



Addendum No. 3: Dated January 11, 2023, to bidding documents for the Culpeper Station Pedestrian Bridge for the Town of Culpeper, Virginia, WW Associates Project No. 220047.00.

From: WW Associates, Inc.

To: All Bidding Document Holders of Record

This addendum forms a part of the bidding documents and modifies the drawing and specifications dated May 27, 2022, revised November 11, 2022. Acknowledge receipt of this addendum in the space provided on the bid form. Failure to do so may subject the bidder to disqualification.

SPECIFICATIONS

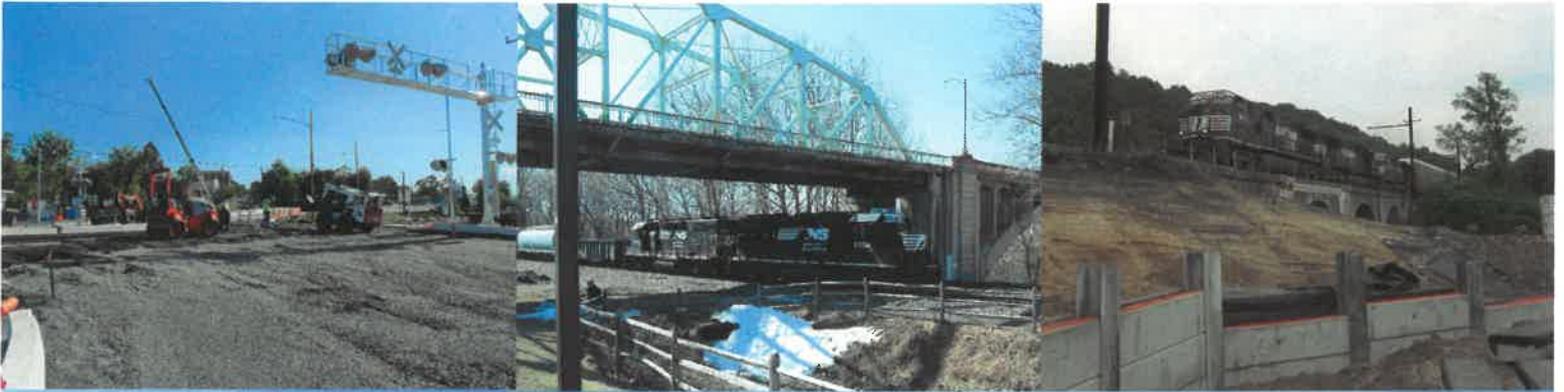
Section 01400 – General Requirements

Delete Paragraph 1.3.6 in its entirety and replace with the following:

“1.3.6 Comply with all requirements of Norfolk Southern’s Public Improvement Projects Manual dated January 1, 2022. Specifically reference Section 4.3, Construction and Appendix E, Norfolk Southern – Special Provisions for Protection of Railway Interests. Contractor to include, but not be limited to, insurance requirements, preconstruction meeting, shop drawing submissions and rigging plan. Owner will provide protective services (flagging).

1.3.6.1 Norfolk Southern Public Improvements Project Contact for Virginia:

George (Brian) Taylor
470-463-7534
george.taylor3@nscorp.com”



Public Improvement Projects Manual

For Projects Which May Impact Norfolk Southern Railway Company

Effective Date: January 1, 2022

1. Introduction

Norfolk Southern Railway Company (NS) places the highest priority on safety – for its employees and for the public. The company must also give careful consideration to anything that could adversely affect customer service, compensation for use of railroad property, and risk to railroad operation.

The Public Improvements Engineers are the initial contact for NS and are assigned territories by State (see Appendix A for Project Engineers and state assignments). Please contact them directly about Public Improvements projects using the information provided. General Engineering Consultants (GEC) provide administrative and engineering services to assist NS in managing public projects.

The NS Public Improvements team is involved in a wide variety of projects initiated by government agencies, local businesses, and others. Accurate and timely communication of information between NS and these parties improves planning, relationships, and successful completion of projects.

The information in this Manual is intended to improve communication and cooperation on construction and improvement projects that may involve NS. The purpose of this Manual is to inform Project Sponsors, Contractors and other Parties involved with projects being constructed over, under or adjacent to NS of Railroad policies, requirements, criteria and standards for the design and construction of those projects. Compliance with these guidelines is required to achieve uniformity in the preparation of construction documents and to expedite the review and approval by the Railroad of design and construction submittals. Examples of projects covered by this Manual include, but are not limited to the following:

A. Highway-Rail Grade Crossings: Closure, removal, installation, and alterations of public highway-rail grade crossings.

A.1. Signals: Installation or alterations of highway-rail grade crossing warning and signal devices shall be coordinated with NS Communications & Signal (C&S) Department:

Administrator Highway Grade Crossings
Norfolk Southern Corporation
650 W Peachtree St. NW
Atlanta, GA 30308
Telephone: (478) 973-3698

A.2. Quiet Zones: Information for a community request to establish a new quiet zone is located at:

<http://www.nscorp.com/content/nscorp/en/about-ns/safety/quiet-zone-information.html>

B. Bridges Over NS: Construction, reconstruction, rehabilitation, repair, removal, and maintenance of bridges over the railroad by outside parties.

C. Bridges Carrying NS: Construction, reconstruction, rehabilitation, repair, removal, and maintenance of bridges carrying NS over highways and other public properties initiated by outside parties.

D. Parallel Roads/Facilities: Construction, reconstruction, modification, removal, and maintenance of parallel roads or other public facilities affecting NS property or operations.

E. Beautification: Modification of structures over or adjacent to the railroad involving aesthetic work only.

F. Bridge Painting: Painting of structures over or adjacent to NS property.

G. Landscaping: Non-structural modifications to land on, adjacent to, or impacting NS right-of-way (ROW).

H. Other Projects Involving NS Rail Corridors: Publicly sponsored projects involving or altering NS facilities or its property, including highway construction, drainage improvements or other activities that require access to NS ROW or property.

H.1 Pipe And Wire: Installation, relocation, or modification of utilities above or below Norfolk Southern's right of way shall be coordinated with Norfolk Southern's Pipe and Wire Program. Information can be found at:

<http://www.nscorp.com/content/nscorp/en/real-estate/norfolk-southern-services/wire-pipeline-fiber-optic-projects.html>

The purpose of review by the Railroad is solely to ensure compliance with the minimum standards of NS, dealing with particular areas of concern to rail transportation, and not to warrant the general safety and longevity of any structure. The information in this document is a tool only and all statements are intended to be for broad use. Specific projects will be subject to analysis of all factors and formal agreements between parties. Safety is always the highest priority.

1.1 Guidelines and References

These Guidelines, as well as other NS documents, are provided for reference only and are subject to revision without notice. These Guidelines cannot be taken as authority to construct. Execution of a preliminary engineering agreement, Railroad approval of construction documents, execution of a project agreement, railroad approval of insurance, railroad Right-of-Entry Agreement (if applicable), and written authorization are required prior to beginning construction. These Guidelines should be considered in addition to the current AREMA Manual for Railway Engineering, AASHTO, MUTCD, and State Railroad Regulatory Body requirements. Where these Guidelines and the documents referenced in the preceding sentence differ, the more stringent requirements will govern.

The AREMA Manual is available from:

American Railway Engineering and Maintenance-of-Way Association
4501 Forbes Boulevard, Suite 130
Lanham, MD 20706-4326
Phone: (301)459-3200; Fax: (301) 459-8077
<http://www.arema.org/>

The AASHTO Manual is available from:

American Association of State Highway and Transportation Officials
555 12th Street NW – Suite 1000
Washington, DC 20004
<https://bookstore.transportation.org/>

The MUTCD is available from:

U.S. Department of Transportation – Federal Highway Administration
<http://mutcd.fhwa.dot.gov/>

The specific railroad requirements for projects, as addressed in this document, shall be followed at all locations where the Railroad operates, regardless of track ownership or track status, either active or out of service.

Any items affecting Railroad property not covered in these Guidelines shall be subject to the Railroad's prior review and approval.

All new or modified overhead structures or underpass structures shall be designed in accordance with the most current policies, requirements, and standards of NS.

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3. Summary of Definitions in the Manual

NS has assembled all written requirements or criteria readily available within the railroad or use in this Manual. The following is a listing of definitions to help in the understanding of the manual.

Access Road: A road used and controlled by NS for maintenance, inspection, and repair.

AREMA: The current edition of the American Railway Engineering and Maintenance-of-Way Association Manual for Railway Engineering.

AASHTO: The current edition of the American Association of State Highway and Transportation Officials Standard Specifications for Highway Bridges.

Project Agreement (PA): An agreement that has been negotiated between NS and the Sponsor that addresses all the duties and responsibilities of each party regarding the construction of the proposed project, including the force account estimate and the maintenance requirements after construction of the said project.

Construction Documents: Refers to design plans and calculations, project and/or standard specifications, geotechnical report and drainage report used to construct a project.

Contractor: The individual, partnership, corporation or joint venture and all principals and representatives (including Sponsor's subcontractors) with whom the contract is made by the Sponsor for the construction of the project.

Contractor Right of Entry Agreement: An agreement between the Railroad and the Contractor allowing access to Railroad property to perform construction activities. All Contractors will be required to execute this agreement prior to starting any work on the Railroad property.

Crossover: A track connection between two adjacent tracks.

Construction Window: A timeframe in which construction or maintenance can be performed by the Contractor with the required presence of a Flagman.

Engineer-of-Record: The Professional Engineer that develops the criteria and concept for the project and is responsible for the preparation of the Plans and Specifications. The Engineer-of-Record must be registered in the state of the project location. The Engineer-of-Record may be the Sponsor's in-house staff or a consultant retained by the Sponsor. The Contractor shall not employ

the Engineer-of-Record as the Contractor's Engineer-of-Record or as a Specialty Engineer, with the exception of design build projects.

Flagman: Qualified NS personnel or qualified contracted personnel who primarily act to restrict and direct train movement in a project area while workers are on or adjacent to NS property.

Force Account Estimate: A time and materials estimate prepared by the railroad that reflects the anticipated costs to be incurred by the railroad. There is no cost allocation included for profit.

GEC: General Engineering Consultants (GECs) provide engineering services to support and represent NS's interest in public projects. GECs perform preliminary engineering, construction inspection, and monitoring under the direction of the NS Engineering personnel. GEC personnel may also perform project administration tasks.

Guidelines: Refers to the information contained in this document or referenced in AREMA or AASHTO.

Grade Separation Project: A project that includes an Overhead or Underpass Structure that crosses the NS right-of-way or other railroad operating location regardless of track status being active or out of service.

Industrial Track: A track connected to the main track or siding which is generally owned by a customer of NS.

Main Track: A track extending through yards and between stations that must not be occupied without proper authority.

Multiple Main Tracks: Two or more parallel or adjacent main tracks.

Observer: Qualified contracted personnel who primarily act to monitor the general activities of persons at a worksite for compliance with railroad requirements and to detect any unsafe acts or conditions observed at the worksite that could interfere with safe operation of trains.

Overhead Structure: A roadway, trail, pedestrian, or utility structure over the NS right-of-way.

Preliminary Engineering: The Preliminary Engineering for a project is referred to as the "PE".

Preliminary Engineering Agreement: An agreement that has been negotiated between NS and the Sponsor that addresses all the duties and responsibilities of each party regarding the engineering review of the proposed project, including the force account estimate of the said project.

Private Crossing Agreement: An agreement that has been negotiated between NS and the Sponsor and/or a contractor for the construction of a new or the use of an existing at-grade crossing.

Public Improvements Engineer: The individual designated by NS as the primary point of contact for the project.

Railroad: Refers to Norfolk Southern Railway Company or its subsidiaries.

Railroad Protective Services: The actions of an Observer, Flagman, and any other qualified NS personnel or qualified contracted personnel directed toward helping to ensure the safe operation of train movements while workers are on or adjacent to NS property.

Railroad Right-of-Entry Agreement: An agreement between the Railroad and a Sponsor or a Contractor allowing access to Railroad property. This agreement cannot be used for construction.

Siding: A track connected to the main track and used for meeting, storing, or passing trains.

Sponsor: Any entity proposing a project on, over or adjacent to the NS right-of-way or other NS operating location, regardless of track being active or out of service.

Temporary Construction Crossing/Access: A temporary at-grade crossing for the exclusive use of the contractor working on the project. Temporary construction crossings are considered on a limited project basis where other means of access are not possible, and if approved, require separate approvals, agreements, and fees with NS' Real Estate Group.

Timetable: A railroad publication with instructions on train, engine, or equipment movement. It also contains other essential Railroad information.

Trail: A pathway impacting NS right-of-way or other NS operating locations regardless of track status being active or out of service. This includes pedestrian, bicycle, approved motorized recreational equipment and equestrian uses.

Underpass Structure: A railroad structure over a roadway and/or trail.

Yard: A system of tracks, other than main tracks and sidings, used for making up trains, storing cars and other purposes.

Yard Limits: A portion of main track designated by "yard limit" signs and included in the timetable special instructions or a track bulletin.

4. Summary Steps of a Project Initiated by an Outside Party

4.1 Preliminary Engineering

4.1.1 Overview

Any proposals that Project Sponsors and others outside NS make that may affect or be near the NS right-of-way must be evaluated in advance by NS to ensure the safety of the public and NS employees, maintain timely rail service to NS customers, and protect NS property and operations.

4.1.2 Purpose of Preliminary Engineering

The purpose of the Preliminary Engineering is to identify issues related to safety, engineering, customer service, operations, legal and regulatory matters, expense, risk, future needs, and other considerations specific to any proposed project. The NS review of plans is only to determine that the plans and improvements constructed in accordance with the plans satisfy NS's requirements.

4.1.3 Process Steps To Be Taken

- Contact the NS Public Improvements Engineer of the project location and provide initial project information. (See Appendix A)
- Review and complete a standard PE agreement (See Section 4.2.1).
- Provide project information; attend meetings (as needed), review site with NS or GEC personnel.
- Submit initial plans to NS, or designated GEC, for review.
- Respond to NS (and/or designated GEC) concerns and adjust design, if necessary.
- Submit final design to NS (and/or designated GEC) for review comments and/or approval.
- NS will complete final review to ensure compliance with railroad requirements.
- NS will estimate the cost of the Force Account work to be completed by NS during construction.
- When the Project Sponsor and NS approve the project for construction, a standard project agreement will be prepared for execution. (See Section 4.2.2)
- Once the project agreement for construction is fully executed, Norfolk Southern Real Estate can process any necessary transactions associated with the project.

4.1.4 Submittal Requirements

As a project evolves through preliminary engineering, the Sponsor or their designated representative shall submit all applicable design and reference documents to NS for review and approval. Project Sponsors shall reference the NS Special Provisions and applicable Design Criteria provided in Appendices E, H, & I to ensure compliance in all aspects of the design. NS requires that the following submittal packages be provided in **electronic format (.pdf)**.

- **Concept Package** – Includes plans, scope, location map, and aerial photos.
 - General Plan, Elevation, and Typical Sections
 - Descriptive scope of work detailing the anticipated construction effort and specifically highlighting the potential impacts to NS
 - A completed Norfolk Southern Project Data Sheet (See Appendix D for data sheets)
- **30% Package** – Applicant Response to Conceptual Plan Comments, Design Plans, Project Specifications, Applicable Design Reports
 - Sponsor generated 'Response to Comments' and revised plans incorporating modifications to the Concept plans
 - Revised General Plan, Elevation, and Typical Sections – Include utilities identified within the project site. General Notes Sheet indicating structure design criteria, project design and construction specifications, and anticipated constructed methodology.
 - Applicable Design Reports
 - Construction Staging Documents (if required)
- **60 % Package** – Applicant Response to 30% Package, progressed Design Plans, Project Specifications, Project Special Provisions, Applicable Design Reports, and Property Deeds, Easement, and ROW Plans. Refer to Appendix G for Norfolk Southern Requirements for easements and ROW plans.
- **90% Package** – Applicant Response to 60% Package, Final Design Plans, Project Specifications, Project Special Provisions, Applicable Design Reports
 - Sponsor generated 'Response to Comments' and revised plans incorporating modifications to the 60% Plans.
 - Revised General Plan, Elevation and Typical Section as well as any additional details required to clearly depict the construction impacting NS. General Notes Sheet indicating the final structure design criteria,

- project design and construction specifications, and anticipated construction methodology.
- Final Project Specifications and Special Provisions detailing the construction requirements for all work impacting NS. This package should include the NS Special Provisions.
- Applicable Design Reports (as revised or developed following the 60% submission)
- Final Construction Staging Documents (as required)
- **100% Package** – Applicant Response to 90% Package, Revised Final Design Plans, Project Specifications, Project Special Provisions, Applicable Design Reports
 - Sponsor generated ‘Response to Comments’ and revised plans incorporating modifications to the 90% Plans.
 - All Plans shall be signed and sealed by a Professional Engineer licensed in the state of the project.
 - Package shall contain a full, final set of the project bid documents including all applicable specifications and special provisions.

4.1.5 Right of Entry – Access to NS Property

Throughout Preliminary Engineering, many public projects located over, under or adjacent to NS will require outside parties to enter the NS right of way for investigative activities – including but not limited to surveying and environmental or geotechnical sampling. All parties requiring access to the NS right of way for these efforts must complete a ‘Right of Entry’ application and submit a detailed scope of work and reference plans/exhibits clearly conveying the limits occupied or disturbed by the investigative activities. In addition, said companies must satisfy all NS Insurance requirements before entry to the right of way will be permitted. Refer to Appendix F.4 for a link to instructions.

4.1.6 Costs and Expenses

NS requires payment for its costs and expenses for reviewing and handling the PE. In addition, all expenses of the party seeking the review will be borne by that party, including expenses for NS employees or GEC personnel attending meetings, reviewing plans, preparing correspondence, travel expenses and other activities to support the review of the project.

Fair compensation for the use of NS’s company’s resources is necessary and reasonable. Moreover, the types of projects being addressed in this manual usually do not directly benefit NS’s core business of providing transportation service vital to its customers. As a result, NS seeks payment for its costs and expenses incurred in connection with project review or construction.

4.1.7 Timing

It is in the interest of all parties to complete the PE review before commitments are made or construction steps begin. NS will work to be responsive, with timing depending upon the complexity of the project. NS, and its GEC, will work with the project sponsor to progress PE and construction to meet project schedule objectives whenever possible, considering available resources. (For review schedule see Appendix C)

4.1.8 Standard Documents

NS utilizes standard documents for the review of all projects including but not limited to:

- Appendix E – Norfolk Southern Special Provisions for Protection of Railway Interests (NS Special Provisions)
- Appendix H – Norfolk Southern Guidelines for Design of Grade Separated Structures
- Appendix I – Norfolk Southern Typical Drawings & Details

4.2 Agreements

NS executes many agreements each year for preliminary engineering and construction of projects. Standard agreements can be executed by NS without additional law department review. Non-standard agreements or terms will require additional law department review. There are variations in standard documents used with some states and agencies. Sample Typical NS agreements are available in the Appendix F.

4.2.1 Preliminary Engineering Agreement

To initiate a construction or improvement project, a Preliminary Engineering (PE) agreement is required to identify the Sponsor, the project, define the tasks to be accomplished and specify the payment schedule. As part of the PE agreement, NS will provide the sponsor with a Force Account Estimate (FAE) detailing the anticipated costs to be incurred in PE. Once the PE agreement is executed, NS will only bill the Sponsor for actual expenses incurred. In the event that NS anticipates

it may incur reimbursable expenses in excess of the original FAE amounts, NS will provide the Project Sponsor with a revised FAE for approval.

NS will not initiate any PE work without either a fully executed PE agreement or written authorization to incur costs from the Project Sponsor. An example PE agreement can be found in Appendix F.1

4.2.2 Project Agreement

When a project is approved, NS will work with the project sponsor to complete a project agreement (PA). A PA is required to:

- Identify parties, the project location, and the project description.
- Define the tasks to be performed by each party during construction
- Define any future ownership or maintenance requirements
- Define all payments and contributions from the involved parties.
- Define the Sponsor's/contractor's insurance requirements.

This document is also required for access onto NS's property during the construction phase. No physical work or entry onto NS's property will be allowed without a fully executed PA.

NS will provide the Sponsor with a Force Account Estimate (FAE) detailing the anticipated costs to be incurred during construction. Once the PA is executed, NS will only bill the sponsor for actual expenses incurred. In the event that NS anticipates it may incur reimbursable expenses in excess of the original FAE amounts, NS will provide the project sponsor with a revised FAE for approval.

An example PA can be found in Appendix F.2.

4.3 Construction

4.3.1 Overview

Once a project has been approved and the PA has been fully executed, NS will initiate the work outlined in the FAE for construction. Force Account Work for construction typically includes but is not limited to:

A. Construction Engineering

- Attendance at project meetings, including project preconstruction meeting.

- Contractor submittal reviews for work impacting NS operations.
- Onsite construction monitoring.
- Coordination with sponsor/contractor

B. Accounting

C. Railroad Protective Services

- Onsite protective services including flagman or observers provided by NS or contracted personnel.

D. Communications Changes

- Relocations or modifications to NS Communications facilities to accommodate the construction project.

E. Signal and Electrical Changes

- Relocations or modifications to NS Signal or Electrical facilities to accommodate the construction project.

F. Track Work

- NS track relocations or modifications to accommodate the construction project, including temporary construction crossings.

G. T-cubed

- Relocations or modifications to NS Fiber Optic Communications facilities to accommodate the construction project.

4.3.2 Purpose of Construction Engineering

The purpose of Construction Engineering is to ensure that all construction work, relative to NS, is performed in accordance with the approved plans, specifications, special provisions, and the PA. In addition to the project documents, all construction work performed on, under, over, or adjacent to NS must be performed in accordance with the Norfolk Southern Special Provisions for Protection of Railway Interests (Appendix E).

4.3.3 Process Steps To Be Taken

- Complete all items on the NS Construction Checklist (refer to Appendix J) summarized in this section
 - Sign and receive a copy of the fully executed Contractor Right of Entry Agreement. (refer to Appendix F.5)
 - Submit contractor's insurances for review and approval by NS. (4.3.4)
 - Conduct a project preconstruction meeting with the Project Sponsor, the Contractor, and NS and their GEC. (4.3.5)
 - Submit a project schedule and schedule Railroad Protective Services. (4.3.6) Provide Written Notice to NS of the project a

minimum of 30 days prior to the start of work on NS property.

- Before any construction work may begin, the contractor must receive a written authorization letter from NS authorizing the contractor to proceed. (4.3.8)
- Submit contractor’s submittals to NS for review by NS and their GEC. (4.3.7)
- GEC will perform ongoing construction monitoring for compliance with approved submittals. (4.3.9)
- During construction coordinate with NS and GEC regarding any project changes to schedule or approved submissions.
- At completion of construction work conduct a project final walkthrough with the Project Sponsor, the contractor, NS and their GEC.

Please note that no work may be performed on, under, over, or adjacent to NS property until NS insurance is approved and the Contractor receives written authorization from the Railroad Engineer.

4.3.4 Insurance

Please refer to Section 14 and Section 2.A.3 of the Norfolk Southern NS Special Provisions for Protection of Railway Interests located in Appendix E for all insurance requirements. Please note that originals of the full insurances policies outlined in the NS Special Provisions must be submitted electronically in original to NS Risk Management Department at NSRISK3@NSCORP.COM.

Due to the number of projects system wide the contractor should anticipate a minimum of 30 days for NS Risk Management to review the insurance submittal.

4.3.5 Preconstruction Meeting

The Project Sponsor shall provide written notification in electronic format to the NS Public Improvements Engineer a minimum of 2 weeks in advance of the project preconstruction meeting. NS shall be given time at the preconstruction meeting to identify their key personnel and contact information, identify the required submittals, and review the Norfolk Southern Special Provisions for the Protection of Railway Interests.

4.3.6 Railroad Protective Services

Please refer to the Norfolk Southern Special Provisions for the Protection of Railway Interests located in Appendix E for all Railroad Protective Services requirements. NS will provide the Railroad Protective Services point of contact at

the preconstruction meeting and in the NS Authorization letter to the contractor. In accordance with NS Special Provisions, 10 days notice is required to schedule Railroad Protective Services; however, it may take up to 30 days to obtain Railroad Protective Services initially for NS. No Railroad Protective Services will be provided until the contractor’s insurance has been approved by NS.

4.3.7 Construction Submittal Requirements

The contractor shall submit all construction related correspondence and submittals electronically to the NS Public Improvements Engineer and the designated GEC for review and approval. Construction submissions are required for any activities that have the potential to foul NS track, impact NS operations, or disturb NS property. All submittals will be reviewed with respect to the impacts to NS operations and overall project safety. All submittals must be prepared, signed and sealed by a registered engineer licensed in the state of the project work.

Appendix E contains a baseline list of submittals required for review and approval for all construction projects. Please note that additional submittals may be required upon request.

Please refer to Section 5 of the Norfolk Southern Special Provisions for the Protection of Railway Interests located in Appendix E and the NS Guidelines for Design of Grade Separation Structures in Appendix H for specific submittal requirements. Work for a specific submittal may not start until written approval in electronic format is provided by NS or their GEC. Contractor requests for submittal revisions shall be coordinated with NS and GEC, then approved before any changes are implemented by the contractor.

4.3.8 Authorization Letter/Email

The Contractor shall not commence any work on, over, under, or adjacent to NS rights-of-way until the Contractor has received written authorization to proceed from the NS Public Improvements Engineer. This authorization will be provided once the items on the NS Construction Checklist (refer to Appendix J) outlined in Section 4.3.3 are completed.

4.3.9 Construction Monitoring

To ensure the safety of the public and NS employees, maintain quality rail service to NS customers and to protect NS assets, construction monitoring of all construction work on, over, under, adjacent to, or that

may in any manner affect NS will be conducted by NS or its GEC personnel.

Monitoring includes intermittent visits to the site or full-time on-site monitoring during construction activities that could be hazardous to the public or NS employees and/or could impact NS operations. Construction Monitoring will also be performed to ensure that all work is being performed in accordance with approved submittals and NS Special Provisions.

Safety of the Project Sponsor or property, the Contractors, and their employees is the responsibility of the Project Sponsor and their contractor. NS and its GEC, as part of its construction monitoring, will review the work site for activities that could interfere with safe operation of the railroad. NS and its GEC are not responsible for monitoring the general work activities under the direction of the Project Sponsor for compliance with safety regulations. Any observed unsafe acts or conditions will be reported immediately to the Project Sponsor and Contractor representatives.

4.3.10 Costs and Expenses

All costs and expenses anticipated in construction will be detailed by NS in a Force Account Estimate (FAE) and provided to the Sponsor for review during the PE review phase. The approved FAE will be incorporated in the Project Agreement. (See Section F.2). All work anticipated by NS during the construction phase will be performed at the Project Sponsor's expense. NS will only bill the sponsor for actual expenses incurred. In the event that NS anticipates it may incur reimbursable expenses in excess of the original Construction FAE amounts, NS will provide the project sponsor with a revised FAE for approval.

4.3.11 Timing

The contractor should anticipate a minimum of 45 days for NS and their GEC to complete the review of all construction submittals. Time frames for reviews can vary significantly depending on the complexity of the project and the quality of submittals. The review times indicated throughout this section are intended to be a guide only and will vary depending on the project. NS will work to be responsive, with timing depending upon the complexity of the project.

E. Norfolk Southern – Special Provisions for Protection of Railway Interests

1. AUTHORITY OF RAILROAD ENGINEER AND SPONSOR ENGINEER:

Norfolk Southern Railway Company, hereinafter referred to as “Railroad”, and their authorized representative shall have final authority in all matters affecting the safe maintenance of railroad traffic including the adequacy of the foundations and structures supporting the railroad tracks. For Public Improvement Projects impacting the Railroad, the Railroad’s Public Improvements Engineer, hereinafter referred to as “Railroad Engineer”, will serve as the authorized representative of the Railroad.

The authorized representative of the Project Sponsor (“Sponsor”), hereinafter referred to as the “Sponsor’s Engineer”, shall have authority over all other matters as prescribed herein and in the Project Specifications.

The Sponsor’s Prime Contractor, hereinafter referred to as “Contractor” shall be responsible for completing any and all work in accordance with the terms prescribed herein and in the Project Specifications. These terms and conditions are subject to change without notice at the sole discretion of the Railroad. The Contractor must request the latest version of these provisions from the Railroad prior to commencing work and must follow the requirements outlined therein.

2. NOTICE OF STARTING WORK:

A. The Contractor shall not commence any work on Railroad rights-of-way until the Contractor has complied with the following conditions:

1. Signed and received a fully executed copy of the required Norfolk Southern Contractor Right of Entry Agreement. Contractor Right of Entry Agreements to be submitted via email to the Public Improvements Engineer.
2. Given the Railroad written notice in electronic format to the Railroad Engineer, with copy to the Sponsor’s Engineer who has been designated to be in charge of the work, at least ten days in advance of the date the Contractor proposes to begin work on Railroad rights-of-way.
3. Obtained written approval from the Railroad of Railroad Protective Liability Insurance coverage as required by paragraph 14 herein. It should be noted that the Railroad does not accept notation of Railroad Protective insurance on a certificate of liability insurance form or Binders as Railroad must have the full original countersigned policy. Further, please note that mere receipt of the policy is not the only issue but review for compliance. Due to the number of projects system-wide, it typically takes a minimum of 30-45 days for the Railroad to review.
4. Obtained Railroad Protective Services as required by paragraph 7 herein.
5. Obtained written authorization from the Railroad to begin work on Railroad’s rights-of-way, such authorization to include an outline of specific conditions with which the Contractor must comply. Written Authorization will be issued by the Railroad once all items on the NS Construction Checklist (refer to Appendix J) have been completed.
6. Furnished a schedule for all work within the Railroad’s rights-of-way as required by paragraph 7.B.1.

- B. The Railroad's written authorization to proceed with the work shall include the names, addresses, and telephone numbers of the Railroad's representatives who are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility of each representative shall be specified.
- C. All project-related utility work that is to occur on, over, or under Railroad right-of-way must be coordinated with the Norfolk Southern Pipe and Wire Program. The Contractor must receive approval from the Norfolk Southern Pipe and Wire Program prior to commencing any utility work.

3. INTERFERENCE WITH RAILROAD OPERATIONS:

- A. The Contractor shall so arrange and conduct the Contractor's work that there will be no interference with Railroad's operations, including train, signal, telephone and telegraphic services, or damage to the property of the Railroad or to poles, wires, and other facilities of tenants on the rights-of-way of the Railroad. Whenever work is liable to affect the operations or safety of trains, the method of doing such work shall first be submitted to the Railroad Engineer for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor which requires Railroad Protective Services or inspection service shall be deferred by the Contractor until the Railroad Protective Services or inspection service required by the Railroad is available at the job site.
- B. Whenever work within Railroad's rights-of-way is of such a nature that impediment to Railroad's operations such as use of runaround tracks or necessity for reduced speed is unavoidable, the Contractor shall schedule and conduct the Contractor's operations so that such impediment is reduced to the absolute minimum.
- C. Should conditions arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of the Railroad, the Contractor shall make such provisions. If in the judgment of the Railroad Engineer, or in the Railroad Engineer's absence, the Railroad's Division Engineer, such provisions are insufficient, either may require or provide such provisions as the Railroad deems necessary. In any event, such unusual provisions shall be at the Contractor's expense and without cost to the Railroad or the Sponsor.
- D. "One Call" Services do not locate buried Norfolk Southern Signals and Communications Lines. The contractor shall contact the Railroad's representative 7 days in advance of work at those places where excavation, pile driving, or heavy loads may damage the Railroad's underground facilities. Upon request from the Contractor or Sponsor, Railroad forces will locate and paint mark or flag the Railroad's underground facilities. The Contractor shall avoid excavation or other disturbances of these facilities. If disturbance or excavation is required near a buried Railroad facility, the contractor shall coordinate with the Railroad to have the facility potholed manually with careful hand excavation. The facility shall be protected by the Contractor during the course of the disturbance under the supervision and direction of the Railroad's representative.

4. TRACK CLEARANCES:

- A. The minimum track clearances to be maintained by the Contractor during construction are shown on the Project Plans. If temporary clearances are not shown on the project plans, the following criteria shall govern the use of falsework and formwork above or adjacent to operated tracks.

1. A minimum vertical clearance of 22'-0" above top of highest rail shall be maintained at all times.
 2. A minimum horizontal clearance of 13'-0" from centerline of tangent track or 14'-0" from centerline of curved track shall be maintained at all times. Additional horizontal clearance may be required in special cases to be safe for operating conditions. This additional clearance will be as determined by the Railroad Engineer.
 3. All proposed temporary clearances which are less than those listed above must be submitted to Railroad Engineer for approval prior to construction and must also be authorized by the regulatory body of the State if less than the legally prescribed clearances.
 4. The temporary clearance requirements noted above shall also apply to all other physical obstructions including, but not limited to: stockpiled materials, parked equipment, placement or driving of piles, and bracing or other construction supports.
- B. Before undertaking any work within Railroad right-of-way, and before placing any obstruction over any track, the Contractor shall:
1. Notify the Railroad's representative at least 72 hours in advance of the work.
 2. Receive assurance from the Railroad's representative that arrangements have been made for Railroad Protective Services as may be necessary.
 3. Receive permission from the Railroad's representative to proceed with the work.
 4. Ascertain that the Sponsor's Engineer has received copies of notice to the Railroad and of the Railroad's response thereto.
5. CONSTRUCTION PROCEDURES:
- A. General:
1. Construction work and operations by the Contractor on Railroad property shall be:
 - a. Subject to the inspection and approval of the Railroad Engineer or their designated Construction Engineering Representative.
 - b. In accordance with the Railroad's written outline of specific conditions.
 - c. In accordance with the Railroad's general rules, regulations and requirements including those relating to safety, fall protection and personal protective equipment.
 - d. In accordance with these Special Provisions.
 2. Submittal Requirements
 - a. The Contractor shall submit all construction related correspondence and submittals electronically to the Railroad Engineer.

- b. The contractor should anticipate a minimum of 45 days for NS and their GEC to complete the review of all construction submittals. Time frames for reviews can vary significantly depending on the complexity of the project and the quality of submittals. Submittals requiring input from other departments may require additional time.
- c. All work in the vicinity of the Railroad's property that has the potential to affect the Railroad's train operations or disturb the Railroad's Property must be submitted and approved by the Railroad prior to work being performed.
- d. All submittals and calculations must be signed and sealed by a registered engineer licensed in the state of the project work.
- e. All submittals shall first be approved by the Sponsor's Engineer prior to submission to the Railroad Engineer for review. Submittals are reviewed by the Railroad for impacts to Railroad operations only; therefore, approval from the Railroad Engineer shall not relieve the Contractor from liability.
- f. For all construction projects, the following submittals, but not limited to those listed below, shall be provided for review and approval when applicable:
 - (1) General Means and Methods
 - (2) Ballast Protection
 - (3) Construction Excavation & Shoring
 - (4) Pipe, Culvert, & Tunnel Installations
 - (5) Demolition Procedure
 - (6) Erection & Hoisting Procedure
 - (7) Debris Shielding or Containment
 - (8) Blasting
 - (9) Formwork for the bridge deck, diaphragms, overhang brackets, and protective platforms
 - (10) Bent Cap Falsework. A lift plan will be required if the contractor want to move the falsework over the tracks.
- g. For Undergrade Bridges (Bridges carrying the Railroad) the following submittals in addition to those listed above shall be provided for review and approval:
 - (1) Girder Shop Drawings including welding/fabrication procedures
 - (2) Bearing Shop Drawings and Material Certifications
 - (3) Shop Drawings for drainage, handrails/fencing, and expansion dams
 - (4) Concrete Mix Design
 - (5) Structural Steel, Rebar, and/or Strand Certifications
 - (6) 28-day Cylinder Test for Concrete Strength
 - (7) Waterproofing Material Certification
 - (8) Dampproofing materials
 - (9) Test Reports for all steel
 - (10) Foundation Construction Reports

Other submittals may be required upon request from the Railroad. Fabrication may not begin until the Railroad has approved the required shop drawings.

- h. The Contractor shall include in all submissions a detailed narrative indicating the progression of work with the anticipated timeframe to complete each task. Work will not be permitted to commence until the Contractor has provided the Railroad with a satisfactory plan that the project will be undertaken without scheduling, performance, or safety related issues. Submissions shall also provide: a listing of the anticipated equipment to be used, plan and profile views showing the location of all equipment to be used relative to the track centerline(s) shown, and a contingency plan of action covering the event that a primary piece of equipment malfunctions.

B. Ballast Protection

1. The Contractor shall submit the proposed ballast protection system detailing the specific filter fabric and anchorage system to be used during all construction activities.
2. The ballast protection is to extend 25' beyond the proposed limit of work, be installed at the start of the project and be continuously maintained to prevent all contaminants from entering the ballast section of all tracks for the entire duration of the project.

C. Excavation:

1. The subgrade of an operated track shall be maintained with edge of berm at least 10'-0" from centerline of track and not more than 24-inches below top of rail. Contractor will not be required to make existing section meet this specification if substandard, in which case the existing section will be maintained.
2. Additionally, the Railroad will require the installation of an OSHA approved handrail and orange construction safety fencing for all excavations of the Railroad right-of-way.

D. Excavation for Structures and Shoring Protection:

1. The Contractor will be required to take special precaution and care in connection with excavating and shoring pits, and in driving piles or sheeting for footings adjacent to tracks to provide adequate lateral support for the tracks and the loads which they carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material.
2. The use of shoring systems utilizing tiebacks shall not be permitted without written approval from the Railroad Engineer.
3. Shoring systems utilizing trench boxes shall not be permitted within the Theoretical Railroad Embankment (Zones 1, 2, or 3) as shown on NS Typical Drawing No. 4 – Shoring Requirements without written approval from the Railroad Engineer.
4. All plans and calculations for shoring shall be prepared, signed, and sealed by a Registered Professional Engineer licensed in the state of the proposed project, in accordance with Norfolk Southern's Overhead Grade Separation Design Criteria, subsection H.1.6 - Construction Excavation (Refer to Norfolk Southern Public Improvement Projects Manual Appendix H). The Registered Professional Engineer will be responsible for the accuracy for all controlling dimensions as well as the selection of soil design values which will accurately reflect the actual field conditions.

5. The Contractor shall provide a detailed installation and removal plan of the shoring components. Any component that will be installed via the use of a crane or any other lifting device shall be subject to the guidelines outlined in section 5.G of these provisions.
6. The Contractor shall be required to survey the track(s) and Railroad embankment and provide a cross section of the proposed excavation in relation to the tracks.
7. Calculations for the proposed shoring should include deflection calculations. The maximum deflection for excavations within 18'-0" of the centerline of the nearest track shall be 3/8". For all other cases, the max deflection shall not exceed 1/2".
8. Additionally, the Railroad will require the installation of an OSHA approved handrail and orange construction safety fencing for all excavations of the Railroad right-of-way.
9. The front face of shoring located closest to the NS track for all shoring setups located in Zone 2 (shown on NS Typical Drawing No. 4 – Shoring Requirements in Appendix I) shall remain in place and be cut off 2'-0" below the final ground elevation. The remaining shoring in Zone 2 and all shoring in Zone 1 may be removed and all voids must be backfilled with flowable fill.

E. Pipe, Culvert, & Tunnel Installations

1. Pipe, Culvert, & Tunnel Installations shall be in accordance with the appropriate Norfolk Southern Design Specification as noted below:
 - a. For Open Cut Method refer to Norfolk Southern Public Improvement Projects Manual Appendix H.4.6.
 - b. For Jack and Bore Method refer to Norfolk Southern Public Improvement Projects Manual Appendix H.4.7.
 - c. For Tunneling Method refer to Norfolk Southern Public Improvement Projects Manual Appendix H.4.8.
2. The installation methods provided are for pipes carrying storm water or open flow runoff. All other closed pipeline systems shall be installed in accordance Norfolk Southern's Pipe and Wire Program and the NSCE-8.

F. Demolition Procedures

1. General
 - a. Demolition plans are required for all spans over the track(s), for all spans adjacent to the track(s), if located on (or partially on) Railroad right-of-way; and in all situations where cranes will be situated on, over, or adjacent to Railroad right-of-way and within a distance of the boom length plus 15'-0" from the centerline of track.
 - b. Railroad tracks and other Railroad property must be protected from damage during the procedure.

- c. A pre-demolition meeting shall be conducted with the Sponsor, the Railroad Engineer or their representative, and the key Contractor's personnel prior to the start of the demolition procedure.
- d. The Railroad Engineer or the Railroad Engineer's designated representative must be present at the site during the entire demolition procedure period.
- e. Demolition of existing bridge decks in spans over the Railroad shall be performed in a controlled manner (i.e. saw-cutting). No impact equipment (track-mounted hoe-ram, jackhammers, etc.) may be used over the Railroad without approval by the Railroad Engineer.
- f. Existing, obsolete, bridge piers shall be removed to a sufficient depth below grade to enable restoration of the existing/proposed track ditch, but in no case less than 2'-0" below final grade.

2. Submittal Requirements

- a. In addition to the submittal requirements outlined in Section 5.A.2 of these provisions, the Contractor shall submit the following for approval by the Railroad Engineer:
 - (1) A plan showing the location of cranes, horizontally and vertically, with proposed boom lengths, operating radii, counterweights, and delivery or disposal locations shown. The location of all tracks and other Railroad facilities as well as all obstructions such as wire lines, poles, adjacent structures, etc. must also be shown.
 - (2) Rating sheets showing that cranes or lifting devices are adequate for 150% of the actual weight of the pick, including all rigging components. A complete set of crane charts, including crane, counterweight, and boom nomenclature is to be submitted. Safety factors that may have been "built-in" to the crane charts are not to be considered when determining the 150% factor of safety.
 - (3) Plans and computations showing the weight of the pick must be submitted. Calculations shall be made from plans of the existing structure showing complete and sufficient details with supporting data for the demolition of the structure. If plans do not exist, lifting weights must be calculated from field measurements. The field measurements are to be made under the supervision of the Registered Professional Engineer submitting the procedure and calculations.
 - (4) The Contractor shall provide a sketch of all rigging components from the crane's hook block to the object being hoisted. Catalog cuts or information sheets of all rigging components with their lifting capacities shall be provided. All rigging must be adequate for 150% of the actual weight of the pick. Safety factors that may have been "built-in" to the rating charts are not to be considered when determining the 150% factor of safety. All rigging components shall be clearly identified and tagged with their rated lifting capacities. The

position of the rigging in the field shall not differ from what is shown on the final plan without prior review from the Sponsor and the Railroad.

- (5) A complete demolition procedure, including the order of lifts, time required for each lift, and any repositioning or re-hitching of the crane or cranes.
- (6) Design and supporting calculations for the temporary support of components, including but not limited to the stability of the superstructure during the temporary condition, temporary girder tie-downs and falsework.

3. Overhead Demolition Debris Shield

- a. The demolition debris shield shall be installed prior to the demolition of the bridge deck or other relevant portions of the superstructure over the track area to catch all falling debris.
- b. The demolition debris shield shall provide a minimum vertical clearance as specified in Section 4.A.1 of these provisions or maintain the existing vertical clearance if the existing clearance is less than that specified in Section 4.A.1.
- c. The Contractor shall include the demolition debris shield installation/removal means and methods as part of the proposed Demolition procedure submission.
- d. The Contractor shall submit the demolition debris shield design and supporting calculations for approval by the Railroad Engineer.
- e. The demolition debris shield shall have a minimum design load of 50 pounds per square foot plus the weight of the equipment, debris, personnel, and other loads to be carried.
- f. The Contractor shall include the proposed bridge deck removal procedure in its demolition means and methods and shall verify that the size and quantity of the demolition debris generated by the procedure does not exceed the shield design loads.
- g. The Contractor shall clean the demolition debris shield daily or more frequently as dictated either by the approved design parameters or as directed by the Railroad Engineer.

4. Vertical Demolition Debris Shield

- a. A vertical demolition debris shield may be required for substructure removals in close proximity to the Railroad's track and other facilities, as determined by the Railroad Engineer.

G. Erection & Hoisting Procedures

1. General

- a. Erection plans are required for all spans over the track(s), for all spans adjacent to the track(s), if located on (or partially on) Railroad right-of-way; and in all situations where cranes will be situated on, over, or adjacent to Railroad right-of-way and within a distance of the boom length plus 15'-0" from the centerline of track.
- b. Neither crane handoffs nor "walking" of cranes with suspended load will be permitted for erection on or over Railroad right-of-way.
- c. Railroad tracks and other Railroad property must be protected from damage during the erection procedure.
- d. A pre-erection meeting shall be conducted with the Sponsor, the Railroad Engineer or their representative, and the key Contractor's personnel prior to the start of the erection procedure.
- e. The Railroad Engineer or the Railroad Engineer's designated representative must be present at the site during the entire erection procedure period.
- f. For field splices located over Railroad property, a minimum of 50% of the holes for each connection shall be filled with bolts or pins prior to releasing the crane. A minimum of 50% of the holes filled shall be filled with bolts. All bolts must be appropriately tightened. Any changes to previously approved field splice locations must be submitted to the Railroad for review and approval. Refer to Norfolk Southern's Overhead Grade Separation Design Criteria for additional splice details (Norfolk Southern Public Improvement Projects Manual Appendix H.1, Section 4.A.3.).

2. Submittal Requirements

- a. In addition to the submittal requirements outlined in Section 5.A.2 of these provisions, the Contractor shall submit the following for approval by the Railroad Engineer:
 - (1) As-built beam seat elevations - All as-built bridge seats and top of rail elevations shall be furnished to the Railroad Engineer for review and verification at least 30 days in advance of the erection, to ensure that minimum vertical clearances as approved in the plans will be achieved.
 - (2) A plan showing the location of cranes, horizontally and vertically, with proposed boom lengths, operating radii, counterweights, and delivery or staging locations shown. The location of all tracks and other Railroad facilities as well as all obstructions such as wire lines, poles, adjacent structures, etc. must also be shown.
 - (3) Rating sheets showing that cranes or lifting devices are adequate for 150% of the actual weight of the pick, including all rigging components. A complete set of crane charts, including crane,

counterweight, and boom nomenclature is to be submitted. Safety factors that may have been “built-in” to the crane charts are not to be considered when determining the 150% factor of safety.

- (4) Plans and computations showing the weight of the pick must be submitted. Calculations shall be made from plans of the proposed structure showing complete and sufficient details with supporting data for the erection of the structure. If plans do not exist, lifting weights must be calculated from field measurements. The field measurements are to be made under the supervision of the Registered Professional Engineer submitting the procedure and calculations.
- (5) The Contractor shall provide a sketch of all rigging components from the crane’s hook block to the object being hoisted. Catalog cuts or information sheets of all rigging components with their lifting capacities shall be provided. All rigging must be adequate for 150% of the actual weight of the pick. Safety factors that may have been “built-in” to the rating charts are not to be considered when determining the 150% factor of safety. All rigging components shall be clearly identified and tagged with their rated lifting capacities. The position of the rigging in the field shall not differ from what is shown on the final plan without prior review from the Sponsor and the Railroad.
- (6) A complete erection procedure, including the order of lifts, time required for each lift, and any repositioning or re-hitching of the crane or cranes.
- (7) Design and supporting calculations for the temporary support of components, including but not limited to temporary girder tie-downs and falsework.

H. Blasting:

1. The Contractor shall obtain advance approval of the Railroad Engineer and the Sponsor Engineer for use of explosives on or adjacent to Railroad property. The request for permission to use explosives shall include a detailed blasting plan. If permission for use of explosives is granted, the Contractor will be required to comply with the following:
 - a. Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the Contractor and a licensed blaster.
 - b. Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way radios.
 - c. No blasting shall be done without the presence of the Railroad Engineer or the Railroad Engineer’s authorized representative. At least 72 hours advance notice to the person designated in the Railroad’s notice of authorization to proceed (see paragraph 2.B) will be required to arrange for the presence of an authorized Railroad representative and such Railroad Protective Services as the Railroad may require.

- d. Have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains, as well as correcting at the Contractor's expense any track misalignment or other damage to Railroad property resulting from the blasting as directed by the Railway's authorized representative. If the Contractor's actions result in delay of trains, the Contractor shall bear the entire cost thereof.
 - e. The blasting Contractor shall have a copy of the approved blasting plan on hand while on the site.
 - f. Explosive materials or loaded holes shall not be left unattended at the blast site.
 - g. A seismograph shall be placed on the track shoulder adjacent to each blast which will govern the peak particle velocity of two inches per second. Measurement shall also be taken on the ground adjacent to structures as designated by a qualified and independent blasting consultant. The Railroad reserves the option to direct the placement of additional seismographs at structures or other locations of concern, without regard to scaled distance.
 - h. After each blast, the blasting Contractor shall provide a copy of their drill log and blast report, which includes number of holes, depth of holes, number of decks, type and pounds of explosives used per deck.
 - i. The Railroad may require top of rail elevations and track centers taken before, during and after the blasting and excavation operation to check for any track misalignment resulting from the Contractor's activities.
2. The Railroad representative will:
- a. Determine approximate location of trains and advise the Contractor the appropriate amount of time available for the blasting operation and clean up.
 - b. Have the authority to order discontinuance of blasting if, in the Railroad representative's opinion, blasting is too hazardous or is not in accord with these special provisions.
3. The Contractor must hire, at no expense to the Railroad, a qualified and independent blasting consultant to oversee the use of explosives. The blasting consultant will:
- a. Review the Contractor's proposed drilling and loading patterns, and with the blasting consultant's personnel and instruments, monitor the blasting operations.
 - b. Confirm that the minimum amounts of explosives are used to remove the rock.
 - c. Be empowered to intercede if the blasting consultant concludes that the Contractor's blasting operations are endangering the Railway.
 - d. Submit a letter acknowledging that the blasting consultant has been engaged to oversee the entire blasting operation and that the blasting consultant approves of the blasting plan.

- e. Furnish copies of all vibration readings to the Railroad representative immediately after each blast. The representative will sign and date the seismograph tapes after each shot to verify the readings are for that specific shot.
 - f. Advise the Railroad representative as to the safety of the operation and notify him of any modifications to the blasting operation as the work progresses.
4. The request for permission to use explosives on the Railroad's Right-of-Way shall include a blasting proposal providing the following details:
- a. A drawing which shows the proposed blasting area, location of nearest hole and distance to Railway structures, all with reference to the centerline of track.
 - b. Hole diameter.
 - c. Hole spacing and pattern.
 - d. Maximum depth of hole.
 - e. Maximum number of decks per hole.
 - f. Maximum pounds of explosives per hole.
 - g. Maximum pounds of explosives per delay.
 - h. Maximum number of holes per detonation.
 - i. Type of detonator and explosives to be used. (Electronic detonating devices will not be permitted). Diameter of explosives if different from hole diameter.
 - j. Approximate dates and time of day when the explosives are to be detonated.
 - k. Type of flyrock protection.
 - l. Type and patterns of audible warning and all clear signals to be used before and after each blast.
 - m. A copy of the blasting license and qualifications of the person directly in charge of the blasting operation, including their name, address, and telephone number.
 - n. A copy of the Authority's permit granting permission to blast on the site.
 - o. A letter from the blasting consultant acknowledging that the blasting consultant has been engaged to oversee the entire blasting operation and that the blasting consultant approves of the blasting plan.
 - p. In addition to the insurance requirements outlined in Paragraph 14 of these Provisions, A certificate of insurance from the Contractor's insurer stating the amount of coverage for XCU (Explosive Collapse and Underground Hazard) insurance and that XCU Insurance is in force for this project.

q. A copy of the borings and Geotechnical information or report.

I. Track Monitoring

1. At the direction of the Railroad Engineer, any activity that has the potential to disturb the Railroad track structure may require the Contractor to submit a detailed track monitoring program for approval by the Railroad Engineer.
2. The program shall specify the survey locations, the distance between the location points, and frequency of monitoring before, during, and after construction. Railroad reserves the right to modify the survey locations and monitoring frequency as necessary during the project.
3. The survey data shall be collected in accordance with the approved frequency and immediately furnished to the Railroad Engineer for analysis.
4. If any movement has occurred as determined by the Railroad Engineer, the Railroad will be immediately notified. Railroad, at its sole discretion, shall have the right to immediately require all Contractor operations to be ceased and determine what corrective action is required. Any corrective action required by the Railroad or performed by the Railroad including the monitoring of corrective action of the Contractor will be at project expense.

J. Maintenance of Railroad Facilities:

1. The Contractor will be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from the Contractor's operations and provide and maintain any erosion control measures as required. The Contractor will promptly repair eroded areas within Railroad rights-of-way and repair any other damage to the property of the Railroad or its tenants.
2. If, in the course of construction, it may be necessary to block a ditch, pipe or other drainage facility, temporary pipes, ditches, or other drainage facilities shall be installed to maintain adequate drainage, as approved by the Railroad Engineer. Upon completion of the work, the temporary facilities shall be removed, and the permanent facilities restored.
3. All such maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.

K. Storage of Materials and Equipment:

1. Materials and equipment shall not be stored where they will interfere with Railroad operations, nor on the rights-of-way of the Railroad without first having obtained permission from the Railroad Engineer, and such permission will be with the understanding that the Railroad will not be liable for damage to such material and equipment from any cause and that the Railroad Engineer may move or require the Contractor to move, at the Contractor's expense, such material and equipment.
2. All grading or construction machinery that is left parked near the track unattended by a watchman shall be effectively immobilized so that it cannot be moved by unauthorized persons. The Contractor shall protect, defend, indemnify and save the Railroad, and any

associated, controlled or affiliated corporation, harmless from and against all losses, costs, expenses, claim, or liability for loss or damage to property or the loss of life or personal injury, arising out of or incident to the Contractor's failure to immobilize grading or construction machinery.

L. Cleanup:

1. Upon completion of the work, the Contractor shall remove from within the limits of the Railroad rights-of-way, all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of the Contractor, and leave said rights-of-way in a neat condition satisfactory to the Railroad Engineer or the Railroad Engineer's authorized representative.

6. DAMAGES:

- A. The Contractor shall assume all liability for any and all damages to the Contractor's work, employees, servants, equipment, and materials caused by Railroad traffic.
- B. Any cost incurred by the Railroad for repairing damages to its property or to property of its tenants, caused by or resulting from the operations of the Contractor, shall be paid directly to the Railroad by the Contractor.

7. RAILROAD PROTECTIVE SERVICES:

A. Requirements:

1. Railroad Protective Services will not be provided until the Contractor's insurance has been reviewed and approved by the Railroad.
2. Under the terms of the agreement between the Sponsor and the Railroad, the Railroad has sole authority to determine the need for Railroad Protective Services required to protect its operations. In general, the requirements of such services will be whenever the Contractor's personnel or equipment are, or are likely to be, working on the Railroad's right-of-way, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a Railroad structure or the Railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by Railroad Protective Services.
3. Normally, the Railroad will assign one Railroad Protective Services personnel to a project; but in some cases, more than one may be necessary, such as yard limits where three (3) Railroad Protective Services personnel may be required. However, if the Contractor works within distances that violate instructions given by the Railroad's authorized representative or performs work that has not been scheduled with the Railroad's authorized representative, Railroad Protective Services personnel may be required full time until the project has been completed.
4. For Projects exceeding 30 days of construction, Contractor shall provide the Railroad Protective Services personnel a small work area with a desk/counter and chair within the field/site trailer, including the use of bathroom facilities, where the Railroad Protective Services personnel can check in/out with the Project, as well as to the Railroad Protective Services personnel's home terminal. The work area should provide access to two (2) electrical outlets for recharging radio(s), and a laptop computer; and

have the ability to print off needed documentation and orders as needed at the field/site trailer. This should aid in maximizing the Railroad Protective Services personnel's time and efficiency on the Project.

B. Scheduling and Notification:

1. The Contractor's work requiring Railroad Protective Services should be scheduled to limit the presence of such personnel at the site. Railroad approval will be required for any Railroad Protective Services requests in excess of 40 hours per week, and in such cases, should be limited to a maximum of 50 hours per week.
2. Not later than the time that approval is initially requested to begin work on Railroad right-of-way, the Contractor shall furnish to the Railroad and the Sponsor a schedule for all work required to complete the portion of the project within Railroad right-of-way and arrange for a job site meeting between the Contractor, the Sponsor, and the Railroad's authorized representative. The Railroad Protective Services personnel may not be provided until the job site meeting has been conducted and the Contractor's work has been scheduled.
3. The Contractor will be required to give the Railroad representative at least 10 working days of advance written notice of the intent to begin work within Railroad right-of-way in accordance with this special provision, and must receive written or verbal confirmation of this request from the Railroad representative. Once begun, when such work is then suspended at any time, or for any reason, the Contractor will be required to give the Railroad representative at least 10 working days of advance notice before resuming work on Railroad right-of-way. Such notices shall include sufficient details of the proposed work to enable the Railroad representative to determine if Railroad Protective Services will be required. If such notice is in writing, the Contractor shall furnish the Engineer a copy; if notice is given verbally, it shall be confirmed in writing with copy to the Engineer. If Railroad Protective Services are required, no work shall be undertaken until the Railroad Protective Services personnel is present at the job site. It may take 30 days or longer to obtain Railroad Protective Services initially from the Railroad. When Railroad Protective Services begin, the Railroad Protective Services personnel is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for on a spot basis. If Railroad Protective Services become unnecessary and are suspended, it may take 30 days or longer to again obtain Railroad Protective Services from the Railroad. Due to Railroad labor agreements, it is necessary to give 5 working days notice before Railroad Protective Service may be discontinued and responsibility for payment stopped.
4. If, after the Railroad Protective Services personnel is assigned to the project site, an emergency arises that requires the personnel's presence elsewhere, then the Contractor shall delay work on Railroad right-of-way until such time as the personnel is again available. Any additional costs resulting from such delay shall be borne by the Contractor and not the Sponsor or Railroad.

C. Payment:

1. The Sponsor will be responsible for paying the Railroad directly for any and all costs of Railroad Protective Services which may be required to accomplish the construction.

2. The estimated cost of Railroad Protective Services is the current rate per day based on a 12-hour workday. This cost includes the base pay for the Railroad Protective Services personnel, overhead, and includes a per diem charge for travel expenses, meals, and lodging. The charge to the Sponsor by the Railroad will be the actual cost based on the rate of pay for the personnel who is available Railroad Protective Services at the time the service is required.
3. Work by Railroad Protective Services in excess of 8 hours per day or 40 hours per week, but not more than 12 hours a day will result in overtime pay at 1 and 1/2 times the appropriate rate. Work by Railroad Protective Services in excess of 12 hours per day will result in overtime at 2 times the appropriate rate. If work is performed on a holiday, the Railroad Protective Services rate is 2 and 1/2 times the normal rate.
4. Railroad work involved in preparing and handling bills will also be charged to the Sponsor. Charges to the Sponsor by the Railroad shall be in accordance with applicable provisions of Subchapter B, Part 140, Subpart I and Subchapter G, Part 646, Subpart B of the Federal-Aid Policy Guide issued by the Federal Highway Administration on December 9, 1991, including all current amendments. Railroad Protective Services costs are subject to change. The above estimates of Railroad Protective Services costs are provided for information only and are not binding in any way.

D. Verification:

1. The Railroad's Protective Services personnel will electronically enter Railroad Protective Services time via the Railroad's electronic billing system. Any complaints concerning Railroad Protective Services must be resolved in a timely manner. If the need for Railroad Protective Services is questioned, please contact the Railroad Engineer. All verbal complaints will be confirmed in writing by the Contractor within 5 working days with a copy to the Sponsor's Engineer. Address all written correspondence electronically to the Railroad Engineer.
2. The Railroad Protective Services personnel assigned to the project will be responsible for notifying the Sponsor's Representative upon arrival at the job site on the first day (or as soon thereafter as possible) that Railroad Protective Services begin and on the last day that the Railroad Protective Services personnel performs such services for each separate period that services are provided. The Sponsor's Representative will document such notification in the project records. When requested, the Sponsor's Representative will also sign the Railroad Protective Services personnel's document(s) showing daily time spent and activity at the project site.

8. HAUL ACROSS RAILROAD TRACK:

- A. Where the plans show or imply that materials of any nature must be hauled across the Railroad's track, unless the plans clearly show that the Sponsor has included arrangements for such haul in its agreement with the Railroad, the Contractor will be required to make all necessary arrangements with the Railroad regarding means of transporting such materials across the Railroad's track. The Contractor or Sponsor will be required to bear all costs incidental to such crossings whether services are performed by the Contractor's own forces or by Railroad personnel.
- B. No crossing may be established for use of the Contractor for transporting materials or equipment across the tracks of the Railroad unless specific authority for its installation, maintenance,

necessary watching and Railroad Protective Services thereof and removal, until a temporary private crossing agreement has been executed between the Contractor and Railroad. The approval process for an agreement normally takes 90 days.

9. WORK FOR THE BENEFIT OF THE CONTRACTOR:

- A. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans; included in the force account agreement between the Sponsor and the Railroad or will be covered by appropriate revisions to same which will be initiated and approved by the Sponsor and/or the Railroad.
- B. Should the Contractor desire any changes in addition to the above, then the Contractor shall make separate arrangements with the Railroad for same to be accomplished at the Contractor's expense.

10. COOPERATION AND DELAYS:

- A. It shall be the Contractor's responsibility to arrange a schedule with the Railroad for accomplishing stage construction involving work by the Railroad or tenants of the Railroad. In arranging the Contractor's schedule, the Contractor shall ascertain, from the Railroad, the lead time required for assembling crews and materials and shall make due allowance therefore.
- B. No charge or claim of the Contractor against either the Sponsor or the Railroad will be allowed for hindrance or delay on account of railroad traffic; any work done by the Railroad or other delay incident to or necessary for safe maintenance of railroad traffic or for any delays due to compliance with these special provisions.

11. TRAINMAN'S WALKWAYS:

- A. 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 trainman's use in walking along trains, extending to a line not less than 10 feet from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while Railroad's Protective Service is provided shall be removed before the close of each workday. If there is any excavation near the walkway, a handrail, with 10'-0" minimum clearance from centerline of track, shall be placed and must conform to AREMA and/or FRA standards.

12. GUIDELINES FOR PERSONNEL ON RAILROAD RIGHT-OF-WAY:

- A. The Contractor and/or the Sponsor's personnel authorized to perform work on the Railroad's property as specified in Section 2 above are not required to complete Norfolk Southern Roadway Worker Protection Training; However, the Contractor and the Sponsor's personnel must be familiar with Norfolk Southern's standard operating rules and guidelines, should conduct themselves accordingly, and may be removed from the property for failure to follow these guidelines.
- B. All persons shall wear hard hats. Appropriate eye and hearing protection must be used. Working in shorts is prohibited. Shirts must cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip-on type boots is prohibited. Hard-sole, lace-up footwear, zippered boots or boots cinched up with straps which fit snugly about the ankle are adequate. Wearing of safety boots and reflective vests are required.

- C. No one is allowed within 25' of the centerline of track without specific authorization from the Railroad.
- D. All persons working near track while train is passing are to lookout for dragging bands, chains and protruding or shifted cargo.
- E. No one is allowed to cross tracks without specific authorization from the Railroad.
- F. All welders and cutting torches working within 25' of track must stop when train is passing.
- G. No steel tape or chain will be allowed to cross or touch rails without permission from the Railroad.

13. GUIDELINES FOR EQUIPMENT ON RAILROAD RIGHT-OF-WAY:

- A. No crane or boom equipment will be allowed to set up to work or park within boom distance plus 15' of centerline of track without specific permission from Railroad official and Railroad Protective Services personnel.
- B. No crane or boom equipment will be allowed to foul track or lift a load over the track without Railroad Protective Services personnel authorized to obtain track time.
- C. All employees will stay with their machines when crane or boom equipment is pointed toward track.
- D. All cranes and boom equipment under load will stop work while train is passing (including pile driving).
- E. Swinging loads must be secured to prevent movement while train is passing.
- F. No loads will be suspended above a moving train.
- G. No equipment will be allowed within 25' of centerline of track without specific authorization of the Railroad official and Railroad Protective Services personnel.
- H. Trucks, tractors, or any equipment will not touch ballast line without specific permission from Railroad official and Railroad Protective Services personnel. At the beginning of each project that involves the Contractor working within 25' of the centerline of any track, orange construction fencing must be established. Orange construction fencing shall be established in accordance with the minimum temporary horizontal clearances contained in Section 4.A.2 and shall be maintained for the duration of construction.
- I. No equipment or load movement is permitted within 25' or above a standing train or Railroad equipment without specific authorization of the Railroad Protective Services personnel.
- J. All operating equipment within 25' of track must halt operations when a train is passing. All other operating equipment may be halted by the Railroad Protective Services personnel if said personnel views the operation to be dangerous to the passing train.
- K. All equipment, loads and cables are prohibited from touching rails.

- L. While clearing and grubbing, no vegetation will be removed from Railroad embankment with heavy equipment without specific permission from the Railroad Engineer and Railroad Protective Services personnel.
- M. No equipment or materials will be parked or stored on Railroad's property unless specific authorization is granted from the Railroad Engineer.
- N. All unattended equipment that is left parked on Railroad property shall be effectively immobilized so that it cannot be moved by unauthorized persons.
- O. All cranes and boom equipment will be turned away from track after each workday or whenever unattended by an operator.
- P. Prior to performing any crane operations, the Contractor shall establish a single point of contact for the Railroad Protective Services personnel to remain in communication with at all times. Person must also be in direct contact with the individual(s) directing the crane operation(s).

14. INSURANCE:

- A. In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, the Prime Contractor will be required to carry insurance of the following kinds and amounts:
 - 1. A Commercial General Liability ("CGL") policy containing products and completed operations, bodily injury, property damage, and contractual liability coverage, with a combined single limit of not less than \$5,000,000 for each occurrence with a general aggregate limit of not less than \$5,000,000. Any portion of this requirement may be satisfied by a combination of General Liability and/or Excess/Umbrella Liability Coverage. The CGL policy shall provide additional insured coverage equivalent to at least as broad as ISO CG 20 10 11/85.
 - 2. Automobile Liability Insurance with a current ISO occurrence form policy (or equivalent) and apply on an "any auto" (Symbol 1) basis, including coverage for all vehicles used in connection with the Work or Services on the leased property, providing annual limits of at least \$1,000,000 per occurrence for bodily injury and property damage combined including uninsured and underinsured motorist coverage, medical payment protection, and loading and unloading. This policy shall be endorsed to include Transportation Pollution Liability Broadened Coverage ISO CA 99 48 03 06 or MCS-90 if vehicles are subject to Federal jurisdiction. If this coverage is on a claims-made form, the Retro Active Date must be prior to the date of this Agreement and the policy endorsement must be maintained for not less than seven (7) years.
 - 3. Workers' Compensation Insurance to meet fully the requirement of any compensation act, plan, or legislative enactment applicable in connection with the death, disability or injury of Licensee's officers, agents, servants, or employees arising directly or indirectly out of the performance of the work.
 - 4. Employers' Liability Insurance with limits of not less than \$1,000,000 each accident, \$1,000,000 policy limit for disease, and \$1,000,000 each employee for disease.

5. All insurance required in Section 14.A (excluding any Workers' Compensation policy) shall name Norfolk Southern Railway and its parent, subsidiary, and affiliated companies as additional insureds with an appropriate endorsement to each policy.
 6. All policies secured by Contractor, whether primary, excess, umbrella or otherwise, and providing coverage to the Railway as an additional insured (i) are intended to take priority in responding and to pay before any insurance policies Railway may have secured for itself must respond or pay and (ii) may not seek contribution from any policies the Railway may have secured for itself.
 7. No cross-liability exclusions are permitted that would apply to the additional insureds, and there may not be any restrictions in any policy that limits coverage for a claim brought by an additional insured against a named insured.
 8. To the fullest extent permitted by law, all insurance furnished by Contractor in compliance with Section 14.A shall include a waiver of subrogation in favor of Railway with an appropriate endorsement to each policy.
 9. All policies required in Section 14.A shall not be subject to cancellation, termination, modification, changed, or non-renewed except upon thirty (30) days' prior written notice to the additional insureds.
 10. The insurance coverages maintained by Contractor shall not limit any indemnity obligations or other liabilities. The insurance available to Norfolk Southern Railway and its parent, subsidiary and affiliated companies as additional insureds shall not be limited by these requirements should Licensee maintain higher coverage limits.
 11. Any deductibles or retentions in excess of \$50,000 maintained on any insurance required in 14.A shall be disclosed and approved by Norfolk Southern Railway with a request made for approval to NSRISK3@nscorp.com.
 12. Anyone subcontractor providing work on this project must extend CG 20 38 (or broader coverage) additional Insured endorsement to provide coverage for up stream parties.
 13. Contractor shall require all subcontractors who are not covered by the insurance carried by Contractor to obtain commercially reasonable insurance coverage, but not less than the requirements of 14.A.
- B. In addition to the insurances required in Section 14.A, the Contractor shall also procure on behalf of the Railroad for the entirety of the project:
1. Railroad Protective Liability (RPL) Insurance having a combined single limit of not less than \$5,000,000 each occurrence and \$10,000,000 in the aggregate applying separately to each annual period. Said policy shall provide coverage for all loss, damage or expense arising from bodily injury and property damage liability, and physical damage to property attributed to acts or omissions at the job site.

The standards for the Railroad Protective Liability Insurance are as follows:

- a. The insurer must be rated A- or better by A.M. Best Company, Inc.

- b. The policy must be written using one of the following combinations of Insurance Services Office (“ISO”) RPL Insurance Form Numbers:

- (1) CG 00 35 01 96 and CG 28 31 10 93; or
- (2) CG 00 35 07 98 and CG 28 31 07 98; or
- (3) CG 00 35 10 01; or
- (4) CG 00 35 12 04; or
- (5) CG 00 35 12 07; or
- (6) CG 00 35 04 13.

- c. The named insured shall read:

Norfolk Southern Corporation and its subsidiaries and affiliates
650 West Peachtree Street NW – Box 46
Atlanta, GA 30308
Attn: Risk Manager

(NOTE: Railroad does not share coverage on RPL with any other entity on this policy)

- d. The description of operations must appear on the Declarations, must match the project description in this agreement, and must include the appropriate Sponsor project and contract identification numbers.
- e. The job location must appear on the Declarations and must include the city, state, and appropriate highway name/number. **NOTE: Do not include any references to milepost, valuation station, or mile marker on the insurance policy.**
- f. The name and address of the prime Contractor must appear on the Declarations.
- g. The name and address of the Sponsor must be identified on the Declarations as the “Involved Governmental Authority or Other Contracting Party.”
- h. Endorsements/forms that are **required** are:
- (1) Physical Damage to Property Amendment
 - (2) Terrorism Risk Insurance Act (TRIA) coverage must be included
- i. Other endorsements/forms that will be accepted are:
- (1) Broad Form Nuclear Exclusion – Form IL 00 21
 - (2) 30-day Advance Notice of Non-renewal or cancellation
 - (3) Required State Cancellation Endorsement
 - (4) Quick Reference or Index Form CL/IL 240
- j. Endorsements/forms that are NOT acceptable are:
- (1) Any Pollution Exclusion Endorsement except CG 28 31
 - (2) Any Punitive or Exemplary Damages Exclusion

- (3) Known injury or Damage Exclusion form CG 00 59
- (4) Any Common Policy Conditions form
- (5) An Endorsement that limits or excludes Professional Liability coverage
- (6) A Non-Cumulation of Liability or Pyramiding of Limits Endorsement
- (7) An Endorsement that excludes TRIA coverage
- (8) A Sole Agent Endorsement
- (9) Any type of deductible endorsement or amendment
- (10) Any other endorsement/form not specifically authorized in item no. 2.h above.

SPONSOR:

RAILROAD:

Risk Management
Norfolk Southern Corporation and its subsidiaries
650 West Peachtree Street NW – Box 46
Atlanta, GA 30308
NSRISK3@NSCORP.COM

- C. All insurance required under Section 14.A and 14.B shall be underwritten by insurers and be of such form and content, as may be acceptable to the Railway. Prior to entry on Railroad right-of-way, the original electronic RPL Insurance Policy shall be submitted by the Prime Contractor to the Railway at NSRISK3@NSCORP.COM for review and approval. In addition, certificates of insurance evidencing the Prime Contractor’s insurance compliant with the requirements in 14.A shall be issued to the Railway at NSRISK3@NSCORP.COM at the same time the RPL Policy is submitted.
- D. The insurance required herein shall in no way serve to limit the liability of Sponsor or its Contractors under the terms of this agreement.
- E. Insurance Submission Procedures
 1. The Railroad will only accept initial insurance submissions via email to NSRISK3@NSCORP.COM. The Railroad will NOT accept initial insurance submissions via hard copies that would be sent either US Mail or Overnight carrier or faxes as only electronic versions only are to be submitted to Railroad. **Please provide point of contact information with the submission including a phone number and email address.**

For email insurance submissions, the subject line should follow the format provided unless otherwise directed by the Railroad Engineer:

Insurance Submittal: City, State – NS File Number – NS Milepost – Project Name – Sponsor Project #
 2. Railroad requires the following two (2) forms of insurance in the initial electronic insurance submission to NSRISK3@NSCORP.COM to be submitted under a cover letter providing details of the project and containing the contact information:
 - a. The full original or certified true electronic countersigned copy of the RPL Insurance Policy in its entirety inclusive of all declarations, schedule of forms



and endorsements along with the policy forms and endorsements as required in Section 14.B.

- b. A certificate of insurance from the Contractor evidencing the Contractor's insurance in Section 14.A (i.e. the Contractor's commercial general, automobile, and workers' compensation liability insurance, etc.). The certificate must show Norfolk Southern Railroad and its subsidiaries and affiliated companies as an additional insured on the General Liability and Auto policies. The certificate should also indicate that the Workers' Compensation policy waives subrogation against Norfolk Southern Corporation and its subsidiaries. See Appendix J for a Sample Certificate of Insurance.

15. FAILURE TO COMPLY:

- A. In the event the Contractor violates or fails to comply with any of the requirements of these Special Provisions:
 - 1. The Railroad Engineer may require that the Contractor vacate Railroad property.
 - 2. The Sponsor's Engineer may withhold all monies due the Contractor on monthly statements.
- B. Any such orders shall remain in effect until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Sponsor's Engineer.

16. PAYMENT FOR COST OF COMPLIANCE:

- A. No separate payment will be made for any extra cost incurred on account of compliance with these special provisions. All such costs shall be included in prices bid for other items of the work as specified in the payment items.

17. PROJECT INFORMATION

- A. Date: _____
- B. NS File No.: _____
- C. NS Milepost: _____
- D. Sponsor's Project No.: _____