this contract shall be coordinated with the Engineer. Types of work windows include Conditional Work Windows and Absolute Work Windows, as defined below:

- A. Conditional Work Window:** A period of time that BNSF operations have priority over construction activities. When construction activities may occur on and adjacent to the railroad tracks within 25 feet (7.62 m) of the nearest track, a BNSF flag person will be required. At the direction of the BNSF flag person, upon approach of a train, and when trains are present, the tracks shall be cleared (i.e., no construction equipment, materials, or personnel within 25 feet (7.62 m), or as directed by the BNSF, from the tracks). Conditional Work Windows are available for the contract.
- B. Absolute Work Window:** A period of time that construction activities are given priority over BNSF operations. During this time frame the designated tracks will be inactive for train movements and may be fouled by the Contractor. At the end of an Absolute Work Window the tracks or signals shall be completely operational for train operations and all BNSF, Public Utilities Commission, and Federal Railroad Administration requirements, codes, and regulations for operational tracks shall be met. In the situation where the operating tracks or signals have been affected, the BNSF will perform inspections of the work prior to placing back into service. BNSF flag persons will be required for construction activities requiring an Absolute Work Window.

Absolute Work Windows will not generally be granted. Any request will require a detailed explanation for BNSF review.
- C.** All work on BNSF's ROW shall be done at such times and in such manner so as not to interfere with or endanger the operations of BNSF. Whenever work may affect the operations or safety of trains, the method of doing such work shall first be submitted to the BNSF for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor that requires flagging or inspection service shall be deferred until the flagging protection required by BNSF is available at the job site.

- D. The Contractor shall make requests in writing for both Absolute and Conditional Work Windows, at least two weeks in advance of any work. The written request shall include:
- Exactly what the work entails.
  - The days and hours that work will be performed.
  - The exact location of work, and proximity to the tracks.
  - The type of window requested and the amount of time requested.
  - The designated contact person.

The Contractor shall provide written notice to the BNSF at least 48 hours before commencing work in connection with approved work windows when work will be performed within 25 feet (7.62 m) of any track center line.

- E. Should a condition arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of BNSF, the Contractor shall make such provisions. If in the judgment of the BNSF such provisions are insufficient, the BNSF may require or provide such provisions as deemed necessary. In any event, such provisions shall be at the Contractor's expense. The BNSF or Engineer will have the right to order Contractor to temporarily cease operations in the event of an emergency or, if in the opinion of the BNSF, the Contractor's operations could endanger BNSF's operations. In the event such an order is given, Contractor shall immediately notify the Engineer of the order.

#### **094003.22 RAILROAD FLAGGING.**

The Contractor shall notify the BNSF and Engineer at least 15 working days in advance of commencement of work and at least ten working days in advance of proposed performance of any work by the Contractor in which any person or equipment will be within 25 feet (7.62 m) of any track, or near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within 25 feet (7.62 m) of any track. This notice shall include the following:

- Project Number
- Contractor's name
- Date flagging is needed
- Location of flagging services to be provided
- Duration of flagging

No work shall be performed, and no person, equipment, machinery, tools, materials, vehicles, or things shall be located, operated, placed, or stored within 25 feet (7.62 m) of any of BNSF's track at anytime unless and until a railroad flagger is provided to watch for trains.

Upon receipt of such, ten working day notice, the BNSF will determine and inform the Contractor whether a railroad flagger need be present and whether the Contractor need implement any special protective or safety measures. If flagging or other special protective or safety measures are performed by the BNSF such services will be provided at a fixed daily cost, however the actual and necessary flagging expense will be billed to the Contracting Authority as a reimbursable item of railroad work. The BNSF will segregate flagger service expenses by project number.

It is to be understood that if the BNSF provides any railroad flagging or other services, the Contractor shall not be relieved of any of its responsibilities or liabilities set forth herein.

This report shall include railroad flagger days and notices of flagger service requests to begin and end flagging. To enable orderly flagger reassignment to other projects the Contractor shall notify the BNSF 5 working days prior to the termination of flagging need or five working days prior to completion of the Contractor's work, whichever is sooner. The Contractor shall inform the BNSF when work requiring flaggers is complete on each project and ready for a final billing to the Contracting Authority.

The BNSF will notify the Engineer and Contractor when non-compliance is reported by BNSF train crews or other BNSF employees. Contractor work performed without proper flagging services, when required, will be subject to a \$5,000 per day price adjustment by the Engineer.

**094003.23                      TEMPORARY CROSSINGS.**

At other than established public road crossings, the Contractor shall not move any equipment or materials across the BNSF's tracks until written permission has been obtained from the BNSF.

If the Contractor requires a temporary railroad crossing the Contractor shall arrange for the crossing installation at a mutually acceptable location at the Contractor's expense to include all BNSF costs of installation, maintenance, removal, and track restoration. The temporary crossing shall be gated and locked at all times when not required for use by the Contractor. Flagging will always be required during use of a temporary crossing. The billing, Contractor payment provisions, and final Contractor payment requirements for crossing costs except flagging are to be covered as agreed to in a separate agreement between the Contractor and BNSF. Prior notice of need for a temporary crossing needs to allow for BNSF site review, cost estimating, securing material, and work crew scheduling and will vary. The Contractor should contact the BNSF prior to making a bid when a temporary crossing is required.

**094003.24                      LIMITATION OF RIGHTS GRANTED.**

The Contract, any Temporary Easement, and Permanent Easement are all subject to the prior and continuing right and obligation of the BNSF to use and maintain its property, not inconsistent with highway purposes, including the right and power of the BNSF to construct, maintain, repair, renew, use, operate, change, modify, or relocate BNSF tracks, roadways, signal, communication, fiber optics, or other wirelines, pipelines, and other facilities upon, along, or across any or all parts of its property, all or any of which may be freely done at any time or times by the BNSF, not inconsistent with highway purposes and at BNSF's sole cost and expense.

The Contract, Temporary Construction Easement, and Permanent Easement, whether recorded or unrecorded, are subject to all outstanding rights (including those in favor of licensees and lessees of the BNSF's property, and others) and the right of the BNSF to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

**094003.25                      MECHANIC'S LIENS.**

The Contractor shall not permit or suffer any mechanic's or material supplier's liens of any kind or nature to be enforced against any property of the BNSF for any work performed. The Contractor shall indemnify and hold harmless the BNSF from and against any liens, claims, demands, costs or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished. It is understood that this specification may be recorded in the county in which the work is to be performed and such recording shall serve as public notice that no Contractor, subcontractor, or material supplier shall file any notice of a mechanic's or material supplier's lien or permit or suffer any mechanic's lien or material supplier's lien on the property of the BNSF to the extent permitted by law.

**094003.26                      METHOD OF MEASUREMENT AND BASIS OF PAYMENT.**

BNSF Insurance Provisions required by this specification above those required by Division 11 of the Standard Specifications will be measured as a lump sum. The cost of the insurance provisions above that required by Division 11 of the Standard Specifications shall be included in the lump sum bid price for BNSF Insurance Provisions.