



**SPECIAL PROVISIONS
FOR
WORK ON RAILROAD RIGHT-OF-WAY (BNSF RAILWAY)**

**Pottawattamie County
IM-NHS-029-3(116)48--03-78
IM-NHS-029-3(117)48--03-78
IM-NHS-080-1(378)4--03-78
IM-NHS-080-1(379)4--03-78
IM-NHS-080-1(380)4--03-78**

**Effective Date
September 19, 2017**

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

1.01 General

1.01.01 The Contractor shall cooperate with the BNSF 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 work which shall not interfere with the movement of trains on Railroad property.

1.01.02 The Contractor's right to enter Railroad's property is subject to the absolute right of the 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.

1.01.03 The Contractor shall notify the Engineer and also the Railroad's Manager Public Projects, Calvin Nutt, BNSF Railway Company, 80-44th Avenue NE, Minneapolis, MN 55421, telephone number: 763.782.3495; at least 10 calendar days before commencing work over, under, on, or adjacent to Railroad property. Contractor's notification to Railroad shall refer to Railroad's file numbers.

1.01.04 ~~Falswork above tracks or excavations located, whichever is greater, within 25 feet of the nearest track or intersecting a slope from the plane of the top of rail on a 1.5 horizontal to 1 vertical slope beginning 11 feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor shall furnish the Railroad five sets of working drawings showing details of construction affecting railroad tracks and property. The working drawings shall include the proposed method of installation and removal of falswork, shoring, or cribbing, not included in the contract plans and two sets of structural calculations of any, falswork, shoring, or cribbing. All calculations~~

shall take into consideration railroad surcharge loading and shall be designed to meet American Railway Engineering and Maintenance-of-Way Association Coopers E-80 live loading standard. All drawings and calculations shall be stamped by a registered Professional Engineer licensed in the state of Iowa. The Contractor shall not begin work until notified by the Railroad that plans have been approved. The Contractor shall use lifting devices such as, cranes and/or winches to place or to remove falsework over Railroad's tracks. The Contractor will not be relieved of responsibility for results obtained by the implementation of said approved plans.

1.01.04 Construction and As-Built Submittals.

1.01.04a Submittals are required for construction materials and procedures as outlined below. Submittals shall include review comments from the Engineer. Design submittals shall be stamped and signed by a Professional Engineer registered in the State of Iowa.

1.01.04b The tables below provide BNSF's minimum submittal requirements for construction items noted. Submittal requirements are in addition to those specified elsewhere in the contract documents (see BNSF Review Comment Sheets & Use of Cranes & Lifting of Materials Submittal Schedule included at the end of this special provision). Minimum review times indicated below represent BNSF's requirements only. Contractor shall allow additional time for BNSF's review time as stated elsewhere in the contract documents.

1.01.04c Submittals will be made by the Engineer to the BNSF. Items in Table SP-150322a-1 shall be submitted, as applicable.

Table SP-150322a-1: Review Sets and Minimum Time for Review

Description	Sets Required	BNSF's Minimum Review Time
Shoring design and details	2	4 weeks
Falsework design and details	2	4 weeks
Drainage design provisions	2	4 weeks
Erection diagrams and sequence	2	4 weeks
Demolition diagram and sequence	2	4 weeks

1.01.04d 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:

- Electronic files of structure design drawings with as-constructed modifications shown in Auto-Cad Civil 3D or Acrobat .PDF format.
- Hard copies of structure design drawings with as-constructed modifications shown.

1.01.05 The Railroad will cooperate with the Contractor such that the work may be handled and performed in an efficient manner.

1.02 Railroad Requirements

1.02.01 The Contractor shall 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.

1.02.02 The Contractor shall perform work in such manner and at such times that shall 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.

1.02.03 The Contractor shall 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. Any damage to Railroad facilities resulting from Contractor's operations will be repaired or replaced by Railroad and the cost of such repairs or replacement shall be paid by the Contractor.

1.02.04 The Contractor shall notify the Railroad's Division Superintendent at Lincoln, NE, (telephone number: 402.458.7500), and provide blasting plans to the Railroad for review a minimum of 7 calendar days prior to conducting blasting operations adjacent to or on Railroad's property.

1.02.05 The Contractor shall abide by the following clearances during the course of construction:

- 25.0 feet horizontally from centerline of nearest track,
- 22.5 feet vertically above top of rail (Temporary Falsework Clearance may be reduced to 21.5 feet subject to Railroad and Public Utilities Commission approval),
- 27.0 feet vertically above top of rail for electric wires carrying less than 750 V,
- 28.0 feet vertically above top of rail for electric wires carrying 750 V to 15 kV,
- 30.0 feet vertically above top of rail for electric wires carrying 15 kV to 20 kV, and
- 34.0 feet vertically above top of rail for electric wires carrying more than 20 kV.

1.02.06 Any desired infringement within clearances due to the Contractor's operations shall be submitted to the Railroad and Engineer and shall not be undertaken until approved in writing by the Railroad and Engineer. No extra compensation will be allowed in the event the Contractor's work is delayed pending approval.

1.02.07 In the case of impaired vertical clearance above top of rail, Railroad will have the option of installing tell-tales or other protective devices Railroad deems necessary for protection of Railroad employees or rail traffic. The cost of tell-tales or protective devices shall be borne by the Contractor.

1.02.08 The details of construction affecting the Railroad's tracks and property not included in the contract plans shall be submitted to the Railroad by the Engineer for approval before work is undertaken and this work shall not be undertaken until approved by the Railroad.

1.02.09 At other than public road crossings, the Contractor shall not move equipment or materials across Railroad's tracks until permission has been obtained from Railroad. Contractor shall obtain a temporary private crossing agreement from Railroad prior to moving equipment or materials across Railroad's tracks. Temporary private crossing shall be gated and locked at all times when not required for use by the Contractor. Temporary private crossing for use of the Contractor shall be at the expense of the Contractor.

1.02.10 The Contractor, upon completion of the work, shall promptly remove from the premises of Railroad all of Contractor's tools, implements, and other materials, whether brought upon said premises by said Contractor or any subcontractor, employee, or agent of Contractor or of any subcontractor, and shall cause said premises to be left in a condition acceptable to the Railroad's representative.

1.03 Protection of Railroad Facilities and Railroad Flagger Services

The Railroad shall have the right to provide, at the expense of the Contractor, a flagman or flagmen or other protective services at any time during construction of that portion of the project on or near Railroad right-of-way when, in the opinion of the Railroad, it is necessary as a matter of protection and safety to track and train operations.

1.03.01 The Contractor shall give a minimum of 30 working days notice to the Railroad's Roadmaster, Jerrod Chapple (telephone number: 402.422.5249), in advance of when flagging services will be required.

1.03.02 Railroad flagger and protective services and devices will be required and furnished when Contractor's work activities are located over, under, or within 25 feet measured horizontally from center line of the nearest track, and when cranes or similar equipment are positioned outside of 25 feet measured horizontally from the track center line that could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto, for the following conditions:

1.03.02a When in the opinion of the Railroad's Representative it is necessary to safeguard Railroad's employees, trains, engines, facilities, and property.

1.03.02b When any 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.

1.03.02c When work, in any way interferes with the safe operation of trains at timetable speeds.

1.03.02d When any hazard is presented to Railroad track, communications, signal, electrical, or other facilities either due to persons, material, equipment, or blasting in the vicinity.

1.03.02e Special permission shall be requested from the Railroad before moving heavy or cumbersome objects or equipment which might result in making the track impassable.

1.03.03 Flagging services will be performed by qualified railroad flaggers. The cost per day for one flagger is approximately \$800.00, 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 eight-hour basic day, with time and one-half or double time for overtime, rest days, and holidays. These rates are subject to 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 the work is performed.

1.03.03a Flagging crew generally consists of one employee. Additional personnel may be required to protect Railroad operations and property, if deemed necessary by the Railroad's Representative.

1.03.03b Each time a flagger is called the minimum period for billing will be the eight-hour basic day.

1.03.03c The cost of flagger services provided by the Railroad, as deemed necessary by the Railroad's representative, shall be borne by the Contractor.

1.03.03c1 Reimbursement to the Railroad.

Reimbursement to the Railroad, by the Contractor, shall cover the full eight hour day during which any flagger is furnished, unless they can be assigned to other Railroad work during a portion of such day. Reimbursement will not be required for the portion of the day during which the flagger is engaged in other Railroad work. Reimbursement will also be required for any day not actually worked by said flagger following assignment to work on the project for which the Railroad is required to pay the flagger and which could not reasonably be avoided by the Railroad by assignment of such flagger to other work, even though the Contractor may not be working during such time.

In the event the Contractor fails to reimburse the Railroad, the Contracting Authority will reimburse the Railroad within 30 calendar days of the Contractor defaulting on the payment (default is defined as non-payment within 30 calendar days of final billing by the Railroad to the Contractor). Failure of the Contractor to reimburse the Railroad may result in a reduction or suspension of the Contractors bidding qualifications according to Article 1102.03 of the Standard Specifications.

1.03.03c2 Documentation and Reimbursement to the Contractor.

The Contractor shall initially pay invoices for all flagging costs in conjunction with railroad flaggers when any of the conditions identified in this Special Provision, warrant a flagger. The Contracting Authority will reimburse the Contractor for any daily cost that exceeds \$800 per day for the cost of flagger services provided by the Railroad. The Contracting Authority will reimburse the Contractor 100% of the total cost of flagger services, as deemed necessary by the Railroad, that does not meet any of the conditions identified in this Special Provision, unless the flagger's presence on the project was a result of the Contractor's communication, or lack of communication, with the Railroad. The Contracting Authority will reimburse the Contractor following receipt of documentation verifying the Railroad invoices have been paid.

For each day that railroad flaggers have been provided, the Contractor shall document daily the conditions on the project site that warrant the flagger. The Contractor shall submit the daily records to the Engineer each week. The Engineer will review the daily logs and promptly notify the Contractor if any information in the daily log is believed to be incorrect.

Contractor shall forward copies of the invoices received from the Railroad for flaggers and a summary of the flagging costs incurred that exceed the Contractors' requirements described in this Special Provision, to the Engineer with a request for payment for the additional railroad flagger costs. The Engineer will review the Contractor's daily logs against the Railroad's invoice and make payment for the eligible costs in accordance with Article 1109.03 of the Standard Specifications.

Contractor shall be responsible to Railroad for all flagging costs. Flagging costs for subcontracted work shall be the responsibility of the Contractor. Reimbursement from subcontractors to the Contractor shall be the sole responsibility of the Contractor.

Contractor shall forward, to the Engineer, copies of payments made to Railroad for flagging costs.

1.03.03d Final payment to the Contractor will not be made by the Engineer until all flagging or other protective services and/or temporary grade crossing expenses have been billed and paid to the Railroad. Contractor shall provide to the Engineer monthly copies of invoices and evidence of payment to the Railroad.

1.03.04 Railroad will notify the Engineer and Contractor when non-compliance is reported by Railroad train crews or other Railroad employees. Contractor work performed without proper flagging services, when such flagging is required, will be subject to a \$5,000.00 per day price adjustment to Contractor, and may result in the removal of Contractor by Railroad or Engineer from the project.

1.04 Contractor General Safety Requirements

1.04.01 Safety is of the utmost importance in performing work on the Railroad's property. The Railroad does not 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.

1.04.02 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. If at any time the Engineer or Railroad are of the opinion that 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 may suspend work until proper protective measures are adopted and provided.

1.04.03 Before beginning any task on Railroad property, a complete job safety briefing shall be conducted with all individuals involved with the task, and again if the task changes. If the task is within 25 feet of any track, the job briefing shall include the Railroad's flagger and include the procedures the Contractor will use to protect its employees, subcontractors, agents, or invitees from moving any equipment adjacent to or across any railroad tracks.

1.04.04 The Contractor shall ensure that prior to any employee entering Railroad property they have completed the safety orientation found on the following website: www.contractororientation.com. This course shall be completed annually for contracts exceeding one year.

1.04.04a Employees of the Contractor, subcontractors, agents, and invitees shall receive Safety Orientation from the Contractor's Safety Officer or a qualified Railroad representative prior to the start of any work. The Contractor's Safety Officer shall 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. It is the responsibility of the Contractor's Supervisor and/or Safety Officer to instruct their employees on the Railroad's Safety guidelines and to require compliance with these guidelines.

1.04.05 Safety rules cannot be all-inclusive. Workers shall refrain from unsafe and improper practices, including the violation and/or disregard of written rules and regulations, and rules of common sense.

1.04.05a 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 shall not 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.

1.04.05b Damage to Railroad property, or if a hazard is noticed on passing trains, shall be reported immediately to the Railroad's representative. A vehicle or machine which may come in contact with a track, signal equipment, or structure (bridge) could result in a train derailment and shall be reported by the quickest means possible to the Railroad representative and to the Railroad's Network Operations Center at (telephone number: 800.832.5452). Local emergency numbers shall be obtained from the Railroad representative prior to the start of any work and shall be posted at the job site.

1.04.05c All persons are prohibited from having firearms or other deadly weapons, including knives with a blade in excess of three inches, in their possession while working on Railroad's property, except those authorized to have them in the performance of their duties or those given special permission.

1.04.05d When working on Railroad's property, the Contractor's employees shall wear eye protection meeting ANSI 287.1, however additional eye protection shall be provided to meet specific job situations such as welding, grinding, burning, etc.; hearing protection which affords enough attenuation to give protection from noise levels that will be occurring on the job site; protective headgear meeting ANSI 289.1; and above-the-ankle, lace-up, hardened toe safety boots with a defined heel, all approved by OSHA. 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.

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. Hearing protection, fall protection, and respirators shall be worn as required by State and Federal regulations.

1.04.05e Workers shall not work nearer than 25 feet 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, every employee shall know: (1) who the Railroad flagger is, and how to contact the flagger, (2) limits of the flag/work protection, (3) the method of communication to stop and resume work, and (4) entry into flag/work limits when designated. Workers or equipment entering flag/work limits that were not previously job briefed shall notify the flagger immediately, and be given a job briefing if working at less than 25 feet from center line of track.

1.04.05f Contractor shall not pile or store any materials, or equipment closer than 25 feet to the centerline of the nearest Railroad track.

1.04.05g Machines or vehicles shall not be left unattended with the engine running. Parked machines or equipment shall be in gear with brakes set and if equipped with blade, pan, or bucket, they shall be lowered to the ground. All machinery and equipment left unattended on Railroad right-of-way shall be left inoperable and secured against movement. Heavy equipment operating within Railroad right-of-way shall be equipped with audible back-up warning devices. If in the opinion of the Railroad the Contractor's equipment is unsafe for use on Railroad right-of-way, Contractor shall remove such equipment from Railroad right-of-way.

1.04.05h Machinery or equipment shall not be stored or left temporarily 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, the Contractor shall establish a storage area with concurrence of the Railroad's representative.

1.04.05i Contaminates shall not be discharged on Railroad property. Should any discharge occur, the Contractor shall report by the quickest means possible to the Railroad's representative. (This includes oils, diesel fuel, gasoline, etc.).

1.04.05j Workers shall not create and leave any conditions at the work site that would interfere with water drainage.

1.04.05k Safeguards and safety signs shall be kept in place and in good condition. It is the responsibility of the Contractor to provide same.

1.04.05l Before excavating, it shall be ascertained by the Contractor 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, the Contractor shall provide written notification to the Railroad's Signal Supervisor and Roadmaster at least 10 working days. Underground and overhead wires shall be considered high voltage and dangerous until verified with the company having ownership of the line. The Contractor shall notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.

1.04.05m The Contractor shall cease work and the Railroad shall be notified immediately 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, no work shall be performed until the exact location has been determined. There will be no exceptions to these instructions.

1.04.05n Excavations, regardless of depth shall be shored where there is any danger to tracks, structures, or employees.

1.04.05o Excavations, holes, or trenches on the Railroad's property shall be covered, guarded, and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas shall be secured and left in a condition that will ensure that railroad employees who might be working in the area are protected from all hazards. All excavations shall be back filled as soon as possible.

1.04.05p All power line wires shall be considered dangerous and of high voltage unless informed to the contrary by proper authority. For lines rated 50 kV or below, minimum clearance between the lines and any part of the equipment or load shall be 10 feet. For lines rated over 50 kV, minimum clearance between the line and any part of equipment or load shall be 10 feet plus 0.4 inches for each 1 kV over 50 kV. If the capacity of the line is not known, minimum clearance of 20 feet shall be maintained. The Contractor shall 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.

1.04.05q When Contractor employees are required to work on the Railroad property after normal working hours or on weekends, the Railroad's representative shall be notified. A minimum of two employees shall be present at all times.

1.04.05r In all cases of doubt or uncertainty, the safest course shall be taken.

1.05 Personal Injury Reporting

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

1.06 Indemnification.

As used in this section, Railroad includes other railroad companies using the Railroad'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 Railroad'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 Railroad, or property in its care or custody)

1.06.01 To the fullest extent permitted by law, the Contractor shall release, indemnify, defend, and hold harmless the Railroad and its affiliated companies, partners, successors, assigns, legal representatives, officers, directors, shareholders, employees and agents (collectively, "indemnitees") for, from and against any and all claims, liabilities, fines, penalties, costs, damages, losses, liens, causes of action, suits, demands, judgments and expenses (including, without limitation, court costs, attorneys' fees and costs of investigation, removal and remediation and governmental oversight costs) environmental or otherwise (collectively, "liabilities") of any nature, kind or description of any person or entity directly or indirectly arising out of, resulting from or related to (in whole or in part):

- (a) this specification, including, without limitation, its environmental provisions,
- (b) any rights or interests granted pursuant to this specification,

- (c) occupation and use of the premises by the Contractors, or anyone directly or indirectly employed by them, or anyone they control or exercise control over,
- (d) the environmental condition and status of the premises caused by or contributed to by the Contractor, or
- (e) any act or omission of the Contractor.

Even if such liabilities arise from or are attributed to, in whole or in part, any negligence of any indemnitee. The only liabilities with respect to which the Contractor's obligation to indemnify the indemnitees does not apply are liabilities to the extent proximately caused by the gross negligence, or willful misconduct of an indemnitee.

1.06.02 The Contractor shall now and forever waive any and all claims, regardless whether based on strict liability, negligence or otherwise, that the Railroad is an "owner", "operator", "arranger", or "transporter" with respect to the improvements for the purposes of CERCLA or other environmental laws.

1.06.03 The Contractor shall to the fullest extent permitted by law indemnify and hold harmless the indemnitees against and assume the defense of any liabilities asserted against or suffered by any indemnitee under or related to the Federal Employers' Liability Act (FELA) whenever employees of grantee or any of its agents, invitees, contractors claim or allege that they are employees of any indemnitee or otherwise. This indemnity shall also extend, on the same basis, to FELA claims based on actual or alleged violations of any federal, state or local laws or regulations, including but not limited to the safety appliance act, the boiler inspection act, the occupational health and safety act, the resource conservation and recovery act, and any similar state or federal statute.

1.07 Insurance Form and Submittal

Before the contract is awarded, Contractor shall submit to the Department a certificate of insurance evidencing the coverage. The certificate shall identify the insurance company firm name and address, Contractor firm name, policy period, type of policy, limits of coverage, and scope of work covered (including project number). Policies shall provide no less than 30 calendar days prior written notice to Contracting Authority and Railroad of cancellation or material change in policies. Following award of the Contract, the Contractor shall submit a certificate of insurance evidencing the foregoing coverage to the Railroad and Contracting Authority (if other than the Department), and a certified, true, and complete copy of policy or policies to the Contracting Authority and Railroad. Upon request from either the Contracting Authority or Railroad, a certified duplicate original of any required certificate or policy shall be furnished at no cost to the Contracting Authority or Railroad. The Contractor shall not begin work upon or over Railroad's ROW until the Railroad 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 Railroad's property and cleans the premises in a manner reasonably satisfactory to Railroad.

1.07.01 The Contractor shall procure and maintain, from beginning to end of construction work on or about Railroad property, the following insurance coverage types and limits:

1.07.01a Railroad Protective Insurance

The Contractor shall provide for and on behalf of the Railroad, Railroad Protective Insurance as stated in the Code of Federal Regulations, Title 23, Part 646, and any revisions thereto issued by the Federal Highway Administration for damages due to bodily injury or death of persons, and injury to or destruction of property resulting from the operations of the Contractor, subcontractors, or their agents, officers, or employees on this project.

Railroad Protective Liability Insurance is required if there is any construction or demolition activities. This insurance shall name only the Railway as the Insured with coverage of at least

\$5,000,000 per occurrence and \$10,000,000 in the aggregate. The policy shall be issued on a standard ISO form CG 00 35 10 93 and include the following:

- ◆ Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93) and on ISO form CG 28 31 10 93.
- ◆ Endorsed to include the Limited Seepage and Pollution Endorsement.
- ◆ Endorsed to include Evacuation Expense Coverage Endorsement.
- ◆ No other endorsements restricting coverage may be added.
- ◆ The original policy shall be provided to the Engineer and Railway prior to performing work.

If available and in lieu of providing a Railroad Protective Liability Policy, the Contractor may participate in the Railroad's Blanket Railroad Protective Liability Insurance Policy available to the Contractor. The limits of coverage are the same as above.

1.07.01b Commercial General Liability Insurance

This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$5,000,000 each occurrence and an aggregate limit of at least \$10,000,000. Coverage shall be purchased on ISO occurrence form CG 00 01 12 04 or a substitute form providing equivalent coverage. This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- ◆ Contractual Liability Railroads ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "BNSF Railway 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.

1.07.01c Business Automobile Insurance

This insurance shall be written on ISO Form CA 00 01 (or a substitute form providing equivalent coverage) and shall contain a combined single limit of at least \$5,000,000 per occurrence. 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 "BNSF Railway Property" as the designated job site
- ◆ Motor Carrier Act Endorsement-Hazardous materials clean up (MCS-90), if required by law

1.07.01d Workers Compensation and Employers Liability Insurance

Workers Compensation and Employers Liability insurance including coverage for, but not limited to:

- ◆ Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance shall cover all employees anyway.
- ◆ Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

1.07.01e 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.

1.07.01f Other Requirements

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages and certificates of insurance shall reflect that no exclusion exists.

Any insurance policy shall be written by a reputable insurance company acceptable to Railroad or

with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the State of Iowa. If any portion of the operation is to be subcontracted by Contractor, Contractor shall require that the subcontractor shall provide and maintain insurance coverage as set forth herein, naming Railroad as an additional insured, and shall require that the subcontractor shall release, defend and indemnify Railroad to the same extent and under the same terms and conditions as Contractor is required to release, defend and indemnify Railroad herein. Failure to provide evidence as required by this section shall entitle, but not require, Railroad to remove contractor from or deny entry of Contractor to Railroad property immediately. Acceptance of a certificate that does not comply with this section shall not operate as a waiver of Contractor's obligations hereunder. The fact that insurance (including, without limitation, self-insurance) is obtained by Contractor shall not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad shall not be limited by the amount of the required insurance coverage.

Contractor agrees to waive its right of recovery against Railroad for all claims and suits against Railroad except in those instances of gross negligence or intentional misconduct. In addition, its insurers, through policy endorsement, to waive their right of subrogation against Railroad for all claims and suits. The certificate of insurance shall reflect waiver of subrogation endorsement. Contractor shall waive its right of recovery, and its insurers also waive their right of subrogation against Railroad for loss of its owned or leased property or property under its care, custody, or control. Contractor's insurance policies through policy endorsement, shall include wording which states that the policy shall be primary and non-contributing with respect to any insurance carried by Railroad. The certificate of insurance shall reflect that the above wording is included in evidenced policies.

All policy(ies) required above (excluding Workers Compensation and employers Liability), shall include a severability of interest endorsement and shall name Railroad as an additional insured using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent Coverage). The coverage provided to Railroad as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for the Railroad's negligence whether sole or partial, active or passive, and shall not be limited to Contractor's liability under the indemnity provisions contained above. Severability of interest and naming Railroad as an additional insured shall be indicated on the certificate of insurance.

Contractor will not be allowed to self-insure without the prior written consent of Railroad. If granted, any deductible, self-insured retention, or other financial responsibility for claims shall be covered directly by Contractor in lieu of insurance. All Railroad liabilities that would otherwise, in accordance with the provisions of this specification, be covered by Contractor's insurance shall be covered as if Contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Contractor represents that this specification has been thoroughly reviewed by Contractor's insurance agent(s)/broker(s), who have been instructed by Contractor to procure the insurance coverage required by the contract documents. Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.

For purposes of this section, Railroad shall mean "Burlington Northern Santa Fe Corporation", "BNSF Railway" and the subsidiaries, successors, assigns, and affiliates of each.

1.07.02 Insurance policy(ies) and a copy of the Certificate of Liability shall be sent to BNSF Risk Management, BNSF Railway Company, 2500 Lou Menk Drive, Building AOB-1, Ft. Worth, Texas 76131. Copy(ies) shall also be sent to the Iowa DOT, Office of Accounting, 800 Lincoln Way, Ames, IA 50010.

1.08 Company Operations.

Contractor shall be advised that trains or equipment are expected on any track, at any time, in either direction. Contractor shall become familiar with train schedules in this location and times when truck traffic increases due to intermodal transfers 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 intermodal transfers, 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 construction activities do not interfere with Railroad 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:

1.08.01 Conditional Work Window

A period of time that Railroad operations have priority over construction activities. When construction activities may occur on or adjacent to railroad tracks within 25 feet of the nearest track, a Railroad flagger will be required. At the direction of the Railroad flagger, upon approach of a train, and when trains are present, tracks shall be cleared (i.e., no construction equipment, materials, or personnel within 25 feet, or as directed by the Railroad, from the tracks). Conditional Work Windows are available for the contract.

1.08.02 Absolute Work Window

A period of time that construction activities are given priority over Railroad 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 Railroad 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 Railroad will perform inspections of the work prior to placing back into service. Railroad flaggers 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 Railroad review.

1.08.03 Requests

Contractor shall make requests in writing for both Absolute and Conditional Work Windows, at least two weeks in advance of the work for which the request is being made. The request shall include:

- Exactly what the work entails.
- Days and hours the work will be performed.
- Exact location of work, and proximity to the tracks.
- Type of window requested and amount of time requested.
- The Contractor's designated contact person.

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

1.09 Method of Measurement and Basis of Payment

Railroad Protective Liability Insurance for BNSF Railway Company will be paid for as a Lump Sum bid item. The Contractor will be paid the Lump Sum bid item price within 30 calendar days after receipt of a signed contract, provided that all necessary certificates of insurance have been submitted to the Department per Article SP-150322a (1.07).

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: _____.
(if available)

9. (a) Injury: _____ (b) Body Part: _____.
(i.e. (a) Laceration (b) Hand)

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:



Version Dated 2017-08-17

**BNSF Review Comment Sheets &
Use of Cranes & Lifting of Materials Submittal Schedule**

The following sheets are meant to be used as addenda to the Grade Separation Guidelines and include comment tracking sheets for use in both design and construction plan submittals given in Tables 3-1 & 3-2 of the Union Pacific –BNSF Guidelines for Railroad Grade Separation Projects.

**Use of Cranes and Lifting of Materials Submittal Schedule
Submittal Type (Action Item Required)**

Equipment or Material Planned Location	1 - Boomed Equipment Utilization Plan	2 - Critical Pick Plan (75% of capacity or multi-crane pick)	3 - Lifted Material Plan (Placement or Removal)
Within Temporary Const. Clearances	A	A,B,C,D	A,B,C,D
Within 25' of CL Tracks	A	A,B,C,D	A,B,C,D
Work on ROW > 25' from CL Tracks	A	A, B,C,D	A, B
Work outside BNSF ROW	A	A, C, D	N/A

Action Item Identifier

A	Plans Submitted to BNSF PE & I/C for I/C Review (Structures Review not required). Also on hand at site location.
B	DOT Review / Acceptance & Provide Confirmation to Structures Review
C	Plans Submitted to BNSF Structures Review by way of BNSF PE
D	Professional Engineer Seal Required

Documentation Required per Submittal Type (See Comment Sheet)

1 - Boomed Equipment Utilization Plan	2 - Critical Pick Plan (75% of capacity or multi-crane pick)	3 - Lifted Material Plan (Placement or Removal)
<ul style="list-style-type: none"> • Ground stability analysis / consideration • Wind limitations • Operator qualifications • Equipment inspection certs / docs • Equipment identification / load charts / data / specs • Boom length • Contractor policy or limitations on critical pick • Rigging data / specs / outriggers • Clearance to track • Underground and overhead utilities 	<ul style="list-style-type: none"> • PE Seal • DOT Acceptance • Max wind speed for the pick • Radii • Location of equipment • Clearance to track • Load to lifting point geometry • Rigging design • Groundman • Communication plan 	<ul style="list-style-type: none"> • Beam stability • Sweep / Camber • Bracing • Splice locations • Required number of fasteners • Tie downs • Material stability plan • Pick points

BNSF Position on Use of Cranes, Lifting of Material, and Demolition on or over BNSF Right-of-Way

This generally addresses lifting activities for overhead bridge construction and demolition, but also covers other work using cranes or material lifting near railroad property which has the potential to impact railroad operations. The intent is to ensure necessary planning, engineering and execution to avoid equipment or material failures that can lead to safety issues or unplanned interruptions of railroad traffic. Demolition procedures other than those considered as lifting activities are covered in a Demolition Plan Submittal.

Use of cranes and the lifting of materials on or over the railroad right-of-way shall not cause interruption to railroad operations.

- A PE-sealed lifting plan or demolition plan is necessary for any lifting activities requiring authority or protection over railroad tracks. The Professional Engineer is responsible for addressing all required parameters of the lifting plan or demolition plan, and BNSF has minimum submittal requirements for specific lifting activities.
- For Agency sponsored projects, Agency shall accept the lifting and/or demolition plan and advise BNSF of acceptance of plan(s) prior to submittal
- An onsite, pre-lift safety meeting is mandatory for all lifting activities covered by the lifting and/or demolition plan
 - Representatives of the contractor, the agency and BNSF shall be present
 - Purpose is to confirm all processes and equipment are in place to proceed per the lifting plan, or otherwise track authority will not be provided.
 - Deviations or modifications to the plan require additional review
- Train operations will not be permitted during splicing, post tensioning or any activities performed during a suspended load until structural stability is achieved. For these reasons, superstructures of these type are not recommended. The method of erection permissible will be dependent upon track time available. This is to be coordinated through the BNSF site representative during construction.
- Prior to the release of Railroad traffic, components lifted over railroad tracks shall be supported by falsework or permanent substructure, shall be secured and stable and shall not be supported by cranes or other construction equipment.

BNSF publishes position statements to clarify BNSF's position on the subject matter. The information contained in a position statement is neither exhaustive nor exclusive to all circumstances or individuals. The relevance and implementation of these recommendations may be affected by local, state, or federal statutes, other rules or regulations, and differing project conditions. Position statements are not intended to provide any approval of a public agency project. Nothing in this position statement, supersedes or supplements the terms of a governing agency agreement with BNSF. The position statement should not be relied upon as being inclusive of all BNSF's policies on the subject matter, but only as a resource. BNSF takes great care in publishing position statements and reserves the right to rescind or modify these statements at any time.

*Approved by Craig Rasmussen, AVP Engineering Services and Structures
Date Approved: August 16, 2017*



No Comment / All Items CLOSED*
 Submittal Essentials in RED **

BNSF Engineering Services-Structures Review Comments

Use of Cranes and Lifting Materials Review Comments Sheet

Project Engineer Review Items; **KC Structures Review Items**

Check for compliance with current AREMA and BNSF guidelines

Project Name:	I-29 Ramp F Overpass	BNSF Point of Contact:	Mark Anderson
Submittal Name:	Pick/Lifting Plan	Project CM Contact:	
Plan File Name:		Asset MP Name:	490.538
Plan File Date:		Plan %:	

1- Boomed Equipment Utilization Plan

Boomed Equipment Utilization Plan Received

Date Received Not Received

Inspector Coordinator to receive plan of Submittal Type 1, 2, & 3, as applicable. See documentation required per submittal type on below **Use of Cranes and Lifting of Materials Submittal Schedule**.

Structures Review (Submittal by BNSF PE to KC Structures) is not required for items specified as Type A. For all submittals when an I/C is representing BNSF, I/C to review prior to sending to BNSF PE. BNSF PE to manage this comment sheet throughout process.

BNSF PE to include their own and I/C comments prior to sending to Structures Review.

Contractor policy or limitations for critical pick (prompt Type 2 ->)

No Exceptions Taken Comments Below N/A

Designated Groundman / Signalman

No Exceptions Taken Comments Below N/A

Communication Plan (Internal & BNSF Flagman)

No Exceptions Taken Comments Below N/A

2 - Critical Pick Plan (75% Capacity or Multi-crane Pick)

Professional Engineer Seal & Signature (Type 2 & 3)

No Exceptions Taken Comments Below

Agency Review / Acceptance – Provide Confirmation via e-mail
 No Exceptions Taken Comments Below

Pre-lift In-person Meeting (Needed for Type 2 or 3)

Date Complete Date Scheduled Not Scheduled

Radii Show on Plans for Chart to be Used

No Exceptions Taken Comments Below N/A

Load to Lift Specified (Weights include rigging)

No Exceptions Taken Comments Below N/A

Location of Equipment to Tracks (Nearest rail)

No Exceptions Taken Comments Below N/A

Items from Submittal Type 1 (On hand – internal clearance review)

No Exceptions Taken Comments Below N/A

3 - Lifting Materials Plan (Placement or Removal)

Agency Review / Acceptance – Provide Confirmation via e-mail

No Exceptions Taken Comments Below

Professional Engineer Seal & Signature
 No Exceptions Taken Comments Below

Brading of All Girders Spanning over Tracks – Removal or Placement (Design & Cals)

No Exceptions Taken Comments Below N/A

Analysis of Measured Sweep & Allowable provided

No Exceptions Taken Comments Below N/A

Tie downs / fasteners Detailed

No Exceptions Taken Comments Below N/A

Show Splice Locations & for Min bolts required for stability (no splice over tracks)

No Exceptions Taken Comments Below N/A

Analysis of Lifting Points During placement and lifting

No Exceptions Taken Comments Below N/A

Item No.	Sheet No.	Reviewer Comment Date:	Initial	Designer's Response Date:	Reviewer's Comment Date:	Initial	Designer's Response Date:	Reviewer's Comment Date:	Initial	Designer's Response Date:	Reviewer's Comment Date:	Initial	Designer's Response Date:	Reviewer's Comment Date:	Status (Open or Closed)
1.															
2.															
3.															
4.															
5.															
6.															

Add Row

*BNSF has reviewed these submittals and no exceptions are taken with regard to BNSF's ability to use or accommodate the project as intended. BNSF has not reviewed the design details or calculations for structural integrity or engineering accuracy. BNSF accepts no responsibility for errors or omissions in the design or execution of the project.

** Check Submittal Essentials prior to transmittal to Structures Review. If not included, Project Engineer to reject and request resubmittal.