



**DEVELOPMENTAL SPECIFICATIONS
FOR
CONSTRUCTION OR MAINTENANCE WORK ON RAILROAD RIGHT-OF-WAY
(DAKOTA, MINNESOTA, & EASTERN RAILROAD CORPORATION dba CANADIAN PACIFIC)**

**Effective Date
October 18, 2016**

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

15047.01 DESCRIPTION.

This specification applies to projects on the Interstate, Primary, Secondary, and Local Road systems involving construction or maintenance of roadways and structures on Dakota, Minnesota & Eastern Railroad Company dba Canadian Pacific ("CP") Right-of-way (ROW).

This specification describes the following:

- Requirements when work is within the ROW or properties of CP and adjacent to tracks, wire lines, and other facilities.
- Coordination with CP when work by the Contractor will be performed upon, over, or under the CP ROW, or may impact current or future CP operations.

The CP representatives will be the persons identified by the CP Public Works Manager to handle specific tasks related to the project. The attachments specify the contact information for these individuals.

Prior to advertising the project for letting, the Contracting Authority will negotiate and obtain an agreement with CP for the work on CP ROW. The Contractor will also be required to enter into a Right of Entry agreement with CP for the purpose of coordinating Contractor work and CP train activities. A copy of this agreement is attached as DS-15047, Attachment A.

Contractor shall provide physical barriers approved by CP to protect track and ballast from damage and contamination when Contractor's equipment is operating within 25 feet from nearest rail.

15047.02 REQUESTS FOR INFORMATION.

Requests for information involving work within CP ROW shall be in accordance with the procedures listed in the contract documents. Requests shall be submitted to the Engineer. Engineer will forward the request to CP as necessary.

15047.03 CONSTRUCTION AND AS-BUILT SUBMITTALS.

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

- B.** The tables below provide CP’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 CP’s requirements only. Contractor shall allow additional time for CP’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 CP. Items in Table DS-15047.04-1 shall be submitted for both railroad overpass and underpass projects, as applicable. Items in Table DS-15047.04-2 shall be submitted for underpass projects only.

Prior to or during construction of underpass structures, CP requires the review and approval of drawings, reports, test data, and material data sheets to determine compliance with the specifications. Product information for items noted in Table DS-15047.04-2 shall be submitted to CP through the Engineer for their review and approval. The signed submittal and the Engineer’s review comments will be reviewed and approved by CP. Review of the submittals by CP will not be conducted until after review by the Engineer.

Table DS-15047.04-1: Review Sets and Minimum Time for Review

Description	Sets Required	CP’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

Table DS-15047.04-2: 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.
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D. As-Built Records will be submitted to CP 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 Auto-Cad Civil 3D 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 Auto-Cad Civil 3D 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

15047.04 SITE INSPECTIONS BY CP.

Site inspections may be performed by CP at any point 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 CP for review and approval 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.

15047.05 CP REPRESENTATIVES.

CP representatives will be provided at the expense of the Contracting Authority to protect CP facilities, property, and movements of its trains or engines. CP may, at the Contractor's sole cost, risk and expense, furnish whatever protective services it considers necessary, including, but not limited to, flagger(s), inspector(s), and stand-by personnel.

In general, CP will furnish such personnel or other protective services as follows:

- Flagging protection will be required during any operation involving direct and potential interference with CP's tracks or traffic. This may include but is not limited to fouling of railroad operating clearances, reasonable proximity of accidental hazard to railroad traffic, work within 25 feet horizontally of the nearest centerline, any work over any railroad track, or in any other condition that CP deems protective services necessary, which may include work on or off CP's property more than 25 feet from the nearest centerline of a railroad track, such as any equipment extension (including but not limited to a crane boom) that will reach or has the potential to reach within 25 feet of any track.
- For any excavation below elevation of track subgrade if, in the opinion of CP, track or other CP facilities may be subject to settlement or movement.
- During any clearing, grubbing, excavation, or grading, or other construction activity in proximity to CP facilities, which, in the opinion of CP, may endanger CP facilities or operations.

- During the Contractor's operations when, in the opinion of CP, CP facilities, including, but not limited to, tracks, buildings, signals, wire lines, or pipe lines, may be endangered.
- Contractor shall arrange with CP to provide the adequate number of flag persons to accomplish the work.

Contractor shall be required to pay CP in advance for the cost of personnel or other protective services. Prepayment will be based on the Contractor's estimated time for needing protective services, and if that prepayment will be exhausted prior to the expiration of the contractor's need for protective services, additional prepayment funds will be needed to cover the new projected completion of the project.

In the event CP is unable to furnish flagging protection, inspection services, or standby personnel at the desired time or on the desired date(s), Contractor shall not perform the said operation or work until such time and date(s) that appropriate CP services can be made available. CP shall not be liable for any delay or increased costs incurred by Contractor owing to CP's inability or failure to have appropriate CP services available at the time or on the date requested.

15047.06 INSURANCE.

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, 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.

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 CP's property and cleans the premises in a manner reasonably satisfactory to CP.

If the Contractor uses a subcontractor(s), the Contractor shall provide the required insurances and shall provide either: equivalent to that described herein or (ii) obtain endorsements to the required policies naming the subcontractor(s) as additional insured parties.

A. Commercial General Liability Insurance.

Commercial general liability (CGL) (occurrence based) with a combined single limit of not less than \$1,000,000.00 each occurrence. 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 "Dakota, Minnesota & Eastern Railroad Corporation 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 \$1,000,000.00 for each accident; covering owned, non-owned, and hired vehicles engaged in or about the work.

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 “Dakota, Minnesota & Eastern Railroad Corporation” as the Designated Job Site.
- Motor Carrier Act Endorsement - Hazardous materials clean up (MCS-90), if required by law.

C. Railroad Protective Liability Insurance.

Railroad protective liability insurance (occurrence form), in the name of the Dakota, Minnesota, & Eastern Railroad Company d/b/a Canadian Pacific, with limits of \$5,000,000.00 per occurrence and \$10,000,000.00 aggregate for bodily injury (including death) and property damage.

Contractor shall use the website listed below to acquire Railroad train movement information for the purpose of obtaining Railroad Protective Liability Insurance:

<http://safetydata.fra.dot.gov/OfficeofSafety/PublicSite/Crossing/Crossing.aspx>

The US DOT Crossing Inventory Number will be located in the project plans. Zero trains per day will be displayed on the crossing inventory report for locations with grade separated crossings or at-grade crossings when there is less than one train per day. In these situations generating a map to find alternative crossing locations may be used to provide the number of trains per day and speed nearest the project location.

D. Workers Compensation and Employers Liability Insurance.

Coverage shall include, but not limited to: Contractor's statutory liability under the workers' compensation laws of the State of Iowa including requirements of any occupational disease law.

If 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 CP in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

E. Umbrella Insurance.

If Contractor utilizes umbrella policies, these policies shall “follow form” and afford no less coverage than the primary policy. Excess coverage is not allowed.

F. 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 \$1,000,000.00 per occurrence and an aggregate limit of \$2,000,000.00.

If the scope of work as defined in this contract includes disposal of hazardous or non-hazardous materials from the job site, Contractor shall furnish to CP 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 \$1,000,000.00 per loss, and an annual aggregate of \$2,000,000.00.

- G.** Policy(ies) required above (except worker's compensation and employers liability) shall include CP and its Parents 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 CP and its Parents as additional insured shall, to the extent provided under ISO Additional Insured

Endorsement CG 20 26, and CA 20 48 provide coverage for CP'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.

- H. 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.
- I. 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.
- J. Prior to commencing the work, 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.
- K. Insurance policies shall be written by a reputable insurance company acceptable to CP 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.
- L. The fact that insurance is obtained by the Contractor or by CP 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 CP from the Contractor or any third party shall not be limited by the amount of the required insurance coverage.

15047.07 ASSIGNMENT, SUBCONTRACTING, AND INSURANCE ENDORSEMENTS.

Contractor shall not assign or subcontract the provisions of this specification, or any interest therein, without the written consent of the Engineer. Contractor shall be responsible for the acts and omissions of all subcontractors. Before Contractor commences any work, they shall, except to the extent prohibited by law; (1) require each subcontractor to include the Contractor and CP as "Additional Insureds" 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.

15047.08 ADDITIONAL SAFETY REQUIREMENTS.

Personnel employed by the Contractor or subcontractors shall complete the course "CP Contractor Security/Safety Course", and be registered prior to working on CP property, except that such personnel are not required to execute the Right of Entry form for contractors, it being understood that all contractors or subcontractors shall instead execute the Right of Entry Agreement attached to this specification. The CP orientation course is available at: www.contractororientation.com. This course shall be completed annually.

CP has exempted from this requirement those it classifies as "Delivery Persons" from this training, such as UPS, FedEx, trucking companies, etc. who merely access the property to supply materials or equipment.

Contractor shall require its employees to be suitably dressed to perform their duties safely. Contractor shall require workers to wear personal protective equipment as specified by CP rules and regulations. All personal protective equipment will be of safe design and construction for the work to be performed and shall be maintained in a sanitary and reliable condition. Protective equipment shall include, but not be

limited to the following PPE listed below that meet the U.S. ANSI standards (American National Standards Institute):

- Eye and face protection ANSI Z 87.1
- Head protection ANSI Z 89.1
- Foot protection ANSI Z 41.1
- High Visibility apparel ANSI / ISEA Z 107

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.

CP requires that the Contractor provide their personnel with the proper training, and that the Contractor's personnel are provided with 1) a sticker to be affixed visibly on their hard hat and 2) a qualification card so that CP employees know that the Contractor's personnel are familiar with CP safety practices and proof of having successfully completed the "CP Contractor Security/Safety Course" course. If a Contractor's employee does not have the sticker and qualification card, that Contractor employee will not be allowed on CP property.

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

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

If at any time the Engineer or CP is 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, or in violation of any applicable safety rule, the Engineer may suspend the work until proper protective measures are adopted and provided. In addition, if CP has a reasonable, good faith belief that the Contractor is engaging, or is about to engage, in any activity that poses a substantial risk of causing great bodily injury or death to any person, or significant property damage, CP may suspend the work of the Contractor and shall as soon as possible thereafter contact the Engineer to review the circumstances of the work stoppage. CP shall thereafter abide by the decision of the Engineer as to the necessity of the work stoppage.

15047.09 SAFETY MEASURES-PROTECTION OF OPERATIONS.

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

A. Explosives.

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

1. Contractor shall provide no less than 48 hours written notice, excluding weekends and holidays, before discharging any explosives.
2. Explosives loaded in holes, placed or otherwise readied for discharge, shall be discharged the same day during daylight hours, and at mutually acceptable times.

3. 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, Contractor shall not cause or permit the view along the tracks of CP 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.

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 CP. Contractor shall not perform any work that may disturb the stability of any area or adversely affect CP's tracks or facilities. 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. Shoring and cribbing shall be constructed and maintained with materials and in a manner approved by CP to withstand all stresses likely to be encountered, including any stresses resulting from vibrations caused by CP's operations in the vicinity.

D. Drainage.

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 CP that may adversely affect any of CP's operations, equipment or any third parties with permitted facilities on CP's ROW. 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 CP'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 CP or any part thereof, or property of others. Contractor shall not obstruct or interfere with existing ditches or drainage facilities.

E. Clearances.

Contractor shall provide a minimum vertical clearance of 22.0 feet above top of rails and a minimum lateral clearance of 12.5 feet from centerline of track nearest temporary construction falsework. No materials, supplies, or equipment will be stored within 25 feet from the centerline of any railroad track, measured at right angles thereto.

Proposed changes to the specified minimum clearances shall be submitted in writing to CP, 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 CP that approval is given and that arrangements have been made for flagging service, as may be necessary. CP will have 15 calendar days to respond to the request.

F. Demolition of Existing Structures.

Contractor shall submit demolition plans to the Engineer for review and approval. The Engineer will forward such plans to CP as identified in the project agreement for CP to review and approve. Demolition performed over or near CP track will require proper protective shielding or other measures (as identified on the plans) as maybe required by CP, and the Contractor shall be required provide signed plans, signed by a Professional Engineer licensed in the State of Iowa, and schedule for review and approval by CP. Such protective shielding or measures shall be designed for immediate removal by Contractor whenever instructed to do so by CP. Demolition shall not be undertaken until CP has advised Engineer of its approval of the plans and schedule, and the Contractor has received the Engineer's and CP's written approval of such demolition plans and schedule. All such reviews and approvals or rejections will be completed by the Engineer and CP within 45 calendar days of receipt from the Contractor.

15047.10 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 CP's use in walking along trains, extending to a line not less than 12 feet from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while CP'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 horizontally from center line of tangent track or 9.5 feet horizontally from centerline of curved track.

15047.11 EXCAVATIONS IN CLOSE PROXIMITY TO CP FACILITIES.

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 CP "Guidelines for Temporary Shoring".

Contractor shall contact CP for facility locates at least 5 working days prior to commencing work at 1.248.740.6227 during normal business hours (7:00 a.m. to 3:00 p.m. C.S.T., Monday through Friday, except holidays). Contractor shall pay CP in advance for the cost of CP locates. The cost for a cable locate is \$250.00. If a telecommunications system is buried anywhere on or near CP property, the Contractor shall coordinate with CP and the telecommunication company to arrange for relocation or other protection of the system prior to beginning any work on or near CP property.

15047.12 NO INTERFERENCE WITH CP'S OPERATION.

Contractor shall not interfere with the constant, continuous, and uninterrupted use of the tracks, property, and facilities of CP its lessees, licensees, or others, unless specifically permitted and authorized in advance by CP. When not in use, Contractor's machinery and materials shall be kept at least 50 feet from the centerline of CP's nearest active track, and there shall be no crossings of CP's tracks except at existing open public crossings or as provided by private construction crossing agreement between CP and the Contractor. CP may require the Contractor to furnish detailed plans prior to entry upon the premises and to view and inspect any activity or work on or above CP's property.

15047.13 TRAFFIC CONTROL.

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

15047.14 INDEMNITY.

As used in this Article, "CP" includes other railroad companies using CP's property at or near the location of the Contractor's work and CP's 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 CP'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 CP, or property in its care or custody).

Contractor shall indemnify, hold harmless, and defend to the extent allowed by law CP from any loss which is due to or arises from any cause and is associated in whole or in part with the work covered herein, 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 to the extent caused by the gross negligence or willful misconduct of CP.

15047.15 MAINTENANCE OF CP FACILITIES.

Contractor shall maintain ditches and drainage structures free of silt or other obstructions which may result from its operations, promptly repair eroded areas within CP's ROW, and repair any other damage to CP property, or its tenants; at no cost to CP. Contractor will be required upon the completion of the work to remove from within the limits of CP's property all machinery, equipment, surplus materials, false work,

rubbish or temporary buildings, and to leave said property in a condition satisfactory to the Engineering Manager of CP or their authorized representative.

15047.16 COMMUNICATIONS AND SIGNAL LINES.

No digging, trenching or boring activities shall be conducted in the proximity of any known buried Railroad Company signal cables without Railroad Company's Signal Department representative being present. If required, CP will rearrange its communications and signal lines, grade crossing warning devices, train signals and tracks, and facilities that are in use and maintained by CP's forces in connection with its operation at the expense of the Contracting Authority. This work will be performed by CP and it is not a part of the contract.

15047.17 FIBER OPTIC CABLE SYSTEMS.

Fiber optic cable systems may be buried on CP'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. Contractor shall contact Iowa One Call (1.800.292.8989 (a 24-hour number)) to determine if fiber optic cable is buried anywhere on CP's ROW to be used by the Contractor. If it is, 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 CP's ROW.

In addition to the liability terms elsewhere in this specification, Contractor shall indemnify and hold harmless CP 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 CP'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 CP's property. Contractor shall not have or seek recourse against CP 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 CP's property or a customer or user of services of the fiber optic cable on CP's property.

15047.18 COOPERATION.

CP 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 CP's ROW in performing the work.

15047.19 WAIVER OF BREACH.

The waiver by CP 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 CP to avail itself of any subsequent breach thereof.

15047.20 CP 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 the train schedules in this location and structure its bid assuming intermittent track windows in this period, as defined below.

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. Contractor shall coordinate and schedule the work so that construction activities do not interfere with CP operations.

Work windows for this contract shall be coordinated with the Engineer, who shall receive CP's approval before advising the Contractor of the availability of any work window. Types of work windows include Conditional Work Windows and Absolute Work Windows, as defined below:

- A. Conditional Work Window:** A period of time that CP operations have priority over construction activities. At the direction of the CP 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, or as directed by CP, 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 CP 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 CP, 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, CP will perform inspections of the work prior to placing back into service. CP flag persons will be required for construction activities requiring an Absolute Work Window.

Absolute Work Windows will not generally be granted, and any provided shall require the express written approval by CP's Transportation Department. Any request will require a detailed explanation for CP review and approval.

- C.** Work on CP's ROW shall be done at such times and in such manner so as not to interfere with or endanger the operations of CP. Whenever work may affect the operations or safety of trains, the method of doing such work shall first be submitted to CP 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 CP is available at the job site.
- D.** Contractor shall make requests in writing for both Absolute and Conditional Work Windows, at least 2 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.

Contractor shall provide written notice to CP at least 48 hours before commencing work in connection with approved work windows when work will be performed within 50 feet 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 CP, Contractor shall make such provisions. If in the judgment of CP such provisions are insufficient, CP may require or provide such provisions as deemed necessary. In any event, such provisions shall be at the Contractor's expense. CP 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 CP, Contractor's operations could endanger CP's operations. In the event such an order is given, Contractor shall immediately notify the Engineer of the order.

15047.21 RAILROAD FLAGGING.

A. Notification.

Contractor shall notify CP and Engineer at least 15 working days in advance of commencement of any work on CP property and at least 10 working days in advance of proposed performance of any work by the Contractor in which any person or equipment will be within 50 feet 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 50 feet of any track. Notice shall be made using CP's "Request for Flagging Services" form attached as DS-15047, Attachment B.

The services of a flagman will be required during any operation involving direct interference with CP's tracks or traffic, fouling of railroad operating clearances, or reasonable proximity of accidental hazard to railroad traffic, when work takes place within 50 feet horizontally of the nearest centerline, any work over any railroad track, or in any other condition that CP deems the services of a flagman necessary, which may include work on or near CP's property more than 50 feet from the nearest centerline of a railroad track. Additional flagmen will also be furnished whenever in the opinion of CP such protection is needed.

Upon receipt of 10 working day notice, CP will determine and inform 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 CP, such services will be provided at Contractor's expense with the understanding that if CP provides any flagging or other services, the Contractor shall not be relieved of any of its responsibilities or liabilities set forth herein. Contractor shall be required to pay CP in advance for the cost of personnel or other protective services. CP shall not be liable for any increased costs incurred by the Contractor or Contracting Authority owing to CP's inability or failure to have appropriate CP personnel available at the time or on the date requested.

To enable orderly flagger reassignment to other projects the Contractor shall notify CP 5 working days prior to the termination of flagging need or 5 working days prior to completion of the Contractor's work, whichever is sooner. Contractor shall inform CP when work requiring flaggers is complete.

CP will notify the Engineer and Contractor when non-compliance is reported by CP train crews or other CP 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 CP or Engineer from the project.

B. Flagger Hours and Rate of Pay.

The rate of pay for each flagger will be at the base rate of \$1,300.00 per weekday (1-10 hour continuous period). Weekend flagman protection will be at the rate of \$150.00 per hour, with a 10 hour minimum of \$1,500.00. Hours in excess of 10 continuous hours per flagman on either weekday or weekend days will be billed at the rate of \$150.00 per hour. Rates are subject to change, at any time, by law or by agreement between CP, its employees or contractors, and may be retroactive as a result of negotiations or a ruling of an authorized Governmental Agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, Contractor shall pay on the basis of the new rates and charges.

A flagman has to perform many functions in conjunction with a flagging project. The hours start once the flagman reaches the local yard. Any needed safety materials must be collected and other railroad employees that may come into the area must be well informed of the project that will be taking place. The commute time from the local yard to the actual project is included in an invoice. Once on site the individual must set up warning devices several miles away from the site (in both directions) in order to assure locomotive engineers are properly warned of additional safety precautions necessary. Once the day is over, the flagman must collect these warning devices and return them to the local yard. In CP terminal areas, this employee is compensated for a full eight hour day regardless if the employee was physically flagging at the location or not, therefore, the full day is charged back to the contractor. If CP must pay the employee for hours in excess of their daily scheduled time or on a holiday in order to accomplish the flagging project, those costs are passed onto the contractor as well.

Occasionally it is necessary for the flagman to leave the project for various reasons. Some of these are to throw a manual switch in order to divert an oncoming train, or to meet a train that is approaching.

C. Reimbursement to CP.

Contractor shall reimburse the CP for railroad flagger services provided within 15 days of billing from the CP. In the event the Contractor fails to reimburse or pay CP for hours of flagman protection provided, the Contracting Authority will reimburse CP within 30 calendar days of the Contractor defaulting on the payment (default is defined as non-payment within 30 calendar days of billing by CP to the Contractor). Failure of the Contractor to reimburse CP may result in a reduction or suspension of the Contractors bidding qualifications according to Article 1102.03 of the Standard Specifications.

D. Documentation and Reimbursement to the Contractor.

Contractor shall initially pay CP for all flagging costs in conjunction with railroad flaggers when any of the conditions identified in Article DS-15047.05, warrant a flagger. The Contracting Authority will reimburse the Contractor for any daily cost that exceeds \$1,000.00 per day for the cost of flagger services provided by CP. The Contracting Authority will reimburse the Contractor 100% of the total cost of flagger services, as deemed necessary by CP, that does not meet any of the conditions identified in Article DS-15047.05, unless the flagger's presence on the project was a result of the Contractor's communication, or lack of communication, with CP. The Contracting Authority will reimburse the Contractor following completion of all work necessitating flagging operations by CP and receipt of documentation verifying CP 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 CP for flaggers and a summary of the flagging costs incurred that exceed the Contractors' requirements described in Article DS-15047.05, to the Engineer with a request for payment for the additional railroad flagger costs. The Engineer will review the Contractor's daily logs against CP's invoice and make payment for the eligible costs in accordance with Article 1109.03, of the Standard Specifications.

Contractor shall be responsible to CP 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 CP for flagging costs.

The Contracting Authority may award multiple contracts for work in the same general area. Contractor shall try to stage work to minimize the need for railroad flaggers. In the event of multiple projects in a particular location, the Contractor initially requiring flagging on a daily basis shall be responsible for all flagging costs for that day.

15047.22 TEMPORARY CROSSINGS.

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

If the Contractor requires a temporary railroad crossing the Contractor shall arrange for the crossing installation at a location acceptable to the Contractor and CP at the Contractor's expense to include all CP 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 private construction crossing agreement between the Contractor and CP. Prior notice of need for a temporary crossing is required to allow for CP site review, cost estimating, securing material, and work crew scheduling and will vary. The Contractor should contact CP prior to making a bid when a temporary crossing is required.

15047.23 LIMITATION OF RIGHTS GRANTED.

The Contract, any Temporary Easement, and Permanent Easement are all subject to the prior and continuing right and obligation of CP to use and maintain its property, not inconsistent with highway purposes, including the right and power of CP to construct, maintain, repair, renew, use, operate, change, modify, or relocate CP 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 CP, not inconsistent with highway purposes and at CP'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 CP's property, and others) and the right of CP to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

15047.24 MECHANIC'S LIENS.

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 CP for any work performed. Contractor shall indemnify and hold harmless CP 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 CP to the extent permitted by law.

15047.25 METHOD OF MEASUREMENT AND BASIS OF PAYMENT.

Railroad Protective Liability Insurance for Dakota, Minnesota & Eastern Railroad Corporation doing business as Canadian Pacific; will be paid for as a Lump Sum bid item. The Contractor will be paid 100% of the Lump Sum bid item once the Engineer has received all necessary certificates of insurance.

Attachments to this specification:

- DS-15047, Attachment A: Right of Entry Agreement
- DS-15047, Attachment B: Requirements Regarding Flagging and Cable Location for Construction on CP

RIGHT OF ENTRY AGREEMENT

This Right of Entry Agreement ("Agreement") is made between _____ (hereafter Contractor) and Dakota, Minnesota & Eastern Railroad Corporation dba Canadian Pacific (hereafter Railroad) in order to permit Contractor to enter onto Railroad's property, for the purposes of performing work in connection with the following project for the Contracting Authority:

Project _____, as further identified in the attached project documents.

Contractor shall pay to Railroad upon execution of this Agreement the sum of \$500.00 as consideration for the right of entry awarded under this Agreement and to cover preparation and administration of this Agreement.

Contractor and Railroad hereby agree as follows:

1. Contractor shall enter Railroad's property (identified in the attached project documents) only in connection with the above-referenced project;
2. Contractor shall give Railroad at least 15 working days' advance notice of the date Contractor plans to start any work on the project;
3. Upon request, Contractor shall provide Railroad with detailed plans of the project at no cost to Railroad;
4. Contractor shall comply with all terms and requirements set forth in Iowa Department of Transportation Developmental Specifications (DS-15047) for Construction or Maintenance Work on Railroad Right-of-Way, including but not limited to the insurance requirements set forth in such specification Contractor shall provide Railroad with certificates and declarations sheets that prove or show compliance with such insurance requirements;
5. As used in this paragraph, "CP" includes other railroad companies using CP's property at or near the location of the Contractor's work and CP's 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 CP'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 CP, or property in its care or custody).

Contractor shall indemnify, hold harmless, and defend to the extent allowed by law CP from any loss which is due to or arises from any cause and is associated in whole or in part with the work covered herein, 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 CP, or except to the extent caused by the gross negligence or willful misconduct of CP;

6. The insurance requirements set forth in this Agreement shall not relieve or limit Contractor's liability to Railroad under the indemnity provisions of this Agreement;
7. Contractor shall comply with any federal, state or local laws, statutes, codes, ordinances, rules and regulations applicable to its construction and maintenance of the project. Contractor shall defend, indemnify and hold railroad and its affiliates harmless with respect to any fines, penalties,

liabilities or other consequences arising from contractor's failure to comply with any such federal, state or local laws, statutes, codes, ordinances, rules and regulations;

- 8. Contractor shall promptly notify Railroad of any loss, damage, injury or death arising out of or in connection with the project work;
- 9. The provisions of this Agreement shall survive the termination or expiration of the Agreement;
- 10. Railroad certifies that it has carefully reviewed the project plans and that it agrees to permit the Contractor and its employees, officers and subcontractors to enter onto and work upon its property for the purpose of completing said project under the terms of this Agreement;
- 11. Any notices or communications concerning this agreement shall be delivered to the following designated individuals:

Edward A. Oom Jim H. Krieger
 Manager Public Works
 CP Plaza – 120 South 6th Street
 Minneapolis, MN 55402
 Telephone Number: 612.330.4553 612.330.4555
 Email: Edward_Oom@cpr.ca jim_krieger@cpr.ca

For Contractor _____

Address: _____

IN WITNESS WHEREOF, Contractor and Railroad have executed and delivered this agreement as of the date set forth below.

Date

Contractor

Date

Railroad

**REQUIREMENTS REGARDING FLAGGING AND CABLE LOCATION FOR CONSTRUCTION ON CP
(Hereinafter called "Railroad")
(Revised: Effective August 1st 2015)**

NOTE: Flagging and/or Cable Locate fees may apply

A utility or contractor shall not commence, or carry on, any work for installation, maintenance, repair, changing or renewal of any FACILITY, under, over or on RAILROAD property at any location without giving notice to the RAILROAD authorized representative at the RAILROAD's office located at Minneapolis, Minnesota, telephone 612.330.4553, or for cable locates telephone 866.291.0741, or for emergency Phone 800-716-9132; and if, in the opinion of the RAILROAD the presence of an authorized representative of the RAILROAD is required to supervise the same, the RAILROAD shall render bills to the utility or contractor for all expenses incurred by it for such supervision. This includes all labor costs for flagmen or cable locate supplied by the RAILROAD to protect RAILROAD operation, and for the full cost of furnishing, installation and later removal of any temporary supports for said tracks, as the RAILROAD's Chief Engineer's Office may deem necessary.

A flagman is required anytime a utility or contractor does any work on or near RAILROAD property within twenty-five (25) feet horizontally of the centerline or any work over any railroad track. The RAILROAD, however, also reserves the right to require a flagman for work on RAILROAD property, which is more than twenty-five (25) feet from the centerline of a railroad track when there are other conditions, or considerations that would dictate the need for a flagman to safeguard the RAILROAD's operations, property and safety of working personnel.

A cable locate of RAILROAD owned facilities may be required to identify and protect Signal & Communication cables that have been installed to provide power, signal control, and wayside communications. These cables are vital to a safe and reliable railway operation. The cable locate will be performed by a qualified RAILROAD employee.

Cost for a cable locate is \$250.00, which is to be prepaid before installation is to begin.

Outside contractors are prohibited from driving on, along, or across any track that does not have a CP installed crossing. They may utilize an existing public crossing. The practice of allowing rubber tired equipment to operate over track with no crossing has been banned.

Exceptions to this rule will require the express approval from CP Engineering.

Prior to any project being started, the RAILROAD requires a "Request for Flagging Services" form to be completed and submitted; including check for prepayment based on the number of days flagman protection will be required.

