



## Iowa Department of Transportation

### SUPPLEMENTAL SPECIFICATIONS FOR WORK ON RAILROAD RIGHT-OF-WAY (Burlington Northern and Santa Fe)

Effective Date  
October 16, 2012

**THE STANDARD SPECIFICATIONS, SERIES 2012, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SUPPLEMENTAL SPECIFICATIONS AND THEY PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.**

This specification applies to Primary projects only. It may apply to Secondary projects when specifically identified in the contract documents.

#### **12001.01 GENERAL.**

- A.** Indemnify and save harmless the Railroad, their agents and employees, from all suits, actions, or claims of any character brought because of any injuries or damage received or sustained by any person, persons, or property because of any act, omission, or neglect in safeguarding or performing the work, or through use of unacceptable materials in constructing the work. So much of the money due the said Contractor under and by virtue of the Contractor's contract as may be considered reasonable and necessary by the Contracting Authority for such purpose may be retained for the use of the State. In case no money is due, the Contractor's surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid have been settled and suitable evidence to that effect furnished to the Contracting Authority. Money due the Contractor will not be withheld when the Contractor produces satisfactory evidence of ownership of adequate public liability and property damage insurance. Notwithstanding the above, it is specifically agreed between the parties executing this contract that it is not intended by any of the provisions of any part of the contract documents to create in the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party to this contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this contract. The duties, obligations, and responsibilities of the parties to this contract with respect to third parties are to remain as imposed by law. The intention of the parties that indemnity herein provided does not extend to acts or omissions of negligence for which the Railroad is solely responsible. Indemnity does extend to all claims in which the Contractor, Subcontractor, or either's employee and the Railroad are alleged to be, or could be, in the absence of an immunity provision in the Workers' Compensation Act, either jointly or concurrently negligent for the injury or damage.
- B.** It is understood that no subcontractor is a third party beneficiary to any contract between the Contracting Authority and the prime contractor. Nothing in any special provision or any supplemental specification is to be construed as eliminating or superseding the requirements of this section.

- C. Cooperate with the Railway Company, hereinafter referred to as "Railroad" where work is over, under, on, or adjacent to Railroad property and/or right-of-way, hereafter referred to as Railroad property, during the construction work, and do not interfere with the movement of any trains on Railroad property.
- D. Railroad contact names, addresses, and/or telephone numbers, as well as train counts will be located on the Railroad Data Sheet in the contract documents.
- E. The Contractor's right to enter Railroad's property is subject to the absolute right of Railroad to cause the Contractor's work on Railroad's property to cease if, in the opinion of Railroad, Contractor's activities create a hazard to Railroad's property, employees, and/or operations.
- F. Furnish the Railroad five sets of working drawings showing details of construction affecting railroad tracks and property for the following:
  - 1. Falsework above tracks, or
  - 2. Excavations located the greater of (both measured perpendicular to center line of track):
    - a. Within 25 feet (7.7 m) of the nearest track, or
    - b. Intersecting a slope from the plane of the top of rail on a 1 1/2 horizontal to 1 vertical slope beginning at 11 feet (3.4 m) from centerline of the nearest track.

In the drawings include: 1) the proposed method of installation and removal of falsework, shoring, or cribbing, not included in the contract plans; and 2) two sets of structural calculations of falsework, shoring, or cribbing.

Ensure all calculations take into consideration railroad surcharge loading and are designed to meet American Railway Engineering and Maintenance-of-Way Association (previously, known as American Railway Engineering Association) Coopers E-80 live loading standard. Ensure all drawings and calculations are stamped by a Professional Engineer licensed in the State of Iowa.

Do not begin work until notified by the Railroad that plans have been approved.

Use lifting devices, such as cranes and/or winches, to place or to remove falsework over Railroad's tracks.

In no case is the Contractor relieved of responsibility for results obtained by the implementation of said approved plans.

- G. It is expected that the Railroad will cooperate with the Contractor such that the work may be handled and performed in an efficient manner.

#### **12001.02 AGREEMENT.**

Ensure that, at a minimum, Project Supervisors have attended a Safety Orientation conducted by the Railroad, or its Representative, and that each employee, subcontractor, agent, or invitee has received the same Safety Orientation (by the Contractor's Project Supervisor or by the Railroad) before work is performed on the Railroad property. Provide Railroad a minimum of 30 calendar days advance notice for scheduling the Safety Orientation.

#### **12001.03 RAILROAD REQUIREMENTS.**

- A. Comply with the rules and regulations of Railroad and the instructions of the Railroad's representatives in relation to the proper manner of protecting the tracks and property of Railroad and the traffic moving on such tracks, as well as the wires, signals, and other property of Railroad, its tenants or licensees, at and in the vicinity of the work area during construction.

- B. Perform work in such manner and at such times that do not endanger, delay or interfere with the safe and timely operation of the tracks and property of Railroad and the traffic moving on such tracks, as well as the wires, signals, and other property of Railroad, its tenants, or licensees.
- C. Take protective measures as are necessary to keep railroad facilities, including track ballast, free of sand, debris, and other foreign objects and materials resulting from the construction operations. The Railroad will repair all damage to railroad facilities resulting from Contractor's operations (cost borne by the Contractor).
- D. Notify the Railroad's Division Superintendent and provide blasting plans to the Railroad for review 7 calendar days prior to conducting blasting operations adjacent to or on Railroad's property.
- E. Abide by the following clearances during the course of construction:
  - 25.0 feet (7.7 m) horizontally from centerline of nearest track.
  - 22.5 feet (6.9 m) vertically above top of rail (Temporary Falsework Clearance may be reduced to 21.5 feet (6.6 m) Subject to Railroad and Public Utilities Commission approval).
  - 27.0 feet (8.2 m) vertically above top of rail for electric wires carrying less than 750 volts.
  - 28.0 feet (8.5 m) vertically above top of rail for electric wires carrying 750 volts to 15,000 volts.
  - 30.0 feet (9.1 m) vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts.
  - 34.0 feet (10.3 m) vertically above top of rail for electric wires carrying more than 20,000 volts.
- F. Submit infringement within clearances due to operations to the Railroad and to the Engineer. Do not undertake such infringements until approved in writing by the Railroad, and until the Engineer has obtained necessary authorization from the State Regulatory Authority for the infringement. No extra compensation will be allowed in the event the Contractor's work is delayed pending Railroad approval or the State Regulatory Authority's approval, or both.
- G. In the case of impaired vertical clearance above top of rail, Railroad has the option of installing tell-tales or other protective devices Railroad deems necessary for protection of Railroad employees or rail traffic (cost borne by the Contractor).
- H. The Engineer will submit construction details not included in the contract plans, but affecting the Railroad's tracks and property, to the Railroad before the work is undertaken. Do not undertake this work until approved by the Railroad.
- I. At other than public road crossings, do not move any equipment or materials across Railroad's tracks until permission has been obtained from the Railroad. Obtain a temporary private crossing agreement from the Railroad prior to moving equipment or materials across the Railroad's tracks. Gate and lock the temporary private crossing at all times when not required for use. The temporary private crossing is at the Contractor's expense.
- J. Upon completion of the work covered by this contract, promptly remove from the premises of the Railroad all tools, implements, and other materials, whether brought upon the premises by the Contractor or subcontractors, or employees or agents of the Contractor or subcontractors. Leave the premises in a condition acceptable to the Railroad's representative.

#### **12001.04 PROTECTION OF RAILROAD FACILITIES AND RAILROAD FLAGGER SERVICES.**

- A. Provide a minimum of 5 working days notice to the appropriate Railroad's Roadmaster in advance of when flagging services will be required.
- B. Railroad flagger and protective services and devices will be required and furnished when:

- Contractor's work activities are located within 25 feet (7.7 m) measured vertically over or under the centerline of the track, or within 25 feet (7.7 m) measured horizontally from center line of the nearest track.
- Cranes or similar equipment are positioned outside of 25 feet (7.7 m) measured horizontally from center line of the nearest track and could, in the event of tip over or other catastrophic occurrence, foul the track.
- In the opinion of the Railroad's Representative it is necessary to safeguard Railroad's employees, trains, engines, facilities, and property.
- Excavation is performed below the bottom of tie elevation, if, in the opinion of Railroad's representative, track or other Railroad facilities may be subject to movement or settlement.
- Work in any way interferes with the safe operation of trains at timetable speeds.
- Any hazard is presented to Railroad track, communications, signal, electrical, or other facilities either due to persons, material, equipment, or blasting in the vicinity.

Obtain special permission from the Railroad prior to moving heavy or cumbersome objects or equipment which might result in making the track impassable.

- C. Flagging services will be performed by qualified railroad flaggers. The cost per day for one Flagger is \$600.00, which includes Vacation Allowance, Paid Holidays, Railroad and Unemployment Insurance, Public Liability and Property Damage Insurance, Health and Welfare Benefits, transportation, meals, lodging, and supervision, for an 8 hour basic day, with time and one-half or double time for overtime, rest days, and holidays. These rates are subject to any increases which may result from Railroad Employees-Railroad Management negotiations or which may be authorized by Federal authorities. The Contractor will be billed on actual costs in effect at the time work is performed.
1. Flagging crew generally consists of one employee. However, additional personnel may be required to protect Railroad operations and property, if deemed necessary by the Railroad's Representative.
  2. Each time a flagger is called, the minimum period for billing is the 8 hour basic day.
  3. The cost of flagger services provided by the Railroad, as deemed necessary by the Railroad's representative, is borne by the Contractor.

#### **12001.05 CONTRACTOR GENERAL SAFETY REQUIREMENTS.**

- A. Safety is of the utmost importance in performing work on the Railroad's property. The Railroad does not in any manner assume the control or responsibility of the Contractor to provide safe working conditions for the Contractor or subcontractors in requiring the Contractor to follow the Railroad's General Safety Requirements.
- B. Work in the proximity of a railroad track is potentially dangerous. The Contractor, subcontractors, and invitees are governed by the following safety rules and general safety requirements while on Railroad property. The Contractor is responsible for enforcement of these safety rules and requirements. The Railroad has the right to bar the Contractor, subcontractors, and invitees from working on Railroad property if the Railroad deems such persons are acting in an unsafe manner.
- C. Before beginning any task on Railroad property, conduct a complete job safety briefing with all individuals involved with the task, and again if the task changes. If the task is within 25 feet (7.7 m) of any track, include the Railroad's flagger and the procedures to be used to protect employees, subcontractors, agents, or invitees from moving any equipment adjacent to or across any railroad tracks.
- D. Prior to the start of all projects, ensure all employees of the Contractor, subcontractors, agents, and invitees receive Safety Orientation from the Contractor's Safety Officer or a qualified Railroad

representative. The Contractor's Safety Officer is to review the safety guidelines contained below to familiarize their employees with safety issues that exist when working in a railroad environment. This should be reviewed at least weekly, and with any new employee working on Railroad property. The Contractor's Supervisor and/or Safety Officer is responsible for instructing employees regarding the Railroad's Safety guidelines and ensuring compliance with these guidelines.

- E.** Safety rules cannot be all-inclusive. Ensure workers refrain from unsafe and improper practices, including the violation or disregard, or both, of written rules and regulations and rules of common sense.
1. The use of alcoholic beverages, intoxicants, narcotics, marijuana, and other controlled substances by employees subject to duty, or their possession or use while on duty or on Railroad's property is prohibited. Workers are not to report for duty under the influence of any alcoholic beverage, intoxicant, narcotic, marijuana, or other controlled substance, or medication, including those prescribed by a doctor, that may in any way adversely affect their alertness, coordination, reaction, response, or safety.
  2. Immediately report damage to Railroad property, or hazards noticed on passing trains, to the Railroad's representative. Vehicle or machines which may come in contact with a track, signal equipment, or structure (bridge) could result in a train derailment. Report these by the quickest means possible to the Railroad representative and the Railroad's Network Operations Center (800.832.5452). Local emergency numbers are to be obtained from the Railroad representative prior to the start of any work. Post these numbers at the job site.
  3. All persons are prohibited from having firearms or other deadly weapons, including knives with a blade in excess of 3 inches (75 mm) in their possession while working on Railroads property, except those authorized to have them in the performance of their duties or those given special permission.
  4. When working on the Railroad's property, wear safety glasses with side shields, hard hats with high visibility orange cover, and above-the-ankle, lace-up, hardened toe safety boots with a defined heel, all approved by OSHA. High visibility retroreflective orange vests are required in certain locations as specified by the Railroad's representative. Particular attention to footing and the use of proper footwear is essential when working in snow or other slippery conditions. Wear hearing protection, fall protection, and respirators as required by State and Federal regulations.
  5. Do not work nearer than 25 feet (7.7 m) to the centerline of any track without proper flag/work protection provided by the Railroad, unless the track is protected by track bulletin and work has been authorized by the Railroad. If flag/work protection is provided, ensure every employee knows:
    - Who the Railroad flagger is, and how to contact the flagger,
    - Limits of the flag/work protection,
    - The method of communication to stop and resume work, and
    - Entry into flag/work limits when designated.

Workers or equipment entering flag/work limits that were not previously job briefed must notify the flagger immediately, and be given a job briefing if working at less than 25 feet (7.7 m) from center line of track.
  6. Do not pile or store any materials or equipment closer than 25 feet (7.7 m) to the centerline of the nearest Railroad track.
  7. Do not leave machines or vehicles unattended with the engine running. Park machines or equipment in gear with brakes set. If equipped with blade, pan, or bucket, lower them to the

ground. Ensure all machinery and equipment left unattended on the Railroad property is left inoperable and secured against movement.

8. Do not store or temporarily leave Machinery or equipment near a highway/rail at-grade crossing in a manner to interfere with the sight distances of motorists approaching the crossing. Prior to beginning work, establish a storage area with concurrence of the Railroad's representative.
9. Do not discharge contaminants (this includes oils, diesel fuel, gasoline, and so forth) on Railroad property. Should any discharge occur, report it by the quickest means possible to the Railroad's representative.
10. Do not create and leave any conditions at the work site that would interfere with water drainage.
11. Provide safeguards and safety signs. Keep them in place and in good condition.
12. Before excavating, determine if there are any underground pipe lines, electric wires, or cables, including fiber optic cable systems that either cross or run parallel with the track which are located within the project's work area. Excavating on right-of-way could result in damage to buried cables resulting in delay to railroad traffic, including disruption of service to users resulting in business interruptions involving loss of revenue and profits. Before any excavation commences, contact the Railroad's Signal Supervisor and Roadmaster. Until verified with the company having ownership of line(s), consider all underground and overhead wires to be high voltage and dangerous. Notify all other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.
13. Cease all work and immediately notify the Railroad before continuing excavation in the area if obstructions are encountered that do not appear on drawings. If the obstruction is a utility, and the owner of the utility can be identified, then the owner should also be notified immediately. If there is any doubt about the location of underground cables or lines of any kind, do not perform work until the exact location has been determined. There will be no exceptions to these instructions.
14. Shore all excavations, regardless of depth where there is any danger to tracks, structures, or employees.
15. Cover, guard, and/or protect all excavations, holes, or trenches on the Railroad's property when not being worked on. When leaving work site areas at night and over weekends, secure the areas and leave in a condition that will ensure railroad employees who might be working in the area are protected from all hazards. Backfill all excavations as soon as possible.
16. Unless informed to the contrary by proper authority, consider all power line wires to be dangerous and of high voltage. Comply with the following:
  - Lines rated 50 KV or below: 10 foot (3.05 m) minimum clearance between the lines and any part of the equipment or load.
  - Lines rated over 50 KV: minimum clearance between the line and any part of equipment or load of 10 feet plus 0.4 inches (3.05 m plus 10 mm) for each 1 KV over 50 KV.
  - Capacity of the line is not known: maintain 20 feet (6.1 m) minimum clearance.

Designate a person to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means.

17. Notify the Railroad's representative when employees are required to work on the Railroad property after normal working hours or on weekends. Ensure a minimum of two employees are present at all times.
18. In all cases of doubt or uncertainty, take the safest course of action.

**12001.06 PERSONAL INJURY REPORTING.**

The Railroad is required to report certain injuries as a part of compliance with Federal reporting requirements. Immediately report to the Railroad's representative (by phone, mail if unable to contact in person) all personal injuries sustained by an employee, subcontractor, or invitees while on the Railroad's property. The Injury Report Form contained herein is to be completed and sent by Fax to the Railroad (817.352.7595), no later than the close of shift on the date of the injury.

**12001.07 INSURANCE FORM AND SUBMITTAL.**

- A. The Contractor is to carry regular contractor's public liability and property insurance as specified in the Federal-Aid Highway Program Manual providing for limits of not less than \$500,000 for all damages arising out of bodily injury to or death of one person, and submit to that limit for each person, a total limit of not less than \$1,000,000 for all damages arising out of bodily injury to or death of two or more persons in any one accident, and providing for a limit of not less than \$500,000 for all damages to or destruction of property in any one accident and subject to that limit a total (or aggregate) limit of not less than \$1,000,000 for all damages to or destruction of property during the policy. A certified copy of the policy providing the Contractor public liability and property damage insurance, executed by a corporation qualified to write the same in the State of Iowa, in a form and substance satisfactory to the Railroad is to be delivered to and approved by the Railroad prior to entry upon or use of the permanent easement property. The Railroad's receipt of any policy or policies of insurance as provided in this section does not serve as a waiver by the Railroad of the insurance requirements as set forth in this section.
- B. Write the Railroads Protective Public Liability and Property Damage Liability Insurance on ISO Form No. CG00351093 and include the Limited Seepage and Pollution Liability Endorsement. The named insured is Burlington Northern and Santa Fe Railway Company.
- C. Send the insurance policy and a copy of the Certificate of Liability to Manager of Insurance, BNSF Railway Company, 4501 Kansas Avenue, Kansas City, KS 66106; fax number 913.551.2792, voice number 913.551.2574. In addition, send a copy of these documents to the Iowa DOT, Office of Accounting, 800 Lincoln Way, Ames, IA 50010.

**NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION**

INFORMATION REQUIRED TO BE COLLECTED PURSUANT TO FEDERAL REGULATION. IT SHOULD BE USED FOR COMPLIANCE WITH FEDERAL REGULATIONS ONLY AND IS NOT INTENDED TO PRESUME ACCEPTANCE OF RESPONSIBILITY OR LIABILITY.

1. Accident City/St \_\_\_\_\_ 2. Date: \_\_\_\_\_ Time: \_\_\_\_\_  
County: \_\_\_\_\_ 3. Temperature: \_\_\_\_\_ 4. Weather: \_\_\_\_\_  
(if non-BNSF location)

5. Social Security # \_\_\_\_\_

6. Name (last, first, mi) \_\_\_\_\_

7. Address: Street: \_\_\_\_\_ City: \_\_\_\_\_ St. \_\_\_\_\_ Zip: \_\_\_\_\_

8. Date of Birth: \_\_\_\_\_ and/or Age \_\_\_\_\_ Gender: \_\_\_\_\_

9. (a) Injury: \_\_\_\_\_ (b) Body Part \_\_\_\_\_  
(i.e. (a) Laceration (b) Hand) (if available)

10. Description of accident (To include location, action, result, etc.): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Treatment:
- First Aid Only
  - Required Medical Treatment
  - Other Medical Treatment

12. Dr. Name: \_\_\_\_\_ 13. Date: \_\_\_\_\_

14. Dr. Address:  
Street: \_\_\_\_\_ City: \_\_\_\_\_ St: \_\_\_\_\_ Zip: \_\_\_\_\_

15. Hospital Name: \_\_\_\_\_

16. Hospital Address:  
Street: \_\_\_\_\_ City: \_\_\_\_\_ St: \_\_\_\_\_ Zip: \_\_\_\_\_

17. Diagnosis: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_