



**MINUTES
OF
IOWA DOT SPECIFICATION COMMITTEE MEETING**

April 11, 2024

Members Present:	Darwin Bishop Dillon Feldmann Daniel Harness Eric Johnsen, Chair Ed Kasper Wes Musgrove Mike Nop Scott Nixon Willy Sorenson Bob Welper	District 3 – DCE Local Systems Bureau Design Bureau Contracts & Specifications Bureau Contracts & Specifications Bureau Construction & Materials Bureau Bridges & Structures Bureau District 1 - DCE Traffic & Safety Bureau District 2 - DME
Members Not Present:	Charlie Purcell	Project Delivery Division
Advisory Members Present:	Jeff Devries Ashley Buss Scott Sommers Micah Loesch Josh Stott Ben Hucker Andy Case Ryan Weidemann Paul Geilenfeldt DeWayne Heintz David Carney	Construction & Materials Bureau Construction & Materials Bureau Construction & Materials Bureau FHWA FHWA Maintenance Bureau Dallas County Hamilton County Marshall County Jefferson County SUDAS

The Specification Committee met on Thursday, April 11, 2024, at 9:00 a.m. Eric Johnsen, Specifications Engineer, opened the meeting. The items were discussed in accordance with the agenda dated April 1, 2024.

The minutes are as follows:

1. Article 1102.20, Assurances Required.

The Contracts and Specifications Bureau requested to update and clarify a contract requirement.

2. Article 2529.03, H, Smoothness (Full Depth Finish Patches).

The Construction and Materials Bureau requested to eliminate an obsolete reference to Section 2316 and update language to reflect current smoothness testing.

3. Section 2558, Cross Stitching of Concrete Pavement.

The Construction and Materials Bureau requested to convert DS-23039 to the Standard Specifications.

4. Article 4184, Reflectorizing Spheres for Traffic Paint.

The Construction and Materials Bureau requested to update glass sphere/bead specifications to current industry practice.

5. DS-23035, Construction or Maintenance Work on Railroad Right-of-Way (Dakota, Minnesota, & Eastern Railroad Corporation dba CPKC).

The Specifications Section requested approval of revisions to the Developmental Specifications for Construction or Maintenance Work on Railroad Right-of-Way (Dakota, Minnesota, & Eastern Railroad Corporation dba CPKC).

6. DS-23XXX, Work on Railroad Right-of-Way (BNSF Railway).

The Specifications Section requested approval of Developmental Specifications for Work on Railroad Right-of-Way (BNSF Railway).

7. New Product Evaluation.

The Specifications Section will investigate a way to simplify the PPM section and automate the data collection so that the new product evaluation submittal is simpler and more transparent.

Form 510130 (02-24)



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Eric Johnsen		Bureau/Office: Specifications	Item 1
Submittal Date: 3/13/2024		Proposed Effective Date: ASAP	
Article No.: 1102.20		Other:	
Title: Assurances Required			
Specification Committee Action: Approved as recommended.			
Deferred:	Not Approved:	Approved Date: 4/11/2024	Effective Date: 10/15/2024
Specification Committee Approved Text: See Specification Section Recommended Text.			
Comments: None.			
Specification Section Recommended Text: 1102.20, Assurances Required.			
<p>Replace the first paragraph: To comply with US DOT Order 1050.2A (dated August 24, 1971) the following Appendix A is a and Appendix E are contract requirements of each contract and shall be included in each subcontract.</p>			
Comments: I couldn't find an effective date for the revised US DOT order. I don't think it matters.			
Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight .)			
Update language requiring Appendix E to be included in each contract and subcontract.			
Reason for Revision:			
New Bid Item Required (X one)	Yes	No X	
Bid Item Modification Required (X one)	Yes	No X	
Bid Item Obsolescence Required (X one)	Yes	No X	
Comments:			
County or City Comments:			
Industry Comments:			

Form 510130 (08-15)



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove/Jeff De Vries		Office: Construction and Materials	Item 2
Submittal Date: 2/9/2024		Proposed Effective Date: Oct 2024 GS	
Article No.: 2529.03, H Title: Smoothness (Full Depth Finish Patches)		Other:	
Specification Committee Action: Approved as recommended.			
Deferred:	Not Approved:	Approved Date: 4/11/2024	Effective Date: 10/15/2024
Specification Committee Approved Text: See Specification Section Recommended Text.			
Comments: None.			
Specification Section Recommended Text: 2529.03, H, Smoothness.			
<p>Replace the Article: Apply Section 2316 2317 to smoothness of full depth finish patches (except when the contract includes an overlay or pavement surface repair by diamond grinding or milling within the patch area) with the following modifications for Full Depth Finish Patches (50 feet or greater in length):</p> <ol style="list-style-type: none"> 1. Smoothness testing and evaluation is required for each patch with a length of 50 feet or more. For full lane width patches, perform the testing near the center of the traffic lane after the patch is placed. For partial lane width patches, perform testing in the patched wheel path. 2. Patches 50 feet to 100 feet in length: <ol style="list-style-type: none"> a. Test the patch length, and the existing pavement in that lane, for a distance of three times the patch length on both ends of the patch. If a patch occurs near a bridge, an intersection, and so forth, where the proper distance cannot be tested, make up the required total on the other end of the patch. If interference occurs on both ends, test only to the points of interference. b. Establish one Average Base Index (ABI) of the pavement for both ends of patch a Mean Roughness Index for the patch, MRI_{patch}. c. Calculate a new index for the entire length. Establish a Mean Roughness Index for the existing pavement on both ends of the patch, $MRI_{preexisting\ pavement}$. d. Compare the new index with the ABI MRI_{patch} to $MRI_{preexisting\ pavement}$. Perform surface correction according to Article 2316.03 2317.04 to a profile index so that the MRI is less than the ABI $MRI_{preexisting\ pavement}$ when either of the below listed conditions exists: <ol style="list-style-type: none"> 1) New profile index MRI_{patch} exceeds 42.0 75.0 inches per mile and exceeds ABI $MRI_{preexisting\ pavement}$ by more than 2.0 7.5 inches per mile. 2) New profile index MRI_{patch} exceeds 30.0 90.0 inches per mile and exceeds ABI $MRI_{preexisting\ pavement}$. e. Corrective action involves correction of bumps and dips exceeding a vertical height of 0.5 inch in a 25 foot span in the patch areas of localized roughness, if identified from the trace, plus appropriate surface correction within the patch and existing pavement, or both, on either end of the patch within the limits tested. 3. Patches 100 feet to 250 feet in length: Article 2529.03, H, 2, applies, except the length tested is the patch length, and the existing pavement in that lane for a distance of 300 feet on both ends of the patch. 4. Patches over 250 feet in length: Apply the requirements for Chart B pavement, of Section 2316 2317. 			

Comments:

Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight.)

2529.03, H

H. Smoothness.

Apply Section 2317 ~~2316~~ to smoothness of full depth finish patches (except when the contract includes an overlay or pavement surface repair by diamond grinding or milling within the patch area) with the following modifications for Full Depth Finish Patches (50 feet or greater in length):

1. Smoothness testing and evaluation is required for each patch with a length of 50 feet or more. For full lane width patches, perform the testing near the center of the traffic lane after the patch is placed. For partial lane width patches, perform testing in the patched wheel path.
2. Patches 50 feet to 100 feet in length:
 - a. Test the patch length, and the existing pavement in that lane, for a distance of three times the patch length on both ends of the patch. If a patch occurs near a bridge, an intersection, and so forth, where the proper distance cannot be tested, make up the required total on the other end of the patch. If interference occurs on both ends, test only to the points of interference.
 - b. Establish ~~one Average Base Index (ABI) of the pavement for both ends of patch.~~ a Mean Roughness Index for the patch, MRI_{patch}.
 - c. ~~Calculate a new index for the entire length.~~ Establish a Mean Roughness Index for the existing pavement on both ends of the patch, MRI_{preexisting pavement}.
 - d. Compare the ~~new index with the ABI~~ MRI_{patch} to MRI_{preexisting pavement}. Perform surface correction according to Article 2317.04 ~~2316.03~~ to a profile index so that the MRI is less than the ~~ABI~~ MRI_{preexisting pavement} when either of the below listed conditions exists:
 - 1) MRI_{patch} ~~New profile index~~ exceeds 75 ~~42.0~~ inches per mile and exceeds MRI_{preexisting pavement} ~~ABI~~ by more than 7.5 ~~2.0~~ inches per mile.
 - 2) MRI_{patch} ~~New profile index~~ exceeds 30 ~~90~~ inches per mile and exceeds MRI_{preexisting pavement} ~~ABI~~.
 - e. Corrective action involves correction of Areas of Localized Roughness ~~bumps and dips exceeding a vertical height of 0.5 inch in a 25 foot span in the patch~~, if identified from the trace, plus appropriate surface correction within the patch and existing pavement, or both, on either end of the patch within the limits tested.
3. Patches 100 feet to 250 feet in length: Article 2529.03, H. 2, applies, except the length tested is the patch length, and the existing pavement in that lane for a distance of 300 feet on both ends of the patch.
4. Patches over 250 feet in length: Apply the requirements ~~for Chart B pavement,~~ Section 2316 of 2317.

Reason for Revision: Eliminating reference to section 2316.

New Bid Item Required (X one)	Yes	No X
Bid Item Modification Required (X one)	Yes	No X
Bid Item Obsolescence Required (X one)	Yes	No X

Comments:

County or City Comments:

Industry Comments:

Form 510130 (08-15)



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove/Elijah Gansen		Office: Construction & Materials	Item 3
Submittal Date: March 25, 2024		Proposed Effective Date: October 2024	
Section No.: 2558 Title: Cross Stitching of Concrete Pavement		Other:	
Specification Committee Action: Approved as recommended.			
Deferred:	Not Approved:	Approved Date: 4/11/2024	Effective Date: 10/15/2024
Specification Committee Approved Text: See attached specification for new Section 2558.			
Comments: District 1 asked when the Engineer would not allow use of an air operated drill. Committee discussed and thought that when they could not demonstrate the process without damage, if the drill begins to damage the pavement after construction has started, or if there is a history of poor results with a contractor using the air operated drill. Otherwise, the air operated drill should be allowed.			
Specification Section Recommended Text: See attached draft specification for new Section 2558.			
Comments:			
Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight.) Add attached new specification to Division 25 of the General Specifications Void DS-23039 because it is no longer needed.			
Reason for Revision: This process has been used on several projects with good results, so the DS is no longer needed.			
New Bid Item Required (X one)	Yes	No X	
Bid Item Modification Required (X one)	Yes	No X	
Bid Item Obsolescence Required (X one)	Yes	No X	
Comments:			
County or City Comments: None.			
Industry Comments: Suggested by industry and they are supportive of the change.			

Section 2558. Cross Stitching of Concrete Pavement

2558.01 DESCRIPTION.

Drill holes and anchor deformed tie bar reinforcement diagonally across cracks or longitudinal joints in concrete pavement in accordance with the details shown on the plans. Do not use on transverse cracks or joints.

2558.02 MATERIALS.

A. Reinforcing Steel.

Use an epoxy coated No. 6 deformed steel bar meeting [Section 4151](#) of the Standard Specifications.

B. Epoxy Grout.

Use epoxy grout in accordance [Materials I.M. 491.11, Appendix A](#).

2558.03 CONSTRUCTION.

A. Equipment

Use a low impact hydraulic drill with a tungsten carbide bit. **An air operated drill may be used with approval of the Engineer.** Do not damage the surface or crack the concrete when drilling. Demonstrate the process prior to use on the repair pavement.

B. Drilling Holes.

1. Drill a 7/8 inch diameter hole transversely across the joint at an angle and distance as described in Standard Road Plan PV-109.
2. Use a drilling guide to ensure the angle and distance are correct and consistent. Cross sectional view of drilling into slab is shown in the plans.
3. Drill holes on alternating sides of the joint line at 24 inch spacing, avoiding any in-place bars.
4. Do not drill completely through the slab. Leave approximately 1 inch undrilled at the bottom of the slab. If hole punches through bottom of slab, fill with epoxy and move 6 inches.
5. Maintain at least 18 inches from load transfer devices.

C. Cleaning Holes.

Blow air into holes to remove dust and debris. The air must be free of oil and other contaminants.

D. Insert Tie Bar.

1. Pour the epoxy into the hole, leaving some volume for the bar to occupy the hole.
2. Insert the tie bar into the hole, remove excess epoxy and finish flush with the pavement surface.
3. Leave approximately 1 inch of cover at the surface of the slab when using the dimensions in Standard Road Plan PV-109.

E. Opening to Traffic.

The pavement may be opened to traffic after the epoxy is tack free.

2558.04 METHOD OF MEASUREMENT.

The number of each installed cross-stitched tie bar location will be counted.

2558.05 BASIS OF PAYMENT.

The Contractor will be paid the contract unit price for each installed cross-stitched bar. This price is full compensation for furnishing all materials, tools, labor, equipment and incidentals necessary to complete the work.

Form 510130 (08-15)



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove / Brian Worrel	Office: Construction & Materials	Item 4
Submittal Date: March 2024	Proposed Effective Date: October 2024	
Article No.: 4184 Title: Reflectorizing Spheres for Traffic Paint	Other:	

Specification Committee Action: Approved with changes.

Deferred:	Not Approved:	Approved Date: 4/11/2024	Effective Date: 10/15/2024
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Specification Committee Approved Text:
4184, Reflectorizing Spheres for Traffic Paint.

Replace the Section:

4184.01 DESCRIPTION.

- A.** This specification covers two types of glass spheres or beads, dual coated and uncoated, for the production of reflectorized pavement markings.
 - Waterborne and VOC compliant solvent borne traffic paint: use dual coated beads (silicone and silane).
 - Epoxy pavement markings: use silicone only coated beads (no silane).
 - Refer to Table 4184.02-1 for gradations of waterborne and VOC compliant solvent borne traffic paint.
 - Refer to Table 4184.02-2 for gradations of multi-component liquid pavement markings.

- B.** The glass beads shall not exhibit a characteristic of toxicity, relative to heavy metals. Glass beads shall not contain more than 200 ppm total of lead, antimony, or arsenic. Manufacturer shall provide a certificate of analysis stating total lead, antimony, and arsenic content for each batch of glass beads supplied. Use transparent, clear, colorless glass spheres that are:
 - Free from milkiness, dark particles, and excessive air inclusions.
 - Essentially clear from surface scarring or scratching.
 - Free of hard lumps and clusters
 - Readily dispensed under any conditions suitable for paint striping.
 - Virgin glass for 0.850 mm (20 Sieve) and larger glass spheres.

- C.** Glass Beads shall meet AASHTO M247 requirements and the following specific requirements.

4184.02 SPECIFIC REQUIREMENTS.

- A. Gradation.**
 Meet the gradation requirements of Table 4184.02-1 or Table 4184.02-2 depending on marking type.

**Table 4184.02-1: Gradation Requirements
 (Standard Blend Glass Spheres/Beads)**

Sieve Size	Percent Passing*	Percent Retained*
16	100	0
20	90-100 85-92	8-15
30	50-75 50-67	25-35

40	15-45 0-37	30-50
50	0-15	15-35
80		0-10
pan		0-2

* Shall meet either Percent Passing or Percent Retained gradation but not required to meet both.

**Table 4184.02-2 Gradation Requirements
(Utah Blend Glass Spheres/Beads)**

Sieve Size	Percent Passing
16	90-100
18	65-80
20	
30	30-50
40	
50	0-5
80	
pan	

B. Roundness.

Minimum of 80% true spheres.

C. Refractive Index.

Minimum refractive index of 1.50.

D. Properties of Dual Coated Spheres.

1. Coated with a dual coating that has both a moisture resistant silicone coating and an adhesion promoting silane coating.
2. Passes the moisture resistance test and the adherence coating test.

E. Properties of Silicone Coated Spheres.

1. Coated only with a silicone coating (no silane).
2. Passes the moisture resistance test and test negative for the adherence coating test.

4184.03 METHODS OF TEST.

Test the specific requirements according to Office of Materials Test Method No. Iowa 814.

Comments: Table 4184.02-1 was corrected for the two errors for the percent retained on sieves 16 and 20.

The Construction and Materials Bureau asked if we test the gradation of the beads. We do not routinely run tests, but the suppliers certify the gradations and other states do test. If reflectivity tests show issues after installation, that could be an indication of a poor gradation as well.

Specification Section Recommended Text:
4184, Reflectorizing Spheres for Traffic Paint.

Replace the Section:

4184.01 DESCRIPTION.

- A.** This specification covers two types of glass spheres or beads, dual coated and uncoated, for the production of reflectorized pavement markings.
 - Waterborne and VOC compliant solvent borne traffic paint: use dual coated beads (silicone and silane).
 - Epoxy pavement markings: use silicone only coated beads (no silane).
 - Utilize table 4184.02-1 for gradations of waterborne and VOC compliant solvent borne traffic paint.
 - Utilize table 4184.02-2 for gradations of Multi-Component Liquid Pavement markings.

- B.** The glass beads shall not exhibit a characteristic of toxicity, relative to heavy metals. Glass beads shall not contain more than 200 ppm total of lead, antimony, or arsenic. Manufacturer shall provide a certificate of analysis stating total lead, antimony, and arsenic content for each batch of glass beads supplied. Use transparent, clear, colorless glass spheres that are:
 - Free from milkiness, dark particles, and excessive air inclusions.
 - Essentially clear from surface scarring or scratching.
 - Free of hard lumps and clusters
 - Readily dispensed under any conditions suitable for paint striping.
 - Virgin glass for 0.850 mm (20 Sieve) and larger glass spheres.

- C.** Glass Beads will meet AASHTO M247 requirements and the following specific requirements.

4184.02 SPECIFIC REQUIREMENTS.

A. Gradation.

Meet the gradation requirements of Table 4184.02-1 or Table 4184.02-2 depending on marking type.

**Table 4184.02-1: Gradation Requirements
(Standard Blend Glass Spheres/Beads)**

Sieve Size	Percent Passing*	Percent Retained*
16	100	100
20	90-100 85-92	15-Aug
30	50-75 50-67	25-35
40	45-45 0-37	30-50
50	0-15	15-35
80		0-10
pan		0-2

* Must meet either Percent Passing or Percent Retained gradation but not required to meet both.

**Table 4184.02-2 Gradation Requirements
(Utah Blend Glass Spheres/Beads)**

Sieve Size	Percent Passing
16	90-100
18	65-80
20	
30	30-50
40	
50	0-5
80	
pan	

B. Roundness.

Minimum of 80% true spheres.

C. Refractive Index.

Minimum refractive index of 1.50.

D. Properties of Dual Coated Spheres.

1. Coated with a dual coating that has both a moisture resistant silicone coating and an adhesion promoting silane coating.
2. Passes the moisture resistance test and the adherence coating test.

E. Properties of Silicone Coated Spheres.

1. Coated only with a silicone coating (no silane).
2. Passes the moisture resistance test and test negative for the adherence coating test.

4184.03 METHODS OF TEST.

Test the specific requirements according to Office of Materials Test Method No. Iowa 814.

Comments: Should the Percent Retained on the 16 sieve for Table 4184.02-1 be "0"? What does "Aug" mean in Table 4184.02-1?

Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use **Strikeout** and **Highlight**.)

Section 4184. Reflectorizing Spheres for Traffic Paint

4184.01 DESCRIPTION.

- A. This specification covers two types of glass spheres **or beads**, dual coated and uncoated, for the production of reflectorized pavement markings.
 - Waterborne and VOC compliant solvent borne traffic paint: use dual coated beads (silicone and silane).
 - Epoxy pavement markings: use silicone only coated beads (no silane).
 - Utilize table 4184.02-1 for gradations of waterborne and VOC compliant solvent borne traffic paint.
 - Utilize table 4184.02-2 for gradations of Multi-Component Liquid Pavement markings.
- B. The glass beads shall not exhibit a characteristic of toxicity, relative to heavy metals. Glass beads shall not contain more than 200 ppm total of lead, antimony, or arsenic. Manufacturer shall provide a certificate of analysis stating total lead, antimony, and arsenic content for each batch of glass beads supplied. Use transparent, clear, colorless glass spheres that are:
 - Free from milkiness, dark particles, and excessive air inclusions.
 - Essentially clear from surface scarring or scratching.
 - Free of hard lumps and clusters
 - Readily dispensed under any conditions suitable for paint striping.
 - Virgin glass for 0.850 mm (20 Sieve) and larger glass spheres.
- C. Glass Beads will meet AASHTO M247 requirements and the following specific requirements.

4184.02 SPECIFIC REQUIREMENTS.

A. Gradation.

Meet the gradation requirements of Table 4184.02-1 **or Table 4184.02-2 depending on marking type.**

Table 4184.02-1: Gradation Requirements (Glass Spheres)

Sieve Size	Percent Passing
16	100
20	90-100
30	50-75
40	15-45
50	0-15

Table 4184.02-1: Gradation Requirements (Glass Spheres / Beads)

Sieve Size	Percent Passing*	Percent Retained*
16	100	100
20	85-92	15-Aug
30	50-67	25-35
40	0-37	30-50
50	0-15	15-35
80		0-10
pan		0-2

* Must meet either Percent Passing or Percent Retained gradation but not required to meet both.

Table 4184.02-2 Gradation Requirements (Glass Spheres / Beads)

Sieve Size	"Utah Blend" – Percent Passing
16	90-100
18	65-80
20	
30	30-50
40	
50	0-5
80	
pan	

B. Roundness.

Minimum of 80% true spheres.

C. Refractive Index.

Minimum refractive index of 1.50.

D. Properties of Dual Coated Spheres.

1. Coated with a dual coating that has both a moisture resistant silicone coating and an adhesion promoting silane coating.
2. Passes the moisture resistance test and the adherence coating test.

E. Properties of Silicone Coated Spheres.

1. Coated only with a silicone coating (no silane).
2. Passes the moisture resistance test and test negative for the adherence coating test.

4184.03 METHODS OF TEST.

Test the specific requirements according to Office of Materials Test Method No. Iowa 814.

Reason for Revision: In meetings with Industry our current specifications are becoming outdated. This update will help increase visibility of the pavement markings thru a changed gradation which incorporates more virgin glass bead material on the #20 sieve which in turn if applied correctly can increase retro-reflectivity numbers of our pavement markings. It also incorporates gradation requirements for the spheres when utilized with our multi-component pavement marking material being used on Interstates.

New Bid Item Required (X one)	Yes	No x
Bid Item Modification Required (X one)	Yes	No x
Bid Item Obsolescence Required (X one)	Yes	No x

Comments:

County or City Comments:

Industry Comments:

Form 510130 (02-24)



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Eric Johnsen		Bureau/Office: Specifications	Item 5
Submittal Date: 3/25/2024		Proposed Effective Date: 6/18/2024	
Article No.: Title:		Other: DS-23035, Construction or Maintenance Work on Railroad Right-of-Way (Dakota, Minnesota, & Eastern Railroad Corporation dba CPKC)	
Specification Committee Action: Approved as recommended.			
Deferred:	Not Approved:	Approved Date: 4/11/2024	Effective Date: 6/18/2024
Specification Committee Approved Text: See attached Developmental Specifications for Construction or Maintenance Work on Railroad Right-of-Way (Dakota, Minnesota, & Eastern Railroad Corporation dba CPKC)			
Comments: Eric Johnsen will be the controller of this DS.			
Specification Section Recommended Text: See attached Draft Developmental Specifications for Construction or Maintenance Work on Railroad Right-of-Way (Dakota, Minnesota, & Eastern Railroad Corporation dba CPKC)			
Comments:			
Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and <u>Highlight</u> .)			
Reason for Revision: Update contacts, attachments, and a few requirements of the railroad.			
New Bid Item Required (X one)	Yes	No X	
Bid Item Modification Required (X one)	Yes	No X	
Bid Item Obsolescence Required (X one)	Yes	No X	
Comments:			
County or City Comments:			
Industry Comments:			

DS- 23056
(Replaces DS-23035)



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

**Effective Date
June 18, 2024**

THE STANDARD SPECIFICATIONS, SERIES 2023, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

23056.01 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-23056, 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 50 feet from nearest rail.

23056.02 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.

23056.03 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-23056.04-1 shall be submitted for both railroad overpass and underpass projects, as applicable. Items in Table DS-23056.04-2 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-23056.04-2 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-23056.04-1: 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-23056.04-2: Sets Required

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

D. As-Built Records will be submitted to 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

23056.04 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.

23056.05 CP REPRESENTATIVES.

CP representatives will be provided at the expense of the Contractor 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 50 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 50 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 50 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.

23056.06 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 \$10,000,000.00 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 \$2,000,000.00 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 CP, 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 with limits of not less than \$1,000,000.00.

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 \$2,000,000.00 per occurrence.

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.

23056.07 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.

23056.08 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.

23056.09 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 feet to the closest rail of track nearest temporary construction falsework. No materials, supplies, or equipment will be stored within 50 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.

23056.10 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.

23056.11 EXCAVATIONS AND FALSEWORK IN CLOSE PROXIMITY TO CP FACILITIES.

Contractor shall take special precaution in connection with excavating, shoring, and falsework. 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". All falsework within 18 feet of centerline of tracks must be designed per AREMA Chapter 8 Part 28.

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.

23056.12 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.

23056.13 TRAFFIC CONTROL.

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

23056.14 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.

23056.15 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.

23056.16 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.

23056.17 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.

23056.18 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.

23056.19 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.

23056.20 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 50 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.

23056.21 RAILROAD FLAGGING.

A. Notification.

Contractor shall notify CP and Engineer at least 30 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-23056, 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.

There is an 8 hours of flagging minimum per day. Please note that flagging charges are approximately \$1200.00 per day for an ~~8~~ 10 hour day. Overtime will need to be authorized. Additional overtime hours will be paid at ~~the appropriate rate~~ \$150 per hour. Weekends and Holidays will be billed at the overtime rate. Normal flagman hours are currently from 8:00 am to 4:00 pm. 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-23056.05, warrant a flagger. The Contracting Authority will reimburse the Contractor for any daily cost that exceeds \$1,200.00 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-23056.05, 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-23056.05, 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.

23056.22 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.

23056.23 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.

23056.24 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.

23056.25 METHOD OF MEASUREMENT AND BASIS OF PAYMENT.

Railroad Protective Liability Insurance for Dakota, Minnesota & Eastern Railroad Corporation will be paid for as a Lump Sum bid item. This payment shall be full compensation for complying with this specification. 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-23056, Attachment A: Right of Entry Agreement (REVISED)
- DS-23056, Attachment B: Canadian Pacific Flagman Request Form (REVISED)
- DS-23056, Attachment C: Minimum Safety Requirements for Contractors Working on CP Property in the United States

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 \$1,500.00 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 for Construction or Maintenance Work on Railroad Right-of-Way (Dakota, Minnesota, & Eastern Railroad Corporation dba Canadian Pacific), 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:

~~Matthew Miller~~ Kyle Spree
Manager Public Works
CP Plaza – 120 South 6th Street, Suite 700
Minneapolis, MN 55402
Telephone Number: 612.330.4555
Email: ~~matthew_miller@cpr.ca~~ Kyle.Spree@cpkcr.com

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

CANADIAN PACIFIC FLAGMAN REQUEST FORM

(All blanks below must be completely filled in before any flagman request will be processed)

Work Authorization

Right of Entry/Formal Agreement/Utility Permit No.: _____ Executed Date: _____

You must have an agreement with CP such as a Right of Entry or Utility Permit in addition to flagging before you may enter CP property

Prior to excavation on CP property or ROW you must contact the following CP CBYD number to (866) 291-0741 and the State-One call number

Project Information

Submit a detailed map of the location where protection is being requested.

Street Location/Intersection: _____ City/State: _____

Railroad Subdivision & Milepost: _____ GPS Lat/Long: _____ DOT Crossing # _____

Description of work, including type of equipment (Continued on page 2): _____

Location for flagman to report: (Address): _____

Name of Site Contact: _____ Site Contact Phone: (____) ____ - _____ 24/7 Emergency Contact: (____) ____ - _____

Requested Dates/Times

Minimum 15 business days advance notice required.

Dates requested are subject to flagman availability Total Days of Flagging Needed to Complete Project: _____

Preferred Dates for Flagging Protection: _____ to _____ or _____ to _____

Anticipated Starting time: _____ Anticipated Ending Time: _____ Anticipated # Hours per Day: _____

Flagmen start and end time may vary based on type of protection required

IMPORTANT: Amount of time to be clear of track (15' FROM TRACK) upon request: (Minutes) _____

NO TRACK OUTAGES ALLOWED

ROE/License/Utility Agreement fees MUST be received before Flagman Protection will be provided.

There is an 8 hours of flagging minimum per day. Please note that flagging charges are approximately \$1200.00 per day for an 8 hour day. Invoices will be sent after the project is completed. Checks should be made payable to the railroad D/B/A listed on your Right of Entry/Permit/License or Formal Agreement.

Overtime will need to be authorized. Additional overtime hours will be paid at the appropriate rate. Weekends and Holidays will be billed at the overtime rate. Normal flagman hours are currently from 8:00 am to 4:00 pm.

Prior to ANY excavation on CP property or ROW you must contact the following CP CBYD number to (866)291-0741 and the State-One call number to ensure that all underground facilities are located. Prior to flagging contractor must provide State One Call Ticket Number and CP Call Before You Dig Ticket Number.

Billing Information

All blanks spaces must be filled out

Company Name: _____ Contact Name: _____

Billing Address: _____

City: _____ State: _____ Zip: _____

Company Phone: _____ Company Fax: _____ E-Mail: _____

THIS COMPLETED FORM MUST BE EMAILED WITH A MAP, AND COI TO: **Charles.Kretchman@cpkcr.com**
PAYMENT CHECK(S) must be mailed to Charles Kretchman - 120 South 6th St, Suite 700, Minneapolis, MN, 55402

I agree to pay for flagging services as requested: _____

Prior to any project being started, Canadian Pacific requires a “Flagman Request Form” to be completed and submitted. You must have an agreement with a CP railroad, such as but not limited to a Right of Entry, Utility Permit, License, Easement, or Formal Agreement in addition to any necessary flagging before you may enter CP property. All Right of Entry, Permit, License, or Utility Agreement fees MUST be received before Flagman Protection will be provided.

All Utilities or Third-Party Contractor’s must follow the policies laid out in “Canadian Pacific’s Minimum Safety Requirements for Contractors Working on CP Property in the United States.” Please refer to the attachments of your ROE, Permit, or formal agreement for that document.

In Case of Emergency on or near CP property, please contact 1-800-716-9132.

Utility and Gas Line Locates on CP Property

A Utility locate on CP may be required prior to the start of any work based on disturbance of soil on CP property. The purpose of Utility locates is 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 railroad operation. The Utility locate will be performed by a qualified CP Signal & Communications employee. A CP CBYD ticket number will last 14 days.

Prior to excavation on CP property or ROW you must contact the following CP CBYD number (866) 291-0741 and the appropriate State-One call number to ensure that all underground facilities are located and marked.

Work Description (Continued from Page 1)

Please provide a detailed description of work you are seeking to perform. Also, please submit a detailed map of the location where protection is being requested: _____

General Information

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 is strictly prohibited. Exceptions to this rule will require the express approval from CP Engineering Department.

A utility or contractor shall not commence, or carry on, any work for installation, maintenance, repair, changing or renewal of any facility, under, over, on, or near railroad property at any United State CP location without giving notice to the CP Public Works Department at the railroad’s office located at Minneapolis, MN.

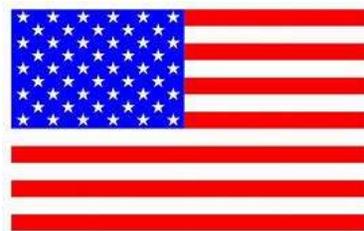
A qualified CP flagman is required any time any work is performed; under or across any railroad track, regardless of whether a contractors work involves a physical presence on the surface of the railroad property; on the surface of the railroad property within fifty (50) feet horizontally of the centerline of any CP railroad track; or on, near, or over railroad property if the work may potentially encroach (intentionally or unintentionally) within fifty (50) feet from the centerline of any CP railroad track. Causes of potential encroachment include but are not limited to equipment that has the potential to SWING, pivot, extend or mechanically fail. Potential encroachment must also account for a distance of one-half the length of the largest load that any equipment may lift. Additionally, CP reserves the right to require a flagman for work on Railroad property not meeting the above criteria when there are other conditions or considerations that would indicate the need for a flagman to safeguard Railroad’s operations, property, and safety of any person.

Best Regards,

Charles Kretchman
Supervisor-Public Works
120 South 6th St, Ste 700
Minneapolis, MN 554026
612-247-0706
Charles.Kretchman@cpkcr.com



Minimum Safety Requirements for Contractors Working on CP Property in the United States



Approval Authority:	Corporate Risk	Effective Date:	October 1, 2018
Version:	3.0	Revision Date:	October 1, 2021

Table of Contents

Table of Contents	2
Introduction	3
1 Application	3
2 Definitions and Interpretation	3
3 Contractor Compliance & Responsibilities	5
4 Site Safety Plans	7
5 Safety Training	7
6 Safety Orientation	7
7 Safety Job Briefing	7
8 Applicable Legislation	8
9 Security Access to CP Property	9
10 Personal Conduct	10
11 Personal Protection	12
12 Railroad Track Protection	133
13 HAZCOM	17
14 Operation of Highway Vehicles	18
15 Tools, Equipment and Machinery	19
16 Emergency Response	21
17 Confined Space	23
18 Reportable Accidents, Incidents and Injuries	23
19 Reporting	24
20 Contractor & Contractor Personnel Acknowledgement	25
21 Attachment A - Emergency Information Sheet	27

Introduction

At Canadian Pacific (CP), safety is an integral part of the way we do business. We expect everyone working on Canadian Pacific's property to be unconditionally committed to safety. Safety must be given top priority and will take precedence over deadlines, production schedules, and all other considerations.

1 Application

1.1 Application

- 1.1.1 These Minimum Safety Requirements are applicable to all who work on CP property (except as noted in 1.13 and 1.14 below) including Contractors and other persons performing Work or otherwise providing services to Canadian Pacific on CP Property in the United States.
- 1.1.2 These Minimum Safety Requirements cannot be waived or altered, in whole or in part, without a prior Risk Assessment specific to the Work being conducted, and written consent has been provided by Manager-in-Charge.
- 1.1.3 Notwithstanding the foregoing, these Minimum Safety Requirements do not apply to other railroad companies who only operate trains on CP Property under various trackage or interchange agreements.
- 1.1.4 Further notwithstanding the foregoing, these Minimum Safety Requirements may not apply to Work or services provided in CP office premises, in which case, CP's Minimum Safety Requirements for Contractors Working in CP Offices may apply.

2 Definitions and Interpretation

2.1 Definitions

- 2.1.1 In these Minimum Safety Requirements, the following capitalized terms shall have the ascribed meaning below:
 - (a) **"Applicable Legislation"** means all applicable legislation, regulations, by-laws, codes, rules, standards, policies, procedures, promulgated by any federal, state, and municipal governmental body, including those of its agencies, having authority over CP and, or a Contractor in relation to the Work in the matter of health and safety of the person, property and, or the environment;
 - (b) **"Canadian Pacific"** or **"CP"** means Canadian Pacific Railway Company Ltd., and its subsidiaries and affiliates, and includes each of their respective directors, officers, employees, agent, and representatives;
 - (c) **"CP Personnel"** means CP's employees, agents, and representatives;
 - (d) **"CP Property"** means any building, facility, yard, track, right of way or other property owned or controlled by CP;
 - (e) **"Contractor"** means the company or person, and their respective employees and authorized agents, representative and subcontractors who are providing goods or services to CP; or on behalf of a third party working on CP property.
 - (f) **"Contractor Personnel"** means the Contractor's employees, and authorized agents, representative and subcontractors;
 - (g) **"Co-mingled Work"** means Work where Contractor Personnel works directly with or, in close proximity (time or space) to CP Personnel;

- (h) **“eTest”** an efficiency test. It is a planned procedure to evaluate compliance with rules, instructions and procedures, with or without the employee's knowledge.
- (i) **“Foul of Track”** means the placement of an individual or equipment within 4’ feet of the outside rail of a railway track that could be struck by a moving train or on- track work equipment (e.g. Hi-rail equipment).
- (j) **“Hazardous Materials”** means any substance, which is hazardous to persons or property and includes, without limiting the generality of the foregoing:
 - (i) radioactive, explosive, poisonous, or toxic substances;
 - (ii) any substance that if added to any water, would degrade or alter the quality of the water to the extent that it is detrimental to its use by man or by any animal, or plant;
 - (iii) any solid, liquid, gas or odor or combination of any of them that, if emitted into the air, would create or contribute to the creation of a condition of the air that endangers the health, safety, or welfare of persons, or the health of animal life, or causes damage to plant life or to property; and
 - (iv) substances declared to be hazardous, toxic or dangerous under any law or regulation now or hereafter enacted by any governmental authority having jurisdiction.
- (k) **“Manager-in-Charge”** means a CP manager as designated or otherwise identified by CP as being responsible for overseeing the Work to be performed, such Manager-in-Charge may include, but is not limited to Local CP Management, Superintendents, Chief Engineers, and Project Managers.
- (l) **“Mobile Equipment”** means any motorized and self-propelled equipment, excluding railroad equipment and highway vehicles, but including, for example, forklifts, tractors, cranes, ATVs, mules, motorized scissor lifts, telescopic boom lifts, and similar equipment that are not designed to operate or move on railroad tracks;
- (m) **“Office Premises”** means any building, facility, or portion thereof, or other premises, whether owned or controlled by CP, which is used solely for clerical or administrative purposes and which does not contain heavy equipment or machinery, as designated by CP from time to time;
- (n) **“Qualified and Authorized”** means a status attained by a person who has successfully completed any required training and demonstrated proficiency in the duties of a particular position or function and who has been given the right to act.
- (o) **“Railroad Equipment”** means trains, locomotives, railcars, on track equipment (track units), hi-rail vehicles and any other equipment designed to operate or move on railroad tracks;
- (p) **“Site Safety Plan”** means a documented plan which set out how Work is to be conducted in a safe manner, as required by Applicable Legislation, see 3.15 c);
- (q) **“Third Party Project”** means any work being performed on CP property that CP is not managing (i.e, road authority, utility company, commuter agency, or other similar entity, are on CP property for their own purposes, and not a project sponsored or managed by CP.
- (r) **“Work”** means the provision of products and services and related activities;
- (s) **“Work Site”** means any CP Property where CP Personnel or Contractor Personnel are present, or permitted to be present, while engaged in any Work, including any railroad equipment, mobile equipment and highway vehicles operated by or used to convey a person engaged in such Work. This applies also to work immediately adjacent to CP property which can pose a risk to safe railway operations (i.e., blasting, excavation next to ROW, etc).

2.2 Interpretation & Application

- 2.2.1 Where legislation is referred to in these Minimum Safety Requirements, it shall include all amendments and replacements thereto as promulgated from time to time.
- 2.2.2 Where standards, such as those of the American National Standards Institute (ANSI), are referred to in these Minimum Safety Requirements, they shall include all amendments and replacements thereof from time to time.
- 2.2.3 Where there is any ambiguity, inconsistencies, or omissions between or among any agreements with CP, expressed or implied; any Applicable Legislations; any applicable CP policies and practices; and any applicable industrial standards and practices, Contractor and Contractor Personnel shall adhere to that which is most stringent and current.

3 Contractor Compliance & Responsibilities

3.1 General Compliance

- 3.1.1 Contractor shall be fully and solely responsible for ensuring the health and safety of Contractor Personnel and for ensuring that its Work and other activities do not compromise the health and safety of CP Personnel or any other party, the protection of the environment, the protection of CP's property and those of any other party, and do not interfere with the safety of CP's railroad operations.
- 3.1.2 Contractor shall comply with and shall ensure all of Contractor Personnel are trained and qualified to safely perform the Work and that they comply with all Applicable Legislation pertaining to the protection against fire, safety, health, and environmental hazards, and with any license, permits, authorizations issued by the respective authority. Contractor shall provide CP with written certification that Contractor's safety program required by 49 CFR Part 243 has been approved by the Federal Railroad Administration (FRA) where applicable.
- 3.1.3 Contractor shall comply with and shall ensure all of Contractor Personnel comply with all terms and conditions of all agreements, expressed or implied, between Contractor and CP, and all applicable CP policies and practices.
- 3.1.4 Subject to the requirements of CP's Access Control Procedures, the contractor shall provide CP eRailsafe training for each employee engaged in work on CP property. Where there is no agreement between CP and the Contractor, the Contractor is responsible for meeting the additional requirements outlines within CP's Access Control Procedures.
- 3.1.5 Contractor shall provide Contractor Personnel, at its own expense, any and all safety equipment required to protect against injuries during the performance of the Work and shall ensure that Contractor Personnel are knowledgeable of and utilize safe practices in performing the Work.
- 3.1.6 The Contractor shall have a copy of the following documents at the Work Site at all times, and shall produce them as and when requested by CP:
 - (a) These Minimum Safety Requirements for Contractors Working on CP Property;
 - (b) Licenses, certifications, permits, training records or other documents required by Applicable Legislation or these Minimum Safety Requirements;
 - (c) Contractor's Site Safety Plan;
 - (d) Contractor's Emergency Information Sheet (see Attachment A); and
 - (e) Any additional documents required by Contract or by agreement with Manager-in-Charge.
 - (f) Employee identification (eRailsafe badge – see 9.1.1).

3.2 Compliance Assurance

- 3.2.1 CP reserves the right to observe, inspect, test and audit Contractor and Contractor Personnel for compliance with all requirements herein, and to demand and receive all relevant records, documentation, and materials evidencing compliance, at any time, and from time to time.
- 3.2.2 Failure of the Contractor or Contractor Personnel to comply with any applicable provisions herein may be considered a material breach, and in addition to all other remedies available, CP may without prejudice:
 - (a) take over control of that Work or activity;
 - (b) order the Work to stop; and/or
 - (c) order Contractor Personnel to leave CP Property.
- 3.2.3 Upon the earlier of the completion of the Work, the expiration of the applicable agreement, or the request of a Manager-in-Charge, Contractor and Contractor Personnel shall return all identification, badges, access cards, and decals, issued or provided by CP to the Manager-in-Charge.

4 Site Safety Plans

4.1 General Requirements

- 4.1.1 Prior to starting any Work on CP Property, the Contractor must have a written Site Safety Plan that identifies:
 - (a) All applicable legislation, rules, policies and work practices in relation to the work being performed;
 - (b) Specific hazards that are associated with the Work being performed on CP property for CP, and Work being performed not for CP:
 - for example:
 - (i) Construction, maintenance or inspections of buildings;
 - (ii) Working on or adjacent to railroad tracks;
 - (iii) Maintenance or inspection or railroad tracks, crossings or signal systems;
 - (iv) Operating Railroad Equipment on CP tracks; or
 - (v) When/where Contractor Personnel work directly with or in proximity (time or space) to CP Personnel; and
 - (c) Methods of verifying compliance.
- 4.1.2 The Contractor will provide Manager-In-Charge with a copy of this Site Safety Plan on reasonable request.
- 4.1.3 The Contractor must be able to demonstrate an awareness of applicable legislation, rules, policies and work practices in relation to the work being performed.

5 Safety Training

5.1 Minimum Training & Qualifications

- 5.1.1 At its sole cost and expense, Contractor shall ensure that all Contractor Personnel be fully trained and qualified for the Work they will be performing. Contractors and Contractor Personnel shall meet, or exceed, all Applicable Legislation requirements relating to training and qualification, including but not limited to the requirements of 49 CFR Part 243.
- 5.1.2 Additionally, Contractor Personnel training and qualification shall meet or exceed all applicable industry standards.

5.2 Proof of Training & Qualification

- 5.2.1 Contractor Personnel shall at all times have proof of such training and qualifications and shall produce them as and when requested by the Manager-in-Charge.
- 5.2.2 CP reserves the right to inspect qualification certificates, licenses, training records and/or Work-history records for any Contractor Personnel, and, or to be provided with copies thereof, on reasonable request. In addition, CP reserves the right to perform eTests on contractor employees, and request discipline for non-conformance.

6 Safety Orientation

6.1 General Requirements

- 6.1.1 Prior to beginning Work, all Contractor Personnel shall participate in a CP authorized safety orientation, including on-site orientation presented by the Manager-in-Charge or designate.
- 6.1.2 Any time the scope of Work, location, condition or supervision changes, Contractor Personnel may be required to attend additional safety orientation sessions.
- 6.1.3 After successful completion of such safety orientation, Contractors must be able to produce company identification or an eRailsafe photo identification badge authorizing access to CP property unescorted for the purposes of conducting work. Managers have the ability to enter the tracking code into CM (Compliance management). Third parties who hire subcontractors must ensure required compliance while on CP property. The eRailsafe identification card shall be worn or be made visible at all times, or produced upon request and cannot be transferred under any circumstances.

7 Job Safety Briefing

- 7.1.1 Contractor Personnel shall attend all Job Safety Briefings as and when conducted. Contractor Personnel shall be solely and fully responsible for understanding the content of the Job Safety Briefing, and at a minimum shall:
 - (a) have an understanding of the scope of Work to be performed and an appreciation of the nature of the location, environment, and conditions where such Work is to be performed;
 - (b) be aware of specific or unusual hazardous condition, existing or potential and the control measures required to protect against, control, mitigate, or where possible, avoid said hazard; and
 - (c) have an emergency response plan/evacuation procedures.

- 7.1.2 Where Contractor Personnel are working directly with or in proximity (time or space) to CP Personnel, job safety briefings must include both CP Personnel and Contractor Personnel, and any other affected third parties. The job safety briefing shall identify nature and extent of the interaction between the Work being performed by Contractor Personnel, and those performed by CP Personnel or other third parties. Contractor Personnel shall inform CP Personnel, and any other third parties of known or potential unsafe conditions and hazards that may be created by, resulting from, or inherent in their Work and the corresponding preventative, mitigation, and/or control measures at all job briefings prior to commencing Work, or as soon as Contractor Personnel becomes aware of such conditions.
- 7.1.3 In all situations, all Contractor Personnel are expected to:
- (a) continually identify hazards and assess risk of hazards and to continually and clearly communicate all hazards to the Manager-in-Charge and to all other parties that may be affected at job safety briefings, and at any other time as and when appropriate or necessary;
 - (b) take actions that are within their assigned responsibility to eliminate or control hazards and risks; and
 - (c) immediately notify their supervisor or the Manager-in-Charge of hazards that pose unacceptable risk that they are unable to eliminate or control.
- 7.1.4 Where Contractor Personnel are unable to eliminate or control a hazard, Contractor Personnel shall take interim measures to protect people, property, equipment and the environment until the hazard can be properly assessed and appropriate corrective actions taken.

8 Applicable Legislation

8.1 General Requirements

- 8.1.1 Contractor and Contractor Personnel shall be solely responsible for identifying and complying with all Applicable Legislation. At a minimum, Contractor and Contractor Personnel shall comply with the federal legislations set out below which list is intended solely for general guidance, and not as a comprehensive list of all Applicable Legislation.
- 8.1.2 Additionally, the Association of American Railroads (AAR) is an industry association which can provide support and guidance on matters related to railroad safety and the transportation of hazardous materials.

8.2 Transportation of Hazardous Materials

- 8.2.1 When Work involves the handling or transportation of hazardous materials (hazmat), that Work must comply with Hazardous Materials Transportation Act and regulations administered by the Pipeline and Hazardous Materials Safety Administration (PHMSA).
- 8.2.2 Contractors shall be solely responsible for ensuring that all Contractor Personnel who handles, offers for transport and/or transports hazmat by any transportation mode are trained and hold a valid training certificate or is working under the direct supervision of someone who is trained and holds a valid training certificate. That training must be based on the Work that the person is expected to perform and the hazmat that the person is expected to handle, offer for transport or transport.
- 8.2.3 All U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations are published in Chapter I of title 49 of the Code of Federal Regulations (49 CFR).

8.3 Railroad Work

- 8.3.1 When Work involves the construction, alteration, operation, inspection and maintenance of any part of the general railroad system of transportation, that Work must comply with the Federal Railroad Safety Act and regulations administered by the Federal Railroad Administration (FRA).
- 8.3.2 Contractors shall be solely responsible for ensuring that all Contractor Personnel who perform railroad Work are trained and qualified in accordance with those regulations and hold valid certificates when required.
- 8.3.3 All FRA regulations are published in Chapter II of title 49 of the Code of Federal Regulations (49 CFR).

8.4 Occupational Safety & Health

- 8.4.1 Any Work being performed that may create a risk to the health and safety of any person, including CP Personnel and Contractor Personnel, when not covered by FRA regulations shall be governed by U.S. Department of Labor regulations administered by Occupational Safety and Health Administration (OSHA).
- 8.4.2 All OSHA regulations are published in Chapter XVII of title 29 of the Code of Federal Regulations (29 CFR).

8.5 Environmental Protection

- 8.5.1 Where Work is being performed that may impact the environment, that Work must comply with all applicable federal state, and local government legislation, regulations and standards.
- 8.5.2 Federal legislation is generally administered by the Environmental Protection Agency. A compilation of those laws and regulations can be accessed at <http://www.epa.gov/lawsregs/>

9 Security Access to CP Property

- 9.1.1 All Contractor Personnel must have personal identification and/or eRailsafe credentials authorizing access and in their possession at all times while on CP Property, and present them for review to any Manager-in-Charge, other CP managers and employees, Police Officer, security guard, or regulatory officer upon request:
 - (a) photo identification (e.g. driver's license); and
 - (b) proof of employment, document or card; and
 - (c) CP safety orientation certificate; or
 - (d) building access pass issued by CP or third party having control over CP premises; or
 - (e) CP security photo ID card or badge; or
 - (f) other proof of safety orientation and access authorization issued by CP.
 - (g) Valid eRailsafe card
- 9.1.2 Where any Work requires Contractor Personnel to ride in locomotive or other non-passenger railroad equipment, the Contractor must also possess a CP ACCESS PASS for riding non-passenger railroad equipment, signed by the responsible operating manager. Such a signed pass must be presented to the train crew or operator when boarding the equipment. Failure to possess such a pass will result in the equipment not moving, removal from the equipment, and/or the filing of trespasser charges.

9.2 Security Awareness

- 9.2.1 Contractor shall conduct employee background checks as is necessary to ensure that Contractor Personnel do not pose a security risk to CP, such security risk includes the risk of the commission of terrorist activities, sabotage, vandalism, theft, and violence. CP reserves the right, at all times, to require that Contractors undertake certain security training and/or performs background checks on Contractor Personnel, prior to allowing such Contractor Personnel to enter onto CP Property.
- 9.2.2 On request CP can make available a copy of CP's Railway Security Awareness Program for use by Contractor Personnel.

9.3 Firearms & Explosives

- 9.3.1 Firearms (loaded or empty) are not permitted on CP Property, except for Police officers and other designated government officials when authorized to do so.
- 9.3.2 No explosives will be permitted on CP Property without written approval by the Manager-in-Charge.

9.4 Reporting

Contractor Personnel must report any security concern, security incident, criminal activity (known or suspected), suspicious happenings and/or suspicious persons on CP Property to the Manager-in-Charge or to CP Police Services in accordance with Section 18.

10 Personal Conduct

10.1 Drug and Alcohol Prohibition

CP recognizes the problem of alcohol and substance abuse in today's society. This problem poses particular concerns to an employer who is subject to governmental regulations and seeks to promote the safety of the general public. CP has a concern for the safety, health and well-being of its employees as well as an obligation to comply with the United States Department of Transportation (DOT) and Federal Railroad Administration (FRA) regulations. CP will comply with all statutes and regulations administered by the FRA in implementing the required 49 CFR §219 Drug and Alcohol Program. CP also expects employees of other railroads, visitors or contractors to comply with this regulation while on CP property, consistent with federal regulations. If subject to this regulation, Contractor shall be solely responsible for compliance with the 49 CFR Part 219. Contractor shall provide CP with proof of its compliance prior to performing services for CP and continued proof of compliance must be provided to CP immediately upon request. This proof of compliance will include, but will not be limited to, a copy of the 49 CFR §219 Drug and Alcohol Program Plan and FRA Approval Letter and Continued Certification of Compliance and Statistical Reporting. Periodic audits to ensure compliance with these regulations may be performed and cooperation and compliance is expected upon request.

If subject to other DOT modalities and regulations, such as the Federal Motor Carriers Safety Administration (FMCSA), compliance of that modality's drug and alcohol program guidelines will be required and periodic audits to ensure compliance with these regulations may be performed and cooperation and compliance is expected upon request.

- 10.1.1 Entry onto CP Property when in possession of, or under the influence of alcohol, intoxicants, narcotics, or controlled substances is strictly prohibited. Controlled substances include all Schedule 1 drugs (such as marijuana and "medical marijuana") and synthetic/designer drugs and/or any intoxicants or products labeled "not intended for human consumption".
- 10.1.2 The sale, trade, and/or offer for sale alcohol or controlled substances are prohibited.

10.1.3 Additionally, Contractor Personnel shall be free of any condition which may in any way adversely affect alertness, concentration, responsiveness, or the ability react calmly and responsibly to safety hazards.

10.1.4 CP reserves the right to request drug and/or alcohol tests for Contractor Personnel as and where required or permitted by law.

10.2 Inappropriate Behavior

10.2.1 CP is committed to maintaining a work environment that supports the dignity of all individuals. No person working at CP may be subjected to any form of discrimination or harassment, including sexual harassment.

10.2.2 Acts or threats of violence are unacceptable at all times on CP Property. Uttering of threats or committing acts of violence will result in the removal of the responsible Contractor Personnel from CP Property, termination of the Contract, and/or criminal charges.

10.2.3 Horseplay, practical jokes, fighting or any other activity that may create a safety hazard is not permitted.

10.3 Electronic Entertainment and Communication Devices

10.3.1 The use of personal entertainment devices, including portable audio and video devices such as compact DVD, CD, video game players, tablets, SMART watches and MP3 players, is prohibited:

- (a) while Working on CP Property;
- (b) while transporting CP Personnel, whether on and off CP Property; and
- (c) while operating any CP highway vehicle, railroad equipment or mobile equipment, whether on and off CP Property.

10.3.2 The use of electronic communication devices, including cell phones, Smart Phones, Blackberries, walkie-talkies, PDAs, iPads, Tablets, GPS navigation units, portable computers, and similar devices, is prohibited:

- (a) while operating any highway vehicle, unless it is stopped and parked in a safe location;
- (b) while transporting CP Personnel, whether on and off CP Property;
- (c) while operating or assisting in the operation of any railroad equipment or mobile equipment;
- (d) while operating power tools, equipment or machinery;
- (e) when Foul of Track for any reason;
- (f) wherever use is prohibited by signage or by a CP manager; or
- (g) whenever use of such a device creates an unsafe condition.

10.3.3 Notwithstanding the foregoing, company cell phones, radios, walkie-talkies, GPS units, iPads, tablets and other communication devices may be used solely for the conduct of business when authorized by the CP Manager-in-Charge and where not prohibited by state or municipal legislation. Any electronic communication device may be used when it is necessary to communicate an emergency condition.

10.4 Smoking

10.4.1 Smoking, including the use of e-cigarettes is prohibited on all CP Property, and in or on all highway vehicles, Railroad Equipment, and Mobile Equipment, except for CP designated outdoor smoking areas.

11 Personal Protection

11.1 Work Clothing

11.1.1 The Contractor must ensure that Contractor Personnel wear clothing that meets applicable legislation and is suitable to perform the work safely. This includes at minimum ankle length pants and waist length shirts with a minimum quarter-length sleeves at all times. Clothing must not interfere with vision, hearing or use of hands and feet.

11.2 Personal Protective Equipment (PPE)

11.2.1 The Contractor shall ensure that Contractor Personnel wear personal protective equipment required by applicable legislation, regulations, codes and industry standards as necessary to protect against personal injuries while on railroad property. All personal protective equipment shall meet applicable legislation and American National Standards Institute (ANSI) standards and shall be in good condition and be properly fitted.

11.2.2 The following mandatory personal protective equipment (“PPE”) shall be supplied by the Contractor at its own expense, and shall be worn at all times by Contractor Personnel while on CP Property:

- (a) safety hard hat, meeting ANSI 89.1 standards, except in office buildings or in enclosed vehicles or equipment;
- (b) safety footwear with protective toe caps and puncture resistant soles, meeting ASTM F2413 standards.
- (c) safety glasses with permanently attached side shields meeting ANSI Z87.1 standards in office buildings or enclosed highway vehicles. Note- transition lenses are not permitted;
- (d) high visibility fluorescent outerwear with retro reflective striping meeting ANSI 107 Class 2 standards not covered by other clothing or equipment, except where necessary for safety reasons such as where fall protection or pole climbing equipment is being used; and
- (e) any other PPE as required by applicable legislation or referenced standard, or as otherwise required to protect Contractor Personnel from injuries.

Type of Protection	Additional Recommendations
Hard Hats	Have hi-visibility characteristics which are not obscured by markings or decals
Safety Eyewear	<p>Tinted safety eyewear must meet military standards for red signal recognition if operating railroad equipment (safety eyewear meeting this requirement is available from ORR Safety; ask for CP approved tinted safety eyewear)</p> <p>Transition lenses are discouraged and should be worn with caution when working in changing light conditions</p> <p>Personal sunglasses are discouraged and must not be worn when operating Railway Equipment</p> <p>Wear mesh face shields over top safety glasses when using any striking tool while performing on track maintenance work (e.g. spiking, snapping on/off anchors, etc.). If working alongside CP employees you will be required to comply with this practice.</p>
Safety Footwear	<p>Have defined heels</p> <p>Be laced and tied securely for ankle support</p> <p>When snow and ice conditions are present wear anti-slip winter footwear</p>
High-Visibility Apparel	Lime-green is recommended when working on, or near tracks, or when performing Co-mingled Work

- 11.2.3 Contractor and Contractor Personnel shall be solely and fully responsible for assessing the risks related to the work and determining whether additional PPE may be required such as:
- (a) Nomex or Proban fire-retardant protective gear when performing certain Transportation of Dangerous Goods (TDG) work and/or handling certain Hazardous Materials, or performing specialized work.
 - (b) hearing protection when working in any area where noise exposure levels:
 - (i) are consistently equal to or greater 85 dBA;
 - (ii) exceed 115 dBA at any time; and
 - (iii) any other work areas where posted, or so notified by CP management.
 - (c) respiratory protection where Contractor Personnel may be exposed to occupational dusts/particulates, fumes, mists, gases and vapors, in which case, in which case Contractors must have a written Respiratory Protection Program that meets or exceeds applicable legislation;
 - (d) additional eye and face protection meeting ANSI standard Z87.1 (i.e. face shields, impact/splash goggles, welding/cutting goggles and welding helmets); and
 - (e) fall protection systems and equipment meeting appropriate ANSI Z359 standards as required by applicable legislation and as appropriate for the related fall hazards.
 - (f) fall protection when working on an unguarded surface over water, where the water is deeper than 4 feet, or where there is a hazard of drowning due to terrain, winter conditions, water velocity or current; contractors must use a fall protection system or a personal floatation device (PFD) meeting approved standards.

12 Railroad Track Protection

12.1 Contractor's Responsibilities for the Protection of Railroad Traffic and Property

- 12.1.1 Where the Work Site is in close proximity to, or is located on, above, or below railroad tracks, special attention, care and precautions shall be taken to ensure the safety of all Contractor Personnel, CP Personnel, all other third parties and to protect CP's property and railroad operations.
- 12.1.2 Contractor shall ensure that Contractor Personnel is made aware of all unique and inherent hazards in working near, on, above or below railroad tracks and shall ensure that all Contractor Personnel are fully trained and equipped to work safely.
- 12.1.3 Contractors who perform inspection, maintenance or repair to railroad tracks or track structures must be trained in accordance with FRA On Track Safety Rules (FRA 49 CFR Part 214, Subpart C - Roadway Worker Protection Regulations).
- 12.1.4 Contractors will not be allowed to foul a track unless:
- (a) They have been properly advised of the On Track Safety awareness procedures;
 - (b) A railroad employee who is qualified to provide protection is present at the work site, or.
 - (c) The Contractor has personnel present who are specifically trained, qualified and authorized to provide that protection.
- 12.1.5 All work shall be organized or executed in such a manner as to ensure no interference with the regularity and safety of railroad operations. No step or sequence of any Work that might directly

or indirectly affect the safe movement of railroad traffic shall be started without the approval of the Manager-in-Charge.

- 12.1.6 No temporary structure, materials, or equipment shall be permitted closer than 12 feet to the nearest rail of any track without prior approval in writing of the Manager-in-Charge.

Contractor Personnel shall at all times remain alert to the movement of trains, rolling stock and other railroad equipment.

- 12.1.7 Contractor Personnel shall be especially alert in yards and terminal areas as

- (a) Railroad equipment that appears to be stationary may be moving;
- (b) the rate of movement of railroad equipment may be faster than it appears;
- (c) Railroad equipment change tracks often; and movements may be occurring simultaneously on adjacent tracks.

- 12.1.8 The Contractor shall, at all times, conduct its operations in a wholly responsible manner to avoid damage to the CP's tracks or property.

12.2 50 feet Clearance Requirement

- 12.2.1 All work shall be performed as far away from railroad tracks as possible.

- 12.2.2 Unless authorized by CP, Contractor Personnel, equipment, and vehicles are not permitted to be within 50 feet of the closest track centerline.

- 12.2.3 In the event work must be carried out within 50 feet of the closest track written authorization must be obtained from the Manager-in-Charge, and Contractor Personnel must still remain at the maximum practicable distance from all railroad tracks at all times.

- 12.2.4 When crossing tracks, Contractor Personnel shall ensure a minimum of 50 feet separation between standing railroad equipment, stay at least 15 feet away from the end of the nearest equipment, and look both ways before crossing tracks, and if clear, walk at a right angle to the tracks.

- 12.2.5 No work activities or processes are allowed within 50 feet of the track while trains are passing through the work site unless specifically authorized.

12.3 Flagging Protection

- 12.3.1 When the Work requires Contractor Personnel to be within 50 feet of any railroad tracks, Contractor or Contractor Personnel shall notify and obtain the written approval of the Manager-in-Charge in advance of the intended start date, and when approved, shall only perform Work strictly in accordance with all terms and conditions of that approval.

- 12.3.2 Unless otherwise indicated by the Manager-in-Charge, proper protection against the movement of trains, rolling stock and other railroad equipment shall be deemed required at all times whenever Work or Contractor Personnel must be within 50 feet of the closet track. Protection may be provided only by a qualified CP employee through use of a flag person.

- 12.3.3 Where CP determines that flagging is required, then Work must be strictly conducted under the direction of a CP flag person or such other person designated by the Manager-in-Charge.

- 12.3.4 Contractor Personnel shall ensure that there is clear communication at all times between Contractor Personnel and any CP flag person. Contractor Personnel shall ensure that they are aware of:

- (a) flagging distance limits;
- (b) time limits; and
- (c) any adjacent tracks where movement of railroad equipment may still occur.

- 12.3.5 Contractor Personnel shall not assume that a train movement is being stopped or cleared unless clear communication is received directly from the CP flag person.
- 12.3.6 A job briefing between the CP flag person and all Contractor Personnel must occur before beginning any Work on or Foul of Track.
- 12.3.7 Blue signal protection is used to indicate that CP or Contractor Personnel are working on, under or between railroad equipment and movement of trains or other railroad equipment is prohibited. Blue signals must not be tampered with or obstructed. Blue signals can only be removed by the person or group of persons who originally applied it. Application, use, and removal of blue signals, when appropriate, may only be done under the authorization and guidance of the Manager-in-Charge.
- 12.3.8 Red flag protection is used to indicate that CP or Contractor Personnel are working on or foul of track, or the track is out of service and movement of trains or other railroad equipment is prohibited. Red flags must not be tampered with or obstructed. Application, use, and removal of red flags, when appropriate, may only be done under the authorization and guidance of the Manager-in-Charge.

12.4 Working on or near Tracks

- 12.4.1 When authorized to perform Work foul of track or otherwise be near railroad tracks, Contractor Personnel shall ensure all Contractor Personnel, equipment, and vehicles are kept as far away from railroad tracks as practicable, and shall at all times:
 - (a) be alert to train movements and shall expect the movement of trains, engines, cars, or other mobile railroad equipment at any time, on any track, and in any direction, even if they appear to be stationary or in storage;
 - (b) not rely on others to protect them from train movement;
 - (c) stay at least 15 feet away from the ends of railroad equipment when crossing the track;
 - (d) ensure a minimum of 50 feet separation prior to crossing between Railroad Equipment;
 - (e) look both ways before crossing tracks, and if clear, walk at a right angle to them.
 - (f) never climb on, under or between railroad equipment;
 - (g) be aware of the location of structures or obstructions where track clearances are close;
 - (h) not stand on the track in front of an approaching engine, car or other equipment;
 - (i) stand at least 20 feet from the track(s) when there is a passing movement of trains, engines, cars, or other mobile railroad equipment, to prevent injury from flying debris or loose rigging and shall observe the train as it passes and be prepared to take evasive action in the event of an emergency;
 - (j) not stand on or between adjacent tracks in multiple track territory when a train is passing;
 - (k) not walk, stand or sit on the rails, between rails or on the end of ties, unless absolutely necessary. As the rail surface can be extremely slippery, personnel must step over the rails when crossing tracks. Personnel shall also be aware railroad ties can also be slippery and that railroad ballast can shift while walking on top of it. Situational awareness and use of proper footwear is important;
 - (l) not remain in a vehicle that is within 50 feet of a passing train unless specifically authorized, or where this is not possible.
 - (m) keep away from track switches as remotely operated switch points can move unexpectedly with enough force to crush ballast rock. Personnel shall stay away from any other railroad devices they are unsure of. Personnel shall not disturb or foul the ballast at any time.

- (n) Third party work that has a potential to impact rail traffic must take into account machine swing radius, vertical grade differences, overhead work, etc to ensure it will not impact a passing train; work and equipment must maintain a distance of 50 feet of a passing train.
- (o) When exiting on track machinery as trains are passing; exit on the opposite side.
 - (a) use 3-point contact when getting on/off any vehicle, equipment or track unit;
 - (b) face the vehicle or equipment/track unit when getting on/off
 - (c) place handheld items onto equipment/track unit or seek help prior to getting on/off
 - (d) get on/off on the operators side when possible

12.5 Equipment on or near tracks

- 12.5.1 Contractor Personnel shall not be Foul of Track with any piece of equipment without a CP flag person or other authorized track protection;
- 12.5.2 Contractor Personnel shall not move equipment across the tracks except at established road crossings, or unless under the protection and authorization of a CP flag person and only if the Work Site has been properly prepared for such a move. Tracked equipment will require a CP flag person any time railroad tracks are crossed.
- 12.5.3 Contractor Personnel shall not move equipment across railroad bridges or through tunnels, except as expressly authorized and only under such conditions as stipulated by the Manager-in-Charge.
- 12.5.4 When there is passing rail traffic, Contractor Personnel shall move equipment away from the tracks at least 50 feet, or where not possible, park the equipment as far away from the tracks as possible, exit to the side away from the track where the movement is taking place, and walk to a safe a distance.
- 12.5.5 When there is passing rail traffic, buckets, shovels, and loads on cranes must be lowered to the ground to rest, and cranes without a load must have their load line tightened or retracted to prevent movement.

12.6 Railroad Signs, Signals, Flags and other Communication Infrastructure

- 12.6.1 Signs, signals and flags shall not be obstructed, removed, relocated, disabled or altered in any way without proper authorization and qualification.
- 12.6.2 Only qualified Contractor Personnel who are authorized by CP are permitted to operate switches, derails, electric track mechanisms, signal and communication systems or other track control appliances.
- 12.6.3 Railroad pole lines carry electric power and should be treated as any other power lines.
- 12.6.4 The Contractor shall keep all Contractor Personnel informed of current weather conditions. Personnel shall stay alert for possible high water conditions, or flash floods. During severe weather conditions:
 - a) Personnel shall be prepared to take cover in the event of a tornado
 - b) Personnel shall not work while lightning is occurring
 - c) If storm conditions arise unexpectedly, Contractor Personnel shall ensure that equipment is in the clear of the tracks and secured before seeking cover. Contractor Personnel shall stay away from railroad tracks when visibility is poor, such as during fog or blizzard conditions.

Any Contractor personnel discovering a hazardous or potentially unsafe condition, which may affect the safe passage of railroad traffic, must advise CP Police immediately by calling the CP Police Communications Centre – 1-800-716-9132

12.7 Excavation

- 12.7.1 Before starting excavation operations, the Contractor shall ascertain that there are no underground wires, fiber optic cables, pipelines or other utilities which could be damaged or, if present, that such installations are properly protected. Fiber optic cables are present on most segments of the right-of-way. Prior to commencing any excavation, the Contractor shall contact the proper authority CP and/or public utility to obtain the necessary permit and to locate and protect such cables or other underground utilities.
- 12.7.2 Excavations shall not be left unattended unless they are properly protected; and the Manager-in-Charge shall be notified.
- 12.7.3 Contractors MUST obtain and maintain utility locates in accordance with applicable law.

13 HAZCOM

13.1 General Requirements

- 13.1.1 If at any time Contractor's Work involves the use, handling, storage, or disposal of Hazardous Materials ("Handling of Hazardous Materials"), Contractor Personnel must inform the Manager-in-Charge.
- 13.1.2 Contractors shall ensure that all Contractor Personnel are fully trained in the Handling of Hazardous Materials and that Contractor and Contractor Personnel are in full compliance with all Applicable Legislation, and as directed by the Manager-in-Charge.
- 13.1.3 Contractor Personnel shall have appropriate processes, systems and controls in place to prevent or otherwise mitigate potential environmental, health and safety risks associated with the Handling of Hazardous Materials.

13.2 Access to Safety Data Sheets (SDS)

- 13.2.1 Prior to beginning any Work that may expose CP Personnel to Hazardous Materials, Contractor or Contractor Personnel shall:
 - (a) provide a copy of the respective SDS to the Manager-in-Charge; and
 - (b) keep a copy of the SDS at the work site and ensure that it is readily available at all times.

13.3 Hazardous Material Incident or Spill

- 13.3.1 In the event of a hazardous material incident or spill, the Contractor must:
 - (a) ensure that no Contractor or CP Personnel have or will be exposed;
 - (b) take all reasonable actions to contain the spill;
 - (c) respond in accordance with its emergency response plan; and
 - (d) notify CP immediately in accordance with Section 18 below.

14 Operation of Highway Vehicles

14.1 Highway Vehicles

14.1.1 The following requirements apply to all highway vehicles, when operated on CP Property; or used to transport CP Personnel.

14.2 Regulations and Inspection

14.2.1 Before using a highway vehicle, Contractor Personnel shall:

- (a) complete a pre-trip inspection;
- (b) maintain an inspection log;
- (c) ensure periodic inspections are completed at official testing locations as required;
- (d) ensure the vehicle is maintained and in safe operating conditions at all times; and
- (e) ensure the vehicle is in compliance with applicable motor vehicle regulations and license requirements.

14.2.2 Vehicle maintenance, inspection records and logs must be made available to the Manager-in-Charge on request.

14.3 Vehicle Operator Requirements

14.3.1 Operation of highway vehicles is restricted to those Contractor Personnel who are licensed, qualified and authorized to do so. Such Contractor Personnel shall be responsible for the safety of all passengers at all times. For greater certainty, such Contractor Personnel shall:

- (a) hold a valid license for the class of vehicle being operated, in accordance with applicable local, state and federal requirements, and
- (b) strictly comply with all posted traffic signs, signals, and all shall obey all applicable legislation; and
- (c) maintain the required driver log, and make the log available to the Manager-in-Charge on request, and
- (d) comply with the requirements on the use of electronic devices as set out in Section 10 above.

14.4 Driving on CP Property

14.4.1 In addition to the requirements set out above, while on CP Property, Contractor Personnel shall:

- (a) travel only on designated roadways unless otherwise instructed;
- (b) keep daytime running lights on (if so equipped);
- (c) not exceed 15 mph unless otherwise posted;
- (d) come to a full stop at all blind corners, rail and roadway crossings;
- (e) yield the right of way to all Mobile Equipment and other non-highway equipment or service vehicles;
- (f) not operate vehicles (or any internal combustion equipment) inside buildings or enclosed structures unless adequate ventilation is provided;
- (g) not park Foul of Track unless on-track protection is provided;
- (h) not leave vehicles running unnecessarily;

- (i) park only in pre-determined or designated areas;
- (j) always use the parking brake (or wheel chocks) when leaving an unoccupied vehicle running; and
- (k) prior to operation of a vehicle the driver must conduct a walk around of the vehicle to identify any obstacles, clearance restrictions, or adjacent vehicles that may interfere with executing a safe movement.
- (l) where safe and practicable, pull vehicles through or back into marked parking spaces to avoid reverse collisions when exiting.
- (m) If a passenger is present, he exit the vehicle prior to a reverse movement to provide guidance and direction to the driver during the reverse movement and applies to commercial vehicles and vehicles with restricted rear views

14.4.2 All Contractor Personnel who will be operating a highway vehicle or Mobile Equipment in any CP intermodal facilities must complete a Driver Safety Orientation program prior to first entry, and from time to time thereafter as directed by the Manager-in-Charge.

14.5 Seat Belts

14.5.1 Seat belts must always be worn while operating or riding in any equipped vehicle unless Contractor personnel is actively engaged in inspections requiring said Contractor Personnel to be free of such restraint, and then only when the vehicle is operating at less than 15 mph.

14.6 Loads

14.6.1 Contractor Personnel shall ensure vehicles are loaded according to weight and dimensional requirements as authorized by state regulations and permits, and properly load and secure tools, material, equipment and freight to avoid shifting, falling, leaking or otherwise escaping from vehicles during operation.

14.7 Riding in CP Vehicles

14.7.1 Contractor Personnel are prohibited from operating or riding in any CP vehicles unless authorized to do so, or in case of emergency.

15 Tools, Equipment and Machinery

15.1 General Safety Requirements Respecting All Tools, Equipment and Machinery

15.1.1 Contractor Personnel shall ensure that all tools, equipment, and machinery used be:

- (a) in compliance with all Applicable Legislation;
- (b) in good working order, properly serviced and maintained;
- (c) safe for their proposed use and used only for purposes specified by the manufacturer;
- (d) operated and maintained only by persons properly trained and qualified for that duty;
- (e) seat belts (if present on equipment) must be worn while operating or riding any such equipped mobile equipment;
- (f) if mobile, equipped with appropriate safety devices (e.g. lights, horns, back-up alarms, safety beacons); and prevented from moving, through use of the hand brake, wheel blocking, wheel chocking and/or a derail, where applicable.

15.1.2 The Contractor shall provide adequate lighting when performing work between sunset and sunrise.

- 15.1.3 Use of CP tools, equipment and machinery by Contractor Personnel is prohibited unless specifically authorized by local CP management.

15.2 Hazardous Energy Control- Lockout

- 15.2.1 Contractor Personnel shall employ lockout/tagout procedures as required to eliminate the accidental or unexpected start-up, energizing, or release of stored (residual) energy during maintenance, repair and/or servicing activities.
- 15.2.2 All tools, equipment and machinery must be made safe and isolated from all energy sources rendering the machine, equipment, or process inoperative prior to performing maintenance, repair or servicing related tasks.
- 15.2.3 No Contractor Personnel can remove any CP applied lock or tag, including bad-order tag.
- 15.2.4 Notwithstanding the foregoing, if Contractor's Work may create an energy hazard to any CP Personnel, then all affected parties must follow the requirements set forth in CP's Lockout – Hazardous Energy Control Policy and Code of Practice.
- 15.2.5 If CP Personnel and Contractors are jointly performing maintenance, repair or servicing activities on the same machine, equipment or using the same energy source, then a multi-lock hasp must be applied with individual locks and tags affixed (as per CP's Lockout – Hazardous Energy Control Policy and Code of Practice).

15.3 Electrical Safety Requirements

- 15.3.1 In addition to the hazardous energy control lockout requirements above, all electrical Work must comply with Applicable Legislation, National Electrical Code (NEC), and National Fire Protection Association (NFPA) requirements.
- 15.3.2 Contractor Personnel Working on electrical systems must:
 - (a) if in proximity to CP Personnel, inform them of:
 - (i) existing or potential electrical hazards;
 - (ii) any specific additional personal protective equipment that may be required;
 - (iii) applicable safe work practices;
 - (iv) applicable emergency and evacuation procedures; and
 - (v) apply lock out procedures as per section above on Hazardous Energy Control-Lockout
 - (b) have practices, procedures and training that comply with:
 - (i) Applicable sections of the NEC and NFPA electrical safety standards;
 - (ii) Any other Applicable Legislation; and
 - (c) not operate or allow cranes or other mobile equipment to approach closer to any live electrical power line than is permitted by OSHA regulations (29 CFR 1910.333).

15.4 Lifting Devices

- 15.4.1 All lifting devices, including but not limited to jacks, cranes, cables, slings, chains and hooks shall:
 - (a) meet Applicable Legislation governing design, inspection, maintenance and operation;
 - (b) be safety certified and labeled or tagged with load capacity limits where required;

- (c) have sufficient capacity for the planned lift;
- (d) have sufficient footing or support area to properly distribute the load during a lift.

15.5 Welding and Torch Cutting

15.5.1 When welding or torch cutting, Contractor Personnel shall:

- (a) be properly trained and qualified;
- (b) ensure that all closed containers have been properly purged;
- (c) direct flame or sparks away from other Workers, equipment and flammable material;
- (d) have a fire extinguisher readily available;
- (e) keep compressed gas and oxygen cylinders stored in a secure, vertical position, with regulators removed and caps applied, labeled properly and located in vented cabinets or other designated locations.

15.6 Explosive Actuated Tools

15.6.1 Only Contractor Personnel who are qualified and licensed in accordance with Applicable Legislation, and authorized by CP, may use explosives or explosive actuated tools.

15.7 Unattended Equipment or Machinery

15.7.1 Tools, Equipment and Machinery shall not be left unattended at any time and shall not be stored on CP Property, unless expressly permitted pursuant to a written agreement with CP or by the Manager-in-Charge in writing, and where so permitted, Contractor shall ensure that:

- (a) storage shall be restricted to the designated area, or as otherwise specified by CP.
- (b) all such tools, equipment and machinery shall be secured in a safe position well clear of all tracks to prevent accidental contact with trains and moving equipment and to not restrict train crew sightlines;
- (c) as much as possible, tools, equipment and machinery shall be stored in locations out of public view.
- (d) Machines must be secured in accordance with on-track machinery rules.

16 Emergency Response

16.1 Emergency Response Plan

16.1.1 The Contractor must maintain a current emergency response plan and make it available to CP on request. Emergency response plans must include at a minimum:

- (a) contractor reporting procedures in the event of an incident or spill;
- (b) emergency response contacts and phone numbers, including phone numbers for CP incident reporting and local CP managers (See Attachment A); and
- (c) containment measures to be taken in the event of an incident or spill.

16.2 Initial Response

16.2.1 Initial response to any emergency condition must follow the following sequence:

- (a) Protect the safety and security of all individuals and communities
- (b) Provide environmental protection and mitigation
- (c) Conduct incident investigation and evidence preservation
- (d) Restore railroad operations

16.3 First Aid

16.3.1 Contractor Personnel must have sufficient First Aid qualified personnel and the required First Aid kit and any other required First Aid equipment at the Work Site, suitable for the crew size, nature of Work being performed and location, all of which shall, at a minimum, comply with OSHA regulations (29 CFR 1910.266).

16.4 Fire Protection

16.4.1 The Contractor must have appropriate fire extinguishers suitable (i.e., type, size and quantity) for nature of the work being done, in compliance with applicable legislation, and be readily available at all times on:

- (a) the work site; and
- (b) all Contractor equipment, machinery and highway vehicles.

16.4.2 Contractor Personnel shall ensure that all necessary precautions are taken to prevent fires, including the following:

- (a) storing flammable material (e.g., paper, rubbish, sawdust, oily or greasy rags, etc.) in proper containers;
- (b) storing and transporting fuel, gasoline or other flammable liquids in approved containers. Use of unapproved containers is prohibited;
- (c) proper disposal of flammable material daily;
- (d) preventing static electricity when dispensing or transferring flammable liquids by using proper grounding and bonding techniques;
- (e) avoid using cutting or welding torches during the last one-half hour of shifts, if possible;
- (f) taking special precautions with fusees, including:
 - (i) store and transport in approved containers;
 - (ii) do not allow fusees to come in contact with any combustible material, including railroad ties or wooden timbers; and
 - (iii) fully extinguish fusees before leaving the location where used;
- (g) promptly advise CP management of any fire on CP Property; and
- (h) fully extinguish or provide protection for any fire prior to leaving the Work Site.

16.4.3 Contractors Working on the CP right-of-way where a high risk of fire exists (e.g., during rail grinding, rail welding) must have:

- (a) appropriate fire prevention and suppression plans (including emergency numbers for CP, local firefighters and fire control districts); and
- (b) additional firefighting equipment and trained Contractor Personnel on site, as required by Applicable Legislation or the Manage In Charge.

17 Confined Space

17.1 Confined Space

- 17.1.1 Qualified and authorized Contractor Personnel must follow all required confined space entry procedures in accordance with applicable legislation and standards prior to entering into a confined space.
- 17.1.2 Rescue procedures and equipment must readily available when required to enter a confined space.

18 Reportable Accidents, Incidents and Injuries

18.1 Reportable Injuries

18.1.1 Reportable injuries include any personal injury to:

- (a) Contractor Personnel;
- (b) any CP Personnel; or
- (c) to any third party on CP Property.

18.2 Reportable Accidents

18.2.1 Reportable accidents include any occurrence that results in:

- (a) damage to railroad tracks, right of way, buildings or other CP Property;
- (b) damage to railroad equipment;
- (c) damage to CP highway vehicles;
- (d) release of hazardous material;
- (e) spill or loss of transported commodities; and
- (f) any threat to the environment.

18.3 Reportable Incidents

18.3.1 Reportable incidents include:

- (a) unintended movement of railroad equipment;
- (b) failure to provide track protection for Workers when required;
- (c) movement of railroad equipment beyond authorized limits;
- (d) operation of railroad equipment by an unqualified person;
- (e) unauthorized handling of a track switch;
- (f) damage, vandalism or tampering with any railroad signals, structures or railroad safety device;

- (g) seepage, leakage, spills of, or other contamination from, Hazardous Materials;
- (h) actual, threaten or suspected security related incidents;
- (i) slides, washouts or other on-track obstructions; or
- (j) any occurrence that may disrupt the movement of trains or affect safe rail operations.

19 Reporting

19.1 Emergency Reporting

19.1.1 In the case of an emergency, Contractor Personnel must call:

- (a) 911, where this emergency response system exists, or
- (b) the local police, fire or emergency department in all cases; and
- (c) CP Police Services Communication Center- 1-800-716-9132.

19.2 Accident, Incident, Injury Reporting

19.2.1 When an accident, incident or injury occurs on CP Property, the Contractor must:

- (a) immediately report it to the
 - (i) CP Police Services Communication Center 1-800-716-9132; and
 - (ii) CP Manager-in-Charge
- (b) follow all instructions given to protect the scene.

19.2.2 CP is obligated to report Contractor Personnel injuries occurring on CP property to the Federal Railroad Administration (FRA). Any state or required regulatory reporting remains the Contractor's responsibility.

19.3 Information to Report

19.3.1 Information required with the initial report includes:

- (a) type of incident;
- (b) date and time of occurrence;
- (c) location (mileage, subdivision, building, yard or other physical description);
- (d) identity of person(s) involved or injured (company & name);
- (e) description of any hazardous materials involved;
- (f) type & unit number of any railroad equipment or vehicle involved;
- (g) description of occurrence, damage and/or injury, and cause if known;
- (h) description of any emergency response;
- (i) name and contact information of person making the report; and
- (j) any such other information that CP may require.

19.4 Environmental Incidents and Spills

19.4.1 In the event of an environmental incident or spill that could have a negative impact on the environment, the Contractor must immediately:

- (a) report the incident to the Operations Center, the Manager-in-Charge, and the designated CP Contact as per the governing agreement relating to the Work;
- (b) take all reasonable actions to contain the spill;
- (c) respond in accordance with its emergency response plan; and

- (d) provide CP with the following information;
 - (i) description of location and surrounding area, including any sensitive environmental areas nearby (e.g., rivers, parks, sewers);
 - (ii) type and quantity of substance released;
 - (iii) cause of spill or deposit, if known; and
 - (iv) details of any immediate action taken or action proposed to be taken to contain spill and recover substance.

19.5 Additional Contractor Requirements

19.5.1 Contractor and Contractor Personnel must:

- (a) ensure an appropriate emergency response is initiated;
- (b) protect any evidence until released by the CP Manager-in-Charge;
- (c) cooperate fully with any CP investigation;
- (d) cooperate fully with any investigating government agency; and
- (e) notify CP if information is requested by any investigating government agency.

20 Contractor & Contractor Personnel Acknowledgement

Acknowledgement

- 20.1.1 Contractor and Contractor Personnel who Work on CP Property shall be deemed to have read and understood the content of these Minimum Safety Requirements for Contractors While Working on CP Property in the United States, as amended from time to time, and to agree to be bound by them.
- 20.1.2 These Minimum Safety Requirements for Contractors While Working on CP Property in the United States are subject to change without prior notice. The most current version of these Minimum Safety Requirements can be viewed at www.cpr.ca or by contacting the Manager-in-Charge.



***Home Safe™ is a commitment to be vigilant about personal safety
and the safety of co-workers.***

21 Attachment A – Emergency Information Sheet

EMERGENCY CONTACT INFORMATION		
EMERGENCY CONTACTS	PHONE	LOCATION
CP Minneapolis Operations Center	1-800-766-4357	.
CP Police Services	1-800-716-9132	
CP Railroad Traffic Controller Radio Channel		
Manager-in-Charge		
Local Police Services		
Local Fire Services:		
Local EMS		
Hospital		
Physician		
Aircraft Service, (if applicable):		
Watercraft Service, (if applicable):		
Other Emergency Services		
Emergency Evacuation Route (Describe nearest evacuation assembly location OR Provide sketch on back)		

WORK SITE INFORMATION		
	PHONE	LOCATION
Work Site Location Name		
Railroad Subdivision & Mileage		
Address, Number and Street		
Nearest Town		
CP Manager-in-Charge		
Emergency Site Access Route (Describe route from nearest emergency services location in detail including access roads & physical landmarks OR provide sketch on back.)		
Contractor Supervisor		
Site Telephone		
Certified First Aid Attendant		
Location of First Aid Supplies at Site		
Location of Fire Extinguishing Equipment:		
Location of WHIMS data sheets		
UTILITY INFORMATION		
UTILITIES CONTACT	PHONE	LOCATION
Natural Gas:	()	
Electrical:	()	
Fiber Optic Line:	()	
Water & Sewer:	()	
Telephone:	()	
Cable System:	()	
Qualified employee(s) in:	()	
Confined Space Entry, (if applicable):	()	
Equipment requirements for Confined Space Entry, (if applicable):	()	
Other:		

Form 510130 (02-24)



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Eric Johnsen		Bureau/Office: Specifications	Item 6
Submittal Date: 3/25/2024		Proposed Effective Date: June 18, 2024	
Article No.: Title:		Other: DS-23XXX, Work on Railroad Right-of-Way (BNSF Railway)	
Specification Committee Action: Approved as recommended.			
Deferred:	Not Approved:	Approved Date: 4/11/2024	Effective Date: 6/18/2024
Specification Committee Approved Text: See attached Developmental Specifications for Work on Railroad Right-of-Way (BNSF Railway)			
Comments: Eric Johnsen will be the controller of this DS.			
Specification Section Recommended Text: See attached Draft Developmental Specifications for Work on Railroad Right-of-Way (BNSF Railway)			
Comments:			
Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight.)			
Reason for Revision: New DS for work on BNSF ROW.			
New Bid Item Required (X one)	Yes	No X	
Bid Item Modification Required (X one)	Yes	No X	
Bid Item Obsolescence Required (X one)	Yes	No X	
Comments:			
County or City Comments:			
Industry Comments:			

DS-23057
(New)



**DEVELOPMENTAL SPECIFICATIONS
FOR
WORK ON RAILROAD RIGHT-OF-WAY (BNSF RAILWAY)**

**Effective Date
June 18, 2024**

THE STANDARD SPECIFICATIONS, SERIES 2023, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE DEVELOPMENTAL SPECIFICATIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

23057.01 DESCRIPTION.

This Special Provision outlines the Contractor's requirements with Burlington Northern Santa Fe Railway (BNSF). Portions of the Special Provision may apply to both the prime contractor and subcontractors. It is the prime contractor's responsibility to ensure subcontractor compliance with these requirements.

23057.02 CONTRACTOR RESPONSIBILITIES

A. General.

1. Upon execution of the contract, coordinate with BNSF as outlined in Exhibit "C" and execute a copy of the agreement found in Exhibit "C-1".
2. Submit copies of all correspondence with BNSF to the Engineer within 1 business day of receipt.
3. Payments required by the Contractor to BNSF for train delays shall be borne by the Contractor and are not reimbursable by the Department to the Contractor.
4. Article 3A of Exhibit "C" states: "*Any damage to railway facilities resulting from Contractor's operations will be repaired or replaced by Railway and the cost of such repairs or replacement must be paid for by the Agency.*" If the Department incurs costs from the Railroad in this manner, the Department will recoup these costs from the Contractor.
5. Article 3F of Exhibit "C" states: "*The cost of tell-tales or protective devices will be borne by the Contracting Authority.*" If the Department incurs costs from the Railroad in this manner, the Department will recoup these costs from the Contractor.

B. Railroad Flagging.

1. **Reimbursement to the Railroad.**
 - a. It shall be understood that any reference to payment for flagging in the attachments, by the Contracting Authority to BNSF, shall be paid by the Contractor. The Contractor shall be responsible for coordinating all flagging activities with BNSF's Roadmaster.

- b. In the event Contractor fails to reimburse 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.

2. Documentation and Reimbursement to the Contractor.

- a. 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 \$1,600 per day for the cost of flagger services provided by the Railroad. 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.
 - b. 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.
 - c. 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.
 - d. 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.
 - e. Contractor shall forward, to the Engineer, copies of payments made to Railroad for flagging costs.
3. 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.
4. 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.

C. Insurance.

- 1. Before the contract is awarded, Contractor shall submit to the Department a certificate or certificates of insurance evidencing all required coverages. The certificate(s) 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.

2. 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.

23057.03 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. This payment shall be full compensation for complying with this specification. 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 DS-23XXX.02, C, 1.

ATTACHMENTS

Exhibit "C" Contractor Requirements
Exhibit "C-1" Agreement Between BNSF Railway Company and the Contractor

EXHIBIT "C"

CONTRACTOR REQUIREMENTS

1) General

- A.** The Contractor must cooperate with BNSF Railway Company, hereinafter referred to as "Railway" where work is over or under on or adjacent to Railway property and/or right-of-way, hereafter referred to as "Railway Property".
- B.** The Contractor must execute and deliver to the Railway duplicate copies of the Exhibit "C-1" Agreement, in the form attached hereto, obligating the Contractor to provide and maintain in full force and effect the insurance called for under Section 3 of said Exhibit "C-1". Questions regarding procurement of the Railroad Protective Liability Insurance should be directed to Rosa Martinez at Marsh, USA, 214-303-8519.
- C.** The Contractor must plan, schedule and conduct all work activities so as not to interfere with the movement of any trains on Railway Property.
- D.** The Contractor's right to enter Railway's Property is subject to the absolute right of Railway to cause the Contractor's work on Railway's Property to cease if, in the opinion of Railway, Contractor's activities create a hazard to Railway's Property, employees, and/or operations. Railway will have the right to stop construction work on the Project if any of the following events take place: (i) Contractor (or any of its subcontractors) performs the Project work in a manner contrary to the plans and specifications approved by Railway; (ii) Contractor (or any of its subcontractors), in Railway's opinion, prosecutes the Project work in a manner which is hazardous to Railway property, facilities or the safe and expeditious movement of railroad traffic; (iii) the insurance described in the attached Exhibit C-1 is canceled during the course of the Project; or (iv) Contractor fails to pay Railway for the Temporary Construction License or the Easement. The work stoppage will continue until all necessary actions are taken by Contractor or its subcontractor to rectify the situation to the satisfaction of Railway's Division Engineer or until additional insurance has been delivered to and accepted by Railway. In the event of a breach of (i) this Agreement, (ii) the Temporary Construction License, or (iii) the Easement, Railway may immediately terminate the Temporary Construction License or the Easement. Any such work stoppage under this provision will not give rise to any liability on the part of Railway. Railway's right to stop the work is in addition to any other rights Railway may have including, but not limited to, actions or suits for damages or lost profits. In the event that Railway desires to stop construction work on the Project, Railway agrees to immediately notify the Iowa Department of Transportation.
- E.** The Contractor is responsible for determining and complying with all Federal, State and Local Governmental laws and regulations, including, but not limited to environmental laws

and regulations (including but not limited to the Resource Conservation and Recovery Act, as amended; the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA), and health and safety laws and regulations. The Contractor hereby indemnifies, defends and holds harmless Railway for, from and against all fines or penalties imposed or assessed by Federal, State and Local Governmental Agencies against the Railway which arise out of Contractor's work under this Agreement.

- F. The Contractor must notify the Contracting Authority and Railway's Manager Public Projects at least thirty (30) calendar days before commencing any work on Railway Property.
- G. For any bridge demolition and/or falsework above any tracks or any excavations located with any part of the excavations located within, whichever is greater, twenty-five (25) feet of the nearest track or intersecting a slope from the plane of the top of rail on a 2 horizontal to 1 vertical slope beginning at eleven (11) feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor must furnish the Railway five sets of working drawings showing details of construction affecting Railway Property and tracks. The working drawing must include the proposed method of installation and removal of falsework, shoring or cribbing, not included in the contract plans and two sets of structural calculations of any falsework, shoring or cribbing. For all excavation and shoring submittal plans, the current "BNSF-UPRR Guidelines for Temporary Shoring" must be used for determining the design loading conditions to be used in shoring design, and all calculations and submittals must be in accordance with the current "BNSF-UPRR Guidelines for Temporary Shoring". All submittal drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. All calculations must take into consideration railway surcharge loading and must be designed to meet American Railway Engineering and Maintenance-of-Way Association (previously known as American Railway Engineering Association) Coopers E-80 live loading standard. All drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. The Contractor must not begin work until notified by the Railway that plans have been approved. The Contractor will be required to use lifting devices such as, cranes and/or winches to place or to remove any falsework over Railway's tracks. In no case will the Contractor be relieved of responsibility for results obtained by the implementation of said approved plans.
- H. Subject to the movement of Railway's trains, Railway will cooperate with the Contractor such that the work may be handled and performed in an efficient manner. The Contractor will have no claim whatsoever for any type of damages or for extra or additional compensation in the event his work is delayed by the Railway.

2) Contractor Safety Orientation

- A. No employee of the Contractor, its subcontractors, agents or invitees may enter Railway Property without first having completed Railway's Engineering Contractor Safety Orientation, found on the web site www.BNSFContractor.com. The Contractor must ensure that each of its employees, subcontractors, agents or invitees completes Railway's Engineering Contractor Safety Orientation through internet sessions before any work is performed on the Project. Additionally, the Contractor must ensure that each and every one of its employees, subcontractors, agents or invitees possesses a card certifying completion of the Railway Contractor Safety Orientation before entering Railway Property. The Contractor is responsible for the cost of the Railway Contractor Safety Orientation. The Contractor must renew the Railway Contractor Safety Orientation annually. Further clarification can be found on the web site or from the Railway's Representative.

3) **Railway Requirements**

- A. The Contractor must take protective measures as are necessary to keep railway facilities, including track ballast, free of sand, debris, and other foreign objects and materials resulting from his operations. Any damage to railway facilities resulting from Contractor's operations will be repaired or replaced by Railway and the cost of such repairs or replacement must be paid for by the Contracting Authority.
- B. The Contractor must notify the Railway's Division Engineer and provide blasting plans to the Railway for review seven (7) calendar days prior to conducting any blasting operations adjacent to or on Railway's Property.
- C. The Contractor must abide by the following temporary clearances during construction:
- 15'-0" Horizontally from centerline of nearest track
 - 21'-6" Vertically above top of rail
 - 27'-0" Vertically above top of rail for electric wires carrying less than 750 volts
 - 28'-0" Vertically above top of rail for electric wires carrying 750 volts to 15,000 volts
 - 30'-0" Vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts
 - 34'-0" Vertically above top of rail for electric wires carrying more than 20,000 volts
- D. Upon completion of construction, the following clearances shall be maintained:
- 25' Horizontally from centerline of nearest track
 - 23' 6" Vertically above top of rail
- E. Any infringement within State statutory clearances due to the Contractor's operations must be submitted to the Railway and to the Contracting Authority and must not be undertaken until approved in writing by the Railway, and until the Contracting Authority has obtained any necessary authorization from the State Regulatory Authority for the infringement. No

extra compensation will be allowed in the event the Contractor's work is delayed pending Railway approval, and/or the State Regulatory Authority's approval.

- F. In the case of impaired vertical clearance above top of rail, Railway will have the option of installing tell-tales or other protective devices Railway deems necessary for protection of Railway operations. The cost of tell-tales or protective devices will be borne by the Contracting Authority.
- G. The details of construction affecting the Railway's Property and tracks not included in the contract plans must be submitted to the Railway by Contractor for approval before work is undertaken and this work must not be undertaken until approved by the Railway.
- H. At other than public road crossings, the Contractor must not move any equipment or materials across Railway's tracks until permission has been obtained from the Railway. The Contractor must obtain a "Temporary Construction Crossing Agreement" from the Railway prior to moving his equipment or materials across the Railways tracks. The temporary crossing must be gated and locked at all times when not required for use by the Contractor. The temporary crossing for use of the Contractor will be constructed and, at the completion of the project, removed at the expense of the Contractor.
- I. Discharge, release or spill on the Railway Property of any hazardous substances, oil, petroleum, constituents, pollutants, contaminants, or any hazardous waste is prohibited and Contractor must immediately notify the Railway's Resource Operations Center at 1(800) 832-5452, of any discharge, release or spills in excess of a reportable quantity. Contractor must not allow Railway Property to become a treatment, storage or transfer facility as those terms are defined in the Resource Conservation and Recovery Act or any state analogue.
- J. The Contractor upon completion of the work covered by this contract, must promptly remove from the Railway's Property all of Contractor's tools, equipment, implements and other materials, whether brought upon said property by said Contractor or any Subcontractor, employee or agent of Contractor or of any Subcontractor, and must cause Railway's Property to be left in a condition acceptable to the Railway's representative.

4) Contractor Roadway Worker on Track Safety Program and Safety Action Plan

- A. Each Contractor that will perform work within 25 feet of the centerline of a track must develop and implement a Roadway Worker Protection/On Track Safety Program and work with Railway Project Representative to develop an on track safety strategy as described in the guidelines listed in the on track safety portion of the Safety Orientation. This Program must provide Roadway Worker protection/on track training for all employees of the Contractor, its subcontractors, agents or invitees. This training is reinforced at the job site through job safety briefings. Additionally, each Contractor must develop and implement the

Safety Action Plan, as provided for on the web site www.BNSFContractor.com, which will be made available to Railway prior to commencement of any work on Railway Property. During the performance of work, the Contractor must audit its work activities. The Contractor must designate an on-site Project Supervisor who will serve as the contact person for the Railway and who will maintain a copy of the Safety Action Plan, safety audits, and Material Safety Datasheets (MSDS), at the job site.

- B.** Contractor shall have a background investigation performed on all of its employees, subcontractors and agents who will be performing any services for Railroad under this Agreement which are determined by Railroad in its sole discretion **a)** to be on Railroad's property, or **b)** that require access to Railroad Critical Infrastructure, Railroad Critical Information Systems, Railroad's Employees, Hazardous Materials on Railroad's property or is being transported by or otherwise in the custody of Railroad, or Freight in Transit involving Railroad.
- i) The required background screening shall at a minimum meet the rail industry background screening criteria defined by the e-RAILSAFE Program as outlined at www.eVerifile.com, in addition to any other applicable regulatory requirements.
 - ii) Contractor shall obtain written consent from all its employees, subcontractors or agents screened in compliance with the e-RAILSAFE Program to participate in the Program on their behalf and to release completed background information to Railroad's designee. Contractor shall be subject to periodic audit to ensure compliance.
 - iii) Contractor subject to the e-RAILSAFE Program hereunder shall not permit any of its employees, subcontractors, or agents to perform services hereunder who are not first approved under e-RAILSAFE Program standards. Railroad shall have the right to deny entry onto its premises or access as described in this section above to any of Contractor's employees, subcontractors or agents who do not display the authorized identification badge issued by a background screening service meeting the standards set forth in the e-RAILSAFE Program, or who in Railroad's opinion, which may not be unreasonable, may pose a threat to the safety or security of Railroad's operations, assets or personnel.
 - iv) Contractors shall be responsible for ensuring that its employees, subcontractors and agents are United States citizens or legally working in the United States under a lawful and appropriate work VISA or other work authorization.

5) Railway Flagger Services

- A.** The Contractor must give Railway's Roadmaster a minimum of thirty (30) calendar days advance notice when flagging services will be required so that the Roadmaster can make

appropriate arrangements (i.e., bulletin the flagger's position). If flagging services are scheduled in advance by the Contractor and it is subsequently determined by the parties hereto that such services are no longer necessary, the Contractor must give the Roadmaster five (5) working days advance notice so that appropriate arrangements can be made to abolish the position pursuant to union requirements.

B. Unless determined otherwise by Railway's Project Representative, Railway flagger will be required and furnished when Contractor's work activities are located over, under and/or within twenty-five (25) feet measured horizontally from centerline of the nearest track and when cranes or similar equipment positioned beyond 25-feet from the track centerline could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto for the following conditions:

- i) When, upon inspection by Railway's Representative, other conditions warrant.
- ii) When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railway's representative, track or other Railway facilities may be subject to movement or settlement.
- iii) When work in any way interferes with the safe operation of trains at timetable speeds.
- iv) When any hazard is presented to Railway track, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.
- v) Special permission must be obtained from the Railway before moving heavy or cumbersome objects or equipment which might result in making the track impassable.

C. Flagging services will be performed by qualified Railway flaggers.

- i) Flagging crew generally consists of one employee. However, additional personnel may be required to protect Railway Property and operations, if deemed necessary by the Railways Representative.
- ii) Each time a flagger is called, the minimum period for billing will be the eight (8) hour basic day.
- iii) The cost of flagger services provided by the Railway will be borne by Contractor. The estimated cost for one (1) flagger is approximately between \$800.00-\$1,600.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Railway and unemployment insurance, public liability and property damage insurance, health and welfare benefits, vehicle, transportation, meals, lodging, radio, equipment, supervision and other costs incidental to performing flagging services.

Negotiations for Railway labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. The flagging rate in effect at the time of performance by the contractor hereunder will be used to calculate the actual costs of flagging pursuant to this paragraph.

6) Contractor General Safety Requirements

- A.** Work in the proximity of railway track(s) is potentially hazardous where movement of trains and equipment can occur at any time and in any direction. All work performed by contractors within 25 feet of any track must be in compliance with FRA Roadway Worker Protection Regulations.
- B.** Before beginning any task on Railway Property, a thorough job safety briefing must be conducted with all personnel involved with the task and repeated when the personnel or task changes. If the task is within 25 feet of any track, the job briefing must include the Railway's flagger, as applicable, 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 Railway track(s).
- C.** Workers must not work within 25 feet of the centerline of any track without an on track safety strategy approved by the Railway's Project Representative. When authority is provided, every contractor employee must know: (1) who the Railway flagger is, and how to contact the flagger, (2) limits of the authority, (3) the method of communication to stop and resume work, and (4) location of the designated places of safety. Persons or equipment entering flag/work limits that were not previously job briefed, must notify the flagger immediately, and be given a job briefing when working within 25 feet of the center line of track.
- D.** When Contractor employees are required to work on the Railway Property after normal working hours or on weekends, the Railway's representative in charge of the project must be notified. A minimum of two employees must be present at all times.
- E.** Any employees, agents or invitees of Contractor or its subcontractors under suspicion of being under the influence of drugs or alcohol, or in the possession of same, will be removed from the Railway's Property and subsequently released to the custody of a representative of Contractor management. Future access to the Railway's Property by that employee will be denied.
- F.** Any damage to Railway Property, or any hazard noticed on passing trains must be reported immediately to the Railway's representative in charge of the project. Any vehicle or machine which may come in contact with track, signal equipment, or structure (bridge) and could result in a train derailment must be reported immediately to the Railway

representative in charge of the project and to the Railway's Resource Operations Center at 1(800) 832-5452. Local emergency numbers are to be obtained from the Railway representative in charge of the project prior to the start of any work and must be posted at the job site.

- G.** For safety reasons, all persons are prohibited from having pocket knives, firearms or other deadly weapons in their possession while working on Railway's Property.
- H.** All personnel protective equipment (PPE) used on Railway Property must meet applicable OSHA and ANSI specifications. Current Railway personnel protective equipment requirements are listed on the web site, www.BNSFContractor.com, however, a partial list of the requirements include: a) safety glasses with permanently affixed side shields (no yellow lenses); b) hard hats; c) safety shoe with: hardened toes, above-the-ankle lace-up and a defined heel; and d) high visibility retro-reflective work wear. The Railway's representative in charge of the project is to be contacted regarding local specifications for meeting requirements relating to hi-visibility work wear. Hearing protection, fall protection, gloves, and respirators must be worn as required by State and Federal regulations. (NOTE – Should there be a discrepancy between the information contained on the web site and the information in this paragraph, the web site will govern.)
- I.** The Contractor must not pile or store any materials, machinery or equipment closer than 25'-0" to the center line of the nearest railway track. Materials, machinery or equipment must not be stored or left within 250 feet of any highway/rail at-grade crossings or temporary construction crossing, where storage of the same will obstruct the view of a train approaching the crossing. Prior to beginning work, the contractor must establish a storage area with concurrence of the Railway's representative.
- J.** Machines or vehicles must not be left unattended with the engine running. Parked machines or equipment must be in gear with brakes set and if equipped with blade, pan or bucket, they must be lowered to the ground. All machinery and equipment left unattended on Railway's Property must be left inoperable and secured against movement. (See internet Engineering Contractor Safety Orientation program for more detailed specifications)
- K.** Workers must not create and leave any conditions at the work site that would interfere with water drainage. Any work performed over water must meet all Federal, State and Local regulations.
- L.** All power line wires must be considered dangerous and of high voltage unless informed to the contrary by proper authority. For all power lines the minimum clearance between the lines and any part of the equipment or load must be; 200 KV or below - 15 feet; 200 to 350 KV - 20 feet; 350 to 500 KV - 25 feet; 500 to 750 KV - 35 feet; and 750 to 1000 KV - 45 feet. If capacity of the line is not known, a minimum clearance of 45 feet must be maintained. A person must be designated 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.

7) Excavation

- A.** Before excavating, the Contractor must determine whether any underground pipe lines, electric wires, or cables, including fiber optic cable systems are present and located within the Project work area. The Contractor must determine whether excavation on Railway's Property could cause damage to buried cables resulting in delay to Railway traffic and disruption of service to users. Delays and disruptions to service may cause business interruptions involving loss of revenue and profits. Before commencing excavation, the Contractor must contact BNSF's Field Engineering Representative. All underground and overhead wires will be considered high voltage and dangerous until verified with the company having ownership of the line. It is the Contractor's responsibility to notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.
- B.** The Contractor must cease all work and notify the Railway immediately before continuing excavation in the area if obstructions are encountered which do not appear on drawings. If the obstruction is a utility and the owner of the utility can be identified, then the Contractor must also notify the owner immediately. If there is any doubt about the location of underground cables or lines of any kind, no work must be performed until the exact location has been determined. There will be no exceptions to these instructions.
- C.** All excavations must be conducted in compliance with applicable OSHA regulations and, regardless of depth, must be shored where there is any danger to tracks, structures or personnel.
- D.** Any excavations, holes or trenches on the Railway's Property must be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas must be secured and left in a condition that will ensure that Railway employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations must be back filled as soon as possible.

8) Hazardous Waste, Substances and Material Reporting

- A.** If Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railway's Property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this Agreement, Contractor must immediately: (a) notify the Railway's Resource Operations Center at 1(800) 832-5452, of such discovery: (b) take safeguards necessary to protect its employees, subcontractors,

agents and/or third parties: and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

9) Personal Injury Reporting

- A.** The Railway is required to report certain injuries as a part of compliance with Federal Railroad Administration (FRA) reporting requirements. Any personal injury sustained by an employee of the Contractor, subcontractor or Contractor's invitees while on the Railway's Property must be reported immediately (by phone mail if unable to contact in person) to the Railway's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form contained herein is to be completed and sent by Fax to the Railway at 1(817) 352-7595 and to the Railway's Project Representative no later than the close of shift on the date of the injury.

NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

(If injuries are in connection with rail equipment accident/incident, highway rail grade crossing accident or automobile accident, ensure that appropriate information is obtained, forms completed and that data entry personnel are aware that injuries relate to that specific event.)

Injured Person Type:

- | | |
|---|--|
| <input type="checkbox"/> Passenger on train (C) | <input type="checkbox"/> Non-employee (N)
<i>(i.e., emp of another railroad, or, non-BNSF emp involved in vehicle accident, including company vehicles)</i> |
| <input type="checkbox"/> Contractor/safety | <input type="checkbox"/> Contractor/non-safety sensitive (G) |
| <input type="checkbox"/> Volunteer/safety sensitive (H) | <input type="checkbox"/> Volunteer/other non-safety sensitive (I) |
| <input type="checkbox"/> Non-trespasser (D) - to include highway users involved in highway rail grade crossing accidents who did not go around or through gates | |
| <input type="checkbox"/> Trespasser (E) - to include highway users involved in highway rail grade crossing accidents who went around or through gates | |
| <input type="checkbox"/> Non-trespasser (J) - Off railroad property | |

If train involved, Train ID:

Transmit attached information to Accident/Incident Reporting Center by:
Fax 1-817-352-7595 or by Phone 1-800-697-6736 or email to: Accident-Reporting.Center@BNSF.com

Officer Providing Information:

(Name)

(Employee No.)

(Phone #)

Report prepared to comply with federal accident reporting requirements and protected from disclosure pursuant to 49 U.S.C. 20903 and 83 U.S.C. 490.

NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

Please complete this form and provide to the BNSF supervisor, who will input this information into the EHS Star system. For questions, call (817) 352-1267 or email Safety.IncidentReporting@BNSF.com.

Accident City/State: _____ Date: _____ Time: _____

County: _____ Temperature: _____ Weather: _____

(if non-BNSF location)

Name (Last/First/MI): _____

Age: _____ Gender (if available): _____

Company: _____

eRailsafe Badge Number: _____ Expiration Date: _____

BNSF Contractor Badge Number: _____ Expiration Date: _____

Injury: _____ Body Part: _____

(e.g., laceration)

(e.g., hand)

Description of accident (including how accident occurred, potential cause, etc.):

Work activity in progress at time of accident: _____

Tools, machinery, or hazardous materials involved in accident: _____

Treatment:

First Aid Only

Required Medical Treatment

Other Medical Treatment: _____

Dr. Name: _____ Date: _____

Dr. Street Address: _____ City: _____ State: _____ Zip: _____

Hospital Name: _____

Hospital Street Address: _____ City: _____ State: _____ Zip: _____

Diagnosis: _____

THIS REPORT IS PART OF BNSF'S ACCIDENT REPORT PURSUANT TO THE ACCIDENT REPORTS STATUTE AND, AS SUCH SHALL NOT "BE ADMITTED AS EVIDENCE OR USED FOR ANY PURPOSE IN ANY SUIT OR ACTION FOR DAMAGES GROWING OUT OF ANY MATTER MENTIONED IN SAID REPORT...." 49 U.S.C. § 20903. See 49 C.F.R. § 225.7(b).

EXHIBIT "C-1"

**Agreement Between
BNSF RAILWAY COMPANY
and the
CONTRACTOR**

Railway File: _____

Agency Project: _____

_____, a/an (hereinafter called "Contractor"), has entered into an agreement (hereinafter called "Agreement") dated _____, 20__, with _____ for the performance of certain work in connection with the following project:_____.

Performance of such work will necessarily require Contractor to enter BNSF Railway Company (hereinafter called "Railway") right of way and property (hereinafter called "Railway Property"). The Agreement provides that no work will be commenced within Railway Property until the Contractor employed in connection with said work for the Contracting Authority (i) executes and delivers to Railway an Agreement in the form hereof, and (ii) provides insurance of the coverage and limits specified in such Agreement and Section 3 herein. If this Agreement is executed by a party who is not the Owner, General Partner, President or Vice President of Contractor, Contractor must furnish evidence to Railway certifying that the signatory is empowered to execute this Agreement on behalf of Contractor.

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Agreement, has agreed and does hereby agree with Railway as follows:

1) RELEASE OF LIABILITY AND INDEMNITY

- A.** Contractor hereby waives, releases, indemnifies, defends and holds harmless Railway for all judgments, awards, claims, demands, and expenses (including attorneys' fees), for injury or death to all persons, including Railway's and Contractor's officers and employees, and for loss and damage to property belonging to any person, arising in any manner from Contractor's or any of Contractor's subcontractors' acts or omissions or any work performed on or about Railway's property or right-of-way. The liability assumed by

Contractor will not be affected by the fact, if it is a fact, that the destruction, damage, death, or injury was occasioned by or contributed to by the negligence of railway, its agents, servants, employees or otherwise, except to the extent that such claims are proximately caused by the willful misconduct or gross negligence of Railway.

- B.** It is mutually negotiated between the parties that the indemnification obligation shall include all claims brought by Contractor's employees against Railway, its agents, servants, employees or otherwise, and Contractor expressly waives its immunity under the industrial insurance act (RCW Title 51) and assumes potential liability for all actions brought by its employees.
- C.** The indemnification obligation assumed by Contractor includes any claims, suits or judgments brought against Railway under the Federal Employee's Liability Act, including claims for strict liability under the Safety Appliance Act or the Locomotive Inspection Act, whenever so claimed.
- D.** Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all claims made against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and thereupon Contractor must proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway's discretion, must defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all damages, judgments, decrees, attorney's fees, costs, and expenses growing out of or resulting from or incident to any such claims or suits.
- E.** In addition to any other provision of this Agreement, in the event that all or any portion of this Article shall be deemed to be inapplicable for any reason, including without limitation as a result of a decision of an applicable court, legislative enactment or regulatory order, the parties agree that this Article shall be interpreted as requiring Contractor to indemnify Railway to the fullest extent permitted by applicable law. Through this agreement the parties expressly intend for contractor to indemnify Railway for Railway's acts of negligence.
- F.** It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement survive any termination of this Agreement.

2) TERM

- A. This Agreement is effective from the date of the Agreement until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

3) INSURANCE

Contractor shall, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

- A. 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 but in no event less than the amount otherwise carried by the Contractor. Coverage must be purchased on a post 2004 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

- ◆ Bodily Injury and Property Damage
- ◆ Personal Injury and Advertising Injury
- ◆ Fire legal liability
- ◆ Products and completed operations

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- ◆ The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- ◆ Waiver of subrogation in favor of and acceptable to Railway.
- ◆ Additional insured endorsement in favor of and acceptable to Railway.
- ◆ Separation of insureds.
- ◆ The policy shall be primary and non-contributing with respect to any insurance carried by Railway.

It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to Railway employees.

No other endorsements limiting coverage as respects obligations under this Agreement may be included on the policy with regard to the work being performed under this agreement.

B. Business Automobile Insurance. This insurance shall contain a combined single limit of at least \$1,000,000 per occurrence, and include coverage for, but not limited to the following:

- ◆ Bodily injury and property damage
- ◆ Any and all vehicles owned, used or hired

The policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- ◆ Waiver of subrogation in favor of and acceptable to Railway.
- ◆ Additional insured endorsement in favor of and acceptable to Railway.
- ◆ Separation of insureds.
- ◆ The policy shall be primary and non-contributing with respect to any insurance carried by Railway.

C. 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 must 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.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- ◆ Waiver of subrogation in favor of and acceptable to Railway.

C. Railroad Protective Liability insurance naming 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 Must be issued on a standard ISO form CG 00 35 12 04 and include the following:

- ◆ Endorsed to include the Pollution Exclusion Amendment
- ◆ Endorsed to include the Limited Seepage and Pollution Endorsement.
- ◆ Endorsed to remove any exclusion for punitive damages.
- ◆ No other endorsements restricting coverage may be added.
- ◆ The original policy must be provided to the Railway prior to performing any work or services under this Agreement
- ◆ Definition of “Physical Damage to Property” shall be endorsed to read: “means direct and accidental loss of or damage to all property owned by any named insured and all property in any named insured’ care, custody, and control arising out of the acts or omissions of the contractor named on the Declarations.

In lieu of providing a Railroad Protective Liability Policy, Licensee may participate (if available) in Railway’s Blanket Railroad Protective Liability Insurance Policy.

Other Requirements:

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages.

Contractor agrees to waive its right of recovery against Railway for all claims and suits against Railway. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against Railway for all claims and suits. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against Railway for loss of its owned or leased property or property under Contractor’s care, custody or control.

Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.

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

Prior to commencing services, Contractor shall furnish to Railway an acceptable certificate(s) of insurance from an authorized representative evidencing the required coverage(s), endorsements, and amendments. The certificate should be directed to the following address:

BNSF Railway Company
c/o CertFocus
P.O. Box 140528
Kansas City, MO 64114
Toll Free: 877-576-2378
Fax number: 817-840-7487
Email: BNSF@certfocus.com
www.certfocus.com

Contractor shall notify Railway in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration.

Any insurance policy shall be written by a reputable insurance company acceptable to Railway or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provided.

If coverage is purchased on a "claims made" basis, Contractor hereby agrees to maintain coverage in force for a minimum of three years after expiration, cancellation or termination of this Agreement. Annually Contractor agrees to provide evidence of such coverage as required hereunder.

Contractor represents that this Agreement 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 this Agreement.

Not more frequently than once every five years, Railway may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by Contractor, Contractor shall require that the subcontractor shall provide and maintain insurance coverage(s) as set forth herein, naming Railway as an additional insured, and shall require that the subcontractor shall release, defend and indemnify Railway to the same extent and under the same terms and conditions as Contractor is required to release, defend and indemnify Railway herein.

Failure to provide evidence as required by this section shall entitle, but not require, Railway to terminate this Agreement 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 Railway shall not be limited by the amount of the required insurance coverage.

In the event of a claim or lawsuit involving Railway arising out of this agreement, Contractor will make available any required policy covering such claim or lawsuit.

These insurance provisions are intended to be a separate and distinct obligation on the part of the Contractor. Therefore, these provisions shall be enforceable and Contractor shall be bound thereby regardless of whether or not indemnity provisions are determined to be enforceable in the jurisdiction in which the work covered hereunder is performed.

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

4) SALES AND OTHER TAXES

- A.** In the event applicable sales taxes of a state or political subdivision of a state of the United States are levied or assessed in connection with and directly related to any amounts invoiced by Contractor to Railway ("Sales Taxes"), Railway shall be responsible for paying only the Sales Taxes that Contractor separately states on the invoice or other billing documents provided to Railway; *provided, however*, that (i) nothing herein shall preclude Railway from claiming whatever Sales Tax exemptions are applicable to amounts Contractor bills Railway, (ii) Contractor shall be responsible for all sales, use, excise, consumption, services and other taxes which may accrue on all services, materials, equipment, supplies or fixtures that Contractor and its subcontractors use or consume in the performance of this Agreement, (iii) Contractor shall be responsible for Sales Taxes (together with any penalties, fines or interest thereon) that Contractor fails to separately state on the invoice or other billing documents provided to Railway or fails to collect at the time of payment by Railway of invoiced amounts (except where Railway claims a Sales Tax exemption), and (iv) Contractor shall be responsible for Sales Taxes (together with any penalties, fines or interest thereon) if Contractor fails to issue separate invoices for each state in which Contractor delivers goods, provides services or, if applicable, transfers intangible rights to Railway.
- B.** Upon request, Contractor shall provide Railway satisfactory evidence that all taxes (together with any penalties, fines or interest thereon) that Contractor is responsible to pay under this Agreement have been paid. If a written claim is made against Contractor for Sales Taxes with respect to which Railway may be liable for under this Agreement,

Contractor shall promptly notify Railway of such claim and provide Railway copies of all correspondence received from the taxing authority. Railway shall have the right to contest, protest, or claim a refund, in Railway's own name, any Sales Taxes paid by Railway to Contractor or for which Railway might otherwise be responsible for under this Agreement; provided, however, that if Railway is not permitted by law to contest any such Sales Tax in its own name, Contractor shall, if requested by Railway at Railway's sole cost and expense, contest in Contractor's own name the validity, applicability or amount of such Sales Tax and allow Railway to control and conduct such contest.

- C. Railway retains the right to withhold from payments made under this Agreement amounts required to be withheld under tax laws of any jurisdiction. If Contractor is claiming a withholding exemption or a reduction in the withholding rate of any jurisdiction on any payments under this Agreement, before any payments are made (and in each succeeding period or year as required by law), Contractor agrees to furnish to Railway a properly completed exemption form prescribed by such jurisdiction. Contractor shall be responsible for any taxes, interest or penalties assessed against Railway with respect to withholding taxes that Railway does not withhold from payments to Contractor.

5) EXHIBIT "C" CONTRACTOR REQUIREMENTS

- A. The Contractor must observe and comply with all provisions, obligations, requirements and limitations contained in the Agreement, and the Contractor Requirements set forth on Exhibit "C" attached to the Agreement and this Agreement, including, but not be limited to, payment of all costs incurred for any damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site. Contractor shall execute a Temporary Construction Crossing Agreement or Private Crossing Agreement (<http://www.bnsf.com/communities/faqs/permits-real-estate/>), for any temporary crossing requested to aid in the construction of this Project, if approved by BNSF.
- B. Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, each of the parties hereto has caused this Agreement to be executed by its duly authorized officer the day and year first above written.

BNSF RAILWAY COMPANY

CONTRACTOR _____

Signature: _____

Signature: _____

Printed Name: _____

Printed Name: _____

Title: Manager Public Projects

Title: _____

Date: _____

Date: _____

Accepted and effective this _____ day of 20_____.

CONTRACTOR

Contact Person: _____

Address: _____

City: _____

State: _____

Zip: _____

Fax: _____

Phone: _____

E-mail: _____

CONTACTS

BNSF

Manager Public Projects

Jacob Rzewnicki
913-551-4275

Division Engineer

Name: _____ **Phone:** _____

Roadmaster

Name: _____ **Phone:** _____

Field Engineering Representative

Name: _____ **Phone:** _____

IOWA DEPARMTNET OF TRANSPORTATION

Resident Construction Engineer or Project Engineer

Name: _____ **Phone:** _____

Field Inspector

Name: _____ **Phone:** _____

TRAIN CONDITIONS

The average train traffic on this route is _____ freight trains per 24-hour period at a timetable speed _____ MPH and _____ passenger trains at a timetable speed of _____ MPH.

Forms:

650075 – On-line application and database for manufacturers and suppliers to submit data for a new product, material or procedure for evaluation. The application will have a public facing page where the status of all reviews will be available.

Policy and Procedure:

I. Purpose

- A. The Specifications Committee is responsible for a thorough and fair evaluation of newly developed products, materials and procedures for potential use in highway construction and maintenance.
- B. The Specifications Committee has the authority to accept, reject or determine the status of new products, materials and procedures submitted for Department use.

II. Procedure

- A. Department offices that receive new product information directly shall forward the vendor to the on-line system.
- B. Once a submittal has been made, the Specification Committee members will receive notification as well as the responsible reviewing office(s).
- C. The responsible reviewing office(s) will determine if the submittal meets the criteria as a new product. They will notify the Specifications Engineer for items that should go through a different process at the Department. The Specification Engineer will contact the submitter and archive the item in the database. Items that are already covered by a Materials I.M. will be forwarded to the Construction and Materials Bureau for action.
- D. The responsible office(s) will review the submittal for completeness and if further information or clarification of the intent is needed, they will attempt to obtain this information from the contact provided on the submittal.
- E. After all the needed information is obtained, the responsible office(s) will review and make one of the following recommendations within 30 days to the Specifications Engineer.
 - 1. Immediate adoption.
 - 2. Referral to the initiator for additional information.
 - 3. Referral to another bureau for evaluation or recommendation.
 - 4. Referral for testing and evaluation by **AASHTO Product Evaluation List (APEL)**.
 - 5. Field trial for further evaluation.

6. Referral to the Research and Analytics Bureau for formal research and development.
 7. Deferral due to current unavailability of technology or equipment.
 8. Deferral because the item is not currently cost-effective.
 9. Rejection.
- F. The Specifications Engineer will update and maintain the status of all items submitted and will forward the recommendations to the Specification Committee for review and approval. After Specification Committee approval, the Specification Engineer will notify the suppliers, manufacturers or persons who submitted the item of the decision of the Specifications Committee. The Specification Engineer will finalize the item record in the database and the record will remain on the public facing web page.