Project Number: 180164
PID #: 102832
Contract ID: DEL102832
DBE Goal: 7.0%

Delaware
SR 750-04.43

FOUR LANE RESURFACING

E161(396)

Work Type Percentage Performed by Prime: 50

THE 2016 CONSTRUCTION AND MATERIAL SPECIFICATION BOOK IS PART OF THE BIDDING DOCUMENTS ON THIS PROJECT

PROPOSAL

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

Jerry Wray, Director

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PN 019 - 01/20/2016 - PREPARATION OF PROPOSAL

ELECTRONIC BIDDING REQUIREMENTS

The Department uses the Bid Express website (http://www.bidx.com) as an official repository for electronic bid submittal. Bidders must prepare their bids electronically using Project Bids and submitted via Bid Express.

The Department will not accept handwritten bids or bids generated electronically from software other than that used and supplied by the Department. All handwritten bids and bids generated electronically from software other than that used and supplied by the Department shall be considered non-responsive and ineligible for award. The Department will only accept and consider bids that have been produced using Project Bids and submitted via Bid Express.

The Department's Office of Contracts will provide planholders with a proposal, plan set and any required addenda. Most addenda will not be provided by hard copy, but will be available on the Office of Contracts website at: http://contracts.dot.state.oh.us. Planholders will be notified of all addenda via email. All proposals, plans, Project Bids (EBSX) files and addenda are also available on the Office of Contracts web site.

Electronic bids must comply with all special provisions, the Construction and Material Specifications, Supplemental Specifications and the rules and regulations of the Ohio Department of Transportation regarding bid preparation and bid submittal.

Blank unit prices will be considered an invalid bid EXCEPT in the case of optional designs (projects where the bidder is required to bid on only one design). Unit prices of zero are not permitted at any time.

Addenda and/or amendments must be acknowledged in the Bid Acknowledgement section of the Project Bids (EBSX) file in order for your bid to be considered for award of this project. The section contains the certification of receipt of all hard copy proposals, addenda, amendments, plans, standard specifications and supplemental specifications. Supplemental Questionnaire information regarding the bidder's outstanding ODOT and non-ODOT work have also been included in this section. Bid Express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Project Bids (EBSX) submissions will result in the rejection of your bid.

Each bidder is required to file with his bid a <u>certified check</u> or <u>cashier's check</u> for an amount equal to five percent (5%) of its bid, but in no event more than <u>fifty thousand dollars</u>, or a <u>bid bond</u> for <u>ten percent</u> (10%) of its bid payable to the "Director of Transportation." Electronic bid bonds will be verified upon submission of bids through Bid Express. Bidders must obtain and verify a Bond ID number from the surety. This Bond ID must be entered in the "Bond ID Number" field in the Bid Bond Section of the Project Bids file.

If the contractor chooses to submit a certified check to guaranty its bid, the Department's Office of Contracts will accept a check up to 72 hours in advance of the letting. The Office of Contracts must receive the certified check by 10:00 a.m. on the day the project sells. All checks must be sent to ODOT, Office of Contracts, Attention: Letting Manager, First Floor, 1980 W. Broad St., Columbus, Ohio 43223.

The successful bidder must furnish a performance bond and a payment bond in an amount equal to one hundred percent (100%) of the awarded contract amount. (Ohio Revised Code Section 5525.16)

Any bid received after 10:00 a.m. on the scheduled day of opening will receive no further consideration for award. The Department will not be responsible for a late bid due to failure of the bidder to allow sufficient time for delivery of the bid.

The Department will ensure that this electronic bid depository is available for a two-hour period prior to the deadline for submission of bids. In the case of disruption of national communications or loss of services by http://www.bidx.com during this two-hour period, the Department will delay the deadline for bid submissions to ensure the ability of potential bidders to submit bids. If this occurs, instructions will be communicated to potential bidders.

PN 007 - 10/15/2004 - TRUCK LEASING

The Code of Federal Regulations Title 49, Section 26.55(d)(4)(5)(6) governs trucking operations. This section states that the Disadvantaged Business Enterprise (DBE) may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract. The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE will receive credit for only the fee or commission it receives as a result of the lease agreement. The DBE does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE. The law requires that a lease must indicate that the DBE has exclusive use of and control over the truck for credit to be accorded to the DBE. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

In lieu of a truck owner displaying the name and identification number of the DBE, the truck owner shall be required to furnish a photocopy of the lease agreement. Thereby, fulfilling the rule without causing undue hardship on any entity.

Credit for expenditures with DBEs for materials or supplies toward the DBE goal is described as follows:

- 1. When the materials or supplies are obtained from a DBE manufacturer the prime contractor may receive credit for 100 percent of the cost of the materials or supplies toward the DBE goal. For purposes of this section, a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- 2. When the materials or supplies are purchased from a DBE regular dealer or supplier the prime contractor may receive credit for 60 percent of the cost of the materials or supplies toward the DBE goal. For purposes of this section, a regular dealer or supplier is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

For subcontract agreement (C-92) purposes the following definitions will be used:

Install - DBE contractor who obtains goods, materials and supplies and fixes in place, for use, the same goods, materials and supplies. (e.g., DBE contractor obtains and fixes in place re-bar on project site). Must spend 20% or more time on project per day. 100% credit toward prime's DBE goal.

Stockpiling - DBE Contractor/Trucker who delivers materials, goods, or supplies to project site. 60% credit toward prime's DBE goal.

Tailgating - DBE Contractor/Trucker who delivers and installs materials, goods, or supplies to project site. Must spend 20% or more time on project per day. 100% credit toward prime's DBE goal.

PN 033 - 04/18/2008 - AS PER PLAN DESIGNATION - PROPOSAL NOTE

For the last several years the "As Per Plan" designation has been added to some item descriptions in the proposal to assist the Contractors to easily identify standard items that have been altered by plan notes.

The "As Per Plan" designation has proven to be a very useful tool for the Contractors. However, its use was <u>never</u> intended to relieve the Contractors of their responsibility to read, bid and construct all items in accordance with all governing plan notes. Therefore, the absence of an "As Per Plan" designation on some item descriptions in the proposal for which there are clear and controlling plan notes does not relieve the Contractors of the responsibility to read, bid and construct those particular items in accordance with the governing plan notes.

Be advised that the item descriptions in the bidding proposal must be read or interpreted with the governing plan notes and the Ohio Department of Transportation Construction and Materials Specifications. A claim based upon an "order of precedence" basis will be denied. In the event that a conflict, either real or perceived, exists between the item description and the governing plan note, the Contractors are to request clarification through the pre-bid process.

PN 038 - 10/15/2004 - UNRESOLVED FINDING FOR RECOVERY

The Contractor affirmatively represents to the Department that it is not subject to a finding for recovery under Ohio Revised Code §9.24, or that it has taken the appropriate remedial steps required under §9.24 or otherwise qualifies under that section. The Contractor agrees that if this representation is deemed to be false, the contract shall be void ab initio as between the parties to this contract, and any funds paid by the state hereunder shall be immediately repaid to the Department, or an action for recovery may be immediately commenced by the Department for recovery of said funds.

PN 039 - 10/15/2004 - ASSIGNMENT OF ANTITRUST CLAIMS IN STATE CONTRACT LANGUAGE

It is the policy of the Ohio Department of Transportation that ODOT and the Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are usually borne by ODOT. As consideration for the Award of the Contract and intent to be legally bound, the Contractor acting herein by and through the person signing this contract on behalf of the Contractor as a duly authorized agent, hereby assigns, sells, conveys, and transfers to ODOT any and all right, title and interest to any and all claims and causes of action the Contractor now has or hereafter requires under state or federal antitrust laws provided that the claims or causes of action related to the goods or services that are the subject to the contract. In addition, the Contractor warrants and represents that it will require any and all of its subcontractors and first tier suppliers to assign any and all federal and state antitrust claims and causes of action to ODOT. The provisions of this article shall become effective at the time ODOT executes this contract without further acknowledgment by any of the parties.

All contracting entities shall assign their rights and responsibilities to ODOT for all antitrust claims and causes of action regarding subcontractors.

PN 015 - 07/06/2012 - CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS

The required contract provisions for federal-aid construction contracts (contained in Form FHWA 1273 revised May, 2012) are hereby incorporated reference as if rewritten herein.

PN 017 - 10/15/2004 - FEDERALLY REQUIRED EEO CERTIFICATION CLAUSE

The Federally Required EEO Certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontractors which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

PN 020 - 11/21/2011 - NOTICE OF REQUIREMENT OF AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY

The Bidder's attention is called to the affirmative action obligations required by the specifications set forth in 23 CFR Part 230, 41 CFR Part 60, Executive Order 11246, Section 503, and the affirmative action provisions of Vietnam Era Veterans' Readjustment Assistance Act (VEVRAA) of 1974.

Utilization goals applicable to the project, expressed in percentages, for minority and female participation for each construction craft can be found on ODOT's website at http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Pages/default.aspx. These goals are based on 2000 census data and represent the area, per craft, minority and female availability pool.

Minority and female utilization obligations by craft per county (applicable to project): http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Construction/CountyAvailability-ByTrade.pdf

Statewide utilization obligations by craft (applicable to the Contractor's statewide workforce): http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Construction/StatewideAverages-ByTrade.pdf

The New Hire Definition is as follows:

An individual who has a break in service (not on an employer's payroll) for a period of 12 months or longer and the person affected is not a salaried employee, but belongs to a union craft. Individuals compensated for training or incidental work which does not cause a break in unemployment compensation, i.e., paid by voucher check or petty cash, are considered new hires if the individual's break in service is 12 months or longer.

The time frame for a new hire shall be associated with the first project worked for that contractor regardless of whether it is public or private. When reporting new hires the contractor shall identify that employee as a new hire on that specific project only. Subsequent work, barring a break in service of 12 months or more, would **not** qualify the employee as a new hire for that contractor.

The Contractor's compliance shall be based on the implementation of affirmative action obligations required by the specifications set forth in 23 CFR Part 230, and its good faith efforts to meet these obligations. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and females on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the affirmative action obligations shall be a violation of the contract and regulations in 23 CFR Part 230. The good faith efforts put forth by the contractor will be measured against the total work hours performed. Under FHWA, ODOT is the authority tasked with ensuring that the contractor adheres to the aforementioned regulations. In addition to complying with the Required Contract Provisions as outlined in the attached subcontract agreement the Contractor shall provide immediate written notification to the ODOT and the Prime Contractor when referral practices of the union or unions with which the Contractor has a collective bargaining agreement impede the company's efforts to meet its equal opportunity obligations.

The Office of Federal Contract Compliance Programs (OFCCP) administers and enforces equal employment opportunity laws that apply to Federal government contractors and subcontractors supplying goods and services, including construction, to the Federal Government under 41 CFR Part 60, Executive Order 11246, Section 503, and the affirmative action provisions of VEVRAA. The OFCCP monitors compliance with these laws primarily through compliance evaluations, during which a compliance officer examines the contractor's affirmative action efforts and employment practices. Under Executive Order 11246, the OFCCP may perform contract compliance reviews on contractors involved with federally funded ODOT projects.

Requirements for affirmative action obligations governing OFCCP contract compliance reviews are those listed in the Federal Register for the Economic Area. http://www.dol.gov/ofccp/TAguides/consttag.pdf page E-32

The Department of Administrative Services (DAS), Equal Opportunity Division, is responsible for ensuring state contractors implement and adhere to the State of Ohio's affirmative action program pursuant to Ohio Administrative Code (OAC) 123:2-3-02. Specifically, this unit's responsibilities includes the issuance of certificates of compliance under ORC 9.47 and 153.08, conducting project site visits and compliance reviews (desk audits) to ensure contractors utilize minorities and women in the construction trades, as well as maintaining a working environment free of discrimination, harassment and intimidation. The DAS may perform contract compliance reviews on contractors involved with state funded ODOT projects. Requirements for affirmative action obligations governing DAS contract compliance reviews are those listed in the O.A.C. for the Metropolitan Statistical Area in which a project is located. http://www.das.ohio.gov/Eod/123 2 3 02.htm

All prime and subcontractors regardless on the number of employees or the state contract amount are required to submit monthly utilization reports (Input Form 29) to Ohio Department of Administrative Services covering the contractor's total workforce within the state of Ohio. The reports must be filed electronically by the 10th of each month, beginning with the contract award and continuing until the contractor or subcontractor completes performance of the state contract. http://www.das.ohio.gov/Eod/ccinputform29.htm

The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs, 200 N. High Street, Room 409, Columbus, Ohio 43215, within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract, estimated starting and completion dates of the subcontract and the geographical area in which the subcontract is to be performed.

PN 029 - 10/16/2015- ONTHEJOB TRAINING (OJT) PROVISIONS

The requirements of this Training Special Provision supersede subparagraph 7b of the Special Provision entitled Special Employment Opportunity Responsibilities, and implements 23 U.S.C. 140(a).

The following must be included as part of the Contractor's equal employment opportunity affirmative action training program:

The Contractor must provide on-the-job training aimed at developing full journey persons in the type or job classification in which they work.

The Contractor is not required to have a specific number of trainees assigned to this project. The Contractor will endeavor to meet ODOT's annual workforce goal of 7.6% for OJT trainees. The number of trainees will be distributed among the work classifications on the basis of the Contractor's needs and the availability of the journey persons in the various classifications. The Contractor will be credited for each trainee employed by him or her who is currently enrolled or becomes enrolled in an approved program.

Training and upgrading of minorities and women toward journey person status is a primary objective of this Training Special Provision. Accordingly, the Contractor must make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and will not be used, to discriminate against any applicant for training, regardless of whether the applicant is a member of a minority group or not.

No employee will be employed as a trainee in any classification in which he or she has successfully completed a training course leading to journey person status or in which he or she has been employed as a journey person. The Contractor must satisfy this requirement by including appropriate questions in the employee's application or by other suitable means. Regardless of the method used, the Contractor's records must document the findings in each case.

The minimum length and type of training for each classification will be established in the training program selected by the Contractor.

No payment by ODOT will be made to the Contractor for providing this training. However, if the Contractor fails to provide adequate training and cannot show good faith efforts on its part to provide adequate training, it will be subject to a formal compliance review to determine the Contractor's efforts in meeting EEO laws and regulations.

Each Contractor shall provide adequate reporting on trainees and their progress. The Contractor shall report all OJT trainees on its payroll submission to the Department via selecting the OJT designation in the labor code for each trainee.

The prime or subcontractor conducting the training must be involved in at least one Federal project per calendar year in order to get FHWA training credit. Participation in the OJT Program is not project or contract specific.

All Contractors are encouraged to participate in the OJT program. Such a program will be considered when examining the Contractor's Good Faith Efforts toward meeting its contractual affirmative action obligations.

All Contractors shall submit their own Training Program or Apprenticeship Certificate, for approval, to the District in which the company's home office is located.

All OJT trainees must have the appropriate certification. Apprenticeship Certificates can be obtained from the State of Ohio, Department of Job and Family Services, Ohio State Apprenticeship Council. The union apprenticeship agreement is not acceptable verification of an apprentice's enrollment in a union-sponsored training program. A copy of the Apprenticeship Certificate along with a statement indicating the number of months/years the employee has been in the apprenticeship program must be submitted to the EEO Coordinator in the company's home district and to the prevailing wage coordinator in the district responsible for the project within 90 days of the apprentice beginning work on the project.

PN 035 - 10/15/2004 - SPECIAL PROVISIONS OF FEDERAL-AID HIGHWAY PROGRAM OF MANUAL 6-4-1-2 SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES

1. GENERAL

- a. Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity as required by Executive Order 11246 and Executive Order 11375 are set forth in Required Contract Provisions (Form PR- 1273 or 1316, as appropriate) and these Special Provisions which are imposed pursuant to Section 140 of Title 23, U.S.C., as established by Section 22 of the Federal-Aid Highway Act of 1968. The requirements set forth in these Special Provisions shall constitute the specific affirmative action requirements for project activities under this contract and supplement the equal employment opportunity requirements set forth in the Required Contract Provisions.
- b. The contractor will work with the State Highway Agencies and the Federal Government in carrying out equal employment opportunity obligations and in their review of his/her activities under the contract.
- c. The contractor and all his/her subcontractors holding subcontracts not including material suppliers, of \$10,000 or more, will comply with the following minimum specific requirement activities of equal employment opportunity: (The equal Employment Opportunity requirements of Executive Order 11246, as set forth in Volume 6, Chapter 4, Section 1, Subsection I of the Federal-Aid Highway Program Manual, are applicable to material suppliers as well as contractors and subcontractors.) The contractor will include these requirements in every subcontract of \$10,000 or more with such modification of language as is necessary to make them binding on the subcontractor.

2. EQUAL EMPLOYMENT OPPORTUNITY POLICY

The contractor will accept as his operating policy the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program:

It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, or national origin. Such action shall include: employment, upgrading, demotion, or transfer recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship, pre-apprenticeship, and/or on-the-job training.

3. EQUAL EMPLOYMENT OPPORTUNITY OFFICE

The contractor will designate and make known to the State Highway Agency contracting officers an equal employment opportunity officer (hereinafter referred to as the EEO Officer) who will have the responsibility for and must be capable to effectively administering and promoting an active contractor program of equal employment opportunity and who must be assigned adequate authority and responsibility to do so.

4. DISSEMINATION OF POLICY

- a. All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's equal employment opportunity policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- (1) Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's equal employment opportunity policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.
- (2) All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer or other knowledgeable company official covering all major aspects of the contractor's equal employment opportunity obligations within thirty days following their reporting for duty with the contractor.
- (3) All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer or appropriate company official in the contractor's procedures for locating and hiring minority group employees.
- b. In order to make the contractor's equal employment opportunity policy known to all employees, prospective employees and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the contractor will the following actions:
- (1) Notices and posters setting forth the contractor's equal employment opportunity policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- (2) The contractor's equal employment opportunity policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

5. RECRUITMENT

- a. When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Employment Opportunity Employer." All such advertisements will be published in newspapers or other publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
- b. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants, including, but not limited to, State employment agencies, schools, colleges and minority group organizations. To meet this requirement, the contractor will, through his EEO Officer, identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to extent that the systems permits the contractor's compliance with equal employment opportunity contract provisions. (The U.S. Department of Labor has held that where implementation of such agreements have the effect of discriminating against minorities or women or obligates the contractor to do the same, such implementation violates Executive Order 1 1246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring minority group applicants will be discussed with employees.

6. PERSONNEL ACTIONS

Wages, working conditions and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, or national origin. The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

7. TRAINING AND PROMOTION

- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event the "Training Special Provisions" are included in this bid proposal, this subparagraph will be superseded as indicated in said provisions.
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

8. UNIONS

If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

- a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
- b. The contractor will use best efforts to incorporate an equal employment opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, or national origin.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the State Highway Department and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex or national origin, making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The U.S. Department of Labor has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral

failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the State highway agency.

9. SUBCONTRACTING

- a. The contractor will use his best efforts to solicit bids from and to utilize minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of minority-owned construction firms from State Highway Agency personnel.
- b. The contractor will use his best efforts to ensure subcontractor compliance with their equal employment opportunity obligations.

10. RECORDS AND REPORTS

- a. The contractor will-keep such records as are necessary to determine compliance with the contractor's equal employment opportunity obligations. The records kept by the contractor will be designed to indicate:
- (1) the number of minority and non-minority group members and women employed in each work classification on the project,
- (2) the progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to contractors who rely in whole or in part on unions as a source of their work force),
- (3) the progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees, and
- (4) the progress and efforts being made in securing the services of minority group subcontractors or subcontractors with meaningful minority and female representation among their employees.
- b. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State Highway Agency and the Federal Highway Administration.
- c. The contractors will submit to the State Highway Agency a monthly report for the first three months after construction begins and every month of July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form PR 139 1. If onthe-job training is being required by "Training Special Provisions," the contractor will be required to furnish Form FHWA 1409.

PN 026 - 10/15/2004 - CERTIFICATION OF NONSEGREGATED FACILITIES

- (a) A Certification of Nonsegregated Facilities, as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities (is included in the proposal and must be submitted prior to the award of a Federal-aid highway construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause).
- (b) Bidders are cautioned as follows: By signing this bid, the bidder will be deemed to have signed and agreed to the provisions of the "Certification of Nonsegregated Facilities" in this proposal. This certification provides that the bidder does not maintain or provide for his employees facilities which are segregated on a basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the bidder will not maintain such segregated facilities.
- (c) Bidders receiving Federal-aid highway construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, will be required to provide for the forwarding of the following notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

"Notice to Prospective Subcontractors and Material Suppliers of Requirement for Certification of Nonsegregated Facilities" -

- (a) A Certification of Nonsegregated Facilities as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, which is included in the proposal, or attached hereto, must be submitted by each subcontractor and material supplier prior to the award of the subcontract or consummation of a material supply agreement if such subcontract or agreement exceeds \$10,000 and is not exempt from the provisions of the Equal Opportunity clause.
- (b) Subcontractors and material suppliers are cautioned as follows: By signing the subcontract or entering into a material supply agreement, the subcontractor or material supplier will be deemed to have signed and agreed to the provisions of the "Certification of Nonsegregated Facilities" in the subcontract or material supply agreement. This certification provides that the subcontractor or material supplier does not maintain or provide for his employees facilities which are segregated on the basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the subcontractor or material supplier will not maintain such segregated facilities.
- (c) Subcontractors or material suppliers receiving subcontract awards or material supply agreements exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of this notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

PN 031 - 02/22/2016 - PROMPT PAYMENT

The Code of Federal Regulations (CFR) 49, 26.29 requires that ODOT establish a mechanism to monitor Prompt Payment requirements to all subcontractors.

The Prime Contractor shall notify the Department that it has complied with the Prompt Payment requirements set forth in Construction and Materials Specification 107.21 utilizing the Civil Rights and Labor (CRL) System. The Prime Contractor will enter subcontractor payments within 10 calendar days of payment from ODOT.

CRL Requirements with interactive training guides can be found at http://transportation.ohio.gov/crl/ under "Ohio DOT Reference Materials"

The affirmation of compliance shall include the following information:

- 1.) The name of the subcontractor or supplier that was paid;
- 2.) The dollar amount of the payment to the subcontractor or supplier;
- 3.) The date the subcontractor/supplier was paid.

Subcontractors or suppliers will affirm the payment was made in the CRL system, on the date and in the amount listed in the affirmation. The Prime Contractor shall include this affirmation requirement in all subcontractor and supplier contracts that it enters into and further require that all subcontractors and suppliers place the same payment obligation in each of their lower tier contracts.

PN 046 - 10/15/2004 - SUBCONTRACT AGREEMENTS

Prime contractors will not be required to submit executed C-92s with their subcontract agreements for Disadvantaged Business Enterprises (DBE) subcontractors prior to the execution of the prime contract with ODOT. The prime contractor must only furnish to the Department subcontract agreements from the DBE subcontractors with whom they propose to utilize to fulfill the project goal. Again, this requirement is at the time of contract execution with ODOT.

However, the prime contractor must submit C-92s prior to the DBE commencing work. At the time of submission of the C-92 the DBE subcontractor must have sufficient dollar and work type qualifications to perform the work. The prime contractor will be held accountable to meet the project goal.

PN 013 – 07/21/2017 - DISADVANTAGED BUSINESS ENTERPRISE (DBE) UTILIZATION PLAN AND GOOD FAITH EFFORTS

DBE UTILIZATION PLAN

All Bidders shall submit a DBE Utilization Plan at the time of bid setting forth specific information demonstrating how the Bidder will achieve the DBE goal. By submitting a DBE Utilization Plan, the Bidder is affirming that they will be using the DBE firms identified in the Utilization Plan to meet the DBE contract goal. The DBE Utilization Plan shall be submitted with the Project Bids (EBS)/Bid Express Online Submission through the DBE List folder at time of bid submission. Any bids received without electronic submission of the DBE Utilization Plan at or before bid time, will be deemed unresponsive. Bidders shall download the dbe.bin file from

http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Construction/dbe-bids.bin. This file contains the current list of certified DBEs and is updated regularly. The dbe-bids.bin file must be saved in the same directory as the Project Bids (EBS) file.

The DBE Utilization Plan shall include the following information:

- 1) The names and addresses of the certified DBE firm(s) that will be used to meet the DBE goal;
- 2) A description of the work that each DBE will perform. To count toward meeting a goal, each DBE firm must be certified in a NAICS code applicable to the kind of work the firm would perform on the contract;
- 3) Whether the DBE firm(s) being used to meet the goal will be utilized as a subcontractor, regular dealer, manufacturer, consultant or other capacity; and

4) The dollar amount of the participation of each DBE firm used to meet the DBE goal.

PROJECTS AWARDED ON ALTERNATES

In the event the project is awarded on alternates which increases or decreases the total dollar amount of the bid, a revision to the DBE Utilization Plan and DBE Affirmation Form(s) shall be submitted and approved by the Office of Small & Disadvantaged Business Enterprise within five (5) calendar days after the notification of the alternates.

DBE AFFIRMATION

The Apparent Low Bidder shall ensure the DBE firms being utilized to meet the DBE goal affirm their participation in the bid within five (5) calendar days after the bid opening to ODOT. The contract dollar amount(s) and/or DBE firm(s) included in the Apparent Low Bidder's DBE Utilization Plan must match the contract dollar amount(s) and/or DBE firm(s) included on the DBE Affirmation Form(s). If the contract dollar amount(s) and/or DBE firm(s) do not match, the Apparent Low Bidder shall utilize the Request to Terminate/Substitute DBE Form located at

http://Transportation.ohio.gov/Divisions/ODI/SDBE/Pages/Resources.aspx and submit for review and approval by the Office of Small & Disadvantaged Business Enterprise within five (5) calendar days of the bid opening.

The Apparent Low Bidder shall utilize the DBE Affirmation Form located at http://Transportation.ohio.gov/Divisions/ODI/SDBE/Pages/Resources.aspx. The DBE Affirmation Form will be utilized as written confirmation from each listed DBE firm that it is participating in the contract in the kind and amount of work provided in the Bidder's DBE Utilization Plan. The Apparent Low Bidder shall submit a separate DBE Affirmation Form for each DBE it is utilizing for the DBE goal and their Good Faith Efforts package if they were not able to attain the DBE Goal via DBE participation.

All other Bidders shall submit a DBE Affirmation Form(s) if notified that the information is required in order for ODOT to complete its bid assessment. Bidders shall have five (5) calendar days from the date of notification to submit all required DBE Affirmation Forms to ODOT. Notification will be by phone or email.

In the event a DBE firm fails to confirm the information contained in the DBE Affirmation Form within five (5) calendar days of bid opening, the Apparent Low Bidder shall submit a Request to Terminate/Substitute DBE Form, as set forth herein. The Request to Terminate/Substitute DBE Form shall be submitted within five (5) calendar days after bid opening in order for the Apparent Low Bidder to still be considered for contract award. The Apparent Low Bidder shall include as its reason for termination the DBE firm's failure to provide a timely affirmation and should include all efforts the Apparent Low Bidder made to obtain the affirmation from the DBE firm and shall attach proof of these efforts, if available. If the Apparent Low Bidder intends to replace the DBE Firm, it shall include the replacement firm's information on the form. In the event the Apparent Low Bidder is unable to affirm a DBE firm included in its original DBE Utilization Plan at bid submission and it results in a goal shortfall, Good Faith Efforts (GFE's) must be submitted by the fifth calendar day after bid opening. All GFE documentation submitted for consideration should demonstrate the efforts the Bidder made prior to the time of bid submission to secure sufficient DBE participation on the project to meet the DBE goal although the Bidder was unable to do so. A DBE firm's failure to timely confirm information contained in the DBE Affirmation Form will be considered as good cause to terminate the DBE firm and will also be considered a part of the Apparent Low Bidder's Good Faith Efforts in meeting the goal.

DBE BIDDERS

In the event that the Bidder is also a certified DBE firm, the Bidder is required to complete a DBE Utilization Plan as set forth above. In this instance, however, the certified DBE Bidder would not need to submit a DBE Affirmation Form for the work it is planning to self-perform in order to meet the goal. ODOT will consider the submission of the bid as the certified DBE Bidder's written confirmation that it is participating in the contract. However, a DBE Affirmation Form must be submitted for all other DBE firms that are being utilized toward the DBE goal.

JOINT VENTURES

In the event that the Bidder is a Joint Venture, the Joint Venture will only be considered a Certified DBE firm if the Joint Venture itself has been certified. The Joint Venture may, however, utilize a Certified DBE firm that is also a partner in the Joint Venture as part of its DBE Utilization Plan. The Certified DBE Firm/Joint Venture Partner, however, does not need to submit a DBE Affirmation Form for any work that the Certified DBE Firm/Joint Venture Partner is going to perform to meet the goal. ODOT will consider submission of the Joint Venture's bid as the Certified DBE Firm/Joint Venture Partner's confirmation that it is participating in the contract.

GOOD FAITH EFFORTS (GFE's)

In the event that the DBE contract goal established by ODOT is not met, the Apparent Low Bidder shall demonstrate that it made adequate good faith efforts to meet the goal, even though it did not succeed in obtaining enough DBE participation to do so.

If the Apparent Low Bidder does not meet the goal at bid time, the Apparent Low Bidder shall submit its Good Faith Efforts (GFE's) documentation within five (5) calendar days of the bid opening. Submission of DBE affirmation(s) with additional participation sufficient to the meet the DBE contract goal does not cure the Apparent Low Bidder's failure to meet the goal at bid time or eliminate the Apparent Low Bidder's responsibility of submitting GFE's within five (5) calendar days of the bid opening.

The Apparent Low Bidder shall demonstrate its GFE's by submitting the following information within five (5) calendar days after the bid opening:

- (1) All written quotes received from certified DBE firms;
- (2) All written (including email) communications between the Apparent Low Bidder and DBE firms;
- (3) All written solicitations to DBE firms, even if unsuccessful;
- (4) Copies of each non-DBE quote when a non-DBE was selected over a DBE for work on the contract:
- (5) Phone logs of communications with DBE firms.

The Apparent Low Bidder shall utilize the Pre-Bid GFE Template to document their GFE's. This template and supporting documentation shall be sent along with any DBE Affirmation Forms within five (5) calendar days of bid opening. ODOT has provided Good Faith Efforts Guidance located at http://www.dot.state.oh.us/Divisions/ODI/SDBE/DBE%20Goal%20Forms/Contractors%20Good%20Faith%20Efforts%20Guidelines.pdf

All other Bidders shall submit documentation of GFE's if notified that the information is required in order for ODOT to complete its bid assessment. Bidders shall have five (5) calendar days from the date of notification to submit all required GFE documentation. Notification will be by phone or email.

ODOT shall utilize the guidance set forth in 49 CFR §26.53 Appendix A in determining whether the Bidder has made adequate good faith efforts to meet the goal.

ADMINISTRATIVE RECONSIDERATION

ODOT will review the GFE documentation and issue a written determination on whether adequate GFE's have been demonstrated prior to contract award. In the event that ODOT determines that the Apparent Low Bidder has failed to demonstrate adequate GFE's to meet the goal, the Apparent Low Bidder will have an opportunity for administrative reconsideration prior to the contract being awarded.

As part of this reconsideration, the Apparent Low Bidder may provide written documentation or argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so. Such written documentation or argument must be provided to ODOT, attention to the Deputy Director of the Division of Chief Legal Counsel, 1980 West Broad Street, MS 1500, Columbus, Ohio 43223, within two (2) business days of ODOT's written determination that GFE's were not adequately demonstrated. The Apparent Low Bidder may also include in their written documentation a request for an in person meeting to discuss the issue of whether it met the goal or made adequate good faith efforts to do so.

ODOT will send the Apparent Low Bidder a written decision on reconsideration explaining the basis for finding that the Apparent Low Bidder did or did not meet the goal or make adequate good faith efforts to do so. The result of the reconsideration process is not administratively appealable to the United States Department of Transportation.

TERMINATION OR REPLACEMENT OF A DBE

By submitting a DBE Utilization Plan, the Bidder is committing to use the DBE firms identified in the plan. The Apparent Low Bidder/Awarded Contractor shall utilize the specific DBEs listed in the DBE Utilization Plan to perform the work and supply the materials for which each is listed unless the Apparent Low Bidder/Awarded Contractor obtains written consent as provided in this paragraph. In order to request termination or substitution of a DBE firm, the Apparent Low Bidder/Awarded Contractor shall utilize the Request to Terminate/Substitute DBE Form located at http://Transportation.ohio.gov/Divisions/ODI/SDBE/Pages/Resources.aspx..

This termination/replacement procedure applies only to DBE firms or the amount of work being utilized to meet the goal.

Without ODOT's written consent to terminate/replace a DBE firm being utilized to meet the goal, the Awarded Contractor shall not be entitled to any payment for DBE listed work or material unless it is performed or supplied by the listed DBE.

GOOD CAUSE

ODOT may provide written consent to terminate a DBE only if it agrees, for reasons stated in a concurrence document, that the Apparent Low Bidder/Awarded Contractor has good cause to terminate the DBE firm.

For purposes of this paragraph, good cause to terminate a DBE includes the following circumstances:

- 1) The listed DBE firm fails or refuses to provide the required DBE Affirmation Form or to execute a written contract;
- The listed DBE firm fails or refuses to perform the work of its subcontract in a manner consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or

refusal of the DBE firm to perform its work on the subcontract results from the bad faith or discriminatory action of the awarded contractor;

- 3) The listed DBE firm fails or refuses to meet the awarded contractor's reasonable, nondiscriminatory bond requirements.
- 4) The listed DBE firm becomes bankrupt, insolvent, or exhibits credit unworthiness;
- 5) The listed DBE firm is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law;
- 6) ODOT has determined that the listed DBE firm is not a responsible contractor;
- 7) The listed DBE firm voluntarily withdraws from the project and provides to you written notice of its withdrawal:
- 8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- 9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract; and
- 10) Other documented good cause that ODOT determines compels the termination of the DBE firm. Provided, that good cause does not exist if the awarded contractor seeks to terminate a DBE it relied upon to obtain the contract so that the awarded contractor can self-perform the work for which the DBE contractor was engaged or so that the awarded contractor can substitute another DBE or non-DBE contractor after contract award.

REPLACEMENT

When a DBE firm is terminated or fails to complete its work on the contract for any reason the Awarded Contractor must make GFEs to find another DBE firm to replace the original DBE. These GFEs shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the contract goal. The GFEs shall be documented by the Awarded Contractor. If ODOT requests documentation under this provision, the Awarded Contractor shall submit the documentation within seven (7) calendar days, which may be extended for an additional seven (7) calendar days if necessary at the request of the contractor, and ODOT shall provide a written determination to the contractor stating whether or not GFEs have been demonstrated.

In addition to post-award terminations, the provisions of this section apply to pre-award deletions and substitutions of DBE firms put forward by Bidders in the DBE Utilization Plan.

ADDITION

In the event additional DBE participation is required for the project, the Awarded Contractor shall utilize the DBE Affirmation Form located at

http://Transportation.ohio.gov/Divisions/ODI/SDBE/Pages/Resources.aspx. The DBE Affirmation Form will be utilized as written confirmation from each DBE firm that it is participating in the contract in the kind and amount of work on the project.

WRITTEN NOTICE TO DBE

Before transmitting to ODOT its request to terminate and/or substitute a DBE firm, the Apparent Low Bidder/Awarded Contractor must give notice in writing to the DBE firm, with a copy to ODOT, of its intent to request to terminate and/or substitute, and the reason(s) for the request.

The Apparent Low Bidder/Awarded Contractor must give the DBE five (5) calendar days to respond to the notice, advising ODOT and the Apparent Low Bidder/Awarded Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why ODOT should not approve the Apparent

Low Bidder/Awarded Contractor's action. If required in a particular case as a matter of public necessity (e.g., safety), ODOT may provide a response period shorter than five (5) days.

GOAL ATTAINMENT POST AWARD

The Awarded Contractor shall make available upon request a copy of all DBE subcontracts. The Awarded Contractor shall ensure that all subcontracts or agreements with DBEs require that the subcontract and all lower tier subcontractors be performed in accordance with this Proposal Note.

Approval of a DBE Utilization Plan does not ensure approval of C-92 Requests to Sublet nor does approval of a DBE Utilization Plan indicate that the DBE goal has been met. ODOT will monitor goal attainment throughout the life of the project. It is the responsibility of the Awarded Contractor to advise ODOT of any changes to the DBE Utilization plan throughout the life of the project. The DBE goal of a project is stated as a percentage of the contract. In the event the contract amount increases or decreases, the actual dollar amount of the DBE goal for the project may increase or decrease accordingly.

SANCTIONS AND ADMINISTRATIVE REMEDIES

PRE-BID

Failure by the Apparent Low Bidder to do any of the following shall result in the bid being rejected in accordance with ORC §5525.08:

- 1) Failure to submit a complete DBE Utilization Plan at the time of bid;
- 2) Failure to submit DBE Affirmation Form(s) and/or failure to submit Request to Terminate/Substitute DBE Form(s) as required by this Proposal Note; and Failure to meet the goal and/or failure to demonstrate GFEs to meet the goal as required by this Proposal Note.

POST-BID

Failure by the Awarded Contractor to carry out the requirements of this Proposal Note, including the submission of adequate good faith efforts to meet the goal for a project, is a material breach of the contract and may result in the issuance of sanctions as follows:

1st Tier: Letter of Reprimand

2nd Tier: Damages equivalent to the DBE shortfall

3rd Tier: If a pattern of paying damages persists or the Contractor has falsified, misrepresented or withheld information, ODOT can pursue other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions may include, but are not limited to the following:

- the magnitude and the type of offense
- the degree of the Contractor's culpability
- any steps taken to rectify
- the Contractor's record of performance on other projects including, but not limited to:
 - o annual DBE participation
 - o annual DBE participation on projects without goals
 - the number of complaints ODOT has received regarding the Contractor
 - the number of times the Contractor has been previously sanctioned by ODOT

PN 090 - 01/21/2011 - WORK TYPE CODES AND DESCRIPTIONS

The Department will indicate the work type required for each pay item. If the line item does not have a corresponding work type, NR will be shown in the work type column. This proposal note will govern the assignment of work types to pay items.

However, the Contractor may perform incidental work items for which it does not hold the required work type provided the cost of the work does not exceed 5% of the total bid. The Contractor may also perform Work Type 26 (Structural steel painting) without holding the required work type provided the total area to be painted does not exceed 700 SF per structure. The Contractor may perform Work Type 57 (Sealing of Concrete Surfaces with Epoxy or Non-Epoxy Sealers) without holding the required work type provided the total area to be sealed does not exceed 75 SY per project.

Listed below are the work types for this proposal. In accordance with Ohio law, a bidder must possess work types, and perform work equal to the percentage included on the front cover of this proposal. This is a percentage of the total amount of the submitted bid price. The Director may, by insertion of a contract provision, reduce the fifty percent amount.

Work Type Code	Work Type Description	Work Type Code	Work Type Description			
1	Clearing & Grubbing	29	Structure Repairs			
2	Building Removal	30	Hydrodemolition			
3	Gas, Oil, Water Well Abandonments	31	Structural Steel Repairs			
4	Roadway Excavation & Embankment Construction	32	Heat Straightening			
5	Major Roadway Excavations	33	Tieback Installation			
6	Incidental Grading	34	Earth Retaining Structures			
7	Soil Stabilization	35	Drainage (Culverts, Misc.)			
8	Temporary Soil Erosion & Sediment Control	36	Guardrail / Attenuators			
9	Aggregate Bases	37	Fence			
10	Flexible Paving	38	Misc. Concrete			
11	Apply Bituminous Treatments	39	Maintenance of Traffic			
12	Rigid Paving	40	Waterproofing			
13	Pavement Planning, Milling, Scarification	41	Raised Pavement Markers			
14	Concrete Texturing	42	Signing			
15	Sawing	43	Highway Lighting			
16	Flexible Replacement	44	Traffic Signals - Standard			
17	Rigid Pavement Replacement	45	Pavement Markings			
18	Pavement Rubblizing, Breaking, Pulverizing	46	Landscaping			
19	Structure Removal	47	Mowing			
20	Level 1 Bridge	48	Trucking			
21	Level 2 Bridge	49	Herbicidal Spraying			
22	Level 3 Bridge	50	Railroad Track Construction			
23	Reinforcing Steel	51	Micro Tunneling			
24	Structural Steel Erection	52	Tunneling			
25	Stud Welding	53	Piling			
26	Structural Steel Painting	54	Post-Tensioning Bridge Members			
27	Expansion & Contraction Joints, Joint	55	Fiber Optic Cable Installation, Splicing,			

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	sealers, Bearing Devices		Termination and Testing – Traffic Signal System			
28	Caissons / Drilled Shafts	56	Fiber Optic Cable Installation, Splicing, Termination and Testing – Intelligent Transportation System			
		57	Sealing of Concrete Surfaces with Epoxy or Non- Epoxy Sealers			

PN 059 - 10/15/2004 - WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
 - an existing published wage determination
 - a survey underlying a wage determination
 - a Wage and Hour Division letter setting forth a position on a wage determination matter
 - a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response for this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determination Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (see 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U. S Department of Labor 200 Constitution Avenue, N.W. Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requester considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U. S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210 4.) All decisions by the Administrative Review Board are final.

PN 061 - 01/20/2016 -WAGE SCALE ON ALL FEDERAL-AID PROJECTS

The wage rates for this project were determined by the Secretary of Labor in accordance with Federal-Aid requirements.

Contractors shall use only the classifications and wage rates set forth in the United States Department of Labor (USDOL) wage decision found at the website noted below on payrolls submitted to the District Office. Additionally, please note that the wage modification in effect at the time of the project sale date, shall be used by all contractors.

This USDOL wage decision may be viewed, by accessing the United States Department of Labor (USDOL) website at:

https://www.wdol.gov/dba.aspx

This contract requires the payment of the total of the basic hourly rates plus the fringe benefits payments for each classification in accordance with the following regulations which by reference are made part of this contract:

- 1) The U.S. Department of Labor Regulations, Title 29, Subtitle A, Part 5, Sections 5.5, 5.31, and 5.32, most recent revision at contract execution.
- 2) Form FHWA-1273 (most recent revision at contract execution) Part IV. Payment of Predetermined Minimum Wage and Part V. Statements and Payrolls.

The failure to pay prevailing wages to all laborers and mechanics employed on this project, shall be considered a breach of contract. Such a failure may result in the termination of the contract and debarment.

The Contractor and all subcontractors shall pay all wages and fringe benefits by company check. All payroll records and canceled pay checks shall be maintained for at least three years after final acceptance as defined in section 109.12 of the Ohio Department of Transportation Construction and Materials Specifications. The Contractor's and all subcontractors payroll records and canceled pay checks shall be made available for inspection by the Department and the U.S. Department of Labor, upon request, anytime during the life of the contract, and for three years thereafter by the U.S. Department of Labor. Additionally, the Contractor and all subcontractors shall permit such representatives to interview any employees during working hours while the employee is on the job.

The wage and fringe rates determined for this project shall be posted by the Contractor in a prominent and accessible place on the project, field office, or equipment yard where they can be easily read by the workers.

The Contractor (both prime and sub) shall submit via the Department Civil Rights & Labor System (CRL), certified payrolls each week beginning three weeks after the start of work. The Department will not accept payrolls not uploaded via CRL (no handwritten payrolls). These payrolls shall include but not limited to the following:

- 1. Employee name, address, social security number, classification, and hours worked.
- 2. The basic hourly and overtime rate paid, total pay, and the manner in which fringe benefit payments have been irrevocably made.

- 3. The contract ID and pay week dates.
- 4. Signature of an authorized company representative will be done online through CRL.

CRL Requirements with interactive training guides can be found at http://transportation.ohio.gov/crl/.

Additionally, a copy of the "Apprentice Certification" obtained from the Ohio State Apprenticeship Council, must accompany all certified payrolls submitted for all apprentices working on this project. Instructions for attaching the apprenticeship certificate can also be found at http://transportation.ohio.gov/crl/ under Attaching the Apprenticeship Certificate.

Please be aware that it is ultimately the responsibility of the Contractor to ensure that all laws relating to prevailing wages in the USDOL Regulations, Title 29, parts 1 and 5, are strictly adhered to by all subcontractors on the project.

If the Contractor or any subcontractor fails to comply with any of the provisions contained in this proposal note, the Department may terminate the contract, debar the Contractor or Subcontractor and/or withhold or suspend pay estimates after written notice and a reasonable opportunity to comply has been provided.

PN 050 - 10/15/2004 - LIMITATION ON USE OF CONTRACT FUNDS FOR LOBBYING

- 1. The prospective bidder certifies, by signing and submitting this bid proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. This certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective bidder also agrees by submitting his or her bid proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such sub-recipients shall certify and disclose accordingly.

PN 045 - 10/15/2004 - NON - COLLUSION AFFIDAVIT

In accordance with Title 23 United States Code, Section 112 and Ohio Revised Code, Chapter 1331 et. seq: and Sections 2921.11 and 2921.13, the bidder hereby states, under penalty of perjury and under

other such penalties as the law provides, that he or his agents or employees have not entered either directly or indirectly into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal. Execution of this proposal on the signature portion thereof shall constitute also signature of this Non-Collusion Affidavit as permitted by title 28 United States Code, Section 1746.

REPORTING BID RIGGING

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

PN 128 - 10/19/2007 - UNAUTHORIZED LANE USE

The Contractor shall be assessed a Disincentive as designated in the Unauthorized Lane Use Table for each unit of time a Critical Lane/Ramp is closed by the Contractor's action while not otherwise permitted by the contract. The Unauthorized Lane Use Table is located in the Plan General Notes The Disincentive will be for any lane closures caused by the Contractor during times and locations not specifically permitted by this contract.

PN 520 09/09/2015 - FUEL PRICE ADJUSTMENT

General: This Fuel Price Adjustment (Fpa) provision is intended to minimize risk to the Contractor or Design Build Team, (DBT) due to fuel price fluctuations that may occur during the Contract. This provision is not designed to estimate actual quantities of fuel used in construction operations, but to provide a reasonable basis for calculating a fuel price adjustment based on average conditions.

The Department determines adjustments under the provisions of this Proposal Note, and presumes that the Contractor/(DBT) has relied on these provisions when determining unit bid prices. The monthly application range for percent change (Mbp/Cbp) will not exceed 50% for a Fuel Price Adjustment increase or decrease as outlined in Section B, Calculation of Fuel Price Adjustment.

A. Price Adjustment Criteria: These requirements provide for a price adjustment, positive or negative, to payments due the Contractor/(DBT) for fluctuations in the cost of fuel consumed in the performance of certain items of work. These price adjustment provisions apply only to those items in the contract as

grouped by category and identified in Table A-1. All adjustments will be made based on fuel consumption indicated by Table A-1, and no changes will be made for actual consumption rates.

Category descriptions and the fuel usage factors which are applicable to each are as follows:

Fuel Adjustment Categories, Table A-1				
Category	Basis of Calculation and Threshold Quantity	Eligible Items	Units	Fuel Usage Factor
Earthwork	Apply only to the greater of the sum of all Excavation quantities or the sum of all Borrow and Embankment quantities. Threshold Quantity* = 30,000 c.y. (22,936 c.m.)	203, 204	Gallons per cubic yard (Gallons per cubic meter)	0.50 (0.65)
Aggregate Bases	Apply to quantity calculated based on the Method of Measurement and Basis of Payment. Threshold Quantity* = 2,500 c.y. (1,912 c.m.)	304, 307	Gallons per cubic yard (Gallons per cubic meter)	0.75 (0.98)
Select Granular Backfill	Apply to quantity calculated based on the Method of Measurement and Basis of Payment. Threshold Quantity* = 2,000 c.y. (1,529 c.m.)	840	Gallons per cubic yard (Gallons per cubic meter)	0.75 (0.98)
Flexible Bases and Pavements	Apply to quantity calculated based on the	301, 302, 424, 441, 442, 443, 446, 448, 803, 826, 851, 857, 880	Gallons per cubic yard (Gallons per cubic meter)	1.70 (2.22)
Rigid Bases and Pavements	Apply to quantity calculated based on the Method of Measurement and Basis of Payment. Threshold Quantity* = 1,200 c.y. (917 c.m.)	305, 306, 451, 452, 526, 884,	Gallons per cubic yard (Gallons per cubic meter)	1.00 (1.31)
Structural Concrete	Apply to quantity calculated based on the Method of Measurement and Basis of Payment. Threshold Quantity* = 350 c.y. (268 c.m.)	511, 524, 842, 892	Gallons per cubic yard (Gallons per cubic meter)	4.00 (5.23)

^{*} A Fuel Price Adjustment will only apply when the sum of all **original** contract quantities or for Design Build Projects all completed in-place accepted final quantities for the category meet or exceed the specified Threshold Quantity. When a Fuel Price Adjustment applies, calculate the Fuel Price Adjustment for the sum of all quantities for the category per this proposal note.

B. Calculation of Fuel Price Adjustment: Fuel Price Adjustments may be either positive or negative. A positive Fuel Price Adjustment will result in a payment to the Contractor/(DBT) while a negative Fuel Price Adjustment will result in a deduction.

The Department will calculate a Monthly Base Price (Mbp) for fuel for each month of each calendar year beginning with January 2001. The method for calculating the Monthly Base Price (Mbp) will be on file in the Division of Construction Management. The Monthly Base Price (Mbp) will be used to calculate all Fuel Price Adjustments. The Contract Base Price (Cbp) will be the Monthly Base Price (Mbp) for the month the contract was bid. All Monthly Base Price (Mbp) values will be posted on the Division of Construction Management, Office of Construction Administration website at: http://www.dot.state.oh.us/Divisions/ConstructionMgt/Admin/Pages/PriceIndexes.aspx

During each month of the contract the Engineer will select the applicable Monthly Base Price (Mbp) and calculate the ratio of the Monthly Base Price (Mbp) divided by the Contract Base Price (Cbp). The formulas below allow for a variation in fuel prices without recognizing cost increases/ decreases within the range of 90% to 110% of the Contract Base Price (Cbp).

When, and only when, the Monthly Base Price (Mbp) divided by the Contract Base Price (Cbp) is less than 0.90 or greater than 1.10 will the Engineer calculate a Fuel Price Adjustment (Fpa).

Cost increases in excess of 150% of the Contract Base Price (Cbp) will not be recognized. When, the Monthly Base Price (Mbp) divided by the Contract Base Price (Cbp) is greater than 1.50, the Fpa shall be calculated using a Cbp/Mbp ratio of 1.50.

Cost decreases in excess of 50% of the Contract Base Price (CBP) will not be recognized. When, the Monthly Base Price (Mbp) divided by the Contract Base Price (Cbp) is less than 0.50, the Fpa shall be calculated using a Cbp/Mbp ratio of 0.50.

For a Price Increase:

 $Fpa = [(Mbp/Cbp) - 1.10] \times Cbp \times Q$

For a Price Decrease:

 $Fpa = [(Mbp/Cbp) - 0.90] \times Cbp \times Q$

Where:

Fpa = Fuel Price Adjustment **Mbp** = Monthly Base Price

Cbp = Contract Base Price

Q = The number of gallons of fuel used in the placement of items identified in Table A-1 during that month at the specified Fuel Usage Factor. Q will be determined by the Engineer for each category by multiplying the applicable Fuel Usage Factor by the sum of quantities of completed and accepted work for the specified items.

The total Monthly Fuel Price Adjustment will be the algebraic sum of the Fuel Price Adjustments for materials placed during the month for each applicable category identified in Table A-1. The Total Fuel Price Adjustment for the project will be the algebraic sum of all Monthly Fuel Price Adjustments. The

Department will calculate the Monthly and Total Fuel Price Adjustment on a monthly basis and make contract modifications as provided in Section C, Payment/Deduction.

- **C. Payment/Deduction:** The Fuel Price Adjustment will be paid, or deducted, upon approval of a change order prepared after completion of all work. Contractor/(DBT) markups are not permitted. Partial payments or deductions will be processed prior to total completion when the unpaid accrued Total Fuel Price Adjustment exceeds \$10,000 or once every 12 months.
- **D. Expiration of Contract Time:** When eligible items of work grouped by category and identified in Table A-1 are performed after expiration of contract time and liquidated damages are chargeable, the value of Monthly Base Price (Mbp) used to compute the price adjustment will be either the Monthly Base

Price (Mbp) at the time of actual performance or the Monthly Base Price (Mbp) at the time contract time expired, whichever is less.

E. Extra Work: When eligible items of work grouped by category and identified in Table A-1 are added to the contract as Extra Work and for which a unit price is negotiated the Contractor/(DBT) must use the appropriate price for fuel when preparing required backup data for the negotiated price. No Fuel Price Adjustment will be made for fuel consumed in the performance of eligible work added to the contract as Extra Work at a negotiated price when the work commences within 90 days of the approval of the change order authorizing said extra work. If the eligible work at a negotiated price commences more than 90 days after the approval of the change order authorizing said extra work a Fuel Price Adjustment will be made if said extra work quantities exceed the applicable threshold quantity in Table A-1. The Fuel Price Adjustment will be calculated using the Monthly Base Price (Mbp) value for the month the change order authorizing said extra work was approved as the value for its Contract Base Price (Cbp).

When Extra Work is added to the contract as a Force Account operating costs for equipment used in the performance of this work will be paid in accordance with C&MS 109.05.C.4 with no further adjustment.

F. Final Quantities: Upon completion of the work and determination of final pay quantities a change order will be prepared to reconcile any difference between estimated quantities previously paid and the final quantities. In this situation, the value for the Monthly Base Price (Mbp) used in the price adjustment formula will be the average of all Monthly Base Price (Mbp) values previously used for computing price adjustments.

PN 534- 04/17/2015 - ASPHALT BINDER PRICE ADJUSTMENT

A. Eligibility

If the Department's asphalt binder index has increased or decreased in excess of 10%, asphalt concrete may be eligible for a price adjustment. The total price adjustment must be more than \$800.

B. Price Adjustment Criteria and Conditions:

The Department will establish and publish the asphalt binder Bidding Index (BI) and Placing Index (PI) for each month of each calendar year. The asphalt binder indexes will be posted on the Department's website.

The Department will establish the asphalt binder indexes based on the data provided in the Poten & Partners, Inc., Asphalt Weekly Monitor® (AWM) (http://www.poten.com/copyright.asp).

The Department will use the selling price for PG 64-22 paving grade asphalt from the Midwest/Midcontinent Markets of Illinois/Michigan/Ohio/Indiana/Kentucky for the Ohio cities/areas listed. The Department will average the Ohio cities/areas low and high selling prices as published in the last weekly publishing period of each month that includes the last Friday of the month to calculate the BI and PI. The calculated asphalt binder BI will be posted by the Department as the index for the following month. The calculated asphalt binder PI will be posted by the Department as the index for the current month.

The Director will determine the asphalt binder indexes in the event data from the AWM is unavailable for any reason.

C. Price Adjustment Calculations

If the ratio of the PI to the BI is greater than 1.10 or less than 0.90, the Department will adjust the compensation the contractor receives for eligible quantities of asphalt concrete. The adjustment is based on the bid month and the month of asphalt concrete placement. The adjustment will apply to the price for asphalt binder used in eligible asphalt concrete quantities according to the following formula:

For a price increase:

$$PA = \left(\frac{PI}{BI} - 1.10\right) \times C \times Q$$

For a price decrease:

$$PA = \left(\frac{PI}{BI} - 0.90\right) \times C \times Q$$

Where:

PA = Price Adjustment

BI = Bidding Index, the asphalt binder index for the month the project is bid

PI = Placing Index, the asphalt binder index for the month the asphalt concrete is placed

C = BI x percent virgin asphalt binder / 100

Q = Eligible quantity of asphalt concrete in tons (metric tons)

The percent of virgin asphalt binder used to calculate C is determined from the approved Job Mix Formula (JMF).

The eligible quantity of asphalt concrete, Q, is the complete, in-place, and accepted quantity in tons (metric tons) placed in the month being considered for price adjustment. If the quantity is paid in cubic yards (cubic meters), the Department will convert the volume into tons (metric tons) using the conversion factor established according to the Department's Construction and Material Specifications Item 401.21.

If eligible asphalt concrete is placed beyond an approved Contract Completion Date, the Department will base price adjustments on either the PI for the last month of the approved Contract Completion Date, or the PI for the actual month of placing, using whichever PI is less.

At a minimum, the Department will calculate and apply price adjustments at the end of each construction season and as soon as practical after the completion of the project.

D. Extra Work/Force Account:

When new asphalt concrete pay items are added to the contract as Extra Work, in accordance with the provisions of C&MS Section 109.05, no price adjustments will be made.

DELAWARE COUNTY DEL-750-4.43; PID 102832 CSX TRANSPORTATION INC.

CSX Great Lakes Division Columbus Line Subdivision MP QE-125.09

SPECIAL CLAUSES IN THE PROPOSAL

The bidder, if awarded the contract for this improvement agrees:

- 1. To cooperate at all times with the local officials of the railroad company.
- 2. To use all reasonable care and diligence in the work in order to avoid accidents, damage or unnecessary delay to, or interference with the trains and other property of the railroad company.
- 3. To conduct his work in a manner satisfactory to the Chief Engineer of the railroad company or his authorized representative, to perform his work in such manner and at such time as not to unnecessarily interfere with the movements of trains or railroad traffic, and to hold his work at all times open to inspection of railroad company inspectors.
- 4. To cooperate with a public utility, railroad or other organizations having occasion to do work on or in connection with the improvement.
- 5. To avoid unnecessary use of railroad property without written permission of the railroad company and to leave railroad roadbed and property in a condition acceptable to the Chief Engineer of the railroad company.
- 6. To execute a bond conditioned according to Section 5525.16 of the Revised Code of Ohio, in favor of the State of Ohio and further to carry insurance of the following kinds and amounts:

The number of trains operating through the improvement is estimated to be:

- 0 Passenger trains per day @ miles per hour.
- 5 Freight trains per day @ 50 miles per hour.
- 7. Railroad Insurance Requirements

Contractor shall procure and maintain in the following insurance policies:

- Commercial General Liability coverage at their sole cost and expense with limits of not less than \$5,000,000 in combined single limits for bodily injury and/or property damage per occurrence, and such policies shall name CSXT as additional insured. The policy shall include endorsement ISO CG 24 17 evidencing that coverage is provided within 50 feet of a railroad.
 - If such endorsement is not included, railroad protective liability insurance must be provided as described in item 4 below.
- 2. Statutory Worker's Compensation and Employers Liability Insurance with limits of not less than \$1,000,000, which insurance must contain a waiver of subrogation against CSXT and its affiliates (if permitted by state law).
- Commercial automobile liability insurance with limits of not less than \$1,000,000 combined single limit for bodily injury and/or property damage per occurrence, and such policies shall name CSXT as additional named insured. The policy shall include endorsement ISO CA 20 70 evidencing that

coverage is provided for work within 50 feet of a railroad. If such endorsement is not included, railroad protective liability insurance must be provided as described in item 4 below.

- 4. Railroad protective liability insurance with limits of not less than \$5,000,000 combined single limit for bodily injury and/or property damage per occurrence and an aggregate annual limit of \$10,000,000, which insurance shall satisfy the following additional requirements:
 - a) The Railroad Protective Liability Insurance must be on the ISO/RIMA Form of Railroad Protective Insurance Insurance Services Office (ISO) Form CG 00 35.
 - b) CSX Transportation must be the named Insured on the Railroad Protective Liability Insurance Policy.
 - c) Name and Address of the Contractor and Agency must appear on the Declarations page.
 - d) Description of operations and location must appear on the Declarations, and must match the project description.
 - e) Authorized endorsements must include the Pollution Exclusion Amendment CG 28 31, unless using form CG 00 35 version 96 and later.
 - f) Authorized endorsements may include:
 - (i) Broad Form Nuclear Exclusion IL 00 21
 - (ii) 30-day Advance Notice of Non-renewal or cancellation
 - (iii)Required State Cancellation Endorsement
 - (iv) Quick Reference or Index Form CL/IL 240
 - g) Authorized endorsements may not include:
 - (i) A Pollution Exclusion Endorsement except CG 28 31
 - (ii) A Punitive or Exemplary Damages Exclusion
 - (iii) A "Common Policy Conditions" Endorsement
 - (iv) Any other endorsement that is not named in 4 (e) or (f) above.
 - (v) Policies that contain any type of deductible
- 5. All insurance companies must be A.M. Best rated A- and Class VII or better.
- 6. The CSX OP number or CSX contract number, as applicable, must appear on each Declarations page and/or certificates of insurance.
- 7. Such additional or different insurance as CSXT may require.
- Additional Insurance Terms
 - 1. Contractor much submit the original Railroad Protective Liability policy, Certificates of Insurance and all notices and correspondence regarding insurance policies to:

Insurance Department CSX Transportation, Inc. 500 Water Street, C-907 Jacksonville, FL. 32202 OR

insurancedocuments@csx.com

9. General Insurance Requirements

Copies of all submitted insurance documentation provided to the Railroad shall also be provided to the Department's Office of Contracts.

The insurance hereinbefore specified shall be with an acceptable insurance company authorized to do business in the State of Ohio, and shall be taken out before execution of the Contract by the Director and kept in effect until all work required to be performed under the terms of the contract is satisfactorily completed as evidenced by the formal acceptance by the State. Such policies shall include thirty (30) days canceling notice. The cost of insurance hereinbefore specified will be a specific bid item.

Notwithstanding the Department's Construction and Material Specification No. 107.12 "Evidence" as above set forth shall consist of furnishing the Director of Transportation three (3) certified copies of the railroad policy.

- To indemnify, defend, and hold CSXT and its affiliates harmless from and against all claims, demands, payments, suits, actions, judgments, settlements, and damages of every nature, degree, and kind (including direct, indirect, consequential, incidental, and punitive damages), for any injury to or death to any person(s) (including, but not limited to the employees of CSXT, its affiliates, the State or the Contractor), for the loss of or damage to any property whatsoever (including but not limited to property owned by or in the care, custody, or control of CSXT, its affiliates, the State or the Contractor, and environmental damages and any related remediation brought or recovered against CSXT and its affiliates), arising directly or indirectly from the negligence, recklessness or intentional wrongful misconduct of the Contractor, the State, and their respective agents, employees, invitees, contractors, or its contractor's agents, employees or invitees in the performance of work in connection with the project or activities incidental thereto, or from their presence on or about CSXT's property. The foregoing indemnification obligation shall not be limited to the insurance coverage required in paragraph 6 above.
- 11. The Railroad company will assign, at the sole cost and expense of the Department, railroad flaggers or other protective services and devices as necessary to insure the safety and continuity of the work to be performed as a part of this contract.

Said services and devices will be provided when necessary, as determined by the railroad company, because of any of the Contractor's operations over, under or adjacent to tracks over which trains are operating.

The provision of such protective personnel and devices does not relieve the Contractor from the liability of payment for damage caused by his operations.

Such protection will be required when men or equipment are working within clearances limits of 25 feet of a rail or when work being performed adjacent to operating tracks may present hazards to tracks, train operation, or when equipment does or may infringe upon such limits.

The Contractor will not be permitted to operate any of his own equipment on railroad tracks except under an acceptable arrangement with the railroad company. Such equipment and the operation of such equipment, or equipment rented from the railroad company, shall be arranged for by the Contractor with the railroad and the cost for its use, including protection or railroad traffic, shall be borne by the Contractor.

The Contractor shall notify the following named individual for the railroad company at least 30 days, or as directed by the authorized representative of the Railroad, in advance of starting any work which might require protection:

Mr. David C. Clark **Director Construction Engineering** CSX Transportation, Inc. 500 Meijer Drive, Suite 305 Florence, KY 41042

Telephone: 859-372-6114

The Contractor shall notify the railroad at least 5 working days in advance of suspending or ceasing operations that require a flagger, and must provide the Project Name, PID number, railroad line and milepost information and/or AARDOT# at the top of pg. SC-1.

Railroad protective personnel assigned to the project will be responsible for notifying the Engineer upon arrival at the job site on the first working day that protective services begin and on the last day that he performs such services. This will be required for each separate period that such services are provided. The Engineer will document such notification in the project diary.

The Contractor will be responsible for protective services provided at his request and not utilized due, in the opinion of the Engineer, to a change in the Contractor's construction schedule or if it is determined by the Engineer that the requested services were not necessary. The actual costs for such protective services so assessed to the Contractor will be deducted from the Contract.

The decision of the Director of Transportation shall be final in the event of controversy as to the necessity for any protection services provided and not utilized by the Contractor as described in the preceding paragraph.

- 11. To pay the railroad or owning company for any changes, requested for his convenience, to railroad property, facilities, wire, fiber optic and/or pipe lines other than shown on the plans for the project.
- 12. If at any time the contractor desires a temporary crossing of the railroad's tracks, he shall make a request for a temporary crossing from the railroad. If approved, he shall arrange with the railroad company, execute its regular form of private grade crossing agreement covering the crossing desired, paying all construction, maintenance, removal, protection and other costs.
- 13. Methods and procedures for performing work on property of CSX Transportation, Inc. must be approved by:

Mr. David C. Clark **Director Construction Engineering** CSX Transportation, Inc. 500 Meijer Drive, Suite 305 Florence, KY 41042

Telephone: 859-372-6114

14. The Contractor will be required to follow all terms and conditions of the attached CSX Transportation Construction Submission Criteria and CSXT Special Provisions.

End of Special Clauses

CSX Transportation

CONSTRUCTION SUBMISSION CRITERIA

Public Projects Group Jacksonville, FL Date Issued: April 14, 2015

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INTRODUCTION

The intent of this document is to guide outside agencies and their Contractors when performing work on, over, or with potential to impact CSXT property (ROW). Work plans shall be submitted for review to the designated CSXT Engineering Representative for all work which presents the potential to affect CSXT property or operations; this document shall serve as a guide in preparing these work plans. All work shall be performed in a manner that does not adversely impact CSXT operations or safety; as such, the requirements of this document shall be strictly adhered to, in addition to all other applicable standards associated with the construction. Applicable standards include, but are not limited to, CSXT Standards and Special Provisions, CSXT Insurance Requirements, CSXT Pipeline Occupancy Criteria, as well as the governing local, county, state and federal requirements. It shall be noted that this document and all other CSXT standards are subject to change without notice, and future revisions will be made available at the CSXT website: www.csx.com.

I. DEFINITIONS

- 1. Agency The project sponsor (i.e. State DOT, Local Agencies, Private Developer, etc.)
- 2. AREMA American Railway Engineering and Maintenance-of-Way Association the North American railroad industry standards group. The use of this term shall be in specific reference to the AREMA Manual for Railway Engineering.
- 3. Construction Submission The Agency or its representative shall submit six (6) sets of plans, supporting calculations, and detailed means and methods procedures for the specific proposed activity. All plans, specifications, and supporting calculations shall be signed/sealed by a Professional Engineer as defined below.
- 4. Controlled Demolition Removal of an existing structure or subcomponents in a manner that positively prevents any debris or material from falling, impacting, or otherwise affecting CSXT employees, equipment or property. Provisions shall be made to ensure that there is no impairment of railroad operations or CSXT's ability to access its property at all times.
- 5. Contractor The Agency's representative retained to perform the project work.
- 6. Engineer CSXT Engineering Representative or a GEC authorized to act on the behalf of CSXT.
- 7. Flagman A qualified CSXT employee with the sole responsibility to direct or restrict movement of trains, at or through a specific location, to provide protection for workers.
- 8. GEC General Engineering Consultant who has been authorized to act on the behalf of CSXT.
- 9. Horizontal Clearance Distance measured perpendicularly from centerline of any track to the nearest obstruction at any elevation between TOR and the maximum vertical clearance of the track.
- 10. Professional Engineer An engineer who is licensed in State or Commonwealth in which the project is to occur. All plans, specifications, and supporting calculations shall be prepared by the Licensed Professional Engineer and shall bear his/her seal and signature.
- 11. Potential to Foul Work having the possibility of impacting CSXT property or operations; defined as one or more of the following:
 - a. Any activity where access onto CSXT property is required.
 - b. Any activity where work is being performed on CSXT ROW
 - c. Any excavation work adjacent to CSXT tracks or facilities, within the Theoretical Railroad Live Load Influence Zone, or where the active earth pressure zone extends within the CSXT property limits.
 - d. The use of any equipment where, if tipped and laid flat in any direction (360 degrees) about its center pin, can encroach within twenty five feet (25'-0") of the nearest track centerline.

This is based upon the proposed location of the equipment during use, and may be a function of the equipment boom length. Note that hoisting equipment with the potential to foul must satisfy the 150% factor of safety requirement for lifting capacities.

- e. Any work where the scatter of debris, or other materials has the potential to encroach within twenty five feet (25'-0") of the nearest track centerline.
- f. Any work where significant vibration forces may be induced upon the track structure or existing structures located under, over, or adjacent to the track structure.
- g. Any other work which poses the potential to disrupt rail operations, threaten the safety of railroad employees, or otherwise negatively impact railroad property, as determined by CSXT.
- 12. ROW Right of Way; Refers to CSXT Right-of-Way as well as all CSXT property and facilities. This includes all aerial space within the property limits, and any underground facilities.
- 13. Submission Review Period a minimum of thirty (30) days in advance of start of work. Up to thirty (30) days will be required for the initial review response. Up to an additional thirty (30) days may be required to review any/all subsequent submissions or resubmission.
- 14. Theoretical Railroad Live Load Influence Zone A 1 horizontal to 1 vertical theoretical slope line starting at bottom corner of tie.
- 15. *TOR* Top of Rail. This is the base point for clearance measurements. It refers to the crown (top) of the steel rail; the point where train wheels bear on the steel rails.
- 16. *Track Structure* All load bearing elements which support the train. This includes, but is not limited to, the rail, ties, appurtenances, ballast, sub-ballast, embankment, retaining walls, and bridge structures.
- 17. Vertical Clearance Distance measured from TOR to the lowest obstruction within six feet (6'-0") of the track centerline, in either direction.

II. GENERAL SUBMISSION REQUIREMENTS

- A. A construction work plan is required to be submitted by the Agency or its Contractor, for review and acceptance, prior to accessing or performing any work with Potential to Foul.
- B. The Agency or its representative shall submit six (6) sets of plans, specifications, supporting calculations, and detailed means and methods procedures for the specific proposed work activity.
- C. Construction submissions shall include all information relevant to the work activity, and shall clearly and concisely explain the nature of the work, how it is being performed, and what measures are being taken to ensure that railroad property and operations are continuously maintained.
- D. All construction plans shall include a map of the work site, depicting the CSXT tracks, the CSXT right of way, proposed means of access, proposed locations for equipment and material staging (dimensioned from nearest track centerline), as well as all other relevant project information. An elevation drawing may also be necessary in order to depict clearances or other components of the work.
- E. Please note that CSXT will not provide pricing to individual contractors involved in bidding projects. Bidding contractors shall request information from the agency and not CSXT.
- F. The Contractor shall install a geotextile fabric ballast protection system to prevent construction or demolition debris and fines from fouling ballast. The geotextile ballast protection system shall be installed and maintained by the Contractor to the satisfaction of the Engineer.
- G. The Engineer shall be kept aware of the construction schedule. The Contractor shall provide timely communication to the Engineer when scheduling the work such that the Engineer may be present during the work. The Contractor's schedule shall not dictate the work plan review schedule, and flagging shall not be scheduled prior to receipt of an accepted work plan.
- H. At any time during construction activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions or other circumstances that may create a potential hazard to rail operations or CSXT facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer's satisfaction. CSXT and its GEC shall not be responsible for any additional costs or time claims associated with such revisions.

- I. Blasting will not be permitted to demolish a structure over or within CSXT's right-of-way.
 - When blasting off of CSXT property but with Potential to Foul, vibration monitoring, track settlement surveying, and/or other protective measures may be required as determined by the Engineer.
- J. Blasting is not permitted adjacent to CSXT right-of-way without written approval from the Chief Engineer, CSXT.
- K. Mechanical and chemical means of rock removal must be explored before blasting is considered. If written permission for the use of explosives is granted, the Agency or Contractor must submit a work plan satisfying the following requirements:
 - 1. Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the Agency or Contractor.
 - 2. Electronic detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
 - 3. No blasting shall be done without the presence of an authorized representative of CSXT. Advance notice to the Engineer is required to arrange for the presence of an authorized CSXT representative and any flagging that CSXT may require.
 - 4. Agency or Contractor must have at the project site adequate equipment, labor and materials, and allow sufficient time, to clean up debris resulting from the blasting and correct any misalignment of tracks or other damage to CSXT property resulting from the blasting. Any corrective measures required must be performed as directed by the Engineer at the Agency's or Contractor's expense without any delay to trains. If Agency's or Contractor's actions result in the delay of any trains including passenger trains, the Agency or Contractor shall bear the entire cost thereof.
 - 5. The Agency or Contractor may not store explosives on CSXT property.
 - 6. At any time during blasting activities, the Engineer may require revisions to the previously approved procedures to address weather, site conditions or other circumstances that may create a potential hazard to rail operations or CSXT facilities. Such revisions may require immediate interruption or termination of ongoing activities until such time the issue is resolved to the Engineer's satisfaction. CSXT and its GEC shall not be responsible for any additional costs or time claims associated with such revisions.

III. HOISTING OPERATIONS

- A. All proposed hoisting operations with Potential to Foul shall be submitted in accordance with the following:
 - 1. A plan view drawing shall depict the work site, the CSXT track(s), the proposed location(s) of the lifting equipment, as well as the proposed locations for picking, any intermediate staging, and setting the load(s). All locations shall be dimensioned from centerline of the nearest track. Crane locations shall also be dimensioned from a stationary point at the work site for field confirmation.
 - 2. Computations showing the anticipated weight of all picks. Computations shall be made based upon the field-verified plans of the existing structure. Pick weights shall account for the weight of concrete rubble or other materials attached to the component being removed; this includes the weight of subsequent rigging devices/components. Rigging components shall be sized for the subsequent pick weight.
 - 3. All lifting equipment, rigging devices, and other load bearing elements shall have a rated (safe lifting) capacity that is greater than or equal to 150% of the load it is carrying, as a factor of safety. Supporting calculations shall be furnished to verify the minimum capacity requirement is maintained for the duration of the hoisting operation.
 - 4. Dynamic hoisting operations are prohibited when carrying a load with the Potential to Foul. Cranes or other lifting equipment shall remain stationary during lifting. (i.e. no moving picks).

- 5. For lifting equipment, the manufacturer's capacity charts, including crane, counterweight, maximum boom angle, and boom nomenclature is to be submitted.
- 6. A schematic rigging diagram must be provided to clearly call out each rigging component from crane hook to the material being hoisted. Copies of catalog or information sheets shall be provided to verify rigging weights and capacities.
- 7. For built-up rigging devices, the contractor shall submit the following:
 - i. Details of the device, calling out material types, sizes, connections and other properties.
 - ii. Load test certification documents and/or design computations bearing the seal and signature of a Professional Engineer. Load test shall be performed in the configuration of its intended use as part of the subject demolition procedure.
 - iii. Copies of the latest inspection reports of the rigging device. The device shall be inspected within one (1) calendar year of the proposed date for use.
- 8. A detail shall be provided showing the crane outrigger setup, including dimensions from adjacent slopes or facilities. The detail shall indicate requirements for bearing surface preparation, including material requirements and compaction efforts. As a minimum, outriggers and/or tracks shall bear on mats, positioned on level material with adequate bearing capacity.
- 9. A complete written narrative that describes the sequence of events, indicating the order of lifts and any repositioning or re-hitching of the crane(s).

IV. DEMOLITION PROCEDURE

- A. The Agency or its Contractor shall submit a detailed procedure for a controlled demolition of any structure on, over, or adjacent to the ROW. The controlled demolition procedure must be approved by the Engineer prior to beginning work on the project.
- B. Existing Condition of structure being demolished:
 - 1. The Contractor shall submit as-built plans for the structure(s) being demolished.
 - 2. If as-built plans are unavailable, the Contractor shall perform an investigation of the structure, including any foundations, substructures, etc. The field measurements are to be made under the supervision of the Professional Engineer submitting the demolition procedure. Findings shall be submitted as part of the demolition means and methods submittal for review by the Engineer.
 - 3. Any proposed method for temporary stabilization of the structure during the demolition shall be based on the existing plans or investigative findings, and submitted as part of the demolition means and methods for review by the Engineer.
- C. Demolition work plans shall include a schematic plan depicting the proposed locations of the following, at various stages of the demolition:
 - 1. All cranes and equipment, calling out the operating radii.
 - 2. All proposed access and staging locations with all dimensions referenced from the center line of the nearest track.
 - 3. Proposed locations for stockpiling material or locations for truck loading.
 - 4. The location, with relevant dimensions, of all tracks, other railroad facilities; wires, poles, adjacent structures, or buried utilities that could be affected, showing that the proposed lifts are clear of these obstructions.
 - Note that no crane or equipment may be set on the CSXT rails or track structure and no material may be dropped on CSXT property.
- D. Demolition submittal shall also include the following information:
 - 1. All hoisting details, as dictated by Section III of this document.
 - 2. A time schedule for each of the various stages must be shown as well as a schedule for the entire lifting procedure. The proposed time frames for all critical subtasks (i.e., torch/saw cutting various portions of the superstructure or substructure, dismantling splices, installing temporary bracing, etc.) shall be furnished so that the potential impact(s) to CSXT operations may be assessed and eliminated or minimized.
 - 3. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.

- 4. Design and supporting calculations shall be prepared, signed, and sealed by the Professional Engineer for items including the temporary support of components or intermediate stages shall be submitted for review. A guardrail will be required to be installed in a track in the proximity of temporary bents or shoring towers, when located within twelve feet (12'-0") from the centerline of the track. The guardrail will be installed by CSXT forces, at the expense of the Agency or its contractor.
- E. Girders or girder systems shall be stable at all times during demolition. Temporary bracing shall be provided at the piers, abutments, or other locations to resist overturning and/or buckling of the member(s). The agency shall submit a design and details of the proposed temporary bracing system, for review by the Engineer. Lateral wind forces for the temporary conditions shall be considered in accordance with AREMA, Chapter 8,Section 28.6.2. The minimum lateral wind pressure shall be fifteen pounds per square foot (15 psf).
- F. Existing, obsolete, bridge piers shall be removed to a minimum of three feet (3'-0") below the finished grade, final ditch line invert, or as directed by the Engineer.
- G. A minimum quantity of twenty five (25) tons of CSXT approved granite track ballast may be required to be furnished and stockpiled on site by the Contractor, or as directed by the Engineer.
- H. The use of acetylene gas is prohibited for use on or over CSXT property. Torch cutting shall be performed utilizing other materials such as propane.
- I. CSXT's tracks, signals, structures, and other facilities shall be protected from damage during demolition of existing structure or replacement of deck slab.

J. Demolition Debris Shield

- 1. On-track or ground-level debris shields (such as crane mats) are prohibited for use by CSXT.
- Demolition Debris Shield shall be installed prior to the demolition of the bridge deck or other relevant portions of the structure. The demolition debris shield shall be erected from the underside of the bridge over the track area to catch all falling debris. The debris shield shall not be the primary means of debris containment.
 - i. The demolition debris shield design and supporting calculations, all signed/sealed by a Professional Engineer, shall be submitted for review and acceptance.
 - ii. The demolition debris shield shall have a minimum design load of 50 pounds per square foot (50 psf) plus the weight of the equipment, debris, personnel, and all other loads.
 - iii. The Contractor shall verify the maximum particle size and quantity of the demolition debris generated during the procedure does not exceed the shield design loads. Shield design shall account for loads induced by particle impact; however the demolition procedure shall be such that impact forces are minimized. The debris shield shall not be the primary means of debris containment.
 - iv. The Contractor shall include installation/removal means and methods for the demolition debris shield as part of the proposed Controlled Demolition procedure submission.
 - v. The demolition debris shield shall provide twenty three feet (23'-0") minimum vertical clearance, or maintain the existing vertical clearance if the existing clearance is less than twenty three feet (23'-0").
 - vi. Horizontal clearance to the centerline of the track should not be reduced unless approved by the Engineer.
 - vii. 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 Engineer.

K. Vertical Demolition Debris Shield

- 1. This type of shield may be required for substructure removals in close proximity to CSXT track and other facilities, as determined by the Engineer.
- 2. The Agency or its Contractor shall submit detailed plans with detailed calculations, prepared, signed, and sealed by a Professional Engineer, of the protection shield.

V. ERECTION PROCEDURE

- A. The Agency or its Contractor shall submit a detailed procedure for erection of a structure with Potential to Foul. The erection procedure must be approved by the Engineer prior to beginning work on the project.
- B. Erection work plans shall include a schematic plan depicting the following, at all stages of the construction:
 - 1. All proposed locations of all cranes and equipment, calling out the operating radii.

- 2. All proposed access and staging locations with all dimensions referenced from the center line of the nearest track.
- 3. All proposed locations for stockpiling material or locations for truck loading.
- 4. The location, with relevant dimensions, of all tracks, other railroad facilities; wires, poles, adjacent structures, or buried utilities that could be affected, showing that the proposed lifts are clear of these obstructions.
- C. No crane or equipment may be set on the CSXT rails or track structure and no material may be dropped on CSXT property.
- D. For erection of a structure over the tracks, the following information shall be submitted for review and acceptance by the Engineer, at least thirty (30) days prior to erection:
 - 1. As-built beam seat elevations field surveyed upon completion of pier/abutment construction.
 - 2. Current Top of Rail (TOR) elevations field measured at the time of as-built elevation collection.
 - 3. Computations verifying the anticipated minimum vertical clearance in the final condition which accounts for all deflection and camber, based upon the current TOR and as-built beam seat elevations. The anticipated minimum vertical clearance shall be greater than or equal to that which is indicated by the approved plans. Vertical clearance (see definitions) is measured from TOR to the lowest point on the overhead structure at any point within six feet (6'-0") from centerline of the track. Calculations shall be signed and sealed by a Professional Engineer.
- E. Girders or girder systems shall be stable at all times during erection. No crane may unhook prior to stabilizing the beam or girder.
 - 1. Lateral wind forces for the temporary conditions shall be considered in accordance with AREMA, Chapter 8, Section 28.6.2. The minimum lateral wind pressure shall be fifteen pounds per square foot (15 psf).
 - 2. Temporary bracing shall be provided at the piers, abutments, or other locations to resist overturning and/or buckling of the member(s). The agency shall submit a design and details of the proposed temporary bracing system, for review by the Engineer.
 - 3. Temporary bracing shall not be removed until sufficient lateral bracing or diaphragm members have been installed to establish a stable condition. Supporting calculations, furnished by the Professional Engineer, shall confirm the stable condition.
- F. Erection procedure submissions shall also include the following information:
 - 1. All hoisting details, as dictated by Section III of this document.
 - 2. A time schedule for each of the various stages must be shown as well as a schedule for the entire lifting procedure. The proposed time frames for all critical subtasks (i.e. performing aerial splices, installing temporary bracing, installation of diaphragm members, etc.) shall be furnished so that the potential impact(s) to CSXT operations may be assessed and eliminated or minimized.
 - 3. The names and experience of the key Contractor personnel involved in the operation shall be included in the Contractor's means and methods submission.
 - 4. A guardrail will be required to be installed in a track in the proximity of temporary bents or shoring towers, when located within twelve feet (12'-0") from the centerline of the track. The guardrail will be installed by CSXT forces, at the expense of the Agency or its Contractor.
 - 5. Design and supporting calculations prepared by the Professional Engineer for items including the temporary support of components or intermediate stages shall be submitted for review.

VI. TEMPORARY EXCAVATION AND SHORING

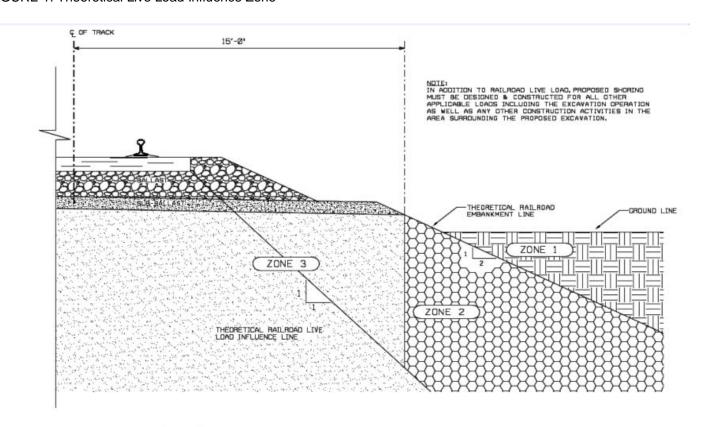
- A. The Agency or its Contractor shall submit a detailed design and procedure for the installation of a sheeting/shoring system adjacent to the tracks. Shoring protection shall be provided when excavating with Potential to Foul, or as otherwise determined by CSXT. Shoring shall be provided in accordance with the AREMA, except as noted below.
- B. Shoring may not be required if all of the following conditions are satisfied:
 - 1. The excavation does not encroach within the Theoretical Live Load Influence Zone. Please refer to Figure
 - 2. The track structure is situated on level ground, or in a cut section, and on stable soil.
 - 3. The excavation does not adversely impact the stability of a CSXT facility (i.e. signal bungalow, drainage facility, under grade bridge, building, etc), or the stability of any structure on, over, or adjacent to CSXT

- property with potential to foul.
- 4. Shoring is not required by any governing federal, state, local or other construction code.
- C. Shoring is required when excavating the toe of an embankment. Excavation of any embankment which supports an active CSXT track structure without shoring will not be permitted.
- D. Trench boxes are not an acceptable means of shoring. Trench boxes are prohibited for use on CSXT property or within the Theoretical Railroad Live Load Influence Zone.
- E. Shoring shall be a cofferdam-type, which completely encloses the excavation. However, where justified by site or work conditions, partial cofferdams with open sides away from the track may be permissible, as determined by the Engineer.
- F. Cofferdams shall be constructed using interlocking steel sheet piles, or when approved by the Engineer, steel soldier piles with timber lagging. Wales and struts shall be included when dictated by the design.
- G. The use of tiebacks can be permissible for temporary shoring systems, when conditions warrant. Tiebacks shall have a minimum clear cover of 6'-0", measured from the bottom of the rail. Upon completion of the work, tiebacks shall be grouted, cut off, and remain in place.
- H. All shoring systems on, or adjacent to CSXT right-of-way, shall be equipped with railings or other fall protection, compliant with the governing federal, state or local requirements. Area around pits shall be graded to eliminate all potential tripping hazards.
- I. Interlocking steel sheet piles shall be used for shoring systems qualifying one or more of the following conditions:
 - 1. Within 18'-0" of the nearest track centerline
 - 2. Within the live load influence zone
 - 3. Within slopes supporting the track structure
 - 4. As otherwise deemed necessary by the Engineer.
- J. Sheet piles qualifying for one or more of the requirements listed in Section VI.I (above) of this document shall not be removed. Sheet piles shall be left in place and cut off a minimum of 3'-0" below the finished grade, the ditch line invert, or as otherwise directed by the Engineer. The ground shall be backfilled and compacted immediately after sheet pile is cut off.
- K. The following design considerations shall be considered when preparing the shoring design package:
 - 1. Shoring shall be designed to resist a vertical live load surcharge of 1,880 lbs. per square foot, in addition to active earth pressure. The surcharge shall be assumed to act on a continuous strip, eight feet six inches (8'-6") wide. Lateral pressures due to surcharge shall be computed using the strip load formula shown in AREMA *Manual for Railway Engineering*, Chapter 8, Part 20.
 - 2. Allowable stresses in materials shall be in accordance with AREMA Chapter 7, 8, and 15.3.
 - A minimum horizontal clearance of ten feet (10'-0") from centerline of the track to face of nearest point of shoring shall be maintained, provided a twelve feet (12'-0") roadbed is maintained with a temporary walkway and handrail system.
 - 4. For temporary shoring systems with Potential to Foul, piles shall be plumb under full dead load. Maximum deflection at the top of wall, under full live load, shall be as follows:
 - i. One-half (½) inch for walls within twelve feet (12'-0") of track centerline (Measured from centerline of the nearest track to the nearest point of the supporting structure).
 - ii. One (1) inch for walls located greater than twelve feet (12'-0") from track centerline
- L. Shoring work plans shall be submitted in accordance with Section II of this document, as well as the following additional requirements:
 - 1. The work plan shall include detailed drawings of the shoring systems calling out the sizes of all structural members, details of all connections. Both plan and elevation drawings shall be provided, calling out dimensions from the face of shoring relative to the nearest track centerline. The elevation drawing shall also show the height of shoring, and track elevation in relation to bottom of excavation
 - 2. Full design calculations for the shoring system shall be furnished.
 - 3. A procedure for cutting off the sheet pile, backfilling and restoring the embankment.

VII. TRACK MONITORING

- A. When work being performed has the potential to disrupt the track structure, a work plan must be submitted detailing a track monitoring program which will serve to monitor and detect both horizontal and vertical movement of the CSXT track and roadbed.
- B. The program shall specify the survey locations, the distance between the location points, and frequency of monitoring before, during, and after construction. CSXT reserves to the right to modify the survey locations and monitoring frequency as necessary during the project.
- C. The survey data shall be collected in accordance with the approved frequency and immediately furnished to the Engineer for analysis.
- D. If any movement has occurred as determined by the Engineer, CSXT will be immediately notified. CSXT, at its sole discretion, shall have the right to immediately require all contractor operations to be ceased, have the excavated area immediately backfilled and/or determine what corrective action is required. Any corrective action required by CSXT or performed by CSXT including the monitoring of corrective action of the contractor will be at project expense.

FIGURE 1: Theoretical Live Load Influence Zone



NORMAL REQUIREMENTS FOR SHORING ADJACENT TO TRACK

ZONE 1 - EXCAVATIONS ABOVE AND OUTSIDE OF THE THEORETICAL RAILROAD EMBANKMENT LINE - DO NOT NORMALLY REQUIRE SHORING TO PROTECT RAILROAD ROADBED, SHORING MAY BE REQUIRED FOR OTHER REASONS.

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ZONE 2 - EXCAVATIONS WHOSE BOTTOMS EXTEND INTO ZONE 2 REQUIRE SHORING, BUT THE SHORING MAY NORMALLY BE PULLED AFTER THE EXCAVATION HAS BEEN BACKFIELD.

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ZONE 3 - EXCAVATIONS WHOSE BOTTOMS EXTEND INTO ZONE 3 WILL NORMALLY REQUIRE THE SHORING TO BE LEFT IN PLACE AND CUT-OFF 3' BELOW BASE OF RAIL, SHORING MUST BE DESIGNED FOR COOPER EBB LIVE LOAD

End of CSX Construction Submission Criteria

CSX Transportation

CSXT SPECIAL PROVISIONS

Public Projects Group Jacksonville, FL Date Issued: July 2017

CSXT SPECIAL PROVISIONS

AUTHORITY OF CSXT ENGINEER

The CSXT Representative shall have final authority in all matters affecting the safe maintenance of CSXT operations and CSXT property, and his or her approval shall be obtained by the Agency or its Contractor for methods of construction to avoid interference with CSXT operations and CSXT property and all other matters contemplated by the Agreement and these Special Provisions.

II. INTERFERENCE WITH CSXT OPERATIONS

- A. Agency or its Contractor shall arrange and conduct its work so that there will be no interference with CSXT operations, including train, signal, telephone and telegraphic services, or damage to CSXT's property, or to poles, wires, and other facilities of tenants on CSXT's Property or right-of-way. Agency or its Contractor shall store materials so as to prevent trespassers from causing damage to trains, or CSXT Property. Whenever Work is likely to affect the operations or safety of trains, the method of doing such Work shall first be submitted to the CSXT Representative for approval, but such approval shall not relieve Agency or its Contractor from liability in connection with such Work.
- B. If conditions arising from or in connection with the Project require that immediate and unusual provisions be made to protect train operation or CSXT's property, Agency or its Contractor shall make such provision. If the CSXT Representative determines that such provision is insufficient, CSXT may, at the expense of Agency or its Contractor, require or provide such provision as may be deemed necessary, or cause the Work to cease immediately.
- **III. NOTICE OF STARTING WORK**. Agency or its Contractor shall not commence any work on CSXT Property or rights-of-way until it has complied with the following conditions:
 - A. Notify CSXT in writing of the date that it intends to commence Work on the Project. Such notice must be received by CSXT at least 10 business days in advance of the date Agency or its Contractor proposes to begin Work on CSXT property. The notice must refer to this Agreement by date. If flagging service is required, such notice shall be submitted at least thirty (30) business days in advance of the date scheduled to commence the Work.
 - B. Obtain authorization from the CSXT Representative to begin Work on CSXT property, such authorization to include an outline of specific conditions with which it must comply.
 - C. Obtain from CSXT the names, addresses and telephone numbers of CSXT's personnel who must receive notice under provisions in the Agreement. Where more than one individual is designated, the area of responsibility of each shall be specified.

IV. WORK FOR THE BENEFIT OF THE CONTRACTOR

- A. No temporary or permanent changes to wire lines or other facilities (other than third party fiber optic cable transmission systems) on CSXT property that are considered necessary to the Work are anticipated or shown on the Plans. If any such changes are, or become, necessary in the opinion of CSXT or Agency, such changes will be covered by appropriate revisions to the Plans and by preparation of a force account estimate. Such force account estimate may be initiated by either CSXT or Agency, but must be approved by both CSXT and Agency. Agency or Contractor shall be responsible for arranging for the relocation of the third party fiber optic cable transmission systems, at no cost or expense to CSXT.
- B. Should Agency or Contractor desire any changes in addition to the above, then it shall make separate arrangements with CSXT for such changes to be accomplished at the Agency or Contractor's expense.

V. HAUL ACROSS RAILROAD

A. If Agency or Contractor desires access across CSXT property or tracks at other than an existing and open public road crossing in or incident to construction of the Project, the Agency or Contractor must first obtain the permission of CSXT and shall execute a license agreement or right of entry satisfactory to CSXT, wherein Agency or Contractor agrees to bear all costs and liabilities related to such access.

B. Agency and Contractor shall not cross CSXT's property and tracks with vehicles or equipment of any kind or character, except at such crossing or crossings as may be permitted pursuant to this section.

VI. COOPERATION AND DELAYS

- A. Agency or Contractor shall arrange a schedule with CSXT for accomplishing stage construction involving work by CSXT. In arranging its schedule, Agency or Contractor shall ascertain, from CSXT, the lead time required for assembling crews and materials and shall make due allowance therefor
- B. Agency or Contractor may not charge any costs or submit any claims against CSXT for hindrance or delay caused by railroad traffic; work done by CSXT or other delay incident to or necessary for safe maintenance of railroad traffic; or for any delays due to compliance with these Special Provisions.
- C. Agency and Contractor shall cooperate with others participating in the construction of the Project to the end that all work may be carried on to the best advantage.
- D. Agency and Contractor understand and agree that CSXT does not assume any responsibility for work performed by others in connection the Project. Agency and Contractor further understand and agree that they shall have no claim whatsoever against CSXT for any inconvenience, delay or additional cost incurred by Agency or Contractor on account of operations by others.

VIII. STORAGE OF MATERIALS AND EQUIPMENT

Agency and Contractor shall not store their materials or equipment on CSXT's property or where they may potentially interfere with CSXT's operations, unless Agency or Contractor has received CSXT Representative's prior written permission. Agency and Contractor understand and agree that CSXT will not be liable for any damage to such materials and equipment from any cause and that CSXT may move, or require Agency or Contractor to move, such material and equipment at Agency's or Contractor's sole expense. To minimize the possibility of damage to the railroad tracks resulting from the unauthorized use of equipment, all grading or other construction equipment that is left parked near the tracks unattended by watchmen shall be immobilized to the extent feasible so that it cannot be moved by unauthorized persons.

VIII. CONSTRUCTION PROCEDURES

A. General

- 1. Construction work on CSXT property shall be subject to CSXT's inspection and approval.
- 2. Construction work on CSXT property shall be in accord with CSXT's written outline of specific conditions and with these Special Provisions.
- 3. Contractor shall observe the terms and rules of the CSXT Safe Way manual, which Agency and Contractor shall be required to obtain from CSXT, and in accord with any other instructions furnished by CSXT or CSXT's Representative.

B. Blasting

- 1. Agency or Contractor shall obtain CSXT Representative's and Agency Representative's prior written approval for use of explosives on or adjacent to CSXT property. If permission for use of explosives is granted, Agency or Contractor must comply with the following:
 - a. Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of Agency or Contractor.
 - b. Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
 - c. No blasting shall be done without the presence of an authorized representative of CSXT. At least 30 days' advance notice to CSXT Representative is required to arrange for the presence of an authorized CSXT representative and any flagging that CSXT may require.

- d. Agency or Contractor must have at the Project site adequate equipment, labor and materials, and allow sufficient time, to (i) clean up (at Agency's expense) debris resulting from the blasting without any delay to trains; and (ii) correct (at Agency's expense) any track misalignment or other damage to CSXT's property resulting from the blasting, as directed by CSXT Representative, without delay to trains. If Agency's or Contractor's actions result in delay of any trains, including Amtrak passenger trains, Agency shall bear the entire cost thereof.
- e. Agency and Contractor shall not store explosives on CSXT property.

2. CSXT Representative will:

- a. Determine the approximate location of trains and advise Agency or Contractor of the approximate amount of time available for the blasting operation and clean-up.
- b. Have the authority to order discontinuance of blasting if, in his or her opinion, blasting is too hazardous or is not in accord with these Special Provisions.

IX. MAINTENANCE OF DITCHES ADJACENT TO CSXT TRACKS

Agency or Contractor shall maintain all ditches and drainage structures free of silt or other obstructions that may result from their operations. Agency or Contractor shall provide erosion control measures during construction and use methods that accord with applicable state standard specifications for road and bridge construction, including either (1) silt fence; (2) hay or straw barrier; (3) berm or temporary ditches; (4) sediment basin; (5) aggregate checks; and (6) channel lining. All such maintenance and repair of damages due to Agency's or Contractor's operations shall be performed at Agency's expense.

X. FLAGGING / INSPECTION SERVICE

- A. CSXT has sole authority to determine the need for flagging required to protect its operations and property. In general, flagging protection will be required whenever Agency or Contractor or their equipment are, or are likely to be, working within fifty (50) feet of live track or other track clearances specified by CSXT, or over tracks.
- B. Agency shall reimburse CSXT directly for all costs of flagging that is required on account of construction within CSXT property shown in the Plans, or that is covered by an approved plan revision, supplemental agreement or change order.
- C. Agency or Contractor shall give a minimum of 30 days' advance notice to CSXT Representative for anticipated need for flagging service. No work shall be undertaken until the flag person(s) is/are at the job site. If it is necessary for CSXT to advertise a flagging job for bid, it may take up to 90-days to obtain this service, and CSXT shall not be liable for the cost of delays attributable to obtaining such service.
- D. CSXT shall have the right to assign an individual to the site of the Project to perform inspection service whenever, in the opinion of CSXT Representative, such inspection may be necessary. Agency shall reimburse CSXT for the costs incurred by CSXT for such inspection service. Inspection service shall not relieve Agency or Contractor from liability for its Work.
- E. CSXT shall render invoices for, and Agency shall pay for, the actual pay rate of the flagpersons and inspectors used, plus standard additives, whether that amount is above or below the rate provided in the Estimate. If the rate of pay that is to be used for inspector or flagging service is changed before the work is started or during the progress of the work, whether by law or agreement between CSXT and its employees, or if the tax rates on labor are changed, bills will be rendered by CSXT and paid by Agency using the new rates. Agency and Contractor shall perform their operations that require flagging protection or inspection service in such a manner and sequence that the cost of such will be as economical as possible.

XI. UTILITY FACILITIES ON CSXT PROPERTY

Agency shall arrange, upon approval from CSXT, to have any utility facilities on or over CSXT Property changed as may be necessary to provide clearances for the proposed trackage.

XII.CLEAN-UP

Agency or Contractor, upon completion of the Project, shall remove from CSXT's Property any temporary grade crossings, any temporary erosion control measures used to control drainage, all machinery, equipment, surplus materials, falsework, rubbish, or temporary buildings belonging to Agency or Contractor. Agency or Contractor, upon completion of the Project, shall leave CSXT Property in neat condition, satisfactory to CSXT Representative.

XIII. FAILURE TO COMPLY

If Agency or Contractor violate or fail to comply with any of the requirements of these Special Provisions, (a) CSXT may require Agency and/or Contractor to vacate CSXT Property; and (b) CSXT may withhold monies due Agency and/or Contractor; (c) CSXT may require Agency to withhold monies due Contractor; and (d) CSXT may cure such failure and the Agency shall reimburse CSXT for the cost of curing such failure.

End of CSX Special Provisions

DELAWARE COUNTY DEL-750-4.43, PID 102832 Lake Division, Sandusky Main MP S-13.60

SPECIAL CLAUSES IN THE PROPOSAL

The bidder, if awarded the contract for this improvement agrees:

- 1. To cooperate at all times with the local officials of the railroad company.
- 2. To use all reasonable care and diligence in the work in order to avoid accidents, damage or unnecessary delay to, or interference with the trains and other property of the railroad company.
- 3. To conduct his work in a manner satisfactory to the Chief Engineer of the railroad company or his authorized representative, to perform his work in such manner and at such time as not to unnecessarily interfere with the movements of trains or railroad traffic, and to hold his work at all times open to inspection of railroad company inspectors.
- 4. To cooperate with a public utility, railroad or other organizations having occasion to do work on or in connection with the improvement.
- 5. To avoid unnecessary use of railroad property without written permission of the railroad company and to leave railroad roadbed and property in a condition acceptable to the Chief Engineer of the railroad company.
- 6. To execute a bond conditioned according to Section 5525.16 of the Revised Code of Ohio, in favor of the State of Ohio, and further to carry insurance of the kinds and amounts as delineated on pgs. E18-E21 in the railroad's 'Special Provisions for Protection of Railway Interest' (attached).

The number of trains operating at this location is estimated to be:

<u>0</u> Passenger trains per day @ a maximum authorized operating speed of ___ miles per hour.

40 Freight trains per day @ a maximum authorized operating speed of 50 miles per hour.

 Norfolk Southern does not accept electronic submissions of insurance policies; they must be mailed as outlined in the attached Norfolk Southern 'Special Provisions for Protection of Railway Interest'. The original railroad protective policy must be sent to Norfolk Southern at the following address:

> Norfolk Southern Railway Company Risk Management Three Commercial Place Norfolk, Virginia 23510-2191 Attn: Scott Dickerson

- Contractors should submit their insurance to Norfolk Southern at least 30-45 days prior to their anticipated start date.
- It is recommended that the insurance is mailed overnight, with tracking.

- Allow two (2) weeks from the day that Norfolk Southern receives your submission for approval or denial.
- Including the NS file number on the cover page of the insurance transmittal will aid in
 quickly identifying the project for which the submission has been made. However, do not
 include milepost data or DOT #'s in the actual policy.
- Contractors should simultaneously submit their insurance policy to Norfolk Southern and the Department

(a) General Insurance Requirements

The insurance hereinbefore specified shall be with an acceptable insurance company authorized to do business in the State of Ohio, and shall be taken out before execution of the Contract by the Director and kept in effect until all work required to be performed under the terms of the contract is satisfactorily completed as evidenced by the formal acceptance by the State. Such policies shall include thirty (30) days canceling notice. The cost of insurance hereinbefore specified in subsection (a) will be a specific bid item.

Notwithstanding the Department's Construction and Material Specification No.107.12 "Evidence" as above set forth shall consist of furnishing the Director of Transportation three (3) certified copies of the railroad policy.

7. The Railroad company will assign, at the sole cost and expense of the Department, railroad flaggers or other protective services and devices as necessary to insure the safety and continuity of the work to be performed as a part of this contract. Said services and devices will be provided when necessary, as determined by the railroad company, because of any of the Contractor's operations over, under or adjacent to tracks over which trains are operating. The provision of such protective personnel and devices does not relieve the Contractor from the liability of payment for damage caused by his operations.

The Contractor shall notify the following named individual for each railroad company at least 30 days, or as directed by the authorized representative of the Railroad, in advance of starting any work which might require protection:

Kevin G. Hauschildt, Chief Engineer Bridges and Structures Norfolk Southern Corporation 1200 Peachtree Street, N.E. Atlanta, GA 30309 Attn: E.W. Chambers

Telephone: (404) 529-1436

All email correspondence should include (at a minimum) either the ODOT Project Identification (PID) Number, and/or the NS File Number in the Subject line for ease of reference.

The Contractor shall notify the railroad at least 5 working days in advance of suspending or ceasing operations that require a flagger, and must provide the Project Name, PID number, railroad line and milepost information and/or AARDOT# as shown at the top of pg. SC-1.

The Contractor will be responsible for protective services provided at his request and not utilized due, in the opinion of the Engineer, to a change in the Contractor's construction schedule or if it is determined by the Engineer that the requested services were not necessary. The actual costs for such protective services so assessed to the Contractor will be deducted from the Contract.

The decision of the Director of Transportation shall be final in the event of controversy as to the necessity for any protection services provided and not utilized by the Contractor as described in the preceding paragraph.

- 8. To pay the railroad or owning company for any changes, requested for his convenience, to railroad property, facilities, wire, fiber optic and/or pipe lines other than shown on the plans for the project.
- 9. If at any time the contractor desires a temporary crossing (or the drawings show a temporary crossing is necessary) of the railroad's tracks, he shall make a request for a temporary crossing from the railroad. Contractor shall complete and execute railroad's regular form of private grade crossing agreement covering the crossing desired, paying any fees directly to the railroad necessary for construction, maintenance, removal, protection and other costs associated with the temporary crossing See attached NS 'Private Road Crossing Application' (at the end of the attached Norfolk Southern 'Special Provisions'), or go to:

 $\underline{\text{http://www.nscorp.com/content/nscorp/en/real-estate/norfolk-southern-services/private-crossings.html}$

Contractor should be aware that submittal, review and approval of a temporary crossing application may take anywhere from 8-12 weeks after submittal of the application to the railroad, and Contractor should account for this in his construction schedule.

10. Methods and procedures for performing work on property of Norfolk Southern Railway Company, including temporary crossing applications, must be approved by:

E.W. Chambers
Norfolk Southern Corporation
Engineer – Public Improvements
1200 Peachtree Street N.E.
Atlanta, GA. 30309
404-529-1436
eldridge.chambers@nscorp.com

AUTHORITY OF RAILROAD ENGINEER AND STATE ENGINEER

The authorized representative of the Railroad company, hereinafter referred to as the Railroad Engineer, shall have final authority in all matters affecting the safe maintenance of railroad traffic of his company including the adequacy of the foundations and structures supporting the railroad tracks.

NOTICE OF STARTING WORK

- A. The Contractor shall not commence any work on Railroad right of way until he has complied with the following conditions:
 - Give the Railroad Engineer at least ten working day advance written notice, with copy to the Engineer, of the date he proposes to begin work on railroad right of way. Said notice shall be sent to Mr. Kevin G. Hauschildt, Chief Engineer, Bridges and Structures, Norfolk Southern Corporation, 1200 Peachtree Street, N.E., Atlanta, Georgia 30309 – Attn. EW Chambers
 - 2. Obtained written authorization from the Railroad Engineer to begin work on Railroad right of way.

- Obtained written approval from the Railroad of the Railroad Protective Liability Policy of Insurance.
- B. The Railroad Engineer's written authorization to proceed shall include the names, addresses, and telephone numbers of the railroad's local representatives who are to be notified as hereinafter required. Where more than one representative is designated, the area of responsibility shall be specified.

FLAGGING SERVICE

A. WHEN REQUIRED

Under the terms of the Agreement between the Department and the Railroad, the Railroad has the sole authority to determine the need for flagging required to protect its operations. In general, the requirements of such flagging services will be whenever the Contractor's men or equipment are, or are likely to be, working on the Railroad's right of way and is across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad track structure, railroad roadbed or the track surface and alignment of any track to such an extent that the movement of trains must be controlled. Normally the Railroad will assign one flagger to a project; but in some cases, more than one may be necessary. However, if the contractor works within distances that violate instructions given by the Railroad's local representative, or performs work that has not been scheduled with the Railroad's local representative, additional flaggers may be required full time until the project has been completed. See pgs. E10 in the railroad's 'Special Provisions for Protection of Railway Interest' (attached).

For Projects exceeding 30 days of construction, Contractor shall provide the flagmen a small work area with a desk/counter and chair within the field/site trailer, including the use of bathroom facilities, where the flagman can check in/out with the Project, as well as to the flagman'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 flagman's time and efficiency on the Project,

B: SCHEDULING AND NOTIFICATION

The Contractor shall furnish to the Railroad's local representative and the Engineer a schedule for all work required to complete the portion of the project within the Railroad right of way and arrange for a job site meeting between the Contractor, Engineer and the Railroad's local representative. Flagging services may not be provided until such meeting has been conducted and the contractor's work scheduled.

The Contractor shall give the Railroad's local representative, copy to the Engineer, at least 10 working days of advance written notice of work to be performed within railroad right of way. Such notices shall include sufficient details of the proposed work to enable the Railroad's local representative to determine if flagging will be required. If flagging is required no work shall be undertaken until the flaggers are present at the job site. Railroad labor agreements usually require flaggers to be assigned to a project on a continual basis and therefore cannot be called for on a spot basis.

If flagging service becomes unnecessary and is suspended it may take up to thirty days to again obtain service from the Railroad. The Contractor shall give five working days notice to cease flagging service.

C: EMERGENCIES

If emergencies arise which require the flagger's presence elsewhere, the Contractor shall delay his work until such time as the flaggers are again available.

D: SUSPENSION OF WORK

If work is suspended the Contractor shall give the Railroad's local representative at least three working days notice before resumption of said work.

E. VERIFICATION

The Railroad flagman assigned to the project will be responsible for notifying the State or Contractor's on-site project representative or Contractor Superintendant upon arrival at the job site on the first day (or as soon thereafter as possible) that flagging services begin and on the last day that he performs such services for each separate period that services are provided. The State or Contractor's on-site project representative will document such notification in the project records. When requested, the State or Contractor's on-site project representative will also sign the flagman's diary, timesheet or flagging report showing daily time spent and activity at the project site.

F. CONTRACTOR RIGHT-OF-ENTRY

Before the Contractor starts any work on Norfolk Southern property, the Contractor is required to complete and submit the attached NS Right-of-Entry (ROE) Application (at the end of the following NS 'Special Provisions' section). Contractor is to allow 7-10 days from the time the application is submitted until the ROE is received back approved by NS. No fee is required to be submitted by the Contractor.

Forward the completed ROE Application to:

E.W. Chambers
Norfolk Southern Corporation
Engineer – Public Improvements
1200 Peachtree Street N.E.
Atlanta, GA. 30309
404-529-1436
eldridge.chambers@nscorp.com

End of Special Clauses

A. Norfolk Southern - Special Provisions for Protection of Railway Interests

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 Projects impacting the Railroad, the Railroad's Public Projects 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, from time to time in the sole discretion of the Railroad. Contractor must request from Railroad and follow the latest version of these provisions prior to commencing work.

2. NOTICE OF STARTING WORK:

- A. The Contractor shall not commence any work on railroad rights-of-way until he has complied with the following conditions:
 - 1. Signed and received a fully executed copy of the required Norfolk Southern Contractor Right of Entry Agreement.
 - 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 he 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's Flagging 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 he must comply.
 - 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.

3. INTERFERENCE WITH RAILROAD OPERATIONS:

- A. The Contractor shall so arrange and conduct his 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 flagging service or inspection service shall be deferred by the Contractor until the flagging service 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 his 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 his absence, the Railroad's Division Engineer, such provisions is insufficient, either may require or provide such provisions as he 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 Railroad utilities. The contractor shall contact the Railroad's representative 2 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.
- 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:
 - 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 flagging service 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:

- 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 shall allow for 30 days for the Railroad's review and response.
- 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 and the Railroad Engineer, but such approval 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) Shop Drawings
 - (2) Bearing Shop Drawings and Material Certifications
 - (3) Concrete Mix Design
 - (4) Structural Steel, Rebar, and/or Strand Certifications
 - (5) 28 day Cylinder Test for Concrete Strength
 - (6) Waterproofing Material Certification
 - (7) Test Reports for Fracture Critical Members
 - (8) Foundation Construction Reports

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. Submission shall also provide a listing of the anticipated equipment to be used, the location of all equipment to be used and insure a contingency plan of action is in place should a primary piece of equipment malfunction.
- B. Ballast Protection

- 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:

- 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 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:

- 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. 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.E-Construction Excavation (Refer to Norfolk Southern Public 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.
- 3. 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.
- 4. 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.
- 5. 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 ½".
- 6. 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.

7. The front face of shoring located to the closest NS track for all shoring set-ups located in Zone 2 as shown on NS Typical Drawing No. 4 – Shoring Requirements (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 Projects Manual Appendix H.4.6.
 - b. For Jack and Bore Method refer to Norfolk Southern Public Projects Manual Appendix H.4.7.
 - c. For Tunneling Method refer to Norfolk Southern Public Projects Manual Appendix H.4.8.
- 2. The installation methods provided are for pipes carrying storm water or open flow run-off. 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 his designated representative must be present at the site during the entire demolition procedure period.
- e. 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, operating radii, with 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 cranes or lifting devices to be 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 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 beam. 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. Railroad tracks and other Railroad property must be protected from damage during the erection procedure.
- c. 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.
- d. The Railroad Engineer or his designated representative must be present at the site during the entire erection procedure period.
- e. 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 Projects Manual Appendix H.1, Section 4.A.3.).

2. Submittal Requirements

- a. In addition 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, operating radii, with 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 cranes or lifting devices to be 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 beam. 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 tiedowns and falsework.

H. Blasting:

- 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 his 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 flagging 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 his expense any track misalignment or other damage to Railroad property resulting from the blasting as directed by the Railway's authorized representative. If his 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.
 - 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.

- 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.
 - Have the authority to order discontinuance of blasting if, in his 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.
 - Confirm that the minimum amounts of explosives are used to remove the rock.
 - c. Be empowered to intercede if he concludes that the Contractor's blasting operations are endangering the Railway.
 - d. Submit a letter acknowledging that he has been engaged to oversee the entire blasting operation and that he 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.
- Type of detonator and explosives to be used. (Electronic detonating devices will not be permitted). Diameter of explosives if different from hole diameter.
- Approximate dates and time of day when the explosives are to be detonated.
- k. Type of flyrock protection.
- 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.
- A letter from the blasting consultant acknowledging that he has been engaged to oversee the entire blasting operation and that he 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

- 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.
- 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:

- The Contractor will be required to maintain all ditches and drainage structures
 free of silt or other obstructions which may result from his 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.
- 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 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:

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 his
authorized representative.

6. DAMAGES:

A. The Contractor shall assume all liability for any and all damages to his 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. FLAGGING SERVICES:

A. Requirements:

- 1. Flagging services will not be provided until the Contractor's insurance has been reviewed & 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 flagging 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 flagging.
- 3. Normally, the Railroad will assign one flagman to a project; but in some cases, more than one may be necessary, such as yard limits where three (3) flagmen 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, a flagman or flagmen may be required full time until the project has been completed.
- 4. For Projects exceeding 30 days of construction, Contractor shall provide the flagmen a small work area with a desk/counter and chair within the field/site trailer, including the use of bathroom facilities, where the flagman can check in/out with the Project, as well as to the flagman'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 flagman's time and efficiency on the Project.

B. Scheduling and Notification:

- The Contractor's work requiring Railroad flagging should be scheduled to limit the presence of a flagman at the site to a maximum of 50 hours per week. The Contractor shall receive Railroad approval of work schedules requiring a flagman's presence in excess of 40 hours per week.
- 2. Not later than the time that approval is initially requested to begin work on Railroad right-of-way, 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. Flagman or Flagmen may not be provided until the job site meeting has been conducted and the Contractor's work scheduled.
- 3. The Contractor will be required to give the Railroad representative at least 10 working days of advance written notice of intent to begin work within Railroad right-of-way in accordance with this special provision. 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 3 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 flagging 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 flagging is required, no work shall be undertaken until the flagman, or flagmen are present at the job site. It may take up to 30 days to obtain flagging initially from the Railroad.

When flagging begins, the flagman 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 flagging becomes unnecessary and is suspended, it may take up to 30 days to again obtain from the Railroad. Due to Railroad labor agreements, it is necessary to give 5 working days' notice before flagging service may be discontinued and responsibility for payment stopped.

4. If, after the flagman is assigned to the project site, an emergency arises that requires the flagman's presence elsewhere, then the Contractor shall delay work on Railroad right-of-way until such time as the flagman 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 flagging which may be required to accomplish the construction.
- 2. The estimated cost of flagging is the current rate per day based on a 10-hour work day. This cost includes the base pay for the flagman, 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 Railroad's employees who are available for flagging service at the time the service is required.
- 3. Work by a flagman 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 a flagman 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 flagging 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. Flagging costs are subject to change. The above estimates of flagging costs are provided for information only and are not binding in any way.

D. Verification:

- Railroad's flagman will electronically enter flagging time via Railroad's electronic billing system. Any complaints concerning flagging must be resolved in a timely manner. If the need for flagging 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 Railroad Engineer.
- 2. The Railroad flagman assigned to the project will be responsible for notifying the Sponsor Engineer upon arrival at the job site on the first day (or as soon thereafter as possible) that flagging services begin and on the last day that he performs such services for each separate period that services are provided. The Sponsor's Engineer will document such notification in the project records.

When requested, the Sponsor's Engineer will also sign the flagman's diary 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 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 his 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 flagging 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 he 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 his schedule he 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 work day. 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 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 is strongly recommended. In the vicinity of at-grade crossings, it is strongly recommended that reflective vests be worn.
- C. No one is allowed within 25' of the centerline of track without specific authorization from the flagman.
- 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 flagman.
- 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 flagman.
- B. No crane or boom equipment will be allowed to foul track or lift a load over the track without flag protection and track time.

- 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 flagman.
- H. Trucks, tractors or any equipment will not touch ballast line without specific permission from Railroad official and flagman. Orange construction fencing may be required as directed.
- I. No equipment or load movement within 25' or above a standing train or Railroad equipment without specific authorization of the flagman.
- 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 flagman if the flagman 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 flagman.
- 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 work day 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 flagman 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:
 - a. Commercial General Liability Insurance having a combined single limit of not less than \$2,000,000 per occurrence for all loss, damage, cost and expense, including attorneys' fees, arising out of bodily injury liability and property damage liability during the policy period. Said policy shall include explosion, collapse,

and underground hazard (XCU) coverage, shall be endorsed to name Railroad specified in item A.2.c. below both as the certificate holder and as an additional insured, and shall include a severability of interests provision.

b. Automobile Liability Insurance with a combined single limit of not less than

\$1,000,000 each occurrence for injury to or death of persons and damage to or loss or destruction of property. Said policy or policies shall be endorsed to name Railroad specified in item A.2.c. below both as the certificate holder and as an additional insured and shall include a severability of interests provision.

2. Railroad Protective Liability Insurance having a combined single limit of not less than \$2,000,000 each occurrence and \$6,000,000 in the aggregate applying separately to each annual period.

If the project involves track over which passenger trains operate, the insurance limits required are not less than a combined single limit of \$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 Railroad, Inc. NOTE: NS does not accept from insurers Chartis (AIG or Affiliated Company including Lexington Insurance Company), Hudson Group or Liberty or Affiliated Company, American Contractors Insurance Company and Erie Insurance Company including Erie Insurance Exchange and Erie Indemnity Company.
- b. The policy must be written using one of the following combinations of Insurance Services Office ("ISO") Railroad Protective Liability 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:

(As named in the Project Agreement with Project Sponsor)

Three Commercial Place

Norfolk, Virginia 23510-2191

Attn: S. W. Dickerson Risk Management

(NOTE: Norfolk Southern does not share coverage on RRPL 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 Pyramidiing 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.

- B. If any part of the work is sublet, similar insurance, and evidence thereof as specified in A.1 above, shall be provided by or on behalf of the subcontractor to cover its operations on Railroad's right of way.
- C. All insurance required under the preceding subsection A shall be underwritten by insurers and be of such form and content, as may be acceptable to the Company. Prior to entry on Railroad right-of-way, the original Railroad Protective Liability Insurance Policy shall be submitted by the Prime Contractor to the Sponsor at the address below for its review and transmittal to the Railroad. In addition, certificates of insurance evidencing the Prime Contractor's and any subcontractors' Commercial General Liability Insurance shall be

issued to the Railroad and the Sponsor at the addresses below, and forwarded to the Department for its review and transmittal to the Railroad. The certificates of insurance shall state that the insurance coverage will not be suspended, voided, canceled, or reduced in coverage or limits without (30) days advance written notice to Railroad and the Sponsor. No work will be permitted by Railroad on its right-of-way until it has reviewed and approved the evidence of insurance required herein.

SPONSOR: RAILROAD:

Risk Management

Norfolk Southern Railway Company

Three Commercial Place Norfolk, Virginia 23510-2191

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
 - Railroad will only accept initial insurance submissions via US Mail or Overnight carrier to the address noted in C above. Railroad will NOT accept initial insurance submissions via email or faxes. Please provide point of contact information with the submission including a phone number and email address.
 - 2. Railroad requires the following two (2) forms of insurance in the initial insurance submission to be submitted under a cover letter providing details of the project and contact information:
 - a. The full original or certified true countersigned copy of the railroad protective liability insurance policy in its entirely inclusive of all declarations, schedule of forms and endorsements along with the policy forms and endorsements.
 - b. The Contractor's commercial general, automobile, and workers' compensation liability insurance certificate of liability insurance evidencing a combined single limit of a minimum of \$2M per occurrence of general and \$1M per occurrence of automobile liability insurance naming Norfolk Southern Railway Company, Three Commercial Place, Norfolk, VA 23510 as the certificate holder and as an additional insured on both the general and automobile liability insurance policy.
 - 3. 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.

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.

NORFOLK SOUTHERN CONTRACTOR RIGHT OF ENTRY AGREEMENT

WHEREAS,	("Principal") has requested that Norfol	k Southern
Railway Company ("Company") permit Prin	cipal to be on or about Company's premises a	nd/or facilities at
or in the vicinity of		(the
"Premises") for the sole purpose of	, on behalf of	
(the "Project Sponsor") during the period "Right of Entry").	, 20, to	, 20 (the

WHEREAS, Company is willing to grant the Right of Entry subject to the terms and conditions set forth herein.

NOW THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the parties hereby agree as follows.

Company hereby grants Principal the Right of Entry. The Right of Entry shall extend to Principal and to subcontractors and other entities affiliated with Principal who are specifically approved for entry by authorized representatives of Company in writing, as well as to the officers and employees of the foregoing (collectively "Licensees"). The Right of Entry shall apply to those portions of the Premises, and to such equipment, machinery, rolling stock and other personal property and fixtures belonging to Company or otherwise located on the Premises, only to the extent specifically designated and approved in writing by authorized representatives of Company (collectively, "Designated Property").

Principal agrees:

- that Licensees' access to the Premises shall be limited to the Designated Property and that Principal shall be liable and fully responsible for all actions of Licensees while on the Premises pursuant to the Right of Entry;
- (ii) that Licensees shall (a) be subject to Company's direction when upon the Premises, and (b) be subject to Company's removal from the Premises, in Company's sole discretion, due to negligence, misconduct, unsafe actions, breach of this agreement or the failure to act respectfully, responsibly, professionally, and/or in a manner consistent with Company's desire to minimize risk and maintain its property with maximum security and minimum distractions or disruptions or for any other lawful reason;
- (iii) that Licensees shall perform all work with such care, diligence and cooperation with Company personnel as to reasonably avoid accidents, damage or harm to persons or property and delays or interference with the operations of any Company's facilities and in accordance with Company's "Special Provisions for Protection of Railway Interest", attached and incorporated herein.
- (iv) to give Company's officer signing this agreement, or his or her authorized representative, advance notification of the presence of Licensees on Designated Property in accordance with Company's "Special Provisions for Protection of Railway Interest";
- (v) to indemnify and save harmless Company, its officers, agents and employees from and against any and all claims, demands, losses, suits, judgments, costs, expenses (including without limitation reasonable attorney's fees) and liability resulting from (a) injury to or death of any person, including without limitation the Licensees, and damage to or loss of any property, including without limitation that belonging to or in the custody of Licensees (the "Licensee Property"), arising or in any manner growing out of the presence of either the Licensees or the Licensee Property, or both, on or about the Premises, regardless

whether negligence on the part of Company, its officers, agents or employees caused or contributed to said loss of life, personal injury or property loss or damage in whole or in part; (b) any alleged violation of any law, statute, code, ordinance or regulation of the United States or of any state, county or municipal government (including, without limitation, those relating to air, water, noise, solid waste and other forms of environmental protection, contamination or pollution or to discrimination on any basis) that results in whole or in part, directly or indirectly, from the activities of Licensees related in any way to their presence on the Premises or from any other act or omission of Licensees contributing to such violation, regardless of whether such activities, acts or omissions are intentional or negligent, and regardless of any specification by Company without actual knowledge that it might violate any such law, statute, code, ordinance or regulation; (c) any allegation that Company is an employer or joint employer of a Licensee or is liable for related employment benefits or tax withholdings; or (d) any decision by Company to bar or exclude a Licensee from the Premises pursuant to subsection (ii)(b) above;

- (vi) to have and keep in effect the appropriate kinds of insurance as listed in the Company's "Special Provisions for Protection of Railway Interest, with insurance companies satisfactory to Company, during the entire time Licensees or Licensee Property, or both, is on the Premises: and to provide certificates of insurance showing the foregoing coverage, as well as any endorsements or other proper documentation showing and any change or cancellations in the coverage to the Company officer signing this agreement or to his or her authorized representative;
- (vii) to reimburse Company for any costs not covered under the existing project agreement between the Company and the Project Sponsor, including any material, labor, supervisory and protective costs (including flagging) and related taxes and overhead expenses required or deemed necessary by Company because of the presence of either Licensees or Licensee Property on the Premises;
- (viii) to exercise special care and precautions to protect the Premises and equipment, machinery, rolling stock and other personal property and fixtures belonging to Company or otherwise located on the Premises (whether or not constituting Designated Property) and to avoid interference with Company's operations;
- (ix) to not create and not allow drainage conditions which would be adverse to the Premises or any surrounding areas;
- (x) to refrain from the disposal or release of any trash, waste, and hazardous, dangerous or toxic waste, materials or substances on or adjacent to the Premises and to clean up or to pay Company for the cleanup of any such released trash, waste, materials or substances; and
- (xi) to restore the Premises and surrounding areas to its original condition or to a condition satisfactory to the Company officer signing this agreement or to his or her authorized representative (ordinary wear and tear to rolling stock and equipment excepted) upon termination of Licensees' presence on the Premises.

As a part of the consideration hereof, Principal further hereby agrees that Company shall mean not only Norfolk Southern Railway Company but also Norfolk Southern Corporation and any and all subsidiaries and affiliates of Norfolk Southern Railway Company or Norfolk Southern Corporation, and that all of Principal's indemnity commitments in this agreement in favor of Company also shall extend to and indemnify Norfolk Southern Corporation and any subsidiaries and affiliated companies of Norfolk Southern Railway Company or Norfolk Southern Corporation and its and/or their directors, officers, agents and employees.

It is expressly understood that the indemnification obligations set forth herein cover claims by Principal's employees, agents, independent contractors and other representatives, and Principal expressly waives any defense to or immunity from such indemnification obligations and/or any subrogation rights available under any applicable state constitutional provision, laws, rules or regulations, including, without limitation, the workers' compensation laws of any state. Specifically, (i) in the event that all or a portion of the Premises is located in the State of Ohio, the following provision shall be applicable: "Principal, with respect to the indemnification provisions contained herein, hereby expressly waives any defense or immunity granted or afforded it pursuant to Section 35, Article II of the Ohio Constitution and Section 4123.74 of the Ohio Revised Code"; and (ii) in the event that all or a portion of the Premises is located in the Commonwealth of Pennsylvania, the following provision shall be applicable: "Principal, with respect to the indemnification provisions contained herein, hereby expressly waives any defense or immunity granted or afforded it pursuant to the Pennsylvania Workers' Compensation Act, 77 P.S. 481".

This agreement shall be governed by the internal laws of the Commonwealth of Virginia, without regard to otherwise applicable principles of conflicts of laws. If any of the foregoing provisions is held for any reason to be unlawful or unenforceable, the parties intend that only the specific words found to be unlawful or unenforceable be severed and deleted from this agreement and that the balance of this agreement remain a binding enforceable agreement to the fullest extent permitted by law.

This agreement may be amended only in a writing signed by authorized representatives of the parties.

Name of Principal	NORFOLK SOUTHERN RAILWAY COMPANY
Ву	Ву
Title	Title
Date, 20	Date, 20

Private Road Crossing Application

Application Fee: \$500.00 (non-refundable)

Instructions:

Following are the instructions, and forms for applying for a private road crossing on Norfolk Southern property. Please complete the trailing **Private Road Crossing Application** and **required attachments.** Once complete please **email** the entire application package to privatexing@nscorp.com. Each application should contain the following documents:

- 1. **Private Road Crossing Application:** Complete and sign the attached Private Road Crossing Application. Please be sure to provide the requesting party's complete legal name, a detailed description of the proposed use of the crossing and your signature on the application. A digital signature for this application is acceptable.
- 2. **Copy of application check**: All applications must be accompanied by an application check per referenced fee above. Please make your checks payable to Norfolk Southern Corporation. Add a scanned copy of the check to the application packages. Send the original check to the following address:

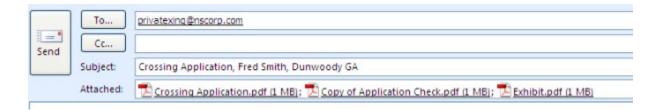
Norfolk Southern Corporation Real Estate Department Attn: Private Crossing Application 1200 Peachtree Street, NE, 12th Floor Atlanta, Georgia 30309

3. **Exhibit**: We need to know where the crossing is located. Include in your application a completed exhibit highlighting the crossing (i.e. aerial image). Save the exhibit in any standard format (PDF, JPEG) and attach to the email.

If available, applications with the following information are processed more efficiently:

- □ Property address or closest property address of crossing
- ☐ GPS coordinates of the crossing, latitude and longitude
- □ Railroad Milepost

Example of Email format:



Processing of your application requires NS Transportation review and approval and may also involve several departments at NS. The private road crossing may not be used prior to the execution of a separate formal agreement with NS and verification that all insurance requirements have been met. Please be advised that the application fee of \$500.00 is non-refundable and does not guarantee approval. If private road crossing requires multiple locations additional fees may apply.

Insurance:

coveraç	ge with various limits. These insurance coverage's must be of a form and underwritten by
insuran	ce companies that meet with the NS' approval. In certain instances the licensee may be required
to pay N	NS a risk-financing fee. The types of insurance typically required by NS include:
	Commercial General Liability Insurance
	Automobile Liability Insurance
	Worker's Compensation Insurance
	Railroad Protective Liability Insurance (during construction or maintenance only)

Each tenant/licensee shall be required to obtain, at its sole cost and expense, various types of insurance

Norfolk Southern generally requires a policy of Commercial General Liability Insurance with a combined single limit of not less than \$2,000,000 per occurrence for injury to or death of persons and damage to or loss or destruction of property. Individual and Residential private crossings will be required to have a policy of Personal Liability Insurance with a combined single limit of not less than \$1,000,000 per occurrence of injury to death of persons and damage to or loss or destruction of property. Specific insurance requirements will be provided to you in the agreement covering your request when it is approved by the Railroad.





PRIVATE ROAD CROSSING APPLICATION FORM

APPLICANT INFORMATION: Application fee of \$500 is enclosed along with this form (Mail in completed application to: Norfolk Southern Real Estate Department, 1200 Peachtree Street, NE, 12th Floor, Atlanta, GA 30309)

Legal Name of Applic	ant (party to agreement)			Tax ID_	
Mailing Address Street		Billing Address Stree	t		
City					
State	Zip _Zip	_ S	tate		
Name of Contact		Billin	g Contact		
Title		_	「itle		
Phone # ()	Fax # ()	_ Phor	ne # (<u>) </u>		Fax #()
E-Mail Address		E-M	lail Address _		
Applicant is a (Provid	e state of formation for Corporati Corporation – State Limited Partnership – State Limited Liability Company - Sole Proprietorship / Owne	: [- State [s, and name o Non-Profit Individual Other (specity Government	fy)	
CROSSING INFORM Location of Crossing:					
Nearest Town	Cou	inty	Sta	te	
Railroad Milepost Ro	eferenceft				
North	n South East	West			
Nearest Street		Lat/l	ong (if known	1)	
Crossing: to be construct	cted already exists DOT No	s			
If already existing:	Are other parties presently using If yes, specify:			Yes ∏I	No
	Are there any agreements cov			Yes□	Nd☐Do not know
	If yes, identify and attach copie	es:			
	Do improvements have to be n	nade at the crossing	g? [Ye⊡	No
	If yes, explain:				
	Crossing to be:	orary Permane	ent		
	If temporary, when is it to expir	re?			



Nortolk Southern Ranway Company		MUNICIA GUVINESS	
For what purpose is t	he crossing to be used?		
	9		
Type of Crossing:	Commercia Residential	Farm	



PRIVATE ROAD CROSSING APPLICATION FORM FOR Legal Name of Applicant (Tenant): ☐ Pedestrians Vehicle П Both Crossing to be used by: If crossing is to be used by vehicles: List type of vehicles:_ What is the expected volume of vehicular traffic? _____ vehicles p □)ay Month What will be the width of the roadway at the crossing? ft. Will the crossing be open to the public Yes No ☐ Yes ☐ Will the crossing involve an: Overpass No □ Yes Underpass No Yes Parallel Roadway No List any additional provisions or conditions not mentioned above: I/We understand that submission of this application does not authorize use of the private road crossing and that all road crossing agreements are contingent upon Transportation approvals. Fees, charges and other requirements will be forwarded to Applicant after the application has been reviewed and approved by Norfolk Southern. Signed: Date

For Railroad use only	
Milepost:	
Division:	
DOT/AAR:	
Date Received	Date Forwarded

To the Director of the Ohio Department of Transportation: The undersigned, having full knowledge of the site, plans and specifications for the following improvement and the conditions of this proposal, hereby agrees to furnish all services, labor, materials, and equipment necessary to complete the entire project, according to the plans, specifications and completion dates, and to accept the unit prices specified below for each item as full compensation for the work in this proposal.

Date Set for Completion: 10/15/2018

Unit Price Contract

FOR IMPROVING VARIOUS SECTIONS IN THE CITY OF COLUMBUS, TOWNSHIPS OF ORANGE AND LIBERTY, IN DELAWARE COUNTY, OHIO, IN ACCORDANCE WITH PLANS AND SPECIFICATIONS BY BUILDING GUARDRAIL, PERFORMING PAVEMENT REPAIRS, RESURFACING ASPHALT PAVEMENT, APPLYING PAVEMENT MARKINGS, AND PERFORMING STRUCTURE REPAIRS.

Project Length: 2.82 Miles Work Length: 2.82 Miles Pavement Width: Varies

Section 0	001 ROAI	DWAY			
Line Alt	Item Code	Item Description	WT	Unit	Quantity
0001	202E38001	GUARDRAIL REMOVED, AS PER PLAN (WT: NR)	NR	FT	4,537.500
0002	202E42001	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN (WT: NR)	NR	EACH	3.000
0003	202E42011	ANCHOR ASSEMBLY REMOVED, TYPE E, AS PER PLAN (WT: NR)	NR	EACH	3.000
0004	202E42041	ANCHOR ASSEMBLY REMOVED, TYPE T, AS PER PLAN (WT: NR)	NR	EACH	3.000
0005	202E42207	ANCHOR ASSEMBLY REMOVED, AS PER PLAN, TYPE B (WT: NR)	NR	EACH	1.000
0006	202E47001	BRIDGE TERMINAL ASSEMBLY REMOVED, AS PER PLAN (WT: NR)	NR	EACH	6.000
0007	203E20001	EMBANKMENT, AS PER PLAN (WT: 06)	06	CY	369.000
8000	209E60200	LINEAR GRADING (WT: 06)	06	STA	49.100
0009	209E72051	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN (WT: 06)	06	MILE	4.570
0010	606E15050	GUARDRAIL, TYPE MGS (WT: 36)	36	FT	2,506.250
0011	606E15100	GUARDRAIL, TYPE MGS WITH LONG POSTS (WT: 36)	36	FT	1,806.250
0012	606E26050	ANCHOR ASSEMBLY, MGS TYPE B (WT: 36)	36	EACH	1.000
0013	606E26150	ANCHOR ASSEMBLY, MGS TYPE E (WT: 36)	36	EACH	8.000
0014	606E26550	ANCHOR ASSEMBLY, MGS TYPE T (WT: 36)	36	EACH	3.000
0015	606E35002	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1 (WT: 36)	36	EACH	4.000
0016	606E35141	BRIDGE TERMINAL ASSEMBLY, TYPE 4, AS PER PLAN (WT: 36)	36	EACH	2.000
0017	606E98000	GUARDRAIL, MISC.:ALTERNATIVE GUARDRAIL PLACEMENT (WT: 36)	36	FT	681.250
0018	620E00500	DELINEATOR, POST GROUND MOUNTED (WT: NR)	NR	EACH	8.000
0019	690E50350	SPECIAL - MAILBOX REMOVED AND RESET (WT: NR)	NR	EACH	1.000
Section 0	002 EROS	SION CONTROL			
Line Alt	Item Code	Item Description	WT	Unit	Quantity
0020	659E00300	TOPSOIL (WT: 46)	46	CY	278.000
0021	659E10000	SEEDING AND MULCHING (WT: 46)	46	SY	2,500.000
0022	659E20000	COMMERCIAL FERTILIZER (WT: 46)	46	TON	0.340
0023	659E31000	LIME (WT: 46)	46	ACRE	0.520
0024	659E35000	WATER (WT: 46)	46	MGAL	14.000
0025	832E30000	EROSION CONTROL (WT: 08)	08	EACH	1,000.000
Section 0	003 DRAI	NAGE			
Line Alt	Item Code	Item Description	WT	Unit	Quantity
0026	611E98630	CATCH BASIN ADJUSTED TO GRADE (WT: 35)	35	EACH	4.000

Section 0004 Line Alt Item	PAVEN m Code		35	EACH	4.000
Line Alt Item	m Code				
Line Alt Item	m Code				
		Itam Description			 -
	E04004	Item Description	WT	Unit	Quantity
		PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLANTYPE A (WT: 16)	16	SY	226.000
0030 251E	E01001	PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLANTYPE B (WT: 16)	16	SY	149.000
0031 253E	E02001	PAVEMENT REPAIR, AS PER PLAN (WT: 16)	16	CY	8.000
0032 254E	E01000	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5" (WT: 13)	13	SY	37,714.000
0033 254E	E01000	PAVEMENT PLANING, ASPHALT CONCRETE, 3.0" (WT: 13)	13	SY	7,459.000
0034 407E	E20000	NON-TRACKING TACK COAT (WT: 10)	10	GAL	8,573.000
0035 424E	E12000	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B (WT: 10)	10	CY	1,711.000
0036 442E	E10000	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) (WT: 10)	10	CY	1,684.000
0037 442E		ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN, PG76-22M (WT: 10)	10	CY	652.000
0038 617E	E10100	COMPACTED AGGREGATE (WT: 06)	06	CY	146.000
0039 617E	E25000	WATER (WT: NR)	NR	MGAL	8.000
0040 897E	E01010	PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, 0.75" - 1.25" (WT: 13)	13	SY	48,583.000
0041 897E	E02000	PATCHING PLANED SURFACE (WT: 13)	13	SY	4,688.000
Section 0005	TRAFF	IC CONTROL			
Line Alt Item	m Code	Item Description	WT	Unit	Quantity
0042 621E	E00100	RPM (WT: 41)	41	EACH	900.000
0043 621E	E54000	RAISED PAVEMENT MARKER REMOVED (WT: NR)	NR	EACH	881.000
0044 626E	E00110	BARRIER REFLECTOR, TYPE 2BI-DIRECTIONAL (WT: NR)	NR	EACH	68.000
0045 630E	E02100	GROUND MOUNTED SUPPORT, NO. 2 POST (WT: 42)	42	FT	28.000
0046 630E	E03100	GROUND MOUNTED SUPPORT, NO. 3 POST (WT: 42)	42	FT	40.000
0047 630E	E79000	SIGN HANGER ASSEMBLY, SPAN WIRE (WT: 42)	42	EACH	2.000
0048 630E	E80100	SIGN, FLAT SHEET (WT: 42)	42	SF	4.000
0049 630E	E84900	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL (WT: NR)	NR	EACH	3.000
0050 630E	E86002	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL (WT: NR)	NR	EACH	3.000
0051 643E	E00720	CHEVRON MARKING (WT: 45)	45	FT	105.000
0052 644E	E00104	EDGE LINE, 6" (WT: 45)	45	MILE	5.320
0053 644E	E00204	LANE LINE, 6" (WT: 45)	45	MILE	2.930
0054 644E	E00300	CENTER LINE (WT: 45)	45	MILE	3.440

0055	644E00400	CHANNELIZING LINE, 8" (WT: 45)	45	FT	5,338.000
0056	644E00500	STOP LINE (WT: 45)	45	FT	566.000
0057	644E00600	CROSSWALK LINE (WT: 45)	45	FT	290.000
0058	644E00700	TRANSVERSE/DIAGONAL LINE (WT: 45)	45	FT	2,800.000
0059	644E01300	LANE ARROW (WT: 45)	45	EACH	46.000
0060	644E01410	WORD ON PAVEMENT, 96" (WT: 45)	45	EACH	3.000

Section 0006 TRAFFIC CONTROL ALTERNATES

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0061	AA1	646E10010	EDGE LINE, 6" (ALTERNATIVE 1) (WT: 45)	45	MILE	0.200
0062	AA1	646E10110	LANE LINE, 6" (ALTERNATIVE 1) (WT: 45)	45	MILE	0.120
0063	AA1	646E10200	CENTER LINE (ALTERNATIVE 1) (WT: 45)	45	MILE	0.100
0064	AA1	646E10300	CHANNELIZING LINE, 8" (ALTERNATIVE 1) (WT: 45)	45	FT	100.000
0065	AA1	646E10400	STOP LINE (ALTERNATIVE 1) (WT: 45)	45	FT	24.000
0066	AA1	646E10600	TRANSVERSE/DIAGONAL LINE (ALTERNATIVE 1) (WT: 45)	45	FT	83.000
0067	AA1	646E20300	LANE ARROW (ALTERNATIVE 1) (WT: 45)	45	EACH	1.000
0068	AA2	646E10010	EDGE LINE, 6"(POLYCARB MARK 55.4) (ALTERNATE 2) (WT: 45)	45	MILE	0.200
0069	AA2	646E10110	LANE LINE, 6"(POLYCARB MARK 55.4) (ALTERNATE 2) (WT: 45)	45	MILE	0.120
0070	AA2	646E10200	CENTER LINE(POLYCARB MARK 55.4) (ALTERNATE 2) (WT: 45)	45	MILE	0.100
0071	AA2	646E10300	CHANNELIZING LINE, 8"(POLYCARB MARK 55.4) (ALTERNATE 2) (WT: 45)	45	FT	100.000
0072	AA2	646E10400	STOP LINE(POLYCARB MARK 55.4) (ALTERNATE 2) (WT: 45)	45	FT	24.000
0073	AA2	646E10600	TRANSVERSE/DIAGONAL LINE(POLYCARB MARK 55.4) (ALTERNATE 2) (WT: 45)	45	FT	83.000
0074	AA2	646E20300	LANE ARROW(POLYCARB MARK 55.4) (ALTERNATE 2) (WT: 45)	45	EACH	1.000

Section 0007 TRAFFIC SIGNALS

Line	Alt	Item Code	Item Description	WT	Unit	Quantity
0075		632E05087	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE, AS PER PLAN, BLACK (WT: 44)	44	EACH	2.000
0076		632E90100	REMOVAL OF TRAFFIC SIGNAL INSTALLATION (WT: 44)	44	EACH	1.000
0077		632E90400	SIGNALIZATION, MISC.:ADJUST LOCATION OF VEHICULAR SIGNAL HEAD (WT: 44)	44	EACH	2.000
0078		632E90400	SIGNALIZATION, MISC.:REPROGRAM EXISTING RADAR SENSORS (WT: 44)	44	EACH	1.000

Section 00	008 MAIN	TENANCE OF TRAFFIC			
Line Alt	Item Code	Item Description	WT	Unit	Quantity
0079	614E11110	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE (WT: 39)	39	HOUR	36.000
0800	614E12461	WORK ZONE MARKING SIGN, AS PER PLAN (WT: 39)	39	EACH	10.000
0081	614E20560	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT (WT: 39)	39	MILE	3.400
0082	614E21550	WORK ZONE CENTER LINE, CLASS III, 642 PAINT (WT: 39)	39	MILE	3.910
0083	614E23680	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT (WT: 39)	39	FT	7,004.000
0084	614E26610	WORK ZONE STOP LINE, CLASS III, 642 PAINT (WT: 39)	39	FT	658.000
0085	614E27620	WORK ZONE CROSSWALK LINE, CLASS III, 642 PAINT (WT: 39)	39	FT	290.000
0086	614E30650	WORK ZONE ARROW, CLASS III, 642 PAINT (WT: 39)	39	EACH	59.000
Section 00	009 STRU	CTURE REPAIR (DEL-750-4.44 SFN:2104210)			
Line Alt	Item Code	Item Description	WT	Unit	Quantity
0087	512E10050	SEALING OF CONCRETE SURFACES (NON-EPOXY) (WT: 57)	57	SY	988.000
0088	516E31200	SPECIAL - SAWING AND SEALING BITUMINOUS CONCRETE JOINTS (WT: 29)	29	FT	117.000
0089	519E12200	PATCHING CONCRETE BRIDGE DECK - TYPE A (WT: 29)	29	SY	345.000
Section 00	010 STRU	CTURE REPAIR (DEL-750-6.46 SFN:2104237)			
Line Alt	Item Code	Item Description	WT	Unit	Quantity
0090	512E10050	SEALING OF CONCRETE SURFACES (NON-EPOXY) (WT: 57)	57	SY	2,580.000
0091	516E31200	SPECIAL - SAWING AND SEALING BITUMINOUS CONCRETE JOINTS (WT: 29)	29	FT	288.000
Section 00)11 INCID	ENTALS			
Line Alt	Item Code	Item Description	WT	Unit	Quantity
0092	100E00300	PREMIUM ON RAILROADS' PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE LIABILITY INSURANCE (WT: NR)	NR	LS	1.000
0093	103E05000	PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND (WT: NR)	NR	LS	1.000
0094	614E11000	MAINTAINING TRAFFIC (WT: 39)	39	LS	1.000
0095	623E10001	CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN (WT: NR)	NR	LS	1.000
0096	624E10000	MOBILIZATION (WT: NR)	NR	LS	1.000