

INFORMATIONAL PROPOSAL

(For information only, not to be used for bidding)

NEBRASKA DEPARTMENT OF TRANSPORTATION

LETTING DATE: May 21, 2019

LETTING TIME: 1:30 PM

CALL ORDER: 350
CONTROL NO. SEQ. NO.: 32320 000
TENTATIVE START DATE: 05/26/2019
LOCATION: N-12, NIOBRARA WEST BRIDGES
IN COUNTY: KNOX

CONTRACT ID: 3320X
PROJECT NO.: ER-12-5(122)
CONTRACT TIME: 706 Calendar Days

DBE GOAL: 2.00

BIDDER

GROUP 1	GRADING
GROUP 3	CONCRETE PAVEMENT
GROUP 4	CULVERTS
GROUP 5	SEEDING
GROUP 6	BRIDGE AT STATION 480+36.68
GROUP 6A	BRIDGE AT STATION 5478+62.22
GROUP 6B	BRIDGE AT STATION 500+94.36
GROUP 6C	BRIDGE AT STATION 476+52
GROUP 7	GUARDRAIL
GROUP 8	SPECIALTY
GROUP 10	GENERAL ITEMS



May 10 2019 DocuSign

NOTICE TO ALL BIDDERS

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.

LETTING QUESTIONS

Prior to the letting, any questions pertaining to the Special Provisions or the Plans for this project should be submitted to the following email: NDOT.EmergencyProjectQuestions@nebraska.gov. **Questions will not be answered verbally.**

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"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, national origin, age or disability. 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."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: 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 EEO policy and contractual responsibilities to provide EEO 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:

a. 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 EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO 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.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. 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 minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. 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, national origin, age or disability. 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 its 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 their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

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. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

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 employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 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 good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO 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, national origin, age or disability.

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 contracting agency 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 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, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. 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 contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours 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, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each 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 FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA- 1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally- assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI.CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or 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. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE
ACTION TO ENSURE EQUAL EMPLOYMENT
OPPORTUNITY
(EXECUTIVE ORDER 11246)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area are as follows:

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE

Economic Area	Goal %	Economic Area	Goal %
103 Sioux City, IA:		Non-SMSA Counties	5.3
SMSA Counties:		IA Adams, IA Audubon, IA Cass,	
7720 Sioux City, IA-NE	1.9	IA Fremont, IA Harrison, IA Mills,	
IA Woodbury, NE Dakota		IA Montgomery, IA Page, IA Shelby,	
Non-SMSA Counties	1.2	IA Taylor, NE Burt, NE Cass, NE Colfax,	
IA Cherokee, IA Crawford, IA Ida,		NE Dodge, NE Platte, NE Saunders,	
IA Monona, IA O'Brien, IA Plymouth,		NE Washington	
IA Sioux, NE Antelope, NE Cedar,		144 Grand Island, NE:	
NE Cumming, NE Dixon, NE Knox,		Non-SMSA Counties	1.4
NE Madison, NE Pierce, NE Stanton,		NE Adams, NE Arthur, NE Blaine,	
NE Thurston, NE Wayne, SD BonHomme,		NE Boone, NE Boyd, NE Brown,	
SD Clay, SD Union, SD Yankton		NE Buffalo, NE Chase, NE Cherry,	
142 Lincoln, NE:		NE Clay, NE Custer, NE Dawson,	
SMSA Counties:		NE Dundy, NE Franklin, NE Frontier,	
4360 Lincoln, NE	2.8	NE Furnas, NE Garfield, NE Gosper,	
NE Lancaster		NE Grant, NE Greeley, NE Hall, NE	
Non-SMSA Counties	1.9	Hamilton, NE Harlan, NE Hayes,	
NE Butler, NE Fillmore, NE Gage,		NE Hitchcock, NE Holt, NE Hooker,	
NE Jefferson, NE Johnson, NE Nemaha,		NE Howard, NE Kearney, NE Keith,	
NE Otoe, NE Pawnee, NE Polk, NE		NE Keya Paha, NE Lincoln, NE Logan,	
Richardson, NE Saline, NE Seward,		NE Loup, NE McPherson, NE Merrick,	
NE Thayer, NE York		NE Nance, NE Nuckolls, NE Perkins,	
143 Omaha, NE:		NE Phelps, NE Red Willow, NE Rock,	
SMSA Counties:		NE Sherman, NE Thomas, NE Valley,	
5920 Omaha, NE-IA	7.6	NE Webster, NE Wheeler	
IA Pottawattamie, NE Douglas,		145 Scottsbluff, NE:	
NE Sarpy		Non-SMSA Counties	5.3
		NE Banner, NE Box Butte, NE Chey-	
		enne, NE Dawes, NE Deuel, NE	
		Garden, NE Kimball, NE Morrill,	
		NE Scotts Bluff, NE Sheridan, NE	
		Sioux, WY Goshen	

GOALS AND TIMETABLES FOR FEMALE PARTICIPATION IN EACH TRADE

Timetables	Goals (Percent)
From April 1, 1980 until further notice	6.9

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. 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 women evenly 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 Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs 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.
4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is by county.

November 3, 1980

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS
(EXECUTIVE ORDER 11246)**

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice, which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its action. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the

work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Supplemental Reporting Requirements

- 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 the number of minority and non-minority group members and women employed in each work classification on the project.
- 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 Contractor and each covered subcontractor will submit to the State Highway agency, for the month of July, for the duration of the project, a report (Form PR-1391) "Federal-aid Highway Construction Contractors Annual EEO Report), indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. If on-the-job training is being required by "Standard Federal Equal Employment Opportunity Specifications" the contractor will be required to furnish (Form FHWA 1409) "Federal-aid Highway Construction Contractor's Semi-Annual Training Report".

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, preapprenticeship, and/or on-the-job training.

General Decision Number: NE190033 01/04/2019 NE33

Superseded General Decision Number: NE20180033

State: Nebraska

Construction Type: Highway

Counties: Antelope, Boone, Boyd, Brown, Burt, Cedar, Colfax, Cuming, Dodge, Holt, Keya Paha, Knox, Madison, Pierce, Platte, Rock, Stanton, Thurston and Wayne Counties in Nebraska.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/04/2019

* ENGI0571-005 01/01/2013

	Rates	Fringes
OPERATOR: Trencher.....	\$ 20.83	9.60

* SUNE2011-029 08/29/2011

	Rates	Fringes
CARPENTER (Excludes Form Work)...	\$ 16.39	

CEMENT MASON/CONCRETE FINISHER...\$ 13.91

ELECTRICIAN.....\$ 20.14

FORM WORKER.....\$ 9.98

IRONWORKER, REINFORCING.....\$ 17.93

LABORER (FLAGGER &
CONE/BARREL SETTER)

Antelope County.....\$ 10.37

Boone, Boyd, Burt, Colfax,
Cuming, Holt, Pierce,
Platte, Rock, Stanton,
Thurston.....\$ 9.96

Brown, Keya Paha Counties...\$ 9.47

Cedar County.....\$ 9.75

Dodge County.....\$ 10.03

Knox County.....\$ 10.91

Madison County.....\$ 9.03

Wayne County.....\$ 9.22

LABORER (LANDSCAPE &
IRRIGATION).....\$ 8.30

LABORER: (COMMON OR GENERAL)

Antelope County.....\$ 11.31

Boone, Boyd, Burt, Colfax,
Cuming, Holt, Pierce,
Platte, Rock, Stanton, &
Thurston Counties.....\$ 10.79

Brown, Keya Paha Counties...\$ 11.82

Cedar County.....\$ 10.54

Dodge County.....\$ 10.63

Knox County.....\$ 10.47

Madison County.....\$ 11.73

Wayne County.....\$ 9.71

LABORER: Mason Tender
(Cement/Concrete).....\$ 9.75

Operating Engineers: (Skid
Loader).....\$ 11.79

OPERATOR:

Backhoe/Excavator/Trackhoe

Antelope, Boone, Boyd,
Burt, Colfax, Cuming,
Dodge, Hold, Madison,
Pierce, Platte, Rock,
Stanton, Thurston, Wayne
Counties.....\$ 15.83

Brown, Keya Paha Counties...\$ 18.39

Cedar County.....\$ 15.28

Knox County.....\$ 12.55

OPERATOR: Bulldozer.....\$ 16.21

OPERATOR: Compactor.....\$ 10.76

OPERATOR: Crane.....\$ 16.17

OPERATOR: Distributor.....\$ 14.37

OPERATOR: Loader
 Antelope, Boone, Boyd,
 Burt, Colfax, Cuming,
 Dodge, Holt, Knox,
 Madison, Pierce, Platte,
 Rock, Stanton, Thurston,
 Wayne Counties.....\$ 13.21
 Brown, Keya Paha Counties...\$ 11.95
 Cedar County.....\$ 12.10

OPERATOR: Scraper.....\$ 12.40

OPERATOR: Screed
 Antelope County.....\$ 13.30
 Boone, Boyd, Burt, Cedar,
 Colfax, Cuming, Dodge,
 Hold, Knox, Madison,
 Pierce, Platte, Rock,
 Stanton, Thurston, Wayne
 Counties.....\$ 12.60
 Brown, Keya Paha Counties...\$ 11.37

OPERATOR: Tractor
 Antelope, Boone, Boyd,
 Burt, Cedar, Colfax,
 Cuming, Dodge, Holt, Knox,
 Madison, Pierce, Platte,
 Rock, Stanton, Thurston,
 Wayne Counties.....\$ 11.97
 Brown, Keya Paha Counties...\$ 9.50

OPERATOR: Broom/Sweeper
 Antelope County.....\$ 11.82
 Boone, Boyd, Brown, Burt,
 Colfax, Cuming, Dodge,
 Holt, Keya Paha, Knox,
 Madison, Pierce, Platte,
 Rock, Stanton, Thurston,
 Wayne Counties.....\$ 11.62
 Cedar County.....\$ 12.97

OPERATOR: Grader/Blade
 Antelope, Boone, Boyd,
 Brown, Burt, Cedar,
 Colfax, Cuming, Dodge,
 Holt, Knox, Madison,
 Pierce, Platte, Rock,
 Stanton, Thurston, Wagne
 Coutneis.....\$ 16.26
 Madison County.....\$ 15.56

OPERATOR: Paver

Antelope County.....\$ 13.55
 Boone, Boyd, Brown, Burt,
 Colfax, Cuming, Dodge,
 Hold, Keya Paha, Knox,
 Madison, Pierce, Platte,
 Rock, Stanton, Thurston
 Counties.....\$ 14.76
 Cedar County.....\$ 15.05
 Wayne County.....\$ 12.45

OPERATOR: Roller

Antelope County.....\$ 13.68
 Boone, Boyd, Burt, Colfax,
 Cuming, Dodge, Holt, Knox,
 Madison, Pierce, Platte,
 Rock, Stanton, Thurston
 Counties.....\$ 13.72
 Brown, Keya Paha Counties...\$ 11.39
 Cedar County.....\$ 15.00
 Wayne County.....\$ 11.96

POWER EQUIPMENT OPERATOR:

(Asphalt Plant).....\$ 14.09

POWER EQUIPMENT OPERATOR:

(Backhoe Loader Combo).....\$ 13.58

POWER EQUIPMENT OPERATOR:

(Concrete Texture Cure
 Machine).....\$ 11.11

POWER EQUIPMENT OPERATOR:

(Mechanic)
 Antelope County.....\$ 15.22
 Boone, Boyd, Burt, Cedar,
 Colfax, Cuming, Dodge,
 Holt, Knox, Madison,
 Pierce, Platte, Rock,
 Stanton, Thurston, Wayne
 Counties.....\$ 14.26
 Brown, Keya Paha Counties...\$ 13.95

TRUCK DRIVER, Includes Dump
 and Tandem Truck

Antelope County.....\$ 15.55
 Boone, Boyd, Brown, Burt,
 Colfax, Cuming, Holt, Keya
 Paha, Knox, Madison,
 Pierce, Platte, Rock,
 Stanton, Thurston, Wayne
 Counties.....\$ 14.12
 Cedar County.....\$ 14.55
 Dodge County.....\$ 14.02

TRUCK DRIVER: Lowboy Truck.....\$ 10.85

TRUCK DRIVER: Oil
Distributor Truck.....\$ 13.25

TRUCK DRIVER: Semi-Trailer
Truck
Antelope, Boone, Boyd,
Burt, Colfax, Cuming,
Dodge, Holt, Knox,
Madison, Pierce, Platte,
Rock, Stanton, Thurston
Counties.....\$ 12.66
Brown, Keya Paha Counties...\$ 11.25
Cedar County.....\$ 12.63
Wayne County.....\$ 11.69

TRUCK DRIVER: Water Truck.....\$ 15.68

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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 from 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 Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 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, DC 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 requestor 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, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

**NOTICE TO BIDDERS
(1-50-0618)**

Executive Order (EO) 13658 and Executive Order (EO) 13706 do not apply to this contract.

**SPECIAL PROVISIONS
FOR
FEDERAL AID
PROJECT NO. ER-12-5(122)**

GENERAL CONDITIONS FOR EMERGENCY WORK

Bids for the work contemplated in this proposal form will be received by the Nebraska Department of Transportation on May 21, 2019, until 1:30 P.M.

- a. Plans, Bidding Files and all other project information can be found at:
<https://negov.sharefile.com/f/foabc32a-05c5-4dcd-a183-53397cf1f981>
- b. Signed and Notarized bids shall be submitted via email to:
NDOT.electronicbids@nebraska.gov
or
mailed or delivered, in a Department provided envelope to:

NDOT Construction Division/Contracts Section
1500 Highway 2
Lincoln, NE 68502

The 2017 Edition of the Standard Specifications for Highway Construction, including all amendments and additions thereto effective at the date of the contract, are made a part of these Special Provisions, through reference.

The Required Contract Provisions, Form FHWA 1273, (Rev. 5-12), and the Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity and Standard Federal Equal Employment Opportunity Construction Contract Specifications dated November 3, 1980, are attached to and are a part of this proposal form. The Standard Labor Classifications and Descriptions for Highway Construction dated September 1, 1996, are made a part of these Special Provisions, through reference.

The General Wage Decision issued under the Davis-Bacon and Related Acts is attached to and is a part of this proposal form.

The attention of bidders is directed to the Required Contract Provisions covering subletting or assigning the contract.

GROUPS 1, 3, 4, 5, 6, 6A, 6B, 6C, 7, 8 & 10 ARE TIED TOGETHER FOR THE PURPOSE OF BIDDING AN AWARD.

**DISADVANTAGED BUSINESS ENTERPRISES
(1-6-1217)**

A. Policy

The Contractor agrees to ensure that Disadvantaged Business Enterprises as defined in 49 CFR Part 26 shall have a “level playing field” and equal opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this contract. Consequently, the Disadvantaged Business requirements of 49 CFR Part 26 are hereby made a part of and incorporated by this reference into this contract.

B. Disadvantaged Business Enterprises Obligation

The Contractor agrees to ensure that Disadvantaged Business Enterprises as defined in 49 CFR Part 26 have a “level playing field” and equal opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, the Contractor shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 to ensure that Disadvantaged Business Enterprises have a “level playing field” and equal opportunity to compete for and perform contracts. The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of FHWA assisted contracts.

Failure of the Contractor to carry out the requirements set forth above shall constitute breach of contract and, after the notification of the FHWA, may result in termination of the agreement or contract by the State or such remedy as the State deems appropriate.

**DISADVANTAGED BUSINESS ENTERPRISES
(Prime Contractor Reporting of DBE Payments)
(1-6-1217)**

This project is funded with Federal Funds and NDOT is required by law to collect DBE payment data from the Contractor. The Prime Contractor shall complete the *DBE Total Paid To Date* portion on the Monthly Employment Report. This report can be found by using the “Contractor Reports” link at www.nebraskatransportation.org/letting/index.htm. All reports must be completed by the Prime Contractor no later than the 10th day of the following month. No estimates/invoices will be processed until this information is received.

USE OF DISADVANTAGED BUSINESS ENTERPRISES (1-7-1217)

- I. INTRODUCTION: The specific requirements of the use of Disadvantaged Business Enterprises, hereinafter referred to as DBEs, are set forth in these Required Contract Provisions and are imposed pursuant to the *Code of Federal Regulations, Title 49, Part 26 and the Nebraska Department of Transportation's Disadvantaged Business Enterprise (DBE) Program*, which are hereby made a part of and incorporated by this reference into this proposal. Copies of these documents are available, upon request, from the Nebraska Department of Transportation, Disadvantaged Business Enterprise Office, P.O. Box 94759, Lincoln, Nebraska 68509-4759.
- A. Definitions:
1. Whenever "NDOT" is used within these special provisions it shall refer to the Nebraska Department of Transportation.
 2. Whenever "DOT" is used within these special provisions, it shall refer to the United States Department of Transportation.
 3. For the purpose of these special provisions, the following definitions will apply:
 - a. Disadvantaged Business Enterprise (DBE) means a for profit small business concern, as defined pursuant to Section 3 of the Small Business Act and Small Business Administration regulations implementing it, which is independently owned and controlled by one or more socially and economically disadvantaged individuals.
 - b. Owned and controlled means a business:
 - (1) Which is at least 51 percent (51%) owned by one or more socially and economically disadvantaged individuals or women, or, in the case of a public owned business, such individuals must own at least 51 percent (51%) of each class of voting stock and 51 percent of the aggregate of all stock outstanding.
 - (2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged owners.
 - c. Socially and economically disadvantaged individual means a person who is a citizen (or lawful permanent resident) of the United States, and who is:
 - (1) "African American," which includes persons having origins in any of the Black racial groups of Africa;

- (2) "Hispanic American," which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
- (3) "Native American," which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
- (4) "Asian-Pacific American," which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;
- (5) "Subcontinent Asian American," which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
- (6) A Woman;
- (7) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

II. DBE CONTRACT GOALS:

- A. DBE goals are set by the NDOT for specific contracts. The specific DBE contract goals are stated on the Required DBE Participation Form included in the proposal. The Contractor must meet or exceed the goal or demonstrate good faith efforts to meet the goal. Requirements for submission of DBE good faith effort information are contained in Section IV of these special provisions.
- B. A current list of certified DBE firms will be posted on the NDOT website (www.dot.nebraska.gov). Only the DBE firms whose names appear on the list will be considered in meeting the contract goal for this project. The DBE firms will be considered only for the items of work listed under the heading, "Nature of Business." DBE firms may request to have additional items of work added to their "Nature of Business," however, no items of work will be added after 5:00 p.m., ten (10) calendar days preceding the letting.
- C. Contractors shall, as a minimum, seek DBE subcontractors in the same geographic area in which they seek subcontractors generally for a given solicitation. If the Contractor cannot meet the DBE goals using DBEs from the normal area, the Contractor will expand its search to a reasonably greater geographic area.

- D. Contractors are required to make good faith efforts to replace a DBE subcontractor that is unable to perform with another DBE. In order to ensure compliance with this requirement, any substitution of DBE subcontractors after execution of the contract must be approved by the NDOT.
 - E. Contractors are also encouraged to use the services of banks owned and controlled by minorities and women; however, this will not be counted toward the contract DBE goal.
- III. MEETING DBE CONTRACT GOAL CRITERIA: The award of the contract will be made upon satisfaction of the requirements of these special provisions. The apparent low bidder must either meet or exceed the DBE goals for the contract or satisfy the NDOT that good faith efforts were made to meet the goals.
- A. REQUIRED DBE PARTICIPATION INFORMATION: All bidders are required to submit to the NDOT the "Required DBE Participation Form" with their bid proposal on the form provided in this proposal.
 - B. THE REQUIRED DBE PARTICIPATION FORM SHALL INCLUDE:
 - 1. The names and addresses of the DBE subcontractors that will actually participate in meeting the contract goal.
 - 2. A complete description (by item number or group, etc.) of the work each named DBE subcontractor will perform.
 - 3. The dollar amount of participation by each named DBE subcontractor.
 - 4. Written and signed documentation from the bidder of commitment to use a DBE subcontractor whose participation it submits to meet a contract goal.
 - 5. The apparent low bidder must submit written and signed confirmation from each DBE that it is participating in the contract as provided in the Prime Contractor's commitment, by 5:00 p.m. on the fifth (5th) calendar day following the letting.
 - 6. If the contract goal is not met, evidence of good faith efforts.
 - C. The proposal will not be read if the "Required DBE Participation Form" is not included.
- If no DBE participation is intended, the form must indicate that good faith effort documentation will be submitted. A blank form that is signed will be interpreted as meaning no DBE participation is intended and will be read.
- Listing options and/or alternates for DBE subcontractors and/or items or groups of work to be performed is not allowed, and will cause this bid to be declared non-responsive.
- Required DBE information shall not be subject to revision after bids are opened.

- D. The information submitted on the DBE Participation Form will be verified by the NDOT. Errors in addition will be treated in accordance with current NDOT specifications and procedures.
- E. If the use of non-certified firms or the use of DBE firms not certified for the type of work indicated results in under achievement of the goal, the bid will be declared non-responsive.
- F. If, at any time prior to execution of the contract, previously undetected errors (such as mathematical errors) result in under-achievement of the goal, the low bidder, along with the other bidders on the project, will be given 5 days from receipt of notification by the NDOT to submit good faith information as outlined in Section IV of these specifications.

The use of firms not certified as DBEs by NDOT, or the use of DBE firms that are not certified for the type of work indicated by the bidder, are not considered previously undetected errors.

- G. REQUIRED SUBCONTRACTOR/SUPPLIER QUOTATIONS LIST: All bidders must provide to the NDOT the identity of all firms who provided quotations on DOT-assisted projects, including both DBEs and non-DBEs.

If no quotations were received, the bidder must indicate this in the space provided.

Each bidder will be required to submit one list per letting to cover all projects bid.

- IV. **GOOD FAITH DETERMINATION:** It is the low bidder's responsibility to meet the DBE contract goals or to provide sufficient information to enable the NDOT to determine that, prior to bidding, the low bidder actually made good faith efforts to meet such goals.
 - A. The NDOT will, in the "Apparent Low Bidder" listing (available 24 hours after bid opening) identify all projects, which contain a DBE goal. The listing will indicate the apparent low bidder's status in attaining the goal, i.e., "Contractor Meets DBE Goal," or "Contractor Requires Good Faith Determination."
 - B. If the low bidder's "Required DBE Participation Form" submitted with the bid indicates the DBE contract goal will be met, and the NDOT concurs, the contract will proceed toward award and the low bidder need not submit any further DBE information prior to award.
 - C. **Good Faith Information Submittal:** If the contract DBE goals have not been met, the "Apparent Low Bidders" listing will reflect that the apparent low bidder is required to submit good faith effort information. Complete and accurate documented information to support a good faith efforts determination must be submitted by 5:00 p.m. on the fifth (5th) day following the letting.
 - D. Any other bidder on the contract who requires a good faith effort submittal must also follow the time frames set forth in "C" above if they wish to be considered for award of the contract. Any bidder who does not meet the submittal deadlines, will not be eligible for award of the contract. (The only exception is a case where the apparent low bidder who met the goal initially is declared ineligible for the

award for reasons other than DBE goal attainment.) If this results in a new apparent low bidder who did not initially meet the goal, all other bidders on the contract indicating good faith effort will be notified, and given 5 days after receipt, to submit complete information to support their good faith efforts. Bidders are cautioned by the NDOT to retain documentation of their good faith efforts until an award is made, or all bids are rejected.

- E. The NDOT will review all information submitted to determine whether the apparent low bidder actually made good faith efforts to meet the contract goal. The decision as to whether the good faith efforts are acceptable will be made jointly by a committee comprised of the NDOT Highway Civil Rights Coordinator, the Contracts Letting Manager, and an at-large NDOT staff member appointed by the Director.

A NDOT determination that the low bidder's information failed to show acceptable good faith efforts shall be cause for declaring the low bid non-responsive. In making a determination, information submitted by other bidders will be considered. If the low bid is declared non-responsive, the above procedure will be applied to the next lowest bid, and other higher bids if necessary, until a bid is found that meets the goal, or establishes that good faith efforts were made to meet it. NDOT reserves the right to reject all bids and readvertise the contract if none of the bids result in a satisfactory level of DBE participation at a reasonable price.

- F. Establishing Good Faith Efforts: To demonstrate good faith efforts to meet the DBE contract goals, documentation shall be maintained and submitted to the NDOT as set forth above. Such documentation may include any or all of the following: This list is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
1. Soliciting through all reasonable and available means (e.g., attendance at pre-bid meetings, advertising and/or written notices) the interest of all Certified DBE firms that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE firms to respond to the solicitation. The bidder must determine with certainty if the DBE firms are interested, by taking steps to follow up initial solicitations.
 2. Selecting portions of the work to be performed by DBE firms in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Prime Contractor might otherwise prefer to perform work items with its own workforce.
 3. Providing interested DBE firms with adequate information about the plans, specifications and requirements of the contract in a timely manner to assist them in responding to a solicitation.

4. (1) Negotiating in good faith with interested DBE firms. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers, and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation should include the names, addresses, and telephone numbers of DBE firms that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE firms to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE firms, is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a Prime Contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime Contractors are not, however, required to accept higher quotes from DBE firms if the price difference is excessive or unreasonable.
 5. Not rejecting DBE firms as being unqualified without sound reasons based on a thorough investigation of their capabilities. The Contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection, or non-solicitation of bids in the Contractor's efforts to meet the project DBE goal.
 6. Making efforts to assist interested DBE firms in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
 7. Making efforts to assist interested DBE firms in obtaining necessary equipment, supplies, materials, or related assistance or services.
 8. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- G. If the NDOT's preliminary finding is that the bidder did not demonstrate a satisfactory effort to meet the contract goal, the bidder may appeal the decision by submitting a written request for reconsideration within three (3) days of the decision. The bidder may then present information either in a written narrative supporting its good faith effort submittal, or may appear in person. Any new information not included in the original submittal will not be used in the final

determination. The appeal will be heard by a Hearing Officer appointed by the NDOT Director. The Hearing Officer will be an individual who is knowledgeable about the DBE Program and its good faith efforts provision, but who had no part in the initial decision.

The Hearing Officer will hear the appeal within five (5) days of receipt of the written request, and will issue a written decision within three (3) days after the appeal. The reconsideration process is administratively final and has no further appeal.

V. COMMERCIALLY USEFUL FUNCTION:

- A. A Contractor may count toward its DBE goals only expenditures to DBE firms that perform a Commercially Useful Function (CUF) in the work of a contract. A DBE firm is considered to perform a CUF when it is responsible for the execution of a distinct element of the work of a contract, and carrying out its responsibilities by actually performing, managing, and supervising the work involved. The DBE firm must also be responsible for materials and supplies used by the DBE firm on the contract, for negotiating price, determining quality and quantity, ordering the material, installing (where applicable), and paying for the material.
- B. A DBE Supplier may be considered to perform a CUF if the products or material (other than bulk items: petroleum products, steel, cement, gravel, stone, asphalt) the DBE supplies for a contract are typically kept in stock in a store, warehouse or other establishment maintained by the DBE and regularly sold to the public. The DBE Supplier must be responsible for identifying the specific products or material to be supplied determining price and quantity, and arranging delivery. The DBE Supplier must be paid directly by the Contractor for products or material supplied unless the Contractor and the DBE have provided the NDOT a signed agreement as set forth in "DBE Goal Credit, paragraph C" of these Required Contract Provisions.

Guidelines:

- 1. As a general rule, it is expected that workers on a DBE subcontract shall be regular employees of the DBE subcontractor, and shall be listed on the subcontractor's payroll. A regular employee is a person who would normally be working for the DBE firm on any other subcontract with any other Prime Contractor, and whose immediate past employment has not been with the Prime Contractor on the present project, or with the renter-lessor of equipment being used on the present project.
- 2. On DBE subcontracts, the DBE must perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or the DBE will not be considered to be performing a Commercially Useful Function. (If a DBE subcontracts part of its work to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.)

Operators of leased specialized equipment are included under this provision. In any case, all employees shall be listed on the DBE firm's payroll and paid by that firm.

3. In addition, a DBE subcontractor shall be required to designate a project superintendent/foreman who is a regular employee of the subcontractor, and who shall be active in the day-to-day management of the project.
4. If a DBE subcontractor purchases supplies and/or materials from the Prime Contractor, which are to be incorporated into the project, the supplies and/or materials will not count toward the established DBE contract goals.
5. TWO PARTY CHECKS: The NDOT does not totally prohibit a DBE firm and a Prime Contractor from using two-party checks to pay for material and/or supplies under certain circumstances, so long as the Prime Contractor acts solely as a guarantor and the funds do not come from the Prime Contractor. Two-party checks cannot be used unless formal written requests to do so from the DBE firm and the Prime Contractor are delivered to the NDOT DBE Office and written approval is given. If this provision is not strictly followed, the Prime Contractor will not be allowed credit for the cost of the material and/or supplies toward the DBE contract goal commitment. The NDOT will closely monitor the use of two-party checks to avoid abuse of this practice.

A DBE does not perform a Commercially Useful Function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, you must examine similar transactions, particularly those in which DBEs do not participate.

When a Prime Contractor commits to use material and/or supplies provided by a DBE Supplier to meet a DBE contract goal, the DBE Supplier must pay for the material and/or supplies without the use of two-party checks or the cost of the material and/or supplies will not be counted toward the Prime Contractor meeting the contract goal. The only exception to this policy might be if unanticipated circumstances prevent the DBE Supplier from being able to pay for a portion of the material and/or supplies and the use of two-party checks is the only viable alternative. The NDOT DBE Office will make the final determination on allowing the use of two-party checks in all such circumstances.

VI. PROHIBITED PRACTICES:

- A. An area of special concern is exclusive arrangements between the Prime Contractor and DBE subcontractors. The DBE subcontractors must be willing to contract with more than one Prime Contractor.
- B. Any subcontracting arrangement which artificially inflates DBE participation is not acceptable. Of utmost concern are the interjection of DBE middlemen or passive conduits and arrangements in which a DBE subcontractor is acting essentially as a broker.

VII. ADMINISTRATION OF THE DBE PROGRAM:

- A. The NDOT intends to achieve its annual overall DBE participation goal with a “narrowly tailored” DBE Program that meets the “strict scrutiny” requirements as defined by case law. The NDOT will adhere to all of the rules and regulations of the DOT’s DBE Program Regulations as contained in 49 CFR Part 26.

It is the intention of the NDOT that DBE subcontractors be independent companies, and function in the same capacity as majority Contractors. It is not the intention of the NDOT to be involved with "in name only" DBE subcontractors who are not providing a Commercially Useful Function to the highway industry. The following will be used in administering the DBE Program.

Situation #1:

Prime Contractor “A” subcontracts to a DBE subcontractor, who performs the work with its own workforce (the employees work on a full-time basis for the DBE firm, or were hired from a union hall, employment service, or other hiring sources by the DBE firm, and are supervised by a full-time employee of the DBE), and uses its own equipment, or equipment rented or leased from an equipment dealer. Prime Contractor “A” is not involved in the DBE firm’s operation, other than coordinating when the work is to be performed, and/or other normal industry practices of contracts between a Prime Contractor and a subcontractor.

This is the ideal situation, is totally acceptable, and is within the intent of the DBE Program.

Situation #2:

Prime Contractor “A” subcontracts to a DBE firm, that performs the work with its own workforce, (the employees work on a full-time basis for the DBE firm, or were hired from a union hall, employment service, or other sources by the DBE firm for the project, and are supervised by a full-time employee of the DBE). The DBE firm uses equipment owned by a majority Contractor, (other than Prime Contractor “A”), on a long-term rent or lease arrangement at rates consistent with normal industry standards, and not leased on an “as equipment is needed” basis. This situation would be no different than the DBE firm leasing or renting equipment from a commercial equipment supplier.

This is totally acceptable, and is within the intent of the DBE Program.

Situation #3:

A DBE firm is a subcontractor to Prime Contractor "A." When it is time for the subcontract work to be performed, the work is actually performed using Prime Contractor "A's" equipment, work force, and supervisory personnel. The DBE firm then makes a certified payroll using the names of Prime Contractor "A's" employees. Basically, the subcontract work was performed by Prime Contractor “A.” This is a very close association with the Prime Contractor, and the DBE’s owner is not considered to be in control of the DBE firm, or the project in question.

This situation described is not considered to be a Commercially Useful Function, and may be subject to any of the administrative actions as cited in Section VIII, C. below.

Situation #4:

A DBE firm is a subcontractor to Prime Contractor "A." When it is time for the subcontract work to be performed, the work is actually done using the workforce, equipment, and supervisory personnel of a majority Contractor, Contractor "B." The DBE firm makes a certified payroll showing Contractor "B's" employees. This condition is not considered to be within the intent of the DBE Program. In reality, majority Contractor "B" is the one that performed the work. The NDOT does not consider this to be a Commercially Useful Function, as Prime Contractor "A" is actually subcontracting to majority Contractor "B," in an unapproved status, rather than the DBE firm.

This situation described is not considered to be a Commercially Useful Function, and may be subject to any of the administrative actions as cited in Section VIII, C. below.

Situation #5:

Prime Contractor "A" is buying supplies from a DBE Supplier to fulfill the DBE goal. This is only acceptable if the DBE firm is a true supplier. The mere fact that the DBE firm purchases the products or material (other than bulk items: petroleum products, steel, cement, gravel, stone, asphalt) from another supplier or manufacturer, then adds some cost and sells the material to a Prime Contractor, does not constitute the DBE as being a supplier. A DBE Supplier must maintain a place of business with an inventory and be generally recognized as a material supplier.

The above situations are very broad and general. While it is known that many different situations may arise, these are basic guidelines used to administer the DBE Program.

The NDOT is more than willing to discuss particular situations with either DBE firms or Prime Contractors prior to a letting in the hope of developing DBE firms.

VIII. INVESTIGATORY POWERS, ADMINISTRATIVE PROCEDURES FOR ENFORCEMENT AND PENALTIES

A. INVESTIGATORY POWERS:

1. The NDOT specifically reserves the right and power to investigate, monitor and/or review all actions taken, statements made, documents submitted, by any Contractor, subcontractor or DBE firm under the terms of these provisions.

B. ADMINISTRATIVE PROCEDURES FOR ENFORCEMENT:

Whenever the NDOT believes a Contractor, subcontractor or DBE firm may not be operating in compliance with the terms of these provisions, the NDOT will conduct an investigation. If the NDOT finds any person or entity not in compliance with these provisions, the NDOT will notify such person or entity in writing as to the specific instances or matters found to be in non-compliance. At the option of the NDOT, the person or entity shall then be allowed a reasonable time to correct any deficiencies noted, and to come into compliance. In the event that the person or entity cannot, thereafter, come into compliance, or fails or refuses to do so, then the NDOT may impose one or more of the penalties

hereafter provided for. It is specifically provided by the NDOT that any person or entity will be found to be out of compliance with these provisions if an investigation reveals any violation or act of such serious or compelling nature that the violation or act indicates a serious lack of business integrity or honesty.

C. PENALTIES:

1. In the event the NDOT finds any Contractor, subcontractor, or DBE firm, to be out of compliance with these provisions, the NDOT may impose one or more of the following sanctions:
 - a. Termination of the contract.
 - b. The DBE firm may be decertified and/or suspended from participating in the NDOT DBE Program.
 - c. The Prime Contractor may not be able to count the work performed toward his project DBE goal, and if possible to do so, may need to subcontract other work on the project to DBE subcontractors to achieve the goal.
 - d. The contract items involved may be considered for a monetary reduction equal to the amount of work not done by the DBE subcontractor.
 - e. The Prime Contractor may be suspended and/or debarred.
 - f. If at any time during the life of the contract, it is determined that the Contractor is out of compliance with these provisions, the NDOT may withhold payment of progress payments.
 - g. If at the completion of the project, the Contractor is determined to be out of compliance, the NDOT may sustain damages, the exact extent of which would be difficult or impossible to ascertain and, therefore, in order to liquidate such damages, the monetary difference between the amount stated by the Contractor and the amount actually paid to the DBEs will be deducted from the Contractor's payment as liquidated damages. These damages would be in addition to any liquidated damages assessed in accordance with Subsection 108.08 of the Standard Specifications.
 - h. Referral to the Attorney General for possible prosecution for fraud.
 - i. Other action as appropriate, within the discretion of the NDOT.

**DISADVANTAGED BUSINESS ENTERPRISE (DBE) GOAL
(1-7-1217)**

All bidders shall submit written assurance that the minimum goal for Disadvantaged Business Enterprise (DBE) participation will be met. The required DBE Participation Form included in this proposal shall be used. The bidder shall submit the name and address of the DBE(s), a complete description of the participation by the DBE(s), and the dollar value of the participation. If the bidder cannot meet the minimum goal for DBE participation, as specified herein, the bidder shall submit complete documentation of its efforts, following the time limits set forth in IV. A., "Good Faith Information Submittal." These efforts shall include but not be limited to those stated previously in IV. E., "Establishing Good Faith Efforts."

Bidders that fail to meet DBE goals or fail to demonstrate sufficient good faith efforts shall be declared non-responsive and ineligible for award of the contract.

Bidders shall assume the responsibility of determining if they are the apparent low bidders by contacting the Nebraska Department of Transportation's Contract Lettings Section in Lincoln, Nebraska. Such information is made public 24 hours after the announced time for opening bids. This information is available from the NDOT Internet web site (<http://www.dot.nebraska.gov/>).

The contract shall be awarded to the lowest responsive responsible bidder.

The standard NDOT procedure concerning subcontractors and suppliers shall apply.

The DBE firms identified at the time of bid opening are the firms to whom subcontracts will be issued. The work subcontracted to be done, and the amount to be paid for the work, shall be as identified at the time of bid opening.

If the Prime Contractor desires to alter this list after execution of the contract, it must demonstrate to the NDOT that the listed DBE firm(s) is unable to perform, and provide the necessary written justification for approval. Justification must also include written documentation from the affected DBE firm(s) stating their position on the Prime Contractor's request. There must be a solid basis for any change.

Any substitution of the named DBE firms must be approved by the Department of Transportation's Disadvantaged Business Enterprise Office. Substitution of DBE's will only be allowed when the DBE firm(s) is not able to perform because of default or over-extension on other jobs or other similar justification. A Prime Contractor's ability to negotiate a more advantageous contract with another subcontractor is not considered as a valid basis for change.

VERIFICATION OF DBE GOAL COMMITMENTS

In order to verify achievement of the DBE commitments on each project, the following forms must be completed and submitted to the NDOT DBE Office.

- A. NDOT Form 441, DBE I. This form shall be filled out and submitted by the Prime Contractor, indicating the DBE firms used, actual work performed, the total amount of money paid to the DBE firms, and the date on which it was paid.

- B. NDOT Form 442, DBE II. This form shall be filled out and submitted by the DBE subcontractor, indicating the name of the DBE firm, actual work performed, the total amount of money received from the Prime Contractor, and the date on which it was received.
- C. The above referenced forms will be sent out by the DBE Office when notification of the project completion has been received. The forms are also available on NDOT's website, www.dot.nebraska.gov.

SUBLETTING OR ASSIGNING OF CONTRACT (1-7-1217)

Prior to beginning work, a copy of all executed subcontracts, written agreements and/or lease agreements used to meet DBE goals shall be submitted to the Construction Engineer for forwarding to the NDOT DBE office. These copies must contain prices.

PROMPT PAYMENT CLAUSE:

The Prime Contractor shall include a "Prompt Payment Clause" as a part of every subcontract (including second tier subcontracts) for work and material. The "Prompt Payment Clause" will require payment to all subcontractors for all labor and material, for work completed, within twenty (20) calendar days of receipt of progress payments from the NDOT for said work. The "Prompt Payment Clause" will also stipulate the return of retainage within thirty (30) calendar days after the subcontractor achieves the specified work as verified by payment from the NDOT.

The failure by the Prime Contractor to carry out the requirements of the "Prompt Payment Clause" and/or timely return of retainage, without just cause, is a material breach of this contract, which may result in the NDOT withholding payment from the Prime Contractor until all delinquent payments have been made (no interest will be paid for the period that payment was withheld), termination of this contract, or other such remedy as the NDOT deems appropriate.

NOTE: The Prime Contractor may withhold payment only for just cause, and must notify the NDOT in writing of its intent to withhold payment prior to actually withholding payment. The Prime Contractor shall not withhold, delay or postpone payment without first receiving written approval from the NDOT.

DBE GOAL CREDIT (1-7-1217)

It is the intent of the NDOT to assure eligible DBE firms have a "level playing field" and equal opportunity to participate in federal-aid contracts, and maintain the integrity of the DBE Program. DBE participation is counted toward goals as follows:

When a DBE firm participates in a contract, only the value of the work actually performed by the DBE firm counts toward the goal.

- A. The entire amount of that portion of a construction contract that is performed by the DBE firm's own forces is counted toward the goal. This includes the cost of supplies and materials obtained by the DBE firm for the work of the contract, including supplies

purchased or equipment leased by the DBE, but not supplies or equipment the DBE purchases or leases from the Prime Contractor or its affiliate.

Example: A DBE firm furnishing and erecting steel or concrete superstructure members, furnishing and driving piling for bridge structures, furnishing and placing prestressed concrete deck panels, and furnishing and placing panels for retained earth walls will be considered a Commercially Useful Function for attaining contract goals for Disadvantaged Business Enterprise (DBE) participation unless the supplies or materials are purchased from the Prime Contractor or its affiliate.

When a DBE subcontractor is responsible for substantially constructing a complete structure the total value of the subcontract may be credited to the DBE goal.

Paragraph 8.a. (4) of Subsection 109.07 in the 2017 Edition of the Standard Specifications is void and superseded by the following:

When applicable a NDOT Form 441, "Identification of DBE Goal Achievement".

B. Manufacturers, Suppliers, and Haulers:

DBE Manufacturers may be given 100% credit towards the DBE goal for products they produce for the contract.

DBE Suppliers may be given 60% credit towards the DBE goal for products they furnish for the contract.

DBE Haulers may be given 100% credit towards a DBE goal for the delivery fees charged.

A DBE firm certified as both a supplier and hauler may be given 60% credit for supplying a given product and 100% credit for hauling that same product.

See the DBE Goal Credit Table for a guide to DBE credit.

C. Supplier, Supplier/Hauler Required Documentation:

When a DBE Supplier is used to meet a DBE goal on a project, the Prime Contractor must provide a signed subcontract agreement identifying specifically the material and the quantities the DBE firm will be supplying, and the amount the DBE firm will be paid for the material.

When a DBE Supplier/Hauler is used to meet a DBE goal on a project by both supplying and hauling material directly to a project for use by the Prime Contractor, the subcontract agreement must identify the material and the quantities the DBE firm will be supplying and hauling, and the separate amounts to be paid to the DBE firm for the material and the hauling.

If a Prime Contractor has its own plant for manufacturing the concrete or asphalt to be used on the project, the DBE firm may be used to supply and haul material to the plant so long as the material is actually incorporated in the project.

In the situations above, the DBE firm must be paid directly by the Prime Contractor.

NOTE: If a Prime Contractor is purchasing concrete or asphalt for the project from a commercial plant, the DBE firm is not allowed to haul material to the commercial plant for DBE goal credit.

Subcontractor:

A DBE Supplier/Hauler may be used to meet a DBE goal on a project by supplying and/or hauling material to a Subcontractor; however, in order for this to be approved the following requirements must be met:

The Subcontractor must be a first-tier subcontractor on the project.

The material supplied and hauled by the DBE firm to the Subcontractor shall be incorporated in the project by the Subcontractor.

Example: The Prime Contractor is using the Subcontractor to do the paving on the project. The DBE Supplier/Hauler may supply and/or haul aggregate to a plant owned by the Subcontractor provided the plant is set up specifically for the project and the aggregate is only used in the concrete or asphalt for the project.

NOTE: If the Subcontractor is doing the paving on the project and is purchasing the concrete or asphalt from a commercial plant, the DBE firm is not allowed to haul material to the commercial plant for DBE goal credit.

Documentation Required:

When a DBE Supplier/Hauler is to be used to meet a DBE goal on a project by supplying and/or hauling material to a Subcontractor, specific documentation must be provided by the Prime Contractor.

1. The Prime Contractor's original DBE Commitment information submitted with their bid must identify the material and quantities the DBE firm will be supplying/hauling to the Subcontractor.
2. DBE Commitment Confirmation must be signed by the Prime Contractor, the Subcontractor and the DBE firm.
3. A signed agreement (which may include a purchase order) between the Prime Contractor, the Subcontractor, and the DBE firm identifying specifically how the DBE firm is going to be used to meet the project DBE goal and how payment is to be made to the DBE firm.

NOTE: Load tickets must be maintained and be available for review by the Department to verify the type and amount of material supplied/hauling by the DBE and the dates of delivery.

DESCRIPTIONS (1-7-1217)

Manufacturer - To be certified as a manufacturer, a DBE firm must operate or maintain 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.

Supplier - A DBE Supplier, or regular dealer, 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. To be a Supplier or regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.

A DBE firm may be a Supplier or regular dealer in such bulk products as petroleum products, steel, cement, gravel, stone, or asphalt without owning a place of business if the DBE firm both owns and operates distribution equipment for the products. Any supplementing of a DBE Supplier's or regular dealer's own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.

NOTE: It is an unacceptable practice to "drop-ship" items which are not typically stocked by a DBE Supplier. If the DBE Supplier does not inventory or take possession of the items being supplied prior to shipping to a project, the items will not count toward the DBE goal. Items supplied for a project that are not typically stocked by the DBE Supplier will not be counted toward the DBE goal.

Packagers, manufacturers' representatives, brokers, or other persons who arrange or expedite transactions are not suppliers (regular dealers) within the meaning of this paragraph.

Broker - With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a supplier, DBE goal credit may be given for the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, provided the fees are reasonable and not excessive as compared with fees customarily allowed for similar services. However, no credit will be given for any portion of the cost of the materials and supplies themselves toward DBE goals.

Rebar Installer - When a DBE is used to install rebar, the Prime Contractor will receive credit for 100 percent of the cost of the installation. The DBE must be responsible for actually performing, managing, and supervising the work.

Rebar Supplier - When a DBE is used to supply rebar, the Prime Contractor will receive credit for 60 percent of the cost of the rebar, provided that the DBE Supplier is performing a Commercially Useful Function (CUF) and is not merely an extra participant in a transaction through which funds are passed in order to obtain the appearance of DBE participation. To perform a CUF, the DBE Supplier must be responsible for negotiating price, determining quality and quantities, ordering, inventorying or taking possession of prior to delivery to a project, and paying for the rebar with the DBE's own funds. The use of two-party checks to pay for the rebar will NOT be allowed.

If a DBE Rebar Supplier does not own, operate, or maintain a store, warehouse, or other establishment in which rebar is kept in stock, and regularly sold in the usual course of business, the DBE must both own and operate distribution equipment for rebar.

Rebar Supplier/Installer - If a DBE is used to both supply and install rebar, the Prime Contractor will receive 100 percent credit for the cost of the rebar and the cost of the installation, provided that the DBE is performing a CUF and is not merely an extra participant in a transaction through which funds are passed in order to obtain the appearance of DBE participation. To perform a CUF, the DBE must be responsible for negotiating price, determining quality and quantities, ordering, inventorying or taking possession of prior to delivery to a project, and paying for the rebar with the DBE's own funds. The use of two-party checks to pay for the rebar will NOT be allowed.

If the DBE Rebar Supplier/Installer does not own, operate, or maintain a store, warehouse, or other establishment in which rebar is kept in stock, and regularly sold in the usual course of business, the DBE must both own and operate distribution equipment for rebar.

The DBE Supplier/Installer must also be responsible for performing, managing, and supervising the installation of the rebar.

The above-cited provisions will be closely monitored and Commercial Useful Function Reviews will be conducted by NDOT to ensure compliance. If the provisions are violated in any manner, the Department will impose penalties as prescribed in the contract provision, "USE OF DISADVANTAGED BUSINESS ENTERPRISES," paragraph VIII. C. 1., a. thru i.

Hauler - The DBE firm must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract. There cannot be a contrived arrangement for the purpose of meeting DBE goals.

The DBE firm must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.

The DBE firm receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.

The DBE firm may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE firm that leases trucks from another DBE firm receives credit for the total value of the transportation services the lessee DBE firm provides on the contract.

The DBE firm may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of the transportation services provided by non-DBE lessees not to exceed the value of transportation services provided by DBE-owned trucks on the contract. Additional participation by non-DBE lessees receives credit only for the fee or commission it receives as a result of the lease arrangement.

Example: DBE Firm X uses two of its own trucks on a contract. It leases two trucks from DBE Firm Y and six trucks from non-DBE Firm Z. DBE credit would be awarded for the total value of transportation services provided by DBE Firm X and DBE Firm Y, and may also be awarded for the total value of transportation services provided by four of the six trucks provided by non-DBE Firm Z. In all, full credit would be allowed for the participation of eight trucks. With respect to the other two trucks provided by non-DBE Firm Z, DBE credit could be awarded only for the

fees or commissions pertaining to those trucks that Firm X receives as a result of its lease with Firm Z.

For the purposes of the above paragraphs, a lease must indicate that the DBE firm has exclusive use of, and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE firm, so long as the lease gives the DBE firm absolute priority for the use of the leased truck. Leased trucks must display the name and identification number of the DBE firm.

If a DBE firm performs in the manner outlined above, it will be performing a Commercially Useful Function.

Pass-throughs and/or brokering will not be tolerated. A pass-through/brokering situation is one in which a DBE firm contracts to haul materials for a project, then hires another hauler to actually perform on the contract.

CERTIFICATION (1-7-1217)

Certain DBE's may be certified in multiple classifications as manufacturers, suppliers, and haulers. The certification will be limited by the products being manufactured, supplied, or hauled.

For example, a manufacturer of certain steel products or aggregates, may also be a supplier of products they store or deliver, but do not manufacture.

A supplier of bulk products, such as aggregates or fuel, may also be certified as a hauler.

DBE GOAL CREDIT TABLE

DBE Manufacturer & DBE Hauler	100% Credit for Materials & 100% Credit for Hauling
DBE Manufacturer & Non-DBE Hauler	100% Credit for Materials & No Credit for Hauling
Non-DBE Manufacturer & DBE Hauler	No Credit for Materials & 100% Credit for Hauling
DBE Supplier & DBE Hauler	60% Credit for Materials & 100% Credit for Hauling
DBE Supplier & Non-DBE Hauler	60% Credit for Materials & No Credit for Hauling
Non-DBE Supplier & DBE Hauler	No Credit for Materials & 100% Credit for Hauling

TRAINING SPECIAL PROVISIONS (1-8-0618)

This On-the-Job Training (OJT) Program was created by the Federal Highway Administration (FHWA) and the Nebraska Department of Transportation (NDOT) to fulfill the Training Special Provisions requirements of federal-aid construction contracts (23 CFR 230, Appendix B to Subpart A). The purpose of the provision is to address the under-representation of minority and female workers in the construction trades through the assignment of OJT training goals. Therefore, the training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision.

Accordingly, the Contractor shall make every effort to enroll minority and women trainees (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.

All Contractors will be responsible for demonstrating the steps that they have taken to recruit minority and women trainees prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not. The Contractor shall provide on-the-job training aimed at developing full journey-level status in the type of trade or job classification involved. The number of training hours under this Training Special Provision will be assigned to each Contractor as set forth below.

1. Under the NDOT Contractor-Specific On-the-Job Training (OJT) Program, OJT hours will be assigned to Contractors and will not be contract or project specific.
 - a. A Contractor who has received an OJT assignment will be allowed to provide training on any NDOT-let project on which the Contractor is working as either a Prime Contractor or a subcontractor. A Contractor will have the flexibility to transfer trainees from one project to another after providing notification of the transfer to NDOT.
 - b. This project does not have a contract-specific training requirement. NDOT has added a training pay item with a nominal 100-hour quantity, that may overrun or underrun, which will be utilized only if the Contractor elects to provide training on this contract.
2. In January each year, NDOT will allocate OJT assignments to Contractors based on the total average dollar amount of all work performed by a Contractor on NDOT-let projects during the previous three (3) calendar years. The total dollar amount will consist of:
 - a. The total dollar amount of the Contractor's prime contracts let by NDOT (both federal and state funded) minus the total dollar amount of the work subcontracted out to others, and
 - b. The total dollar amount of the subcontract work the Contractor performed for others on NDOT-let projects.

The Contractor's average dollar amount for the previous three calendar years will be calculated, and training hours will then be assigned as follows:

Three Year Average**Training Assignments**

Under \$2,500,000	0 hours
\$2,500,000 to 5,000,000	1,000 hours
Over \$5,000,000 to 7,500,000	1,500 hours
Over \$7,500,000 to 10,000,000	2,000 hours
Over \$10,000,000 to 15,000,000	3,000 hours
Over \$15,000,000 to 20,000,000	4,000 hours
Over \$20,000,000 to 25,000,000	5,000 hours
Over \$25,000,000 to 30,000,000	6,000 hours
Over \$30,000,000 to 40,000,000	8,000 hours
Over \$40,000,000 to 50,000,000	10,000 hours
Over \$50,000,000 to 60,000,000	12,000 hours
Over \$60,000,000	15,000 hours

Example: Contractor A, who averaged \$28.66 million, would be assigned 6,000 hours of OJT. Contractor B, who averaged \$10.33 million, would be assigned 3,000 hours of OJT. Contractor C, who averaged \$2.26 million, would not be assigned any OJT hours.

	2011	2012	2013	3 Year Average	2014 OJT Assignment
Contractor A	24.3	33.4	28.3	28.66	6,000 hours
Contractor B	9.3	11.9	9.8	10.33	3,000 hours
Contractor C	2.3	1.4	3.1	2.26	0 hours

3. The OJT hours assigned to a Contractor in January are to be completed during that calendar year (e.g., OJT hours assigned in January of 2014 are to be completed during the period of January 1, 2014 thru December 31, 2014).
 - a. If a Contractor exceeds the number of OJT hours assigned for a calendar year, the Contractor may request to bank up to 30 percent of the excess hours. Banked hours may then be credited toward the Contractor's OJT assignment for the next calendar year.
4. Completion of the annual OJT assignment is the Contractor's responsibility. The Contractor is not allowed to assign any of the OJT hours to any other Contractor. The Contractor must make a Good Faith Effort to enroll an adequate number of trainees and provide the trainees a sufficient number of hours training to achieve the Contractor's annual OJT assignment.
5. While trainees may be assigned to NDOT-let federally or state funded projects, the Contractor should attempt to schedule and assign trainees so that at least 50 percent of a trainee's hours are earned on federally funded projects - unless otherwise approved in advance by NDOT.
6. The Contractor must use an OJT program approved by NDOT and/or the FHWA. An OJT program shall be approved if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and qualify the average trainee for journey-level status in the job classification concerned by the end of the training period.

An approved OJT program must specify the number of hours required for a trainee to achieve journey-level status in each job classification. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, shall also be considered acceptable provided they are being administered in a manner consistent with the equal employment obligations of federal-aid highway construction contracts.

7. The Contractor shall furnish each trainee a copy of the OJT Program he/she will follow in providing the training. The Contractor shall also provide each trainee with a certification showing the type and length of training satisfactorily completed.
8. The Contractor's Equal Employment Opportunity (EEO) Officer shall be responsible for administering the Contractor's OJT and monitoring the trainees' progress. The EEO Officer shall serve as the point of contact for NDOT regarding OJT information, documentation, and conflict resolution. If necessary, the EEO Officer may designate another individual to assist with the OJT monitoring responsibilities. NDOT must be provided the name and contact information for any such designee.
9. At least seven (7) days prior to commencing training, the Contractor must submit a "Request for Trainee Approval" form to NDOT for each individual to be enrolled as a trainee and a tentative list of the projects to which the trainee will be assigned. Requests for Trainee Approval may be submitted by mail, fax, or email.
10. If the Contractor submits a "Request for Trainee Approval" form to NDOT for an individual who is not a minority or female, or cannot replace departing trainees with minorities or females, the Contractor must also produce sufficient Good Faith Efforts documentation of the type set forth below. NDOT may reject non-minority male trainees for entry into the program if it determines that a Contractor failed to make sufficient Good Faith Efforts to hire minorities or female trainees and/or the Contractor failed to document or submit evidence of its Good Faith Efforts to do so.
11. Any training hours provided to a trainee prior to the Contractor receiving approval from NDOT will not be credited toward the Contractor's annual OJT assignment.
12. When an individual is first enrolled as a trainee, the individual will be approved for the number of hours of OJT required to achieve journey-level status in the classification for which the individual is to receive training. (A Contractor will not be penalized if a trainee does not achieve the full number of hours for which the trainee is approved.)
13. If the Contractor is unable to provide a trainee the full number of training hours required to achieve journey-level status on one project, the trainee should be transferred to other NDOT-let projects on which the Contractor is working.
14. At least one (1) day before all such transfers of trainees are made, the Contractor must provide NDOT in writing the name of the trainee and current project, the project to which the trainee will be transferred, and when the transfer is to take place. Notifications of trainee transfers may be submitted by mail, fax, or email.

15. Any training hours provided to a transferred trainee prior to the Contractor having notified NDOT of the transfer will not be credited toward the Contractor's annual OJT assignment.
16. No individual may be employed as a trainee in any classification in which they have successfully completed training leading to journey-level status or in which they have been employed at journey-level. No individual may be employed as a trainee in any classification with a lower skill level than any classification in which they have successfully completed training leading to journey-level status or in which they have been employed at journey-level (e.g., an individual who has achieved journey-level status as an equipment operator may not be trained as a laborer). The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

An individual may be trained in multiple classifications that require relatively equal skill levels but different skill sets (e.g., an individual who has received training as a milling machine operator may also receive training as a roller operator, or a scraper operator, etc.). Preferably, an individual should have achieved journey-level status in a classification before beginning training in another classification.

The Contractor must request and receive approval from NDOT for an individual to receive training in a classification other than the classification for which the individual was originally approved. Any training hours provided prior to receiving approval from NDOT will not be credited toward the Contractor's annual OJT assignment.

17. Training shall be provided in construction crafts rather than clerk-typist or secretarial-type positions. Training is permissible in positions that are not assigned to a specific project such as office engineers, estimators, timekeepers, shop mechanics, etc., if the selected OJT program includes these classifications. Training in such positions will not be eligible for reimbursement, but will be eligible to be credited toward the Contractor's annual OJT assignment.
18. Some off-site training is permissible as long as the training is an integral part of an approved OJT program and does not comprise a significant part of the overall training (e.g., 16 hours training per trainee per year in areas such as jobsite safety or accident response would be permissible). A copy of a training certificate, agenda, or curriculum must be provided to verify off-site training.
19. The Contractor will be reimbursed \$2.00 per each hour of training provided in accordance with an approved OJT program and the NDOT Training Special Provisions.
20. Contractors shall be allowed to transfer trainees or utilize trainees on other NDOT-let projects which do not contain the Training Special Provisions. NDOT will utilize a Change Order / Supplemental Agreement to incorporate the Training Special Provisions and the appropriate pay item into the contracts of such projects.
21. On all federally funded NDOT-let projects, trainees must be paid at least 60 percent of the appropriate minimum journey-level rate specified in the contract for the first half of the training period, 75 percent for the third quarter, and 90 percent for the last quarter of the training period - or the appropriate rates approved by the U.S. Department of Labor

or the U.S. Department of Transportation in connection with the program in which the trainee is enrolled.

22. In order to document and evaluate a trainee's progress toward journey-level status, the Contractor must provide NDOT at the end of each month a "Special Training Provision Monthly On-The-Job Training Report" listing each trainee, the number of hours trained during the month, and the total number of hours trained as of the date of the report.

NOTE: The monthly reporting requirements may change if/when on-line reporting is implemented by NDOT.

23. If a trainee's employment is terminated for any reason prior to completion of the number of OJT hours for which the individual was approved, the Contractor must make Good Faith Efforts to replace the trainee with another minority or female.
24. Contractors must submit an annual summary report to NDOT by January 15th each year giving an account of all trainee hours provided during the previous year. The report shall show a breakdown of training provided on each project and/or contract.
25. Contractors will have fulfilled their OJT responsibilities if they have provided acceptable training for the number of hours assigned, or have demonstrated that they made a Good Faith Effort to provide the number of OJT hours assigned. Where a Contractor cannot meet his or her annual training hour goal with females and minorities, the Contractor remains responsible for demonstrating the Good Faith Efforts taken in pursuance of the goal. Examples of what actions constitute Good Faith Efforts are set forth below. NDOT will make compliance determinations regarding the Training Special Provisions based upon either attainment of the annual goal or Good Faith Efforts to meet it.
26. Good Faith Efforts are those designed to achieve equal opportunity through positive, aggressive, and continuous results-oriented measures (23 CFR § 230.409(g)(4)). Good Faith Efforts should be taken as trainee-hiring opportunities arise and when minorities and women are under-represented in the Contractor's workforce. NDOT will consider all Contractors' documentation of Good Faith Efforts on a case-by-case basis and take into account the following:
 - a. Availability of minorities, females, and disadvantaged persons for training;
 - b. The potential for effective training;
 - c. Duration of the contract;
 - d. Dollar value of the contract;
 - e. Total normal work force that the average Contractor could be expected to use;
 - f. Geographic location;
 - g. Type of work;
 - h. The need for journey level individuals in the area.

Good Faith Efforts may include, but are not limited to, documentation of efforts to:

- Contact minority and female employees to gain referrals on other minority and female applicants;
- Refer specific minorities and females to training programs and specifically request these trainees by name in the future;
- Upgrade minority and female unskilled workers into the skilled classifications when possible;
- Accept applications at the project site or at the Contractor's home office;
- Review and follow up on previously received applications from minorities and females when hiring opportunities arise;
- Maintain monthly evaluations that monitor efforts made to achieve diversity in the Contractor's workforce in general (i.e., significant numbers of minorities and females employed on a company-wide basis);
- Provide incentives for project management personnel or superintendents when hiring goals are met on a project (i.e., similar to performance bonuses paid when a job is completed in a timely manner and under budget).

27. Liquidated damages will be assessed the Contractor for failure to demonstrate a Good Faith Effort to achieve their full OJT assignment or for failure to demonstrate a Good Faith Effort to achieve their full OJT assignment with minority and women trainees.

Liquidated damages will be assessed at the rate of \$4.00 per hour for the number of OJT hours not achieved or, even if achieved, the number of OJT hours in which the Contractor fails to demonstrate Good Faith Efforts to hire minorities and women. (e.g., if the Contractor was assigned 3,000 hours but only achieved 2,000 hours and did not demonstrate a Good Faith Effort, the liquidated damages would be assessed at 1,000 hours x \$4.00 = \$4,000.00.)

28. NDOT will invoice a Contractor for liquidated damages assessed as a result of the Contractor's failure to demonstrate a Good Faith Effort to achieve the number of OJT hours assigned.

The Contractor's failure to promptly pay any invoice for liquidated damages may result in the Contractor being disqualified to bid work with NDOT for a time period determined by the Director/State Engineer.

29. At the end of the calendar year, if the dollar amount of work the Contractor performed on NDOT-let projects is substantially below the three-year average upon which the Contractor's OJT assignment was based, the Contractor's OJT goal for that year may be adjusted according to the table in Paragraph 2. above.

30. The established per hour unit price for the item "Training" shall be full compensation for all costs incurred, which includes but is not limited to providing the necessary supervision, labor, equipment, tools and material. Any additional costs due to payment

of wages in excess of the minimum rates specified and for the payment of any fringe benefits shall not be paid for directly, but shall be considered subsidiary to the items for which direct payment is made.

AMENDMENT TO CONSTRUCTION TRAINING REPORT REQUIREMENTS

The last sentence under Paragraph C., on Page 5 of the Standard Federal Equal Employment Opportunity Construction Contract Specifications, dated November 3, 1980, is void.

FHWA Form 1409 "Federal-aid Highway Construction Contractor's Semi-Annual Training Report" is not required.

CERTIFICATION FOR FEDERAL-AID CONTRACTS (1-9-1217)

The bidder certifies, by signing and submitting this bid, to the best of his or her knowledge and belief, that:

- (1) 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.
- (2) 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.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of 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 a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The bidder also agrees by submitting his or her bid 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 subrecipients shall certify and disclose accordingly.

STATUS OF UTILITIES

The following information is current as of May 1, 2019.

Utility facilities, aerial and/or underground may exist within this project. The Contractor shall determine to his satisfaction the extent of occupancy and utility for facilities located within the construction areas.

At this time no utilities have been required to relocate their facilities.

Any utility adjustments or interruption of service for the convenience of the Contractor shall be the sole responsibility of the Contractor.

To arrange for utilities to locate and flag their underground facilities, contact Diggers Hotline of Nebraska at 1-800-331-5666.

Utilities known to be in the vicinity of this project:

GREAT PLAINS COMMUNICATIONS

P.O.C. Mark Petersen (402) 426-6203

Any work necessary will be concurrent with construction.

CONDITIONAL STATUS OF RIGHT OF WAY

The right of way for this project has been acquired and physical possession is held by the State of Nebraska and ready for the Contractor's use, except tracts listed below:

Unacquired Right-of-Way Tracts as follows: United States of America Army Corps of Engineers, State of Nebraska Games and Parks Commission.

Right-of-Way Tracts with Pay Items:

Tract Number	Pay Items
N/A	N/A

The Right of Entry gives the State the right to excavate, construct permanent structures, store material and machinery and all other things incidental to the construction of this project.

- Encroachments on the old right of way are being checked.
- All necessary arrangements have been made for the right of way clearance to be undertaken and completed concurrently with the highway construction.
- No individual or families were required to be relocated.
- Steps relative to relocation advisory assistance and payments for business and moving personal property as required by the current Federal Highway Administration directives covering the administration of the Highway Relocation Assistance Program are not required.

SPECIAL PROSECUTION AND PROGRESS (Accelerated Timeframe)

NDOT advises the Contractor that it will take extraordinary effort from the Contractor to meet the project schedule milestones indicated in this proposal. The Contractor is expected to allocate sufficient resources to complete the work within the specified timeframe.

SPECIAL PROSECUTION AND PROGRESS (Construction Schedule & Internal Liquidated Damages)

I. Construction Schedule

The time allowance for this project is 706 consecutive calendar days. The Contractor shall have no more than 526 consecutive calendar days to complete all work associated with completing Phase 1 and 2.

The temporary bridge and road shall be open and accepted by the Department by August 1, 2019.

All lanes of N-12 shall be open and accepted by the Department by November 2, 2020.

The plans and these Special Provisions depict phasing sequences that are to be used in the construction of this project. Any deviation from these sequences shall require the written approval of the Engineer.

II. Internal Liquidated Damages

The Contractor's failure to have 2-lane, 2-way traffic on N-12 by November 2, 2020, shall result in the assessment of \$1,775 per calendar day internal liquidated damage assessment. This assessment shall begin on November 2, 2020 and shall continue per calendar day until, and including, the day 2-lane, 2-way traffic is returned to N-12. This internal liquidated damage assessment has not been provided for elsewhere in the contract and shall be considered in addition to other liquidated damages that are part of the contract. The following formula was used to determine this assessment:

$$\begin{aligned}\text{Cost} &= [(1-\%T)(\text{ADT})(\$ \text{Pass}) + (\%T)(\text{ADT})(\$ \text{Trucks})] \times D \\ &= [(1-0.11)(1,005)(0.33) + (0.11)(1,005)(0.54)] \times 5 \\ &= [\$295.17 + \$59.70] \times 5 \\ &= \$1,774.35 \rightarrow \text{Rounded to } \$1,775/\text{Calendar day}.\end{aligned}$$

Where:

- %T = percent trucks
- ADT = average daily traffic
- \$Pass = passenger car factor = \$0.33
- \$Truck = truck factor = \$0.54
- D = delay (in minutes)

SPECIAL PROSECUTION AND PROGRESS (A + B Bidding Conditions)

I. GENERAL STATEMENT

The Department has determined this project will be bid utilizing the “A+B” bidding method for the Phase 1 work.

The Phase 1 work shall include, but not be limited to, the construction of temporary road and bridge, earthwork and new pavement from Sta. 468+00 to 471+00 and Sta. 491+00 to 495+39, the necessary Group 6B work to open the westbound lane, install new guardrail with surfacing under guardrail from Sta. 491+00 to 495+39 Lt & Rt, all concrete pavement repair, and all temporary traffic control items installed according to the Traffic Control Plan.

II. DEFINITION OF TERMS

For this project, the following terms are used in association with the “A+B” bidding method for the Phase 1 work and the determination of incentive/disincentive assessment used:

A. CONTRACT AMOUNT

The amount bid by the Contractor for the groups of work contained in the contract. This amount is the summation of the products of the approximate project quantities listed in the Schedule of Items multiplied by the Contractor's unit bid prices. The Contract Amount will be shown in the ITEMS TOTAL column at the end of Schedule of Items.

B. CALENDAR DAY

The Department will determine the maximum number of calendar days available to perform the required work to complete the Phase 1 portion of the project. The maximum number of calendar days to complete the Phase 1 portion is 67 days.

The bidder will determine the actual number of calendar days they shall require to complete the Phase 1 portion of the project and have N-12 traffic utilizing the temporary road and bridge. Under no circumstances will the number of calendar days bid by the Contractor exceed the maximum number of calendar days established by the Department.

The bid will be void if the number of calendar days bid by the Contractor exceeds the maximum number of calendar days determined by the Department.

The Contractor will enter the number of calendar days they bid in the Proposal Sites folder in AASHTOWARE Project Bids.

C. USER COST

The amount determined by the Department that will be used for (1) the incentive/disincentive assessments on a per calendar basis and (2) to help determine the low bidder for the contract. The Contractor cannot change the USER COST. The USER COST is shown in the "Cost/Day" column of the Proposal Sites folder in AASHTOWARE Project Bids.

The USER COST shall be \$15,000 per calendar day and has been determined according to the following formula:

$$\begin{aligned}
 \text{Cost} &= [(1-\%T)(\text{ADT})(\$ \text{ Pass}) + (\%T)(\text{ADT})(\$ \text{ Trucks})] \times D \\
 &= [(1-0.11)(1,005)(\$0.33) + (0.11)(1,005)(\$0.54)] \times 197 \\
 &= [\$295.17 + \$59.70] \times 197 \\
 &= \$69,909.39 \rightarrow \text{Rounded to } \$69,910/\text{Calendar day. By} \\
 &\quad \text{Administrative decision, this amount is adjusted to} \\
 &\quad \$15,000/\text{CD.}
 \end{aligned}$$

Where: %T = percent trucks
 ADT = average daily traffic
 \$ Pass = passenger car factor = \$0.33
 \$ Trucks = truck factor = \$0.54
 D = delay (in minutes)

D. COMPUTED COST for PHASE 1

The COMPUTED COST for Phase 1 is the summation of the number of calendar days bid for the Phase 1 portion multiplied by the established USER COST (\$15,000).

III. PREPARATION OF BID

In addition to the requirements of Subsection 102.10 of the Standard Specifications, the bidder shall show the total number of calendar days bid for the completion of the Phase 1 portion in the "# DAYS" column next to the USER COST (Cost/Day column) in the Proposal Sites folder of AASHTOWARE Project Bids.

The COMPUTED COST will automatically be added to the ITEMS TOTAL to arrive at the TOTAL BID.

IV. AWARD AND EXECUTION OF CONTRACT

A. The **TOTAL BID** will be determined by the following calculation:

$$\text{TOTAL BID} = \text{ITEMS TOTAL} + \text{COMPUTED COST}$$

The Department, based on the lowest total bid, will then determine the successful bidder. The total bid will be used to determine the successful bidder, but will not be used to determine the Contract award amount nor final payment to the Contractor.

B. Subletting of Contract

For this project, the total contract cost referred to in Subsection 108.01 of the Standard Specifications shall be considered as to contract amount as described in Section II.A above (ITEMS TOTAL). If applicable, the DBE goal is based on the ITEMS TOTAL (the Contract Amount).

C. Incentive Payment

If the Contractor completes the Phase 1 portion of the Project in less than the number of calendar days bid, the amount shown in the proposal as User Cost per calendar day (\$15,000) will be added to the Contractor's payments for each calendar day less than the number of calendar days bid by the Contractor. Computation of this incentive payment will begin on the first full day following the acceptance of the Phase 1 work by the Engineer. **The amount of incentive payment will be capped at \$150,000.**

D. Disincentive Assessment

If the Contractor fails to complete the Phase 1 portion of the project in the number of calendar days bid, the disincentive assessment for the Phase 1 portion of the project will begin on the next calendar day (calendar days bid plus 1).

The amount shown in the proposal as User Cost per calendar day (\$15,000) shall be deducted from the Contractor's payments for each calendar day of the Project in excess of the bid by the Contractor. The count of calendar days shall continue per calendar day until, and including, the day that Phase 1 work is accepted by the Engineer. This assessment has not been provided for elsewhere in the contract and shall be in addition to other liquidated damages which are part of the contract.

E. Project Liquidated Damages

Project liquidated damages shall be determined according to Subsection 108.08 of the Standard Specifications, where the value of "T" shall be:

$$T = \text{the number of calendar days for Project ER-12-5(122)} = 706.$$

F. Change Orders

In the event that a Change Order is necessary which affects the work to be performed during the project, it is the responsibility of the Contractor to demonstrate the direct impact, via critical path project schedule, to the number of allowed calendar days. The adjustments made to the critical path schedule will be taken into consideration during the Change Order negotiation process.

G. Subsection 109.01 of the Standard Specifications

Subsection 109.01 of the Standard Specifications is amended to include the following:

The User Cost, shown in this provisions (Section II.C.), will be used only for bid comparisons and as a deduction from money due the Contractor or as a credit for additional money due the Contractor, in accordance with the above stipulated conditions.

ENVIRONMENTAL COMMITMENT

Below are the Conservation Conditions that will be required for this project. All conditions and regulations of any permit obtained for this project will be followed by the Contractor. The NDOT Construction Project Manager (CPM) will serve as an NDOT point of contact.

Wetlands

The Contractor shall not stage, store, waste or stockpile materials and equipment in known/potential wetlands and/or known/potential streams that exhibit a clear “bed and bank” channel. Potential wetland areas consist of any area that is known to pond water, swampy areas or areas supporting known wetland vegetation or areas where there is a distinct difference in vegetation (at lower elevations) from the surrounding upland areas.

Construction mats or timber mats should be used to minimize heavy machinery impacting any wetland or waters of the U.S. All mats will be removed upon completion of construction and any disturbance of wetlands or waters of U.S. will be restored by minor grading to preconstruction conditions. Disturbed areas will be seeded and erosion control measures will be implemented as appropriate.

Threatened & Endangered Species

The project is within the range of multiple State and Federally Listed Threatened & Endangered Species. Range maps and County Lists for these species can be found on the Nebraska Game and Parks Commission website (found below).

Threatened and Endangered Species. The Contractor shall reference the Nebraska Game and Parks Commission website for a reference of federal and state listed species that may occur in the project vicinity prior to starting project emergency relief operations. These guidance documents can be found at:

- <http://outdoornebraska.gov/atriskspecies/>

If federal or state listed species are observed during emergency relief work, stop work and contact the NDOT Construction Project Manager and District Environmental Coordinator to determine action required prior to resuming work. Coordination with NDOT Environmental Section will be required if Night-Time work is needed.

Refueling. The Contractor shall conduct refueling only within non-wetland and non-stream locations. Areas adjacent to wetlands and/or streams will be avoided. Spills shall be reported to the NDOT Construction Project Manager. The contractor shall be responsible for cleanup of spilled fuel or any other Hazardous Materials, such as engine oil, hydraulic fluid, antifreeze, etc. used in the contract specified emergency relief activity. The Contractor is required by NDOT's Standard Specification section 107 (legal relations and responsibilities to the public) to handle and dispose of contaminated material in accordance with applicable laws.

<https://dot.nebraska.gov/media/10343/2017-specbook.pdf>

Restricted Activities. The following project activities shall, to the extent possible, be restricted to between the beginning and ending points of the project, within the right-of-way designated on the project plans.

- Construction debris waste disposal areas
- Staging areas
- Material storage sites

Waste/Debris. Construction waste/debris will be disposed of in areas or a manner which will not adversely affect state and/or federally listed species and/or designated critical habitat. (Contractor)

Encountering Unexpected Waste

If contaminated soils/water or unexpected wastes are discovered, the Contractor shall stop all work within the immediate area. The Contractor shall secure the area of the discovery and notify the NDOT Construction Project Manager (CPM). The Contractor shall not re-enter the discovery area until allowed to do so by the CPM. At the time of discovery, the CPM and Contractor shall utilize the NDOT Unexpected Waste Action Plan (UWAP) to coordinate appropriate actions. The actions to be carried out by the NDOT CPM are (but not limited to): verification that the contractor has suspended construction activities in the area of the discovery, contact the Environmental Section Manager and make an entry into Site Manager that an unexpected waste discovery was made. The CPM shall then utilize the UWAP Site Discovery Check List to properly document the extent and type of waste. The CPM shall ensure that proper disposal of the waste and any required health and safety mitigation is implemented by the Contractor. The Contractor is required by NDOT's Standard Specification section 107 (legal relations and responsibilities to the public) to handle and dispose of regulated material in accordance with applicable laws.

Ground Disturbance

Any and all ground disturbance shall be limited to the area required to achieve the emergency relief activities.(Contractor)

Unmarked Human Burial Sites

The contractor shall comply with the Nebraska Unmarked Human Burial Sites and Skeletal Remains Protection Act, Sections 12-1201 – 12-1212. If human skeletal remains or burial goods associated with an unmarked human burial in the ground or on the ground are discovered, then all work in the immediate area of the discovery shall stop and the contractor shall contact the NDOT District Environmental Coordinator. The NDOT District Environmental

Coordinator will then comply with Section 12-1205, notification of local law enforcement in the county in which the remains or burial goods are found. The NDOT District Environmental Coordinator will promptly consult with the appropriate federal, state, and tribal agencies to determine if further field investigations are required before maintenance operations may resume. Pertinent legal authorities covering such discoveries include: the National Historic Preservation Act, the Native American Graves Protection and Repatriation Act, the Archeological Resources Protection Act, the Nebraska Unmarked Burial Sites and Skeletal Remains Protection Act, and the Nebraska Archeological Resources Protection Act.

Any discovered archeological or paleontological objects or deposits are not the property of the Contractor. The NDOT Environmental Coordinator will consult with appropriate federal, state, or tribal agencies to determine the proper disposition of such remains.

STORM WATER DISCHARGES

In compliance with the Federal Water Pollution Control Act, authorization to discharge storm water on this project has been granted under National Pollutant Discharge Elimination System (NPDES) General NPDES Permit Number NER110000 for Storm Water Discharges from Construction Sites to Waters of the State of Nebraska. This permit became effective on January 1, 2008.

Contractors are advised that, under the Construction Storm Water General Permit, ***plant sites, camp sites, storage sites, and borrow or waste sites not shown on the plans may be subject to separate NPDES permit authorization requirements for stormwater discharges from those locations.*** Contractors shall be responsible for verifying the need for NPDES permit coverage with the Nebraska Department of Environmental Quality (NDEQ). When required for these locations, the filing of a "Notice of Intent" shall be made by the Contractor directly to the NDEQ.

Because this project is emergency in nature, the Contractor may discharge on the condition that a complete and accurate NOI is submitted within 30 calendar days after commencing construction activities. Documentation must be provided in the SWPPP to substantiate the occurrence of a public emergency.

Additionally, asphalt (SIC Code 2951) or concrete (SIC Code 3273) batch plants that are owned by a private Contractor and are operated on a contract-for-service basis to perform work for the Contractor completing the project may be subject to NPDES General Permit Number NER000000 for Industrial Storm Water Discharges. While the plant may be required for completion of the project, it is not under the control of the Department (or other project owner); and the filing of a "Notice of Intent" shall be made by the Contractor directly to the NDEQ.

The NDEQ may be contacted at 402-471-4220 for additional information.

**REQUIRED SUBCONTRACTOR/SUPPLIER QUOTATIONS LIST
(1-43-1217)**

All bidders must provide to the NDOT the identity of all firms who provided quotations on all projects, including both DBEs and non-DBEs. This information must be on a form provided by the NDOT Contracts Office.

If no quotations were received, the bidder must indicate this in the space provided.

Each bidder will be required to submit one list per letting to cover all projects bid.

**WORKER VISIBILITY
(1-43-1217)**

Pursuant to Part 634, Title 23, Code of Federal Regulations, the following modified rule is being implemented:

Effective on January 1, 2008, all workers within the right-of-way who are exposed either to traffic (vehicles using the highway for purposes of travel) or to construction equipment within the work area shall wear high-visibility safety apparel.

High-visibility safety apparel is defined to mean personal protective safety clothing that:

- 1 - is intended to provide conspicuity during both daytime and nighttime usage, and
- 2 - meets the Performance Class 2 or Class 3 requirements of the ANSI/ISEA 107-2004 publication titled "American National Standards for High-Visibility Safety Apparel and Headwear."

**SPECIAL PROSECUTION AND PROGRESS
(Federal Immigration Verification System)
(1-43-1217)**

The Contractor shall register with and use a Federal Immigration Verification System to determine the work eligibility status of newly hired employees physically performing services within the State of Nebraska. The Prime Contractor shall contractually require every subcontractor to register with and use a Federal Immigration Verification System to determine the work eligibility status of newly hired employees physically performing services within the State of Nebraska.

The Federal Immigration Verification System shall be an electronic verification of the work authorization program of the Illegal Immigration Reform and Immigration Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program. The Contractor may use an equivalent Federal program designated by the United States Department of Homeland Security or other Federal agency authorized to verify the work eligibility status of a newly hired employee. The equivalent program shall comply with the Immigration Reform and Control Act of 1986.

The Prime Contractor shall furnish a letter to the NDOT Construction Division in Lincoln on company letterhead and signed by an officer of the company stating that documentation is on file certifying that the Contractor and all subcontractors have registered with and used a Federal Immigration Verification System. The Contractor shall maintain all records of registration and use for a period of three years and make records available upon request. The Contractor shall contractually require subcontractors to maintain all records for a period of three years and make records available upon request.

Payment will not be made to the Contractor for using the Federal Immigration Verification System or the maintenance of the records. This work shall be subsidiary to the work being performed.

The Contractor's Certification shall become part of the final records of the Contract. The Department considers this document to have direct bearing to the beginning interest date and may affect the amount of interest earned.

PROPOSAL GUARANTY BID BOND (BID BOND) (1-43-1217)

Paragraph 1.b. of Subsection 102.14 in the Standard Specifications is void.

PERMITS, LICENSES, AND TAXES (Contractor Site Use Approval) (1-43-1118)

Paragraph 4. of Subsection 107.02 Paragraph 4. in the Standard Specifications is void and superseded by the following:

4. Contractor Site Use Approval:
 - a. (1) When a Contractor intends to obtain borrow and/or dispose of excess excavation at a site (or sites) not shown or otherwise designated in the contract the Contractor shall submit a completed NDOT Form 119 "*Borrow Site - Waste Excavation Site Request Identification and Evaluation*" to the Lincoln Construction Office for processing and approval.
 - (2) When a Contractor intends to: (i) dispose of construction debris, (ii) stockpile materials, equipment or other tangible property for the project, and/or (iii) install and operate a mobile asphaltic concrete plant, mobile Portland cement concrete plant or other mobile production plant at a site (or sites) not shown or otherwise designated in the contract the Contractor shall submit a completed NDOT Form 56 "*Plant Site - Stockpile Site - Construction Debris Site Request Identification and Evaluation*" to the Lincoln Construction Office for processing and approval.

- (3) The NDOT Form 56 and NDOT Form 119 (hereafter referred to as “the Contractor Site Request form(s)”) can be found on the NDOT website. Each Contractor Site Request form shall represent only one site and shall be project specific.
- (4) The time frame required to obtain site approvals varies and is dependent upon whether the project has a Corps Section 404 notifying-permit and upon the complexities of each site listed in each request.
- b. The Contractor shall contact the Nebraska Department of Environmental Quality (NDEQ) to determine if it is necessary for the Contractor to obtain a NPDES permit. The Contractor shall also be responsible for obtaining any and all other permits required by local governments.
- c. The Contractor shall not begin work at any borrow, waste, debris, stockpile or plant site until receiving written approval for the submitted Contractor Site Request form(s) from NDOT, before obtaining a NPDES permit (if required), or any other permits required.
- d. No extension of completion time will be granted due to any delays in securing approval of a borrow, waste, debris, stockpile or plant site unless a review of the time frames concludes that there were conditions beyond the Contractor’s control.

**MEASUREMENT AND PAYMENT
(Partial Payment)
(1-43-0318A)**

Paragraph 6 of Subsection 109.07 of the Standard Specifications is void and superseded by the following:

- 6. When payrolls must be submitted, the Department may withhold partial payments if the Contractor does not provide all payrolls (including Subcontractor payrolls) within seven (7) days of each payroll ending date.

**WAGES AND CONDITIONS OF EMPLOYMENT
(Employment of Labor – Payrolls)
(1-43-0119)**

Paragraph 3 of Subsection 110.03 of the Standard Specifications shall be amended to include the following:

- i. On projects requiring submittals of certified payrolls, Contractors shall submit their payrolls electronically, meeting the following requirements:
 - (1) Format – Portable Document Format (PDF)

- (2) Size of file – Limited to 25 MB
- (3) Signatures – A scanned copy of the original certified payroll or Adobe digitally signed.

Payrolls certified by the Prime Contractor must be emailed to the Project Manager within seven (7) days of the payment date thereof. Payrolls must be complete and accurate.

LIABILITY INSURANCE (1-49-0118)

Paragraph 1.b.(5) of Subsection 107.15 in the Standard Specifications is void and superseded by the following:

- (5) Automobile liability coverage shall be obtained from an insurance carrier who is licensed in Nebraska and any other State in which the project is located.

Paragraph 1.c. of Subsection 107.15 is amended to include the following:

Limit: Statutory coverage for Nebraska and for any other State in which the project is located.

Paragraph 1.c.(3) of Subsection 107.15 is void and superseded by the following:

- (3) Workers' compensation coverage shall be obtained from an insurance carrier who is licensed in Nebraska and any other State in which the project is located.

Paragraph 1.f.(5) of Subsection 107.15 in the Standard Specifications is void and superseded by the following:

- (5) Prior to execution of the contract, Contractor shall provide the State of Nebraska, Department of Transportation evidence of such insurance coverage in effect in the form of an ACORD® (or equivalent) certificate of insurance executed by a licensed representative of the participating insurer(s). Certificates of insurance shall show the Nebraska Department of Transportation as the certificate holders.

Paragraph 1.f. of Subsection 107.15 is amended to include the following:

- (9) For so long as insurance coverage is required under this agreement, the Contractor shall have a duty to notify the State of Nebraska Department of Transportation (State) when the Contractor knows, or has reason to believe, that any insurance coverage required under this agreement will lapse, or may be cancelled or terminated. The Contractor must forward any pertinent notice of

cancellation or termination to the State by mail (return receipt requested), hand-delivery, email, or facsimile transmission within 2 business days of receipt by Contractor of any such notice by an insurance carrier. Notice shall be sent to the State at the following address:

Nebraska Department of Transportation
Construction Division -- Insurance Section
1500 Highway 2, P.O. Box 94759
Lincoln, NE 68509-4759
Facsimile No. 402-479-4854
NDOT.ConstructionInsurance@nebraska.gov

AWARD AND EXECUTION OF CONTRACT

The first sentence of Subsection 103.06 in the Standard Specifications is void and superseded by the following:

The bidder to whom the contract is awarded shall furnish within 5 days after the award, a contract bond, in a sum equal to the full amount of the contract.

Paragraphs 2.a. and b. of Subsection 103.07 are void and superseded by the following:

- a. The contract has been signed by a person authorized to sign for the bidder as shown in the prequalification (when prequalification is required for the contract) and returned to the Department within 5 calendar days from the date of award.
- b. The Contractor has provided a satisfactory bond and certificate of insurance within 5 calendar days from the date of award.

CONSTRUCTION DETAILS

TEMPORARY WATER POLLUTION CONTROL (2-1-1217)

Section 204 in the Standard Specifications is void.

CONSTRUCTION STORMWATER MANAGEMENT CONTROL (2-1-1217)

A. General

1. This Section defines some best management practices (BMPs) for erosion and sediment control measures and construction practices the Contractor shall use to prevent soil erosion and avoid water pollution.

2.
 - a. The Department and the Contractor are co-permittees of the NPDES Construction Storm Water General Permit.
 - b. The Contractor shall comply with all conditions required by the current NPDES Construction Storm Water General Permit.
3. The Contractor shall exercise every reasonable precaution throughout the life of the contract to prevent silting of the waters of the state, the project site, and adjacent property. Construction of drainage facilities, as well as performance of other contract work which will contribute to the control of siltation, shall be carried out in conjunction with earthwork operations or as soon thereafter as is practicable.
4.
 - a. The Contractor shall take sufficient precautions to prevent pollution of the waters of the state, the project site, and adjacent property from construction debris, petroleum products, chemicals, or other harmful materials.

The Contractor shall conduct and schedule the operations to avoid interference with any protected species.
 - b. The Contractor shall comply with all applicable statutes relating to pollution of the waters of the state and fish and game regulations.
5. All construction debris shall be disposed in a manner that it cannot enter any waterway. Excavation shall be deposited as to protect the waters of the state from siltation.
6. All erosion and sediment control measures shall be properly installed and maintained by the Contractor until all permanent drainage facilities have been constructed, and all slopes are sufficiently vegetated to be an effective erosion deterrent; or until tentative acceptance of the work.
7. All erosion and sedimentation resulting from the Contractor's operations and the weather conditions must be corrected by the Contractor.

LIMITATION OF OPERATIONS (2-1-1217)

A. General

1. The maximum exposed surface area for the Contractor's operations in excavation, borrow, and embankment is 18 acres (72,800 m²) plus an equal area of clearing and grubbing/large tree removal. A written request for an increase in the maximum exposed surface area may be approved by the Engineer. This approval will be based on the soil, moisture, seasonal conditions, the Contractor's operation, or other conditions.

2. The Engineer shall have the authority to reduce the maximum exposed surface area when any of the following conditions warrant:
 - a. Soil and moisture conditions are such that erosion is probable.
 - b. Seasonal conditions may force extended delays.
 - c. Proximity to the waters of the state requires more stringent controls.
 - d. Equipment and personnel available on the job is not sufficient to properly maintain erosion and dust control measures.
 - e. Any other environmental condition in the area that may exist which would be affected by erosion from the project.
3. Construction operations in rivers, streams, wetlands, and impoundments shall be restricted to those areas specifically shown in the contract. Rivers, streams, wetlands, and impoundments shall be promptly cleared of all false work, piling, debris, or other obstructions placed therein or caused by the construction operations.
4. Fording and operation of construction equipment within streams and wetlands will not be allowed, unless explicitly allowed in the contract. Streams are defined as any area between the high banks, regardless of the flow conditions.

CONSTRUCTION METHODS (2-1-1217)

A. General

1. The Contractor shall conduct all construction activities and install temporary erosion control measures, as necessary, to control sediment and avoid soil erosion during construction.
2. The Contractor shall incorporate all permanent erosion control features into the project at the earliest practicable time.
3. Construction stormwater management control measures for Contractor obtained work areas located outside the right-of-way, such as borrow site operations, haul roads, plant sites, staging sites, waste sites, equipment storage sites, etc. are the sole responsibility of the Contractor. All construction stormwater management control measures for these areas are at the Contractor's expense. The Contractor is responsible for securing all required permits for use of these sites.
4. The construction stormwater management procedures contained herein shall be coordinated with any permanent erosion control measures specified elsewhere in the contract to the extent practical to assure economical, effective, and continuous erosion and sediment control throughout the construction period.

5. The Contractor shall be responsible to limit erosion and prevent siltation into the waters of the state during the construction period, as well as during the times that work may be suspended.
6.
 - a. All erosion and sediment control items shall be installed by personnel who are knowledgeable in the principles and practice of various BMP installations.
 - b. The installation of all erosion and sediment control items shall be done under the direct supervision of the Contractor's employee who has successfully completed training provided by the Department and has been certified as an Erosion and Sediment Control Inspector (Inspector). The Contractor's Inspector shall be present at each site during installation to direct and inspect all erosion and sediment control BMP installations.
 - i. The NDOT Erosion and Sediment Control Inspector Certification is obtained by completing an Erosion and Sediment Control Inspector Training Course provided by the Nebraska Department of Transportation and passing the examination that accompanies the training.
 - c. The Contractor shall notify the Engineer of all employees, who have been certified as Inspectors, who will be on the project to direct and inspect all erosion and sediment control BMP installations.
 - d. No payment will be made for any erosion and sediment control item unless a Contractor's Inspector was present to directly supervise and inspect the work.
 - e. No payment will be made for any erosion and sediment control item that is not properly installed. All erosion and sediment control items shall be installed as per the contract.

ENVIRONMENTAL COMMITMENT DOCUMENT (2-1-1217)

A. Environmental Commitment Document

1.
 - a. An Environmental Commitment Document will be created by the Department to identify all project specific environmental commitments and will be included in the Contract.
 - b. The Department will provide information for the following, when applicable:
 - i. Storm Water Pollution Prevention Plan (SWPPP)
 - ii. U.S. Army Corps of Engineers (USACE) Section 404 Permit

- iii. Nebraska Department of Environmental Quality 401 Water Quality Certification
 - iv. State Title 117 Waters (USACE Non-Jurisdictional)
 - v. Floodplain Permit
 - vi. Historic Clearance
 - vii. Endangered Species Act Clearance
 - viii. Nebraska Nongame and Endangered Species Conservation Act Clearance
 - ix. National Environmental Policy Act Compliance
 - x. NPDES Construction Stormwater Permit (within Right-of-Way limits, only)
 - xi. Conservation Measures
 - xii. Migratory Bird Treaty Act
 - xiii. Bald and Golden Eagle Protection Act Compliance
 - xiv. Other pertinent issues
- c. The Contractor shall provide information for the following, when applicable:
- i. Temporary Erosion Control Plan
 - ii. Spill Prevention and Control Plan
 - iii. Migratory Bird Treaty Act Compliance Plan
 - iv. Name and telephone number of the Contractor's representative responsible for the Environmental Commitments
 - v. Name and telephone number of the employees that are NDOT-Certified Erosion and Sediment Control Inspectors
 - vi. Critical Path Construction Schedule
 - vii. Other items as defined elsewhere in the contract

**STORM WATER POLLUTION PREVENTION PLAN (SWPPP)
(2-1-1217)**

A. General

1. A SWPPP is required for projects that construction activities will cause a land disturbance of one (1) acre or more. The Department will prepare the SWPPP for the areas within the Right-of-Way, temporary easements and permanent easements.
2. For projects not requiring a SWPPP, the Contractor shall comply with the requirements of Environmental Commitment Document, Paragraph 1.b. of this Special Provision, as applicable.
3. Contractor obtained work areas, located on private property, are not included in the NDOT Project SWPPP.

B. Temporary Erosion Control Plan

1. The Contractor shall prepare and submit the Temporary Erosion Control Plan prior to the start of any work. The Contractor shall not begin work until the Temporary Erosion Control Plan has been submitted to the Engineer and appropriate erosion control measures are in place. Payment for any work on the contract will be withheld if erosion control measures are not in place or properly maintained.
2. The Temporary Erosion Control Plan will be reviewed at project progress meetings. All active Contractors shall have their Inspectors present and work in cooperation to determine any necessary changes. Necessary changes will be documented on the Temporary Erosion Control Plan by the Engineer.
3. Payment for preparing the Temporary Erosion Control Plan, inspections and meeting reviews are subsidiary to items that direct payment is made.

C. Spill Prevention and Control Plan

1. All project activities shall be addressed in the Spill Prevention and Control Plan. The Contractor shall prepare and submit the plan to the Engineer and install all appropriate spill prevention and control measures prior to the start of any work.
2. The Spill Prevention and Control Plan shall clearly state measures to prevent, contain, document and clean up a spill. It shall state measures for disposal of the contaminated material, disposal documentation and incident review to train personnel to prevent spills from reoccurring.
3. Spill Prevention and Control Plans are applicable to construction sites where hazardous materials are stored, used and/or generated onsite. Hazardous materials include, but not limited to, hazardous wastes, pesticides, paints, cleaners, petroleum products, fertilizers, solvents and porta-potty wastes.
4. Direct payment will not be made for the Spill Prevention and Control Plan.

D. Migratory Bird Treaty Act Compliance Plan

1. The Contractor shall not begin work until a Migratory Bird Treaty Act Compliance Plan has been submitted to the Engineer and appropriate nesting migratory bird avoidance measures are in place.
2.
 - a. The Contractor shall clearly state the necessary measures they intend to use to avoid a "Take" of nesting migratory birds in the Migratory Bird Treaty Act Compliance Plan. Measures may include but are not limited to:
 - i. Clearing and grubbing prior to April 1st or after September 1st
 - ii. Tree removal prior to April 1st or after September 1st
 - iii. Clearing empty nests on structures prior to April 1st
 - iv. Maintaining clear structures until commencement and throughout the duration of work on structures
 - v. Netting structures to prevent nesting
 - vi. Commitment to perform surveys according to protocol
 - vii. Hire a biologist to survey areas to be disturbed prior to commencement of work during the nesting season
 - viii. Submittal of required bird survey reports
 - ix. Training of Contractor Personnel to insure compliance
3.
 - a. The Migratory Bird Treaty Act Compliance Plan is applicable to the entire project site to avoid the "Take" of migratory birds protected under the Migratory Bird Treaty Act.
 - b. "Take" is defined as: pursuit, hunt, shoot, wound, kill, trap, capture, collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.
4. The Migratory Bird Treaty Act Compliance Plan shall adhere to the NDOT's Avian Protection Plan located at:

<http://www.dot.nebraska.gov/media/3952/avian-protection-plan.pdf>

Direct payment will not be made for the Migratory Bird Treaty Act Compliance Plan.

E. SWPPP Inspection

1. The Contractor shall accompany the Engineer on inspections in accordance with the NPDES Construction Storm Water General Permit.

2. The SWPPP will be maintained and updated by the Engineer as work progresses and site conditions change to accurately describe the BMPs that are currently in place.
3. The Contractor's participation in SWPPP inspections, maintenance and updates shall begin on the first day construction activities cause land disturbance and end on the date of project completion as evidenced as the completion date in the District Engineer's Letter of Tentative Acceptance.
4.
 - a. The Contractor's Inspector shall be responsible for ensuring that all BMPs are installed in accordance with the contract or the manufacturers' recommendations. The Contractor's Inspector shall be capable of reading and interpreting these documents.
 - b. The Contractor's Inspector shall be familiar with product and structural BMPs. The Contractor's Inspector shall inspect, assess, and supervise the maintenance of erosion and sediment control BMPs to ensure compliance with the NPDES Construction Storm Water General Permit while preserving BMP functionality.
5. Payment for project inspection is subsidiary to items that direct payment is made.

ENVIRONMENTAL COMMITMENT ENFORCEMENT (2-1-1217)

A. General

1. This specification establishes payment and disincentive assessment for the Contractor's performance in complying with Contract Environmental Commitments.
2. Deficiencies are described but not limited to:
 - a. Failure to install pollution prevention control BMPs as work progresses or as described in the SWPPP.
 - b. Failure to maintain existing pollution prevention control BMPs.
 - c. Failure to remove non-functioning pollution prevention control BMPs.
 - d. Failure to comply with USACE Section 404 Permit requirements.
 - e. Failure to comply with NPDES Construction Storm Water General Permit requirements.
 - f. Failure to comply with all applicable statutes relating to pollution of the waters of the state.
 - g. Exceeding the maximum exposed surface area for excavation of 18 Acres without written request for permission and written approval.

- h. Failure to comply with wildlife species-specific conservation conditions.
- i. Failure to comply with the Contract.
- j. Failure to comply with the Engineers directives.

B. SWPPP Deficiency Notification

1. The Engineer will document and direct the Contractor to correct deficiencies.
2.
 - a. The Contractor shall commence correcting deficiencies, provide adequate equipment and personnel, and diligently pursue correcting deficiencies without cessation until all deficiencies have been corrected.
 - b. The count of Working Days and/or Calendar Days will continue during the time period that corrective work is being performed.
 - c. Delays to the project as a result of the Contractor conducting corrective actions for the Contract Environmental Commitments will not constitute a valid reason for an extension of the contract time allowance.
3. Deficiencies shall be corrected within seven (7) calendar days of notification or within an approved extension. When deficiencies are not corrected within seven (7) calendar days or within an approved extension, the Engineer will make a disincentive assessment to the contract as stated herein.
4.
 - a. If soil, weather, or other conditions prevent the Contractor from completing the corrective actions within seven (7) calendar days, the Contractor shall notify the Engineer in writing. The Contractor's letter shall state the reasons preventing corrective action within the time allowed. The Contractor shall propose a written Corrective Action Plan within 48 hours. Corrective work shall continue while the Corrective Action Plan is developed. The Contractor's Corrective Action Plan must contain a course of action and a timeframe for completion. If the reasons and the Corrective Action Plan are acceptable, the Engineer may extend the time in which to complete the corrective work.
 - b. The Contractor will be allowed to proceed with the plan as proposed without incurring a disincentive assessment. If all corrective work is completed within the time allowance shown in the Notification or within an approved extension, a disincentive assessment will not be imposed upon the Contractor.
 - c. Storm events or soil and weather conditions occurring on other projects, which interfere with a Contractor completing corrective actions on the project within seven (7) calendar days, will not be justification for a time extension to complete the corrective work.
5. If all corrective work identified in the Notification has not been completed at the end of the seventh (7th) calendar day after the Initial Notice Date or within an approved extension, a Shut-Down Notice will be issued on the eighth (8th)

calendar day after the Initial Notice Date or on the calendar day following the last day of an approved extension.

6. All operations shall cease as of the date and time cited in the Shut-Down Notice. The Contractor shall work, exclusively, on the deficiencies until all have been corrected or as directed by the Engineer. Upon issuance of the Shut-Down Notice, a disincentive of \$500.00 per deficiency per calendar day will be assessed thru the day the corrective work is completed, inclusive.
7. The Engineer may require the Contractor to provide a written Procedures Plan that describes the process to prevent reoccurrence of deficiencies. The written Procedures Plan shall be provided within two (2) calendar days of the request. Failure to correct all deficiencies and provide a Procedures Plan may result in payments being withheld until such time that procedures are outlined.
 - a. Payment for preparing a written Procedures Plan is subsidiary to items that direct payment is made.

C. Storm Event Restoration – Incentive and Disincentive

1. The Department will pay “Storm Event Restoration - Incentive” when the Contractor completes the restoration work to eliminate the pollution prevention control deficiencies within seven (7) calendar days of Notification or within an approved extension. Multiple deficiencies may be included in one notification. If the restoration work has not been completed within seven (7) calendar days after the Initial Notice or within an approved extension, payment for the item of “Storm Event Restoration - Incentive” will not be made.
2. A storm event is defined as a storm exceeding 0.50-inch of rain in a 24-hour period.
3. The Department will notify the Contractor of pollution prevention control deficiencies.
4.
 - a. Payment for the item of “Storm Event Restoration - Incentive” may not be made when the Contractor is notified to correct pollution prevention devices not installed in accordance with the contract or the manufacturer’s recommended installation instructions.
5. If the restoration work is not completed within seven (7) calendar days or within an approved extension, a disincentive assessment of \$500.00 per deficiency per calendar day will be assessed. The disincentive assessment will begin on the eighth (8th) calendar day after the issuance of the Initial Notice Date or on the calendar day following the last day of an approved extension(s) and continue through the day that the restoration work is completed, inclusive.

D. Method of Measurement

1.
 - a. “Storm Event Restoration – Incentive” will be measured by the each upon completion of restoration of all deficiencies included in a notification within the allowed time and only one payment per notification is allowed when multiple deficiencies are included on the notification.
 - b. If deficiencies from multiple notifications are restored during the same restoration operation, only one (1) incentive is eligible for payment.
 - c. If multiple notifications are the result of successive storm events and deficiencies are transferred to ensuing notifications, incentive payment is only eligible for the latest notification.
2. “Storm Event Restoration – Disincentive” will be measured by the calendar day in accordance with Paragraph C.5. above.

E. Basis of Payment

- | | | |
|----|--|-----------------|
| 1. | Pay Item | Pay Unit |
| | Storm Event Restoration – Incentive | Each |
| | Storm Event Restoration – Disincentive | Calendar Day |
2. All equipment, materials, etc. used in the restoration work will be paid for in accordance with Division 800 of the Standard Specifications.
 3. Payment is full compensation for all other incidentals required to complete the restoration work included in the notification within the allowed time.

F. Environmental Commitments – Contractor Compliance

1. To provide payment for all plans, inspections, surveys, reports, travel, qualified inspection person’s, carrion removal, and any other subsidiary activities for the work of implementing threatened and endangered species commitments, temporary erosion control or any other environmental commitments prescribed in the contract.
2. Multiple visits to the project may be required to comply with environmental commitments prescribed in the contract.

G. Method of Measurement

1. No measurement is required.

H. Basis of Payment

- | | | |
|----|---|-----------------|
| 1. | Pay Item | Pay Unit |
| | Environmental Commitments – Contractor Compliance | Lump Sum |

2. Partial payments will be made as follows:
 - a. The Department will pay 50 percent of the total amount bid for the item Environmental Commitments – Contractor Compliance within seven (7) calendar days after the Notice to Proceed Date.
 - b. Upon completion of 50 percent of the Original Contract Amount, the Department will pay 30 percent of the amount bid for the item Environmental Commitments – Contractor Compliance.
 - c. Upon completion of 75 percent of the Original Contract Amount, the Department will pay the remaining 20 percent of the amount bid for the item Environmental Commitments – Contractor Compliance.
 - d. Failure to comply with any or all of the contract requirements, included for payment under the item of Environmental Commitments – Contractor Compliance, will preclude all payment for the item, including any previous payment.
3. Payment is full compensation for all work prescribed in the contract.

I. Immediate Action Deficiencies

1. Deficiencies that pose an imminent threat to the environment are considered an emergency situation. These deficiencies will be identified in the Immediate Action Deficiencies Section of the Environmental Commitment Deficiency Notification Form. The corrective work for Immediate Action Deficiencies shall begin immediately and continue without cessation until completed.
2. The Engineer will issue a shut-down notice. All work on the contract shall cease until the corrective work has been completed. The Engineer may allow the Contractor to continue working in areas unaffected by the Immediate Action Deficiency, provided corrective actions are being actively performed on the deficiency.
3. Immediate Action Deficiencies are not eligible for an incentive payment.
4. The Contractor will be assessed a disincentive assessment of \$1,000.00 per deficiency per calendar day for failure to begin corrective actions or failing to continue to completion as directed by the Engineer or by the regulatory agency with jurisdiction.
5. Examples of Immediate Action Deficiencies include but are not limited to:
 - a. Threatened & Endangered Species habitat protection deficiencies
 - b. USACE Section 404 Permit Noncompliance
 - c. Petroleum Spills/Tank Leakage
 - d. Hazardous Material Spills

J. Rights Reserved

1. The Department reserves the right to initiate and perform corrective action on any deficiencies which result from the Contractors' actions, inactions, or for failure to comply with the NPDES Construction Stormwater General Permit, USACE Section 404 Permit, or any other applicable permit.
2. The Contractor shall be liable to the Department for any and all costs incurred by the Department for corrective actions taken by the Department.
3. It is expressly understood that the provisions of this specification shall not relieve the Contractor of their responsibilities nor shall it relieve the Surety of its obligation for and concerning any just claim.
4. The Contractor shall indemnify and save harmless the Department and all of its representatives from any and all actions or claims brought because of the Contractor's actions, inactions, or for failure to comply with the NPDES Construction Storm Water General Permit, USACE Section 404 Permit, or any other applicable permit.

**HAZARDOUS MATERIALS MANAGEMENT
(2-1-1217)**

Description

This work shall consist of minimizing the exposure of the environment, including waters of the state, to hazardous materials. This specification also includes the requirements for clean-up of releases of hazardous materials.

Material Requirements

1. Prior to beginning work on the project, the Contractor shall prepare a Spill Prevention and Control Plan (SPCP) that clearly states measures to prevent a spill, contain a spill, clean up a spill, dispose of contaminated materials and train personnel to prevent and control spills. The plan shall include the notification contacts, as well as the processes and timeframes to address the situation in the event that a spill occurs. The following shall be included in the plan:
 - a. A site plan showing locations for loading of equipment and materials, storage of equipment and materials, equipment fueling and wash areas, portable toilet locations and waste disposal areas.
 - b. Descriptions of the following that may be used on projects:
 - i. Best Management Practices (BMPs) for secondary containment.
 - ii. Description of spill response equipment and materials, including safety and clean up equipment.

- iii. Preventative inspection and maintenance techniques for equipment to minimize leaks.
 - iv. Procedures for filling tanks and equipment to prevent spills.
 - v. Procedures for containing, diverting, isolating and cleaning up a spill.
 - vi. Procedures and BMPs to be administered at bridge and culvert sites to ensure that hazardous materials do not runoff.
 - (1) When water is present, immediate action to contain and remediate a spill is required.
 - (2) The Contractor shall notify the NDOT Project Manager and NDEQ upon release of any quantity of material to waters of the state. The NDOT Project Manager will notify the NDOT Environmental Section upon notification of a release.
 - vii. Spill training agenda and materials for the Contractor's staff and subcontractors.
- c. Identify individuals responsible for implementing the plan.
 - d. Specify how and when to notify appropriate authorities such as Nebraska Department of Environmental Quality and Nebraska State Patrol.
2. The Contractor shall provide and maintain a spill kit with appropriate materials to clean up minor spills on site as described in the Spill Prevention and Control Plan. A minor spill is defined as a release that is less than the reportable quantity for a given material and not entering waters of the state.
 3. Material Safety Data Sheets (MSDS) shall be maintained on site for all hazardous materials being used or stored for the project. The MSDS Sheets shall contain reportable quantities and spill response information.

Construction Methods

1. The Contractor shall store paints, solvents, pesticides, petroleum products, and other hazardous materials in areas with secondary containment.
2. Hazardous materials storage, including portable toilets, shall be restricted to specific areas away from:
 - a. vehicular traffic
 - b. restricted areas shown on the plans
 - c. waters of the state, including wetlands (50 feet minimum distance)
 - d. Wellhead Protection Areas, unless designated in a Wellhead Protection Plan that has been approved by the local authority.

3. The Contractor shall inspect hazardous material containers weekly to ensure that all containers are clearly identified and that no leaks are present.
4. The Contractor shall inspect the site weekly to ensure that cleanup procedures are posted and that a spill kit is adequately stocked and readily available.
5. The Contractor shall verify and update the SPCP site maps as necessary during inspections to accommodate changes in the site.
6. A spill kit shall be readily available, in close proximity and appropriately stocked when applying petroleum based or other hazardous materials to bridge and culvert sites.
7. The Contractor shall develop, implement and maintain a training program regarding hazardous materials management. Training of the Contractor's staff and subcontractors shall be conducted to ensure that workers are knowledgeable of the procedures, materials and equipment outlined in the SPCP. The Contractor shall maintain a database of individuals that have been trained.
 - a. Specific hazardous materials and their handling procedures shall be discussed during safety briefings.
8. The Contractor shall maintain and provide to the Project Manager, upon request, a record of all spills occurring on site. This record shall include:
 - a. The circumstances leading to the spill
 - b. The date of the release
 - c. Measures taken to resolve the incident
 - d. Measures taken to prevent a reoccurrence
9. The Contractor shall follow NDEQ notification procedures for all spills in excess of a reportable quantity as defined by NDEQ Title 126 or the products MSDS Sheets. The NDOT Project Manager will notify the NDOT Environmental Section.
10. The Contractor shall follow all local, state and federal regulations associated with the release and/or cleanup, including disposal of the hazardous material.

Method of Measurement and Basis of Payment

1. Direct payment will not be made for work associated with Hazardous Materials Management, but is considered subsidiary to the items for which direct payment.
2. The Contractor shall solely bear all penalties and costs associated with the containment, cleanup, remediation and disposal of material associated with a spill.

**ACCEPTANCE TESTING OF SOILS BY USE OF THE LIGHT WEIGHT
DEFLECTOMETER (LWD) SCOPE
(2-2-1217)**

This test method covers the in-place measurement of deflection and moisture content of Class III embankments, subgrade preparation, granular fill and backfill for acceptance testing on Nebraska Department of Transportation Projects. Refer to Subsection 205.03 of the NDOT Standard Specifications for Highway Construction for a definition of Class III embankments. Refer to NDOT Test Method T 2835 for the proper operation of the LWD.

The deflection test measurement shall be the average measured deflection of the fourth, fifth, and sixth drops of the falling weight of the LWD. The first three drops are to be used to seat the LWD.

The Deflection Target Value (DTV) is the deflection value of each soil determined by using a test strip or from correlation with the Nebraska Group Index for an individual Soil.

Option 1

A. Determination of DTV using a Test Strip

1. A test strip shall be constructed for each soil type to determine the deflection target value.
2. A new test strip shall be constructed when there is an observed change in material or as determined by the Engineer.
3. The test strip dimensions for roadway embankment and subgrades shall have a minimum length of 200 feet and a width equal to the embankment or roadway. The total thickness shall be no less than 6 inches for roadway subgrade and no less than 1 foot and no more than 3 feet for roadway embankment.
4. The test strip dimensions for trenches, culverts, and structures shall have a minimum length of 10 feet and a width equal to that of the excavation. The total thickness shall be no less than 1 foot and no more than 3 feet.
5. The optimum moisture of fine-grained soils shall either be determined in the NDOT Branch Lab or Central Lab, and shall be based on a correlation with the Plastic Limit or determined from AASHTO T-99. A 10-lb sample of proposed material shall be submitted to the NDOT Branch Lab or Central Lab a minimum of 14 days prior to grading operations.
6. The moisture content for granular soils shall be "as necessary" to achieve proper compaction.
7. The moisture content limits of the soil shall follow the requirements provided in Table 1.
8. The test strip area construction shall be incidental to the embankment construction.
9. The testing rate during the test strip construction is provided in Table 2.

Table 1 - Moisture Requirements

Location	Soil Type	Depth Below Finished Subgrade	Minimum %	Maximum %
Soil materials receiving concrete pavement	Silt – Clay Silt- Clay Granular	Upper 3 feet Greater than 3 feet All Depths	Opt. -3 Opt. -3 **	Opt. +2 Opt. +2 **
Soil materials receiving flexible pavement	Silt – Clay Silt- Clay Granular	Upper 3 feet Greater than 3 feet All Depths	Opt. -2 Opt. -3 **	Opt. +1 Opt. +2 **
Soil materials receiving gravel surfacing	All materials	All Depths	**	**
Subgrade prep. Shoulder subgrade prep (concrete pavement)	Silt – Clay Granular	The upper 6 inches of subgrade soil	Opt. -3 **	Opt +2 **
Subgrade prep. Shoulder subgrade prep (flexible pavement)	Silt – Clay Granular	The upper 6 inches of subgrade soil	Opt. -2 **	Opt +1 **
Stabilized Subgrade	-	-	See Specifications	
Granular Structural Fill (MSE Walls, bridges, culverts, et.)	Granular	All Depths	**	**

** Moisture as necessary to obtain proper compaction. The moisture target value for granular materials shall be established in the field by the Contractor during the compaction process. Once established the target moisture shall not vary by more than $\pm 2\%$.

Table 2 - Test Strip Testing Rate

Material Location	Minimum Testing Rate
Roadway embankment and subgrade	3 tests/ pass*
Trenches, culverts, and miscellaneous structures	1 test / pass*

* Number of passes with compaction equipment as described in paragraph 13c of Subsection 205.03 of the NDOT Standard Specifications for Highway Construction.

B. Test Strip Construction and Testing

1. Prior to placing the fill material for the test strip, the subgrade shall be scarified and re-compacted.
2. The fill material shall be placed with a lift thickness no greater than 8 inches uncompacted.
3. The test strip shall be constructed with uniform material and moisture content, and compaction; until it meets the requirements of numbers 3 or 4 of Section A of this provision.
4. The deflection target value is obtained when:
 - i. The moisture content is within the acceptable range.

- ii. The average of the deflection test measurements for three consecutive passes of compaction equipment does not change by more than 10% with additional compaction. The DTV shall be based on the lowest average deflection test measurement from these passes.
- 5. A 10-lb sample of the test strip material shall be submitted to the NDOT Branch Lab or Materials and Research Soil Lab for index testing.
- 6. The DTV shall be re-evaluated when:
 - i. Deflection test measurements are consistently less than the DTV. (3 out of 5 consecutive deflection test measurements are less than 0.80 of the DTV).
 - ii. Failing test results are consistently occurring and adequate compaction is observed.

Option 2

C. Determination of Deflection Target Values based on the Nebraska Group Index (NGI)

- 1. Prior to construction a 10-lb bag of representative material shall be submitted to the nearest NDOT Branch Lab or Materials and Research Soil Lab for each different soil type no less than 21 days prior to grading operations.
- 2. From the laboratory testing NDOT will determine the Nebraska Group Index (NGI) for each soil type submitted and provide a correlated minimum DTV and optimum moisture content.
- 3. If no correlation data is available for an individual NGI, a test strip shall be used to determine the DTV as discussed in parts A and B in this provision.
- 4. The DTV shall be re-evaluated when:
 - i. Deflection test measurements are consistently less than the DTV. (More than 20% of the deflection test measurements are less than 0.80 of the DTV).
 - ii. Failing test results are consistently occurring and adequate compaction is observed.

Acceptance Testing

- 1. The Deflection Target Value for use as acceptance testing shall be:
 - DTV \leq 1.10 x average deflection value determined from Option 1, Part B, of this provision
 - DTV \leq Correlated DTV determined from the NGI correlation, Option 2, Part C

2. The testing frequency for moisture and deflection shall follow the NDOT Materials Sampling Guide.
3. The moisture content of soil shall be performed using NDOT's approved equipment and methods. Approved equipment includes: 1) hot plates, stove, or microwave, 2) Speedy Moisture Method, or 3) Laboratory oven method.
4. Moisture content results shall be reported to the nearest tenth of a percent.

EMBANKMENT

All embankment except for the upper 3 feet of the mainline foreslopes shall be granular fill meeting the gradation requirements of 50% - 97% passing the No. 4 sieve, 16% - 40% passing the No. 30 sieve, and 0% - 3% passing the No. 200 sieve.

The upper 3 feet of the foreslope material shall be cohesive soil, and the top 6 inches of that 3 feet shall be topsoil. The cohesive soil shall have a liquid limit of less than 50 percent.

REMOVE ASPHALT SURFACE

The Contractor shall be required to saw cut or mill the asphaltic concrete full depth to expose a vertical face at locations where removed asphalt surface will abut new pavement or surfacing, as shown in the plans, or using other methods approved by the Engineer. The work of cutting, removing and disposing of the existing bituminous material will not be measured for payment directly but shall be considered subsidiary to the item "Remove Asphalt Surface".

FOUNDATION COURSE (3-1-0319)

Paragraph 8. of Subsection 1033.02 in the Standard Specifications is void.

Section 307 in the Standard Specifications is void and superseded by the following:

307.01 – Description

1. The foundation course is a layer of compacted material conforming to the lines, grades, and dimensions shown in the contract. The foundation course shall be built on a finished subgrade. The Contractor shall complete the following requirements under the foundation course bid items including but not limited to:
 - a. Adjust grade lines to meet intersections, pavements, bridge ends, railroad crossings, or any other physical features designated by the Engineer.
 - b. Process the source material.

- c. Place the foundation course.
 - d. Compact the foundation course.
 - e. Profile the foundation course.
 - f. Dispose of excess material after profiling is completed.
2. The types of foundation course are:
- a. Bituminous.
 - b. Crushed concrete.
 - c. Aggregate Foundation Course – D.

307.02 – Material Requirements

- 1.
 - a. All samples, including field samples, will be washed according to AASHTO T 11 prior to performing sieve analysis. All samples will be taken from the project grade prior to the spreading and profiling operations.
 - b. The Contractor shall handle all material in such a manner that prevents contamination.
- 2. Bituminous Foundation Course:
 - a. Material used in constructing bituminous foundation course shall consist of salvaged bituminous material. The source of the salvaged bituminous material will be described in the contract.
 - b. All salvaged bituminous material must be less than 3 inches (75 mm) in maximum dimension and shall not contain more than 5% by weight of material retained on a 2 inch (50 mm) sieve just prior to its use.
 - c. Contractor Production
 - (1) All salvaged bituminous material produced by the Contractor from pavement removal or by cold milling material from existing pavement structures on the project, whether hauled directly to the site of use or temporarily stockpiled, shall be screened to meet the requirements of Paragraph 2.b.
 - (2) If, after screening, there is insufficient material to produce the plan quantity, the Engineer may order the oversized salvaged bituminous material to be further processed at no cost to the State prior to delivery to the roadway. Processing shall mean crushing, pulverizing, re-screening, or a combination of these methods.
 - (3) On projects that allow multiple foundation course materials to be used, the Engineer may direct that salvaged bituminous material

continue to be placed as bituminous foundation course to the extent this material is available and can be utilized on the project.

- (4) Unless otherwise shown in the contract, all Contractor produced salvaged bituminous material, including oversized material, remaining at the end of the bituminous foundation course operation shall become the property of the Contractor and removed from the project.
- (5) The salvaged bituminous material shall be free of deleterious matter as determined by the Engineer.

d. Department Provided Stockpiles

- (1) If the salvaged bituminous material is to be obtained from existing stockpiles described in the contract, the salvaged bituminous material shall be screened to meet the requirements of Paragraph 2.b. prior to delivery to the roadway. Any oversized bituminous material remaining from the screening operation shall remain the property of the Department.
- (2) If, after screening, there is insufficient material to produce the plan quantity, the Engineer may order the oversized salvaged bituminous material to be further processed for use as Bituminous Foundation Course. Processing shall mean crushing, pulverizing, re-screening, or a combination of these methods. This will be paid for as Extra Work as described in Paragraph 5. of Subsection 104.02.

3. Crushed Concrete Foundation Course:

- a. Material used in constructing crushed concrete foundation course shall consist of processed and stockpiled concrete pavement. The source of the materials for the crushed concrete will be described in the contract. Crushed Concrete shall be free of deleterious matter as determined by the Engineer.
- b. All samples will be taken from the project grade prior to spreading and profiling. The crushed concrete gradation shall be determined as described in NDOT T 27 (washed test). The gradation requirement for the crushed concrete foundation course is shown in Table 307.01. Material represented by samples with 15% or more passing the No. 200 (75 µm) sieve will be subject to removal.
- c. Material gradation will be accepted by the table below on a lot basis of 2,500 cubic yards on the average of 5 consecutive tests, one for each 500 cubic yard subplot. If at the end of the project, the final lot consists of less than 2,500 cubic yards, a minimum of 3 samples, or 1 sample for each 500 cubic yards or fraction thereof, whichever is greater shall be taken and tested and acceptance based on the average of those tests.

- d. Moisture content shall be no higher than necessary to facilitate compaction to the required stiffness.

Table 307.01

Crushed Concrete Foundation Course Gradation Requirements	
Sieve Size	(Percent Passing)
1½ inch (37.5 mm)	100 minimum
¾ inch (19.0 mm)	85 maximum
No. 4 (4.75 µm)	20 to 50
No. 200 (75 µm)	0 to 8

4. Aggregate Foundation Course-D
- a. Aggregate Foundation Course-D shall be a non-recycled virgin material.
 - b. Aggregate shall conform to the quality requirements of Paragraphs 1. and 2. of Subsection 1033.02.
 - c. Mineral aggregates shall have a Los Angeles Abrasion loss percentage of no more than 40% by weight.
 - d. Mineral aggregates shall have a soundness loss of no more than 12% by weight at the end of 5 cycles using the Sodium Sulfate Soundness test.
 - e. At least 14 days before beginning foundation course production, the Contractor shall submit a proposed mix design along with a 50 pound (23 kg) sample of each aggregate to the Engineer for approval. The mix design will:
 - (1) Result in an aggregate mix that meets the gradation requirements of Table 307.02
 - (2) Propose single defined values for the percentage passing each sieve on the gradations of Table 307.02.
 - (3) Include the average aggregate gradations used to calculate the mix design.
 - (4) Create a fine aggregate angularity value of 43.0 or greater. The specific gravity for calculation of the Fine Aggregate Angularity (FAA) shall be determined on a combined aggregate sample of the material passing the No. 8 (2.36 mm) sieve and retained on the No. 100 (150 µm) sieve as defined in AASHTO T 304 Method A, except the specific gravity material shall be washed over the No. 100 (150 µm) sieve.
 - f. The Engineer will determine the optimum moisture content for the proposed foundation course design in accordance with the compaction requirements.

Table 307.02

Aggregate Foundation Course-D Gradation Requirements		
Sieve Size	Target Value (Percent Passing)	Tolerance
1/2 in (12.5 mm)	100	0
3/8 in (9.5 mm)	100	-4
No. 4 (4.75 mm)	93	±4
No. 10 (2.0 mm)	55	±10
No. 30 (600 µm)	25	±5
No. 40 (425 µm)	20	±4
No. 200 (75 µm)	3	±3

307.03 – Construction Methods

1. The Contractor shall process, load, haul, uniformly distribute, place, compact and profile the foundation course as shown in the contract.
2. Rolling pattern and deflection target value:
 - a. The Department will establish a rolling pattern and set a deflection target value.
 - b. The Department will monitor the rolling pattern with a lightweight deflectometer. If conditions change, the Engineer may require the rolling pattern be adjusted to attain optimal stiffness. Additional testing of separately placed irregular areas will be performed, as directed by the Engineer, to determine the necessary rolling pattern (or other type of compaction work) needed to attain optimum stiffness.
 - c. The Contractor shall roll the foundation course until no further compaction can be obtained, and roller marks are eliminated.
 - d. The Contractor shall take immediate action to adjust the rolling pattern whenever the Engineer determines that the foundation course stiffness variance is outside the tolerance of the deflection target value.
3. Profiling:
 - a. After the foundation course has been compacted and before the surface is profiled, the thickness shall be measured.
 - b. If the thickness of the compacted material is insufficient to permit profiling, the deficiency shall be corrected by the placement and compaction of additional material.
 - c. The profiling operation may be accomplished by milling, if necessary.
 - d. During the profiling operation, the control of grade and cross slope shall be maintained by the Contractor.

- e. The accuracy of the preparation of the subgrade and the profiling of the foundation course will be such that the profile grade will not vary from the contract by more than ½ inch.
 - f. The grade stakes placed for controlling the profiling operation shall be protected so that they are available for controlling the pavement operation.
4. Surface Protection:
- a. The Contractor shall only allow necessary local traffic and essential construction equipment on the foundation course.
 - b. The Contractor shall repair or replace marred, distorted, or otherwise damaged foundation course at no additional cost to the Department.
5. Material from the profiling operation may be reused if it meets the material requirements. Material not meeting the material requirements shall be wasted and removed from the project.

307.04 – Method of Measurement

- 1. Foundation course will be paid for by the square yard (square meter). Foundation course will not be measured directly. The measured pavement quantity of the overlying pavement is to be used as the foundation course quantity.
 - a. Any thickness in excess of the specified thickness of foundation course will not be measured for payment, but will be considered subsidiary to the respective foundation course pay item.
- 2.
 - a. Screening of salvaged bituminous material will not be measured for payment.
 - b. Processing of Contractor produced salvaged bituminous material, ordered by the Engineer, which contains excessive oversized material due to the Contractors production methods, will not be measured for payment.

307.05 – Basis of Payment

1.	Pay Item	Pay Unit
	Aggregate Foundation Course ____	Square Yard (SY) [Square Meter (m ²)]
	Bituminous Foundation Course ____	Square Yard (SY) [Square Meter (m ²)]
	Crushed Concrete Foundation Course ____	Square Yard (SY) [Square Meter (m ²)]
	Foundation Course ____	Square Yard (SY) [Square Meter (m ²)]

2. a. If a foundation course is $\frac{1}{2}$ to 1 inch (12mm to 25mm) less than the specified thickness, it shall be removed and replaced; or, at the Engineer's option, the material may be left in place and paid for at 40% of the bid price for the deficient areas. The area of the deficient section shall be determined by the Engineer.
 - b. Foundation course more than 1 inch (25mm) less than the specified thickness shall be removed and replaced at no additional cost to the Department. The extent of the area to be corrected will be determined by the Engineer.
3. All water applied to foundation course will not be measured for payment, but will be considered subsidiary to the relevant foundation course bid item.
4. Screening of salvaged bituminous material shall be considered subsidiary to the bituminous foundation course item.
5. Processing of salvaged bituminous material, ordered by the Engineer, which contains excessive oversized material due to the Contractors production methods, shall be considered subsidiary to the bituminous foundation course item.
6. If the Contractor is required to reprocess the oversized bituminous material from State stockpiles, the work of reprocessing will be paid for as Extra Work as described in Paragraph 5. of Subsection 104.02.
7. Payment is full compensation for all work described in this Section.

FOUNDATION COURSE 4"

The Contractor shall have the option of using either Aggregate Foundation Course-D, Crushed Concrete Foundation Course or Bituminous Foundation Course; and the Contractor shall bid the pay item "Foundation Course____" accordingly.

These different foundation courses may be used interchangeably throughout the project, with the exception being that the same type of foundation course shall be used across the entire width of a pavement section to provide uniform drainage across that template. The Contractor shall make every attempt to use the same type of foundation course in long paving runs and any changes in foundation course type shall be approved by the Engineer.

Regardless of the type of material used it shall be obtained from Contractor sources, the cold milling operations, or pavement removal operation on the project.

Regardless of the type of material used it shall be measured and paid for as Foundation Course ____".

FOUNDATION COURSE (Compaction and Stiffness)

Amend Subsection 307.03 of the Standard Specifications to include:

Equipment

A minimum of one self-propelled double drum vibratory roller shall be required. The vibratory roller shall have a minimum operating weight of 18,000 pounds.

Compaction and Stiffness

The Department shall monitor the in-place stiffness by measuring the deflection of the foundation course by using a control strip by performing Light Weight Deflectometer measurements of the foundation course for acceptance. Refer to NDOT Test Method T 2835 for the proper operation of the Light Weight Deflectometer (LWD). The procedure for conducting Lightweight Deflectometer testing is as follows:

1. The deflection test is defined as the average of the fourth, fifth, and sixth drops of the deflectometer at one location.
2. The deflection value is defined as the average of 3 test locations.
3. The Deflection Target Value (DTV) is the lowest deflection value determined by using a control strip.
4. A single coverage is defined as the compacting of unbound material over a given point a single time.
5. A new control strip shall be constructed when there is an observed change in material or as determined by the Engineer.

A Control Strip shall be constructed for the purpose of determining the Deflection Target Value.

6. The control strip dimensions for roadway shall have a minimum length of 200 feet.
7. The control strip area construction shall be incidental to the pay item Foundation Course_____".
8. During construction of the control strips, the Contractor shall make repeated compaction coverages. When the material is visibly densified, the Engineer will take deflection tests at 3 locations to get an average deflection value. Following each test, additional coverages shall be conducted and deflection tests taken until a Deflection Target Value is established.
9. The Deflection Target Value of the control strip shall be determined by compacting the foundation course to a point that three consecutive coverages do not change the deflection by more than 10%. The DTV shall be based on the lowest average deflection test. The roller procedure shall have a minimum of 6 consecutive coverages unless an alternate rolling pattern is approved by the Engineer.

10. The Deflection Target Value shall be re-evaluated when:
 - i. Deflection test measurements are consistently less than the DTV. (3 out of 5 consecutive deflection tests are less than 0.8 of the DTV).
 - ii. Failing test results are consistently occurring and adequate compaction is observed.

Acceptance Testing

A passing deflection test is defined as a deflection value that is less than $1.10 \times \text{DTV}$. The frequency of testing deflection is 1 test at one location for every 1500 square yards or less.

WORK ZONE TRAFFIC CONTROL SIGNS (4-3-1217)

The Department has adopted the FHWA 2009 Manual of Uniform Traffic Control (MUTCD) and the 2011 Nebraska Supplement to the MUTCD as the official guidance for work zone traffic control signs. Many work zone traffic control signs have been revised, redesigned, or replaced in the 2009 MUTCD (and 2011 Nebraska Supplement). Accordingly, all work zone signs shall comply with the following:

- 1 - All signs, regardless of age, shall meet the design standards of the 2009 MUTCD (and 2011 Nebraska Supplement).

TEMPORARY TRAFFIC CONTROL SIGNS AND DEVICES (4-3-1018)

Paragraph 19. of Subsection 422.04 in the Standard Specifications is void.

CONCRETE PROTECTION BARRIERS (4-9-0718)

Guidance for concrete protection barriers:

1. Type A: 4-loop barriers with a large opening at the bottom.
Type B: 6-loop barriers with 4 lifting slots and no slots for tie-down rods.
Type C: 6-loop barriers with 4 lifting slots and 6 slots for tie-down rods.
2. Type A barriers and 10-foot barriers will not be allowed for use on NDOT projects.

3. Existing Type “B” and “C” concrete protection barriers that meet NCHRP 350 and were built prior to December 31, 2019 can be used throughout their normal service life until December 31, 2027. The Engineer will determine if the barriers are within their normal service life using the Nebraska Department of Transportation Evaluation Guide Concrete Protection Barriers 2018 Edition.
4. Only Type “C” barriers shall be fabricated for use on this project on or prior to December 31, 2019. After December 31, 2019, all new concrete protection barriers shall meet the 2016 MASH criteria.
5. Other existing barriers meeting NCHRP 350 or MASH (Test Level 3) testing guidelines and FHWA approval may only be used with written permission (containing this project name and/or control number) from the District and Roadway Design Division.

TEMPORARY TRAFFIC SIGNAL WITH WAIT TIME DISPLAY

Paragraph 6 of Subsection 422.03 in the 2017 Standard Specifications for Highway Construction is amended to include the following:

Description

The Wait Time Display consists of a changeable message sign (CMS) which is interconnected with the temporary traffic signal. The display provides the motorist with wait time information.

Physical Requirements

The changeable message sign shall have the following minimum requirements:

- Minimum dimensions of 18” H x 28” W
- 1-2 line message capability
- Line 1: characters of 10-1/4” H x 5- 3/4” W (4 per line)
- Line 2: characters of 7” H x 4” W (6 per line)
- Up to 2 screens per message

Physical Placement

The changeable message sign shall be located at a height between 7’-0” and 18’-6” as measured from the bottom of the CMS to the road surface. The CMS shall not be located over the travelled roadway. There shall be 12” minimum separation between the edge of the CMS and the edge of nearest traffic signal head.

Operational Requirements

The CMS shall be powered by the power plant used to power the temporary traffic signal. The Wait Time Display shall function in traffic signal applications of fixed time operation and actuated operation as follows:

Fixed Time

When the temporary traffic signal displays a red indication, the CMS shall display the remaining red time in minutes. When the signal display changes to green, the CMS may display a “SLOW”/ “WORKZONE” message. When the signal display changes to yellow, the CMS shall

display a "WAIT TIME"/ "UP TO # MIN" message. The initial # shall be calculated by adding the programmed red clearance and yellow times of all signals plus the green time of the opposing signals. When the signal display changes to red, the CMS shall display "WAIT TIME"/ "UP TO # MIN", where # is the remaining red time in minutes and shall be changed with one (1) minute intervals, holding on 1 minute until the signal display changes to green.

Actuation

When the temporary traffic signal displays a red indication, the CMS shall display a "WAIT TIME"/ "UP TO # MIN". When the signal display changes to green, the CMS may display a "SLOW"/ "WORK ZONE" message. When the signal display changes to yellow, the CMS shall display a "WAIT TIME"/ "UP TO # MIN" message. The initial # shall be calculated by adding the programmed red clearance and the yellow times of all signals plus the maximum green of the opposing signals. When the signal changes to red, the CMS shall display "WAIT TIME"/ "UP TO # MIN", where # is the remaining red time in minutes and shall be changed with one (1) minute intervals, holding on 1 minute until the signal display changes to green.

Subsection 422.05 in the Standard Specifications is amended to include the following:

Pay Item	Pay Unit
Temporary Traffic Signal with Wait Time Display	Each (ea)

SURFACING UNDER GUARDRAIL (5-3-1217)

Amend Section 503 in the Standard Specifications to include Surfacing Under Guardrail.

At the Contractor's option, the surfacing may be constructed using Class "47B-3000" Concrete, Class "BX-3000" Concrete, Class "PR-3000" Concrete (Class 47B-20 Concrete, Class BX-20 Concrete, Class PR-20 Concrete), or any commercially produced hot mix asphaltic concrete, which has been approved by the Engineer. These materials may be used interchangeably during the course of the work except that surfacing at any individual location must be completed with the same material with which the work was begun.

If concrete is used in the surfacing, it shall reach a minimum strength of 3000 psi (20 Mpa) before opening to traffic.

If asphalt is used in the surfacing, the Contractor shall monitor the density through a combination of rolling pattern and field testing as deemed necessary by the Engineer.

The surfacing under guardrail may be placed in a single lift. If placing in multiple lifts, the lower lifts may be placed by means other than a paver, however, the final lift must be placed with a paver.

Amend Subsection 302.04 in the Standard Specifications to provide that the work of subgrade preparation for surfacing under guardrail will not be measured for payment, but shall be considered subsidiary to the item "Surfacing Under Guardrail".

Subsection 304.04 in the Standard Specifications is amended to provide that the work of earth shoulder construction associated with surfacing under guardrail will not be measured for payment, but shall be considered subsidiary to the item "Surfacing Under Guardrail."

Subsection 503.05 in the Standard Specifications is amended to provide that P.G. Binder used in the asphaltic concrete will not be measured for payment, but shall be considered subsidiary to the item "Surfacing Under Guardrail".

Subsection 504.04 in the Standard Specifications is amended to provide that the application of a tack coat, including furnishing emulsified asphalt, will not be measured for payment, but shall be considered subsidiary to the item "Surfacing Under Guardrail".

The work and materials required for any drainage curb placed on surfacing under guardrail will not be measured and paid for, but will be considered subsidiary to the item "Surfacing Under Guardrail".

The work and materials required for surfacing under guardrail will be paid for at the contract unit price per square yard (square meter) for the item "Surfacing Under Guardrail". Payment will be full compensation for the work prescribed in these Special Provisions and the Standard Specifications.

**ASPHALTIC CONCRETE
(Cold Weather Asphaltic Concrete Placement)
(5-8-1118)**

Table 503.03 in Subsection 503.04 in the Standard Specifications is void and superseded by the following:

Table 503.03

Cold Weather Asphaltic Concrete Placement	
Lift Thickness	Minimum Surface Temperature
1 inch (25 mm) or less	50°F (10°C)
Greater than 1 inch (25 mm) and Less than 2 inches (50 mm)	45°F (7°C)*
2 to 3 inches (50 to 75 mm)	37°F (3°C)*
Greater than 3 inches (75mm)	35°F(2°C)*

* 32°F (0°C) when a warm mix additive is used in accordance with the contract.

TEMPORARY SURFACING 8"

The work shall consist of the construction of the Temporary Surfacing on this project in accordance with plans, Standard Specifications and these Special Provisions.

The finished surface shall not vary more than 1/8" as determined by using a ten-foot straightedge, or other devices approved by the Engineer. The Contractor shall correct any depressions or high areas in excess of 1/8".

Prior to placing the Temporary Surfacing, prepare the underlying subgrade in accordance with the requirements of Section 302 of the Standard Specifications.

At the Contractor's option the Temporary Surfacing 8" may be constructed using Class 47B-3500 Concrete, Class BX-3500 Concrete, or Asphaltic Concrete Type SPR, SPH, or SLX. These materials may be used interchangeably during the course of the work except that surfacing at any individual location must be completed with the same material with which the work was begun.

Asphaltic Concrete used for surfacing shall meet all specifications and be sampled and tested as shown in the Standard Specifications or Special Provisions. Any concrete or asphaltic concrete not meeting the specifications will be subject to removal.

Subsection 302.04 is amended to provide that the work of Subgrade Preparation, as well as all water applied as directed by the Engineer, will not be measured for payment, but shall be considered subsidiary to the item "Temporary Surfacing ___".

Subsection 304.04 is amended to provide that the work of Shoulder Construction, as well as all water applied as directed by the Engineer, will not be measured for payment, but shall be considered subsidiary to the item "Temporary Surfacing ___".

Subsection 503.05 is amended to provide that Asphaltic Concrete and PG Binder used in the asphaltic concrete will not be measured for payment, but shall be considered subsidiary to the item "Temporary Surfacing ___". Performance Graded Binder 58V-34 or 58E-34 shall be used if Asphaltic Concrete is chosen as the Temporary Surfacing 8".

Subsection 504.04 is amended to provide that the application of a tack coat, including furnishing emulsified asphalt, will not be measured for payment, but shall be considered subsidiary to the item "Temporary Surfacing ___".

Paragraph 15 of Subsection 603.03 is amended to provide that concrete used in the temporary surfacing, reach a minimum strength of 3000 psi before opening to traffic.

Subsection 603.04 is amended to provide that concrete pavement will not be measured for payment, but shall be considered subsidiary to the item "Temporary Surfacing ___".

When the need for the temporary surfacing is no longer required the Contractor shall remove the temporary surfacing and it shall become the property of the Contractor and removed from the project. All the work necessary to accomplish this requirement is considered subsidiary to the item "Temporary Surfacing ___".

Measure temporary surfacing by the square yard of completed and accepted work.

The work and materials required for temporary surfacing will be paid for at the contract unit price per square yard for the item "Temporary Surfacing ____". Payment will be full compensation for the work prescribed in these Special Provisions and the Standard Specifications.

Temporary Surfacing Thickness Cores

The Contractor will be required to core the Temporary Surfacing for final thickness determination. The cores will be cut prior to opening the temporary surfacing to traffic. One core shall be taken for each 3500 square yards, or fraction thereof, of temporary surfacing placed with a minimum of 1 core taken per project. The Engineer shall select the site where the core shall be taken. All work, materials and incidentals necessary to complete the work shall be considered subsidiary to the item "Temporary Surfacing ____".

ELECTRONIC VIBRATOR MONITORING (6-10-0718-A)

Paragraph 9. of Subsection 601.02 is amended to include the following:

- e. For slip-form construction, an electronic monitoring device displaying the operating frequency of each individual internal vibrator shall be required for the construction of mainline pavement exceeding 600 feet in length.
 - (1) The monitoring device shall have a readout display near the operator's controls visible to the paver operator and to the Engineer.
 - (2) It shall operate continuously while paving, and shall display all vibrator frequencies with manual or automatic sequencing among all individual vibrators.
- f.
 - (1) Each vibrator monitor shall be routinely checked for functionality and adequate frequency no less than once an hour or 300 feet of paving, whichever is more frequent.
 - (2) If a vibrator monitor fails to function properly, a hand held device may be used until the monitor is repaired. The Contractor shall measure and record the vibrations of each vibrator at least once an hour.
- g.
 - (1) For projects having 50,000 or more square yards of mainline pavement, the electronic monitoring device shall record the following information:
 - i. the clock time
 - ii. station location
 - iii. paver track speed
 - iv. operating frequency of individual vibrators

- (2) These recorded values shall be made after each 25 feet of paving or after each 5 minutes of time, whichever is more frequent.
- (3) These recorded values shall be provided to the Engineer at the end of each day's placement on paper or in an electronic format suitable to the Engineer.

**CONCRETE PAVEMENT
(Compressive Strength of Cores)
(6-10-1018)**

Paragraph 4.a.(3) of Subsection 603.05 in the Standard Specifications is void and superseded by the following:

- (3) The results of the additional two cores taken by the Contractor will be averaged for the final compressive strength calculation and pay factor.

SEALING JOINTS

Paragraph 1. of Subsection 612.02 is void and superseded by the following:

- 1. The joints shall be sealed with joint sealing filler, which conforms to the requirements of Section 1014. Joints in concrete patching of bituminous surfacing shall be hot pour type.

Paragraphs 2.a. and b. of Subsection 612.03 are void and superseded by the following:

- a. The Contractor shall furnish the Engineer, the manufacturer's recommendations for mixing, application, and temperature restrictions of the sealer 7 days prior to work beginning. These recommendations shall be strictly followed. If hot pour sealer is used, in no case shall the temperature exceed the maximum heating temperature recommended by the manufacturer, nor shall the temperature fall below the minimum application temperature recommended by the manufacturer, during the application process.
- b. The joints shall be filled full depth as shown in the contract to 1/4-inch to 5/8-inch (3 mm to 6 mm) below the pavement surface. If hot pour type sealer is used, the application can begin when the minimum application temperature is attained. The joints shall be filled as shown in the contract through the use of a pressure type applicator equipped with a nozzle which will fit into the joints.

Paragraphs 2.a., b., and c. of Subsection 612.05 are void and superseded by the following:

- a. When test results of on-site sealant materials are outside of the specified property ranges, joint sealing shall be paid for at the contract unit price multiplied by the Pay Factors in Table 612.01.

Table 612.01

Pay Factor	Specified Property
1.00	Deviation of up to (+/-) 5.0%
0.95	Deviation of (+/-) 5.1% to 10.0%
0.90	Deviation of (+/-) 10.1% to 15.0%
0.80	Deviation of (+/-) 15.1% to 20.0%
0.70	Deviation of (+/-) 20.1% to 25.0%
0.40 or Reject	Deviation of 25.1% or greater

- (1) When the specification requirement is stated as a percentage, the test result deviation from the specification will be divided by the specification value. The resulting deviation percentage is then applied to the above Table.
 - (2) When more than one specified property exceeds specification tolerances, the single largest Pay Factor reduction will be the one applied.
 - (3) Material not meeting a Pass/Fail requirement falls under the Pay Factor of 0.40 or Reject.
- b. If the material is found to be out of specification, the material shall be rejected if not already used. All material out of specification, regardless of Pay Factor, not in place, will be rejected and shall be removed from the site.
- c. If the Pay Factor is less than 1.00, and the material has been incorporated in work, which is allowed to remain in place, the Pay Factor for the material is determined by Table 612.01.

Paragraph 3.a. of Subsection 612.05 is void and superseded by the following:

- a. Only the Contractor can initiate dispute resolution, and request referee testing. Should the Contractor request referee testing, it shall be submitted in writing to the Department within 30 days of receiving the notification of deficiency.

CONCRETE PATCHING OF BITUMINOUS SURFACING

The work shall consist of the removal and disposal of unstable or disintegrated bituminous surfacing, the preparation of the repair area, and the furnishing, placing, finishing, and curing of the concrete. Concrete patching shall be done at locations specified by the Engineer, or as shown in the contract. Concrete Patching shall include the correction of faulty subgrade conditions. The concrete patching of bituminous surfacing on this project shall be performed in accordance with plans, Standard Specifications and these Special Provisions.

When the concrete patching exceeds a depth of 16 inches, the Engineer shall evaluate whether the roadway subgrade is replaced with soils having a liquid limit less than 50%, or whether additional concrete is instead placed.

The spacing between transverse joints shall not exceed 15 feet. Transverse repairs with a length less than or equal to 4 feet shall have a midpoint joint tooled while the concrete is still plastic.

Repair locations shall be removed by sawing to create a clean vertical face. A joint between the bituminous surfacing and the concrete patch shall be sawn, or tooled while the concrete is still plastic. The joints shall be sealed with a hot pour sealant from Section 1014 of the Standard Specifications.

Concrete patching of bituminous surfacing shall be done in accordance with Section 605 of the Standard Specifications except that all references to the existing concrete pavement shall be replaced with the words "bituminous surface." Void all references to joint or curb repair.

Paragraphs 1., and 4. of Subsection 605.01 of the Standard Specifications are void.

Paragraph 5. of Subsection 605.03 of the Standard Specifications is void.

Paragraphs 1., 2., 4., and 7., of Subsection 605.04 of the Standard Specifications are void.

The Contractor shall compact the subgrade or foundation course under full depth patches to the maximum density achievable.

Where the repair area is not bordered by asphalt, a form shall be used as the edge to provide the same surface elevation and edge alignment as the existing surface. The form shall be supported or braced in position to prevent movement during the placement and finishing of the concrete. Forms for concrete patching shall conform to the requirements of Subsection 603.03.

When the surface will not be overlaid, all saw cuts, transverse joints, and longitudinal joints shall be thoroughly cleaned with compressed air to remove all dust, dirt, loose material and moisture, and sealed with hot pour sealant.

Random cracks, which develop in the new concrete repair that will not be overlaid with asphaltic concrete, shall be removed or repaired as directed by the Engineer.

CONCRETE CONSTRUCTION (7-3-1217)

Paragraph 6.g.(3) of Subsection 704.03 in the Standard Specifications is void and superseded by the following:

- (3) Steel stay-in-place form material shall conform to the requirements of ASTM A 653/A 653M Coating Designation G165/Z500.

Paragraphs 8.b. and c. of Subsection 704.05 in the Standard Specifications are void and superseded by the following:

8. Payment Deductions:

- b. If the 28-day compressive strength is less than the design compressive strength by more than 500 psi, the Contractor may request approval to take cores at the Contractor's expense.
 - (i) A minimum of two cores shall be taken within 45 days after the concrete was poured under the supervision of the Engineer.
 - (ii) The location of the cores shall be approved by the Engineer.
 - (iii) The Engineer will take immediate possession of the cores and take them to the nearest lab for testing.
 - (iv) Cores shall be taken in accordance with ASTM C42.
 - (v) The average compressive strength of all the cores taken for a Group's class of concrete poured that day will be used.
- c. If the 28-day compressive strength of the cylinders or the average core compressive strength, whichever is greater, is less than the specified compressive strength and the Engineer determines that the concrete is acceptable for use, a pay factor will be applied to all pay items represented by that 28-day strength. The pay factors are as shown in Table 704.03.

Table 704.03

Concrete Strength Pay Factor	
Amount Below Specified Compressive Strength (PSI)	Pay Factor
0 to 50	100
Greater than 50 to 100	99
Greater than 100 to 200	97
Greater than 200 to 300	93
Greater than 300 to 400	88
Greater than 400 to 500	80
Greater than 500	40 or Remove and Replace

**BRIDGE DECK CRACK SEALING
(7-3-1217)**

1. Prior to project acceptance, the contractor can end his responsibility to seal cracks at no cost provided that all cracks have been sealed in accordance with the following requirements:
 - a. The Contractor shall not seal any bridge deck cracks until after the following:
 - i. Concrete has reached a minimum age of 28-days.
 - ii. Work on all phases of the bridge is complete, excluding bump grinding and grooving,
 - iii. The bridge is no longer being used as a haul road for construction equipment
 - b. The Contractor shall clean the bridge to remove any asphalt, curing compound, or other materials that may impair the ability to identify cracks.
 - c. The Contractor shall wet the deck and mark all visible cracks as it dries.
 - d. The bridge deck shall be dry for 24 hours prior to installation of crack sealant.
 - e. Crack sealing shall be performed in the presence of the Engineer.
 - f. The Contractor shall submit a letter certifying that all cracks have been sealed in accordance with the requirements above.
2. The sealing of any additional cracks which develop may be considered for payment as extra work.
3. Bridge decks with excessive cracking will be evaluated by the engineer and may require additional sealing procedures.

**PILES AND PILE DRIVING
(7-4-1217)**

Paragraph 2.a. (1) of Subsection 703.05 in the Standard Specifications is void and superseded by the following:

2. a. (1) Provided that the Contractor furnishes the Engineer signed purchase orders for bearing and sheet piling, authorized "cutoff" of bearing and sheet piling shall be made at the invoice price per linear foot (meter) of bearing piling, and per square foot (meter) of sheet piling.

**PARTIAL PAYMENT FOR STRUCTURAL STEEL
(7-5-1217)**

Subsection 109.07 of the Standard Specifications is amended to include the following:

The Engineer may also include in any partial payment estimate an amount not to exceed 90 percent of the invoice of any inspected and accepted fabricated structural steel item. Payment will only be considered for raw material stockpiled at production plants or fabrication sites that is clearly segregated and identified for a specific project use. Payment will not be allowed for items held in a manufacturer's general inventory of goods available for sale. The payment for raw material will not exceed 80 percent of receipted mill invoice value.

**DOWELING INTO CONCRETE STRUCTURES - POST INSTALLED ADHESIVE
ANCHORS
(7-16-0718-A)**

Materials

1. This provision governs the installation of reinforcing bars in hardened concrete. The adhesive anchor system used for post-installed anchorage of reinforcing steel to concrete shall conform to requirements of the most recently published ACI 355.4, *Acceptance criteria for Qualification of Post-Installed Anchors in Concrete and Commentary*.
2. The epoxy resin adhesives for the anchor system shall meet one of the following requirements:
 - a. On the Approved Products List and comply with minimum requirements as stated in this provision.
 - b. Adhesives for post-installed anchors shall meet ACI 355.4 and comply with minimum requirements as stated in this provision. Bulk mixed adhesives are not permitted.
 - c. Adhesive anchor systems are qualified for different anchor element types and coatings and only those anchor types and coatings specifically mentioned in the Manufacturer's Printed Installation Instructions (MPII) shall be used.
3. The adhesive anchors shall be supplied as a complete system. The system shall include, but not be limited to, a new adhesive cartridge, a clean mixing nozzle, extension tube, a dispensing gun and all manufacturer recommended supplies for properly cleaning the drilled hole.
4. Anchorage design shall be in accordance with Appendix D of ACI 318. For adhesive anchors, the following minimum value for bond stress was assumed for design using the above adhesive anchor assemblies:

$$T = 2050 \text{ psi}$$

5. Epoxy resin adhesives used for doweling reinforcing bars into hardened concrete shall be capable of providing the full tensile resistance of the reinforcement at the embedment depths specified in the plans. The ultimate tensile force for 60 ksi reinforcement is given in the table below for various bar sizes. Product requiring a greater embedment depth to achieve the required pull-out capacity than that shown in the plans may only be used at the Engineer's sole discretion.

#3	7,425 lb.
#4	13,500 lb.
#5	20,925 lb.
#6	29,700 lb.

6. Epoxy anchorage materials that have exceeded their expiration date shall not be used.

General Installation Guidelines

1. Concrete shall have a minimum compressive strength (f'_c) of 2500 psi at the time of adhesive anchor installation.
2. Concrete at time of anchor installation shall be a minimum of 21 days old.
3. Concrete temperature at the time of anchor installation shall be 50°F or warmer.
4. Anchor embedment depth and projection (length protruding) from the concrete surface are shown on the drawing or detailed for the particular anchor being installed. The Contractor shall select a product from the APL that can meet the required pull out strength at the embedment depth provided in the plans. The Engineer shall decide the appropriate action to be taken in cases where this information is unclear or absent from the plans.
5. Adhesives shall be stored and installed in accordance with this specification and in accordance with the manufacturer's written specifications. In cases of discrepancies, the more restrictive specification shall govern.

Installation Techniques

1. Post-installed adhesive anchors shall be installed in accordance with the Manufacturer's Printed Installation Instructions (MPII), except when the instructions of this provision are more stringent than the MPII, adhesive anchors shall be installed in accordance with these provisions.
2. Installation of all adhesive anchors shall be installed under the supervision of personnel certified by the ACI/CRSI Adhesive Anchor Installer Certification Program.
3. The installer's qualifications, when required, shall be submitted to the Engineer, prior to any work being done on the project.
4. The Contractor shall provide all equipment required to install the adhesive anchor, including but not limited to drills, setting tools, clean-out brushes, blow-out bulbs, oil-free compressed air, shop vacuums, wrenches.

5. Anchors shall be installed in holes drilled with a rotary impact hammer drill or rock drill.
6. Anchor holes shall be thoroughly cleaned prior to adhesive injection, as required by the MPIL. At a minimum, the cleaning of the holes consists of cleaning with compressed air free of oil and moisture using a nozzle extended to the bottom of the hole. This shall be supplemented with brush or other tool cleaning to remove all concrete dust and loose material followed by a second compressed air cleaning. This is commonly known as "blow-brush-blow" (BBB).
7. Cleaned anchor holes shall be protected from contamination until the adhesive is installed.
8. A hole shall be re-cleaned using BBB if, in the opinion of the Engineer, the hole has become contaminated after cleaning.
9. Unless otherwise indicated on the MPIL, adhesive shall be dispensed through a tube or cartridge extension, beginning at the maximum depth of the hole and withdrawn as adhesive is injected until the hole is entirely filled. This shall be followed by insertion and rotation of the anchor to the specified depth. Where necessary, spaces around anchors, at the surface, shall be sealed to prevent loss of the adhesive during curing where holes are drilled in a range from horizontally to an upward incline.
10. Anchors to be installed in the adhesive shall be clean and free of any surface contaminants or imperfections; e.g., oil, loose rust, paint. Epoxy coatings on rebar shall be removed from the portion of the rebar embedded in the epoxy anchorage.
11. Unless shown otherwise on the drawings, anchors shall be installed perpendicular to the concrete surface.
12. Installed adhesive anchors shall be securely fixed in place to prevent displacement during curing of the adhesive. Anchors displaced before full adhesive cure shall be considered damaged and replaced at the Contractor's expense.
 - a. The cure time varies by product and temperature Contractors shall comply with the cure time provided in the MPIL.
13. Reinforcing bars shall not be bent after being adhered in the concrete.

Basis of Payment

1. Work as described in this section is subsidiary to other items for which direct payment is made.

TEMPORARY BRIDGE

PART 1 - GENERAL:

1.01 Description:

This section describes the requirements associated with the project Temporary Bridge. Work associated with the Temporary Bridge includes engineering, delivery, assembly, installation, maintenance, removal, and technical support of a portable, prefabricated, truss-type bridge of galvanized steel construction.

1.02 Substitution:

- A. Substitutions to specifics of these specifications will need to be submitted to the NDOT for Approval. No guarantees or assurances are provided that substitutions will be permissible. Substitutions will need to be submitted in a timely manner given the expedited nature of the project.

1.03 Drawings:

- A. Superstructure drawings and calculations will be submitted, signed, and sealed by a Professional Engineer Licensed in the State of Nebraska, provided by the supplier, for review by the Owner and Engineer.
- B. Supplier shall provide a qualification of the remaining bridge fatigue design life to ensure service through the duration required for the project.

PART 2 - PRODUCTS:

2.01 General Dimensions and features:

- A. The total length of the temporary bridge shall be as outlined on the design plans.
- B. The clear roadway width of the driving surface between curbs or guardrails shall be as shown on the project plans. For a single lane of traffic, as expected for this project, the minimum clear roadway width shall be 17 feet and the maximum clear roadway width shall be 24 feet.
- C. Span lengths shall be as shown on the plans. No geometric modification of the pier or the back-wall structures will be accepted unless submitted and approved by the Engineer at least 3 days before the bid date to allow for review and formal response.

2.02 Engineering:

- A. Meet or exceed the requirements of AASHTO HL-93 live load design and rating for Nebraska legal loads with a live load deflection limited to $L/800$.
- B. Guardrail on the bridge shall be designed and detailed to meet the requirements of NDOT and rate for MASH Level TL-2.

- C. Upon award of the contract, the product manufacturer shall furnish to the Engineer, through the Contractor, product drawings and calculations sealed and signed by a Professional Engineer licensed in the State of Nebraska. These documents shall include, but not be limited to, full details of the Temporary Bridge system, members, connections, bearings (and their connections to the substructure), bearing loading conditions, installation procedures, erection recommendations, maintenance and monitoring procedures, and removal instructions.

2.03 Materials:

- A. All material shall be 100% domestic origin and fabricated in the United States. Certificates of compliance for each shipment shall be submitted identifying the manufacture date and attesting to its required domestic content and fabrication.
- B. The upper and lower chords of a panel shall be fabricated from hot-rolled steel channels or rectangular hollow sections. Verticals and diagonals shall be fabricated from rectangular hollow sections, channels, or flat bars.
- C. The floorbeams or transoms shall be fabricated from wide flanged sections or rectangular hollow sections. Vertical cross-bracing shall be incorporated between the floorbeams in every other bay. Bracing shall be at each end of the floorbeams and shall prevent horizontal loads from being transferred from the floorbeams into the truss members.
- D. The deck system shall be comprised of orthotropic units (or approved equal). Each unit shall be a minimum of 10-ft long and shall have a steel deck plate welded to the longitudinal stringers. The top surface of the deck plate shall be coated with an anti-skid epoxy aggregate mixture (or approved equal). Curbs shall be 6 in. tall and shall be shop welded to a deck unit. All deck units are to be designed to handle HL-93 and associated Live Loads specified here within.

2.04 Technical Specifications:

- A. Materials shall meet or exceed the following requirements:
 - 1. Panels (comprised of chords, diagonals and verticals), Reinforcing Chords, Truss Braces, Swaybraces, Raker Braces
 - a. AASHTO M223 Grade 65
 - b. Ultimate tensile strength 80,000/100,000 psi
 - c. Yield 65,000 psi
 - d. Elongation 17% of 8-inch Gauge Length
 - e. Galvanized in accordance with AASHTO M111 and ASTM A123

2. Deck Stringers, Floorbeams
 - a. AASHTO M223 Grade 50
 - b. Ultimate tensile strength 70,000/90,000 psi
 - c. Yield 50,000 psi
 - d. Elongation 18% of 8-inch Gauge Length
 - e. Galvanized in accordance with AASHTO M111 and ASTM A123
3. All other parts
 - a. AASHTO M183 Grade 36
 - b. Ultimate tensile strength 63,000/75,000 psi
 - c. Yield 36,000 psi
 - d. Elongation 20% of 8-inch Gauge Length
 - e. Galvanized in accordance with AASHTO M111 and ASTM A123
4. Panel Connecting Pins
 - a. Previously Unused Material (New)
 - b. ASTM A193 GradeB7
 - c. Ultimate tensile strength (minimum) 125,000 psi
 - d. Galvanized finish
5. Bolts
 - a. Previously Unused Material (New)
 - b. ASTM A325
 - c. Ultimate tensile strength (minimum) 105,000 psi
 - d. Galvanized finish

2.05 Fabrication:

- A. Provide workmanship, fabrication, and shop connections in accordance with the AISC (American Society of Steel Construction), AWS (American Welding Society) D1.1 and D1.5 Bridge welding codes, 2010 AASHTO (American Association of State and Highway Transportation Officials) LRFD Bridge Design Specifications, Eighth Edition, and fabricated in the United States of America).

- B. The bridge shall be fabricated by a fabricator who is currently certified by the American Institute of Steel Construction for the "Advanced Major Steel Bridges Category" and shall be located in the United States of America.
- C. All parts shall be available from a domestic stock for a period of 10 years.
- D. Welding shall be performed by AWS certified welders.

2.06 Finishing:

- A. Use hot-dipped galvanization to AASHTO M111 and ASTM A123 specifications or equivalent for all major components.
- B. Galvanize or spin galvanize all bolts, pins, etc. in accordance with ASTM F2329 or ASTM A153, and AASHTO M232.

PART 3 - EXECUTION:

3.01 Delivery and Erection:

- A. Coordinate the delivery of the temporary bridge with the supplier. Contractor is responsible for ensuring all items are delivered to the project site and for ensuring they meet necessary requirements and are undamaged at the time of delivery. The Contractor shall be responsible for the unloading of the material at the time of arrival.
- B. The temporary bridge will be assembled on-site and lifted, launched, or crane-assisted launched into position at the discretion of the Contractor. The installation procedure shall be signed and sealed by a Professional Engineer licensed in the state of Nebraska and shall be submitted to the Engineer for review prior to construction.
- C. The supplier shall, at a minimum, provide technical assistance during the initial erection of the Temporary Bridge and throughout the erection process as deemed necessary by the Contractor. It will be the Contractor's responsibility to ensure product provider directions, procedures, specifications, etc. are properly followed during erection and operation.
- D. The use of any construction equipment on the new bridge shall be approved in advance by the bridge supplier. These approvals shall be submitted to the Engineer for review.
- E. The Contractor shall be responsible for and ensure proper maintenance of the bridge between erection and disassembly. The contractor shall maintain records of maintenance operations and coordinate with the Temporary Bridge supplier on any repairs or modifications prior to conducting the work. Any damage shall be repaired prior to the return of the temporary structure to its owner.

3.02 Disassembly and Return:

- A. The Temporary Bridge will be disassembled on site in a fashion similar to assembly and in accordance with the supplier provided recommendations.

3.03 Foundations:

- A. Temporary Bridge foundations shall be constructed in accordance with the project plans, which were developed based on an ACROW bridge with TSR3 configuration. If a different bridge type is provided, the Contractor shall provide reactions and dimensional information for the selected bridge type as part of the shop drawing submittal.
- B. Superstructure loading and connection detail requirements from the superstructure to the abutment shall be provided by the supplier.

PART 4 - MEASUREMENT AND PAYMENT:

4.01 Measurement: Temporary Bridge shall not be measured for payment but shall be paid for at the contract unit price per Lump Sum, complete and in place. This Includes the cost of shipping (to the site and return to the manufacturer), deck surface, rental of the temporary bridge, including all materials necessary to erect and install, as well as to maintain the structure while it is in service, removal and all necessary incidentals shall be included in the cost of the pay item.

- A. Partial payments for the lump sum bid for the Temporary Bridge will be made as follows:
 - a. Any engineering costs necessary to procure the Temporary Bridge will be reimbursed upon the receipt of the invoice from the temporary bridge supplier, and paid as stockpiled material as defined in Specification.
 - b. Any down payment required to be paid prior to receiving the Temporary Bridge will be reimbursed upon the receipt of the invoice from the temporary bridge supplier, and paid as stockpiled material as defined in Specification.
 - c. When the Temporary Bridge is in-place and open to traffic, NDOT will pay 30% of the Temporary Bridge item, and will pay 2.5% of the Temporary Bridge item monthly until the temporary bridge is removed or the total for the item has been paid.
 - d. When the Temporary Bridge and all associated items have been removed from the project site, NDOT will pay the Contractor the remaining balance of the Temporary Bridge item.

4.02 Payment: All elements discussed in this section along with installation and removal are included in the cost of TEMPORARY BRIDGE.

- A. Substructure: Direct payment shall be made for the construction of the substructure elements according to the individual pay items provided in the plans. Construction and payment for the Temporary Bridge substructure, including abutments and bents, shall be completed in accordance with the requirements outlined in the 2017 Standard Specifications for Highway Construction. Removal of the substructure elements shall be paid for directly for the pay item "Remove Structure at Station 5478+62.22.

RESET GIRDERS AT BEARING

This work shall consist of raising the girders at Pier No. 1, moving them transversely to be re-centered over their respective bearings and lowering them to achieve full contact between the pins and the upper/lower bearing elements.

It shall be the Contractor's responsibility to develop a suitable method for supporting, raising transversely moving and resetting the girders on their respective bearings. If cross bracing needs to be cut or sections of the deck need to be removed to facilitate the Contractor's operations, this information shall be included in the submittal package. Girders must be fully supported against out-of-plane bending and twisting during the entire operation.

The temporary supports shall be equipped so that they will allow slow, gradual, and simultaneous raising and lowering of the girders. The Contractor shall make every effort to minimize the time that the structure is supported by the jacks and to minimize the height that the girders are raised.

All the materials required to accomplish the work as described herein shall be on the project site before any work on this item commences, including the lifting of the girders. Extreme caution shall be used throughout the operation to prevent damage to the existing structure. Any damage to the structure occurring due to contractor's operations or caused by deviation from the plans or specifications shall be repaired by the contractor at no expense to the State.

Plans and procedures for vertically jacking the girders, temporarily supporting them and re-centering them on their respective bearings shall be prepared and sealed by a Professional Engineer registered in the State of Nebraska. Copies of the jacking plans and calculations shall be submitted to the Engineer for record. The Contractor is solely responsible for the satisfactory performance of the jacks and the jacking/moving operations.

Jacks shall be hydraulic type. Prior to beginning the raising operation, the Contractor shall furnish to the Engineer for his approval, certification of the calibration and rated capacity of all jacks to be used on the project. Jacking action is to be against the girders only. Jacking against bent plate separators and/or cross-frames will not be permitted.

The temporary supports shall be designed for adequate strength to support the forces due to the weight of the superstructure. Temporary supports shall also be designed so that they will not settle.

The item "Reset Girders at Bearing" will be paid for as a lump sum. This price shall be full compensation for materials, labor, equipment, tools, and incidentals necessary to complete this work.

CONTRACTOR'S ACCESS CROSSING AT STATION 496+00

It will be the Contractor's option to use an access crossing to accomplish the repair work on the west end of Structure S012 16027. The access crossing shall be constructed in accordance with the details in the plans. The footprint of this access crossing may be expanded as necessary to accomplish the superstructure repair work in Span No. 1 and Span No. 2 of the bridge. The expanded access crossing must comply with the details in the plans except that the top width may be increased as necessary.

Bidders must submit a bid for the item "Access Crossing at Station 496+00" in the schedule of items.

The item "Access Crossing at Station 496+00" will be paid for as a lump sum. The bid price shall be considered full compensation for all work required for the Contractor to construct and remove the access crossing. The Contractor will only be paid for this item if they construct the access crossing. The Contractor will be paid 90% of the lump sum when the access crossing is installed. The remaining 10% of the lump sum will be paid when the access crossing is removed.

If the Contractor does not plan to utilize an access crossing, they shall bid the item "Access Crossing at Station 496+00" at \$0. If the Contractor bids this item at \$0 and later decides to utilize an access crossing, it will be at the Contractor's expense.

Crushed rock surfacing and erosion control items necessary for building and maintaining the approaches to the access crossing will not be paid for directly, but shall be considered subsidiary to the item "Access Crossing at Station 496+00".

No change orders will be approved to increase the cost of the "Access Crossing at Station 496+00" item after award of the contract.

CONTRACTOR'S ACCESS CROSSING AT STATION 506+00

It will be the Contractor's option to use an access crossing to accomplish the repair work on the east end of Structure S012 16027 and to provide access from the east side of the channel. The access crossing shall be constructed in accordance with the details in the plans.

Bidders must submit a bid for the item "Access Crossing at Station 506+00" in the schedule of items.

The item "Access Crossing at Station 506+00" will be paid for as a lump sum. The bid price shall be considered full compensation for all work required for the Contractor to construct and remove the access crossing. The Contractor will only be paid for this item if they construct the access crossing. The Contractor will be paid 90% of the lump sum when the access crossing is installed. The remaining 10% of the lump sum will be paid when the access crossing is removed.

If the Contractor does not plan to utilize an access crossing, they shall bid the item "Access Crossing at Station 506+00" at \$0. If the Contractor bids this item at \$0 and later decides to utilize an access crossing, it will be at the Contractor's expense.

Crushed rock surfacing and erosion control items necessary for building and maintaining the approaches to the access crossing will not be paid for directly, but shall be considered subsidiary to the item "Access Crossing at Station 506+00".

No change orders will be approved to increase the cost of the "Access Crossing at Station 506+00" item after award of the contract.

DRILLED SHAFTS

It is not the intent of these Special Provisions to unnecessarily restrict the contractor in his construction methods, techniques, or equipment. The following are considered to be minimum requirements necessary to provide adequate foundations.

1.0 DESCRIPTION OF WORK

This work consists of constructing drilled shafts including the furnishing and placing of reinforcing steel and concrete, all in accordance with the contract documents.

Throughout this special provision, the terms "drilled shaft" and "shaft" are used interchangeably and shall include the upper cased portion of the shaft and the socket, which shall be defined as that portion of the drilled shaft below the upper elevation at which sound rock occurs across the entire width of the shaft.

2.0 DRILLED SHAFT INSTALLATION PLAN

Two weeks prior to the pre-construction conference, the Contractor shall submit a list containing at least three projects completed in the last three years on which the Contractor has installed drilled shafts of a diameter and length similar to those shown on the plans. If the drilled shafts are to be poured by the prime contractor and not the drilling contractor, the jobsite supervisor must have previous experience in pouring drilled shafts. The list of projects shall contain names and phone numbers of owner's representatives who can verify the Contractor's and supervisor's participation on those projects. The Contractor shall also submit a signed statement that the Contractor has inspected the project site and all the subsurface information made available in the contract documents.

No later than one month prior to constructing the drilled shafts, the Contractor shall submit a drilled shaft installation plan for review by the Engineer. This plan shall provide information on the following:

- A. Name and experience record of the driller and drilled shaft superintendent in charge of drilled shaft operations for this project. The drilled shaft superintendent shall have a minimum of five years experience in drilled shaft construction.

- B. List of proposed equipment to be used including cranes, drills, augers, bailing buckets, final cleaning equipment, desanding equipment, core sampling equipment, tremies or concrete pumps, casing, slurry equipment, airlift pumps, etc.
- C. Details of overall construction operation sequence and the sequence of shaft construction in groups.
- D. Details of shaft excavation methods.
- E. When the use of slurry is anticipated, details of the mix design and its suitability for the subsurface conditions at the construction site, mixing and storage methods, maintenance methods and disposal procedures.
- F. Details of methods to clean the shaft excavation.
- G. Details of reinforcement placement, including support and centralization methods.
- H. Details of concrete placement, including proposed operational procedures for free fall, tremie or pumping methods.
- I. Details for permanent casing including installation methods, diameter and casing thickness.

The Engineer will evaluate the drilled shaft installation plan for conformance with the contract documents. Within 14 days after receipt of the plan, the Engineer will notify the Contractor of any additional information required and/or changes necessary to meet the contract requirements. All procedural approvals given by the Engineer shall be subject to trial in the field and shall not relieve the Contractor of the responsibility to satisfactorily complete the work as detailed in the contract documents.

3.0 MATERIALS

Materials shall meet the required specifications:

- A. **Concrete:** Concrete for drilled shafts shall be Class 47B with 28-day strength of 4,000 psi.

Concrete slump shall be as follow:

<u>Slump Range</u>	<u>Typical Condition</u>
7-9 inches (180 mm – 230 mm)	Placing under drilling fluid
6-8 inches (150 mm-200 mm)	All other conditions

To achieve the required slump range Type D or Type G admixture shall be used. This will increase the slump range without adding water.

- B. **Reinforcing Steel:** Reinforcing steel shall be ASTM A 615M/A 615 or ASTM A 706M/A 706, Grade 60 (Grade 420).

- C. **Casing:** Casing shall be of sufficient thickness to carry working stress and loads imposed on the casing during construction. The minimum casing thickness shall be 5/16 inches (8 mm).

4.0 PROTECTION OF EXISTING STRUCTURES

The Contractor shall control his operations to prevent damage to existing structures and utilities. Preventive measures shall include, but are not limited to, selecting construction methods and procedures that will prevent caving of the shaft excavation and monitoring and controlling the vibrations from construction activities such as the driving of casing or sheeting, drilling of the shaft, or from blasting, if permitted.

5.0 GENERAL METHODS AND EQUIPMENT

FHWA Publication No. FHWA-NHI-10-016 Drilled Shaft: Construction Procedures and Design Methods (2010) shall be used as a guide for the construction of drilled shafts.

The Contractor shall perform the excavations required for shafts, through whatever materials are encountered, to the dimensions and elevations shown in the plans or otherwise required by the specifications and special provisions. The Contractor's methods and equipment shall be suitable for the intended purpose and materials encountered. The permanent casing method shall be used for all drilled shaft locations unless otherwise authorized in writing by the Engineer. Blasting shall only be permitted if specifically stated on the plans or authorized in writing by the Engineer.

- A. **Drilling Equipment:** The excavation and drilling equipment shall have adequate capacity, including power, torque and down thrust to excavate a hole of both the maximum diameter and to a depth of 25 percent beyond the depths shown on the plans.

The excavation and overreaming tools shall be of adequate design, size and strength to perform the work shown in the plans or described herein. When the material encountered cannot be drilled using conventional earth augers with soil or rock teeth, drill buckets, grooving tools, and/or underreaming tools, the Contractor shall provide special drilling equipment, including but not limited to: rock core barrels, rock tools, air tools, blasting materials, and other equipment as necessary to construct the shaft excavation to the size and depth required. Approval of the Engineer is required before excavation by blasting is permitted.

Sidewall overreaming shall be required when the sidewall of the hole is determined by the Engineer to have softened due to excavation methods, swelled due to delays in concreting, or degraded because of slurry cake buildup. Overreaming thickness shall be a minimum of 1/2 inch (13 mm) and a maximum of 3 inches (75 mm). Overreaming may be accomplished with a grooving tool, overreaming bucket or other approved equipment. The thickness and elevation of sidewall overreaming shall be as directed by the Engineer. The Contractor shall bear all costs associated with both sidewall overreaming and additional shaft concrete placement.

- B. **Excavation:** Shaft excavations shall be made at locations and to the top of shaft elevations, estimated bottom of shaft elevations, shaft geometry, minimum socket lengths and dimensions shown in the contract documents. The Contractor shall extend bottom of shaft elevations when the Engineer determines that the material encountered during excavation is unsuitable and/or differs from that anticipated in the design of the drilled shaft. All shafts shall be advanced to the minimum socket lengths and to the bottom of shaft elevation, whichever is deeper as determined by the Engineer.
- C. **Obstructions:** The Contractor shall remove surface and subsurface obstructions at drilled shaft locations. Such obstructions may include man-made materials such as old concrete foundations and natural materials such as ironstone layers and boulders. Special procedures and/or tools shall be employed by the Contractor after the hole cannot be advanced using conventional augers, drilling buckets and/or under-reaming tools. Such special procedures/tools may include but are not limited to: chisels, boulder breakers, core barrels, air tools, hand excavation, temporary casing, and increasing the shaft diameter. Blasting shall not be permitted unless specifically approved in writing by the Engineer. Payment for removal of man-made subsurface obstructions will be in accordance with section 104.05 of the Standard Specifications.
- D. **Lost Tools:** Drilling tools that are lost in the excavation shall not be considered obstructions and shall be promptly removed by the Contractor without compensation. All costs due to lost tool removal shall be borne by the Contractor including, but not limited to, costs associated with the repair of hole degradation due to removal operations or an excessive time that the hole remains open.

6.0 SHAFT CONSTRUCTION

The drilled shafts shall be constructed by the permanent casing method as necessary to produce sound, durable concrete foundation shafts free of defects.

A shaft maybe constructed using dry construction methods if the following conditions are met. If water seepage collects at 6 inches (305 mm) or less per hour when no pumping is permitted and the side and bottom of the shaft remain stable without detrimental caving, sloughing or swelling.

The Contractor shall maintain a drilling log during shaft excavation. The log shall contain information such as the description and approximate top and bottom depth of each soil or rock material encountered; drilling time in each stratum; description of the tools and drill rigs used and any equipment changes necessitated by changing ground conditions; seepage or ground water encountered and remarks. Two copies of the log, signed by the Contractor and the Engineer's representative, shall be furnished to the Engineer within one week after completion of the excavation.

The Contractor shall clean the base of each shaft so that a minimum of 50% of the base will have less than 0.5 inch (13 mm) of sediment at the time of concrete placement. The maximum depth of sediment or debris at the base of the shaft shall not exceed 1.5 inches (38 mm).

Disposal of excavated material as well as any slurry and/or water removed from the shaft excavation by the Contractor shall be in accordance with applicable specifications for disposal of excavated materials.

No foundation piling shall be driven or boring performed either by pile hammer or drilled shaft method, within a radius of 20 feet (6 m) of concrete that has taken its initial set until the concrete has attained a compressive strength of 1,500 psi (10 MPa).

- A. **Casings:** Casings shall be steel, smooth, clean, and watertight and of ample strength and thickness to withstand both handling and driving stresses and the pressure of both concrete and the surrounding earth materials. The outside diameter of casing shall not be less than the specified diameter of shaft and the outside diameter of any excavation made below the casing shall not be less than the specified diameter of the socket. No extra compensation will be allowed for concrete required to fill an oversized casing.

Furnish full-penetration welds, as needed, meeting the requirements of "Structural Welding Code Steel" (ANSI/AWS D1.1) of the American Welding Society requirements for joints in non-corrugated permanent steel casings. Welders shall be AWS certified.

Deliver casing to site in undamaged condition. Handle and protect casing to maintain diameter within 2 percent.

The use of an oversized excavation to install the permanent casing is not permitted. The casing shall maintain intimate contact with the surrounding soils at all times to minimize disturbance, formation of voids and loss of ground.

- B. **Allowable Tolerances:** The shafts shall be installed as shown on the applicable design drawing and in accordance with these special provisions.

1. The bottom of shaft elevations have been estimated from the boring data. The location and log of each boring is shown on the plan.
2. No shaft shall be off center from its design location more than 3 inches (75 mm) at the top of the shaft.
3. No vertical shaft shall be out of plumb more than 1 percent of its length.
4. The reinforcement steel cage shall be set at no less than 6 inches (75 mm) above the bottom of the excavated shaft prior to placement of concrete.
5. The top elevation of the shaft shall have a tolerance of + 1 inch (25 mm) or - 3 inches (75 mm) from the plan top-of-shaft elevation.
6. Excavation equipment and methods shall be designed so that the completed shaft excavation will have a flat bottom. The cutting edges of excavation equipment shall be normal to the vertical axis of the equipment within a tolerance of 3/8 inch/foot (30 mm/m) of diameter.

7. After the concrete is placed, the top of the reinforcing steel cage shall be no more than 6 inches (152 mm) above and no more than 3 inches (76 mm) below plan position.

Drilled shaft excavations and completed shafts not constructed within the required tolerances are unacceptable. The Contractor shall be responsible for correcting all unacceptable shaft excavations and completed shafts to the satisfaction of the Engineer. Materials and work necessary, including engineering analysis and redesign, to complete corrections for out of tolerance drilled shaft excavations shall be furnished without either cost to the Department.

7.0 SLURRY

Slurry may be used to support the hole in the socket if caving occurs below the permanent casing.

Polymer slurries shall be employed when slurry is used in the drilling process unless other drilling fluids are approved in writing by the Engineer.

During construction, the level of the slurry shall be maintained at a height sufficient to prevent caving of the hole. In the event of a sudden significant loss of slurry to the hole, the construction of that foundation shall be stopped until either a method to stop slurry loss or an alternate construction procedure has been approved by the Engineer.

The Contractor shall take all steps necessary to prevent the slurry from "setting up" in the shaft. Such methods may include but are not limited to: agitation, circulation and/or adjusting the properties of the slurry. Disposal of all slurry shall be done off site in suitable areas by the Contractor.

If polymer slurry is proposed, the Contractor's slurry management plan shall include detailed provisions for controlling the quality of the slurry, including tests to be performed, the frequency of those tests, the test methods, and the maximum and/or minimum property requirements that must be met to ensure that the slurry meets its intended functions in the subsurface conditions at the construction site and with the construction methods that are to be used. The slurry management plan shall include a set of the slurry manufacturer's written recommendations and shall include the following tests, as a minimum: Density test (API (American Petroleum Institute) 13B-I, Section 1), viscosity test (Marsh funnel and cup, API 13B-I, Section 2.2, or approved viscometer), pH test (pH meter, pH paper), and sand content test (API sand content kit, API 13B-I, Section 5). However, whatever product is used, the sand content at the base of the drilled shaft excavation shall not exceed 1 percent.

If approved by the Engineer, the Contractor may use only water as a drilling fluid.

The Contractor shall ensure that a heavily contaminated slurry suspension, which could impair the free flow of concrete, has not accumulated in the bottom of the shaft. Prior to placing concrete in any shaft excavation, the Contractor shall take slurry samples using a sampling tool approved by the Engineer. Slurry samples shall be extracted from the base of the shaft and at intervals not exceeding 10 feet (3 m) up the slurry column in the shaft, until two consecutive samples produce acceptable values for density, viscosity, and pH.

When any slurry samples are found to be unacceptable, the Contractor shall take whatever action is necessary to bring the slurry within specification requirements. Concrete shall not be poured until the slurry in the hole is re-sampled and test results produce acceptable values.

During construction, the level of polymer slurry shall be maintained at a level not less than 6 feet (1.8 m) above the highest expected piezometric pressure head along the shaft. If at any time the slurry construction method fails, in the opinion of the Engineer, to produce the desired final results, then the Contractor shall both discontinue this method and propose an alternate method for approval of the Engineer.

8.0 EXCAVATION INSPECTION

The Contractor shall provide equipment for checking the dimensions and alignment of each shaft excavation. The dimensions and alignment shall be determined by the Contractor under the direction of the Engineer. Final shaft depths shall be measured with a suitable weighted tape or other approved methods after final cleaning. Shaft cleanliness shall be determined by visual inspection for dry shafts or other methods deemed appropriate for wet shafts. For dry shafts, the sidewalls shall be visually free of cuttings that may have smeared on the walls during removal or insertion of the drilling tools. The excavated shaft shall have the Engineer's approval prior to proceeding with construction.

9.0 REINFORCING STEEL CAGE CONSTRUCTION AND PLACEMENT

The reinforcing steel cage, consisting of longitudinal bars, ties, cage stiffener bars, spacers, centralizers, pipes for CSL, and other necessary appurtenances, shall be completely assembled and placed as a unit immediately after the shaft excavation is inspected and accepted, and prior to concrete placement. Internal stiffeners shall be removed as the cage is placed in the borehole so as not to interfere with the placement of concrete.

The reinforcing steel in the shaft shall be tied and supported so that the reinforcing steel will remain within allowable tolerances. Concrete spacers or other approved non-corrosive spacing devices shall be used at sufficient intervals [near the bottom and at intervals not exceeding 10 feet (3 m) up the shaft] to ensure concentric spacing for the entire cage length. Spacers should be located at no more than 30-inch spacing around the circumference of the reinforcing cage and a minimum of three spacers. Spacers shall be constructed of approved material equal in quality and durability to the concrete specified for the shaft. The spacers shall be of adequate dimension to insure a minimum 3-inch (75 mm) annular space between the outside of the reinforcing cage and the side of the excavated hole. Approved cylindrical concrete feet (bottom supports) shall be provided to ensure that the bottom of the cage is maintained the proper distance above the base.

The rebar cage shall be handled with use of slings of temporary attachments such that no permanent distortion of the rebar takes place. Several lifting points shall be used in the process of lifting the cage, such that the sag or bend between lifting points is limited to 1 ft from the centerline of the cage. Lifting devices attached to the rebar cage shall engage a minimum of 4 longitudinal bars. Steel pipes attached to the rebar cage for the purpose of CSL testing shall remain intact and without permanent deformation such that probes can be inserted unimpeded to the bottom of the shaft. Any permanent

deformation to the rebar or pipes shall be inspected prior to the placement of the concrete and repaired if, in the opinion of the engineer, it is deemed necessary.

10.0 CONCRETE PLACEMENT

Concrete placement shall be performed in accordance with the applicable section of NDOT Standard Specification for Highway Construction and with the requirements herein.

Concrete shall be placed as soon as possible after reinforcing steel placement. Concrete placement shall be continuous from the bottom to the top of the shaft. Concrete placement shall continue after the shaft excavation is filled until good quality concrete is evident at the top of shaft. Concrete shall be placed either by free fall or through a tremie or concrete pump. The free fall placement shall only be permitted in dry holes. Concrete placed by free fall shall fall directly to the base without contacting either the rebar cage or shaft sidewall. Drop chutes may be used to direct concrete to the base during free fall placement.

The elapsed time from the beginning of concrete placement in the shaft to the completion of the placement shall not exceed 2-hours. Admixtures such as water reducers, plasticizers, and retarders shall not be used in the concrete mix unless permitted in the contract documents. All admixtures, when approved for use, shall be adjusted for the conditions encountered on the job so the concrete remains in a workable plastic state throughout the 2-hour placement limit.

The Contractor may request a longer placement time provided he or she supplies a concrete mix that will maintain a slump of 4 inches (100 mm) or greater over the longer placement time as demonstrated by trial mix and slump loss tests. The trial mix and slump loss tests shall be conducted using concrete and ambient temperatures appropriate for site conditions.

- A. **Tremies:** Tremies may be used for concrete placement in either wet or dry holes. Tremies used to place concrete shall consist of a tube of sufficient length, weight, and diameter to discharge concrete at the bottom of the excavated shaft. The tremie shall not contain aluminum parts that will have contact with the concrete. The tremie inside diameter shall be at least 6 times the maximum size of aggregate used in the concrete mix but shall not be less than 10 inches (250 mm). The inside and outside surfaces of the tremie shall be clean and smooth to permit both flow of concrete and unimpeded withdrawal during concreting. The wall thickness of the tremie shall be adequate to prevent crimping or sharp bends, which restrict concrete placement.

The tremie used for wet excavation concrete placement shall be watertight. Underwater or under slurry placement shall not begin until the tremie is placed to the bottom of the excavated shaft, and the concrete shall be kept completely separated from the water or slurry prior to the time it is discharged. Valves, bottom plates or plugs may be used for this purpose only if concrete discharge can begin within one tremie diameter of the base of the drilled shaft. Plugs shall either be removed from the excavation or be of a material, approved by the Engineer, which will not cause a defect in the shaft if not removed. The discharge end of the tremie shall be constructed to permit the free radial flow of concrete during placement operations. The tremie discharge end shall be

immersed at least 5 feet (1.5 m) in concrete at all times after starting the flow of concrete. The flow of the concrete shall be continuous. The level of the concrete in the tremie shall be maintained above the level of slurry or water in the borehole at all times to prevent water or slurry intrusion into the shaft concrete.

If at any time during the concrete pour, the tremie line orifice is removed from the fluid concrete column and discharges concrete above the rising concrete level, the shaft shall be considered defective. In such case, the Contractor shall remove the reinforcing cage and concrete, complete any necessary sidewall removal directed by the Engineer and repour the shaft. All costs of replacement of defective shafts shall be the responsibility of the Contractor.

- B. **Pumped Concrete:** Concrete pumps and lines may be used for concrete placement in either wet or dry excavations. All pump lines shall have a minimum 4 inches (100 mm) diameter and be constructed with watertight joints. Concrete placement shall not begin until the pump line discharge orifice is at the bottom of the excavated shaft.

For wet excavations, a plug or similar device shall be used to separate the concrete from the fluid in the hole until pumping begins. The plug shall either be removed from the excavation or be of a material, approved by the Engineer, that will not cause a defect in the shaft if not removed.

The discharge orifice shall remain at least 5 feet (1.5 m) below the surface of the fluid concrete. When lifting the pump line during concreting, the Contractor shall temporarily reduce the line pressure until the orifice has been repositioned at a higher level in the excavation.

If at any time during the concrete pour the pump line orifice is removed from the fluid concrete column and discharges concrete above the rising concrete level, the shaft shall be considered defective. In such case, the Contractor shall remove the reinforcing cage and concrete, complete any necessary sidewall removal directed by the Engineer, and re-pour the shaft. All costs of replacement of defective shafts shall be the responsibility of the Contractor.

- C. **Drop Chutes:** Drop chutes may be used to direct placement of free-fall concrete in excavations where the maximum depth of water does not exceed 3 inches (75 mm). Free fall placement is not permitted in wet excavations. Drop chutes shall consist of a smooth tube of either one-piece construction or sections that can be added and removed. A drop chute can also be a hopper with a short tube to direct the flow of concrete. Concrete may be placed through either the hopper at the top of the tube or side openings as the drop chute is retrieved during concrete placement. If concrete placement causes the shaft excavation to cave or slough, or if the concrete strikes the rebar cage or sidewall, the Contractor shall reduce the height of free fall and/or reduce the rate of concrete flow into the excavation. If caving or sloughing of the borehole walls occurs during free-fall placement of concrete, the shaft shall be considered defective. In such case, the Contractor shall remove the reinforcing cage and concrete, complete any necessary sidewall removal directed by the Engineer and repour the shaft. All costs of replacement of defective shafts shall be the responsibility of the Contractor. If concrete placement cannot be satisfactorily accomplished by free

fall in the opinion of the Engineer, the Contractor shall use either tremie or pumping techniques to accomplish the pour.

11.0 CROSSHOLE SONIC LOG (CSL) TESTING

Crosshole Sonic Log (CSL) testing shall be utilized to evaluate the integrity of drilled shaft foundations. CSL testing measures the response of an ultrasonic pulse passing from a signal source in one access tube to a receiver in a second access tube. In uniform, good quality concrete, the CSL test will produce records of consistent travel times and signal amplitudes and correspond to a reasonable concrete pulse velocity from the bottom to the top of the shaft. Longer travel times and lower signal strength in the record indicate the presence of irregularities such as poor quality concrete, voids, honeycombs, or soil intrusions.

If anomalies are suspected, the Contractor shall submit a proposal, which shall include further testing to evaluate the extent of the anomalies. If a defect is confirmed, the Contractor shall bear all costs involved with the shaft coring, grouting, and remediation. The Contractor shall also submit a proposal containing recommendations for the modification of construction procedures to prevent defects for subsequent shaft installations.

12.0 Access Tubes for Crosshole Sonic Log Testing

- A. **Tubes:** The access tubes shall be 2 inches (51 mm) I.D. schedule 40 steel pipe. The selected pipes must have a round, regular internal diameter free of defects or obstructions, including any at the pipe joints, in order to permit free, unobstructed passage of the source and receiver probes. The pipes must be watertight and free from corrosion with clean internal and external faces to insure smooth passage of the probes and to secure a good bond between the concrete and the tubes.

The pipes shall each be fitted with a watertight shoe on the bottom and a removable cap on the top. A minimum of two pipes are required and for drilled shafts greater than 2 feet (610 mm) in diameter, one additional tube shall be added for each 1 foot (305 mm) increase in diameter.

- B. **Installation:** If required, the contractor shall install access tubes for crosshole sonic log testing to permit access for the crosshole sonic test probes. The access tubes shall be evenly spaced around the perimeter of the reinforcing cage and securely attached to the interior of the reinforcement cage of the shaft. The tubes shall be as near to vertical and parallel as possible. Even moderate bending of the tubes will result in large regional variations of the data. The tubes shall extend from 6 inches (150 mm) above the bottom of the drilled shaft to at least 4 feet (1.2 m) above the construction joint. Under no circumstances should the tubes be allowed to rest on the bottom of the excavated shaft. During placement of the reinforcement cage, care shall be exercised as to not damage the tubes.

After placement of the reinforcement cage, the tubes shall be filled with clean water as soon as possible and the tube tops capped to keep debris out. The tubes must be filled with water and capped either before the pouring of the concrete or no later than 4 hours after the pouring of the concrete, otherwise

debonding of the access tubes from the concrete will occur resulting in data that indicates poor quality concrete. Care shall be taken during the removal of the caps from the pipes after installation so as not to apply excess torque, hammering, or other stresses, which could break the bond between the tubes and the concrete.

Upon completion of the CSL testing and acceptance of the drilled shaft by the Engineer, the water shall be removed from the access tube and any other drilled holes. The access tubes and the holes shall then be completely filled with grout. The access tubes shall be filled using grout tubes that extend to the bottom of the holes. The access tubes are to be cut off flush with the top of the drilled shaft.

- C. **Grout:** Grout for filling the access tubes at the completion of the crosshole sonic log tests shall consist of Portland cement, water, and a water reducing admixture and shall be mixed in the following proportions:

i.	Portland Cement Type I or II	1 Sack (94 lbs. (49.2 kg)
ii.	Water	4.5 Gallons (17 liters) Maximum
iii.	Water Reducing Admixture	Manufacturer's Recommendation
iv.	Fly Ash (Optional)	20 lbs. (9 kg) Maximum

13.0 METHOD OF MEASUREMENT

Drilled Shafts shall be measured by the lineal foot for each diameter of completed concrete drilled shaft listed. Rock Sockets shall be measured by the lineal foot for each diameter of completed concrete socket at each pier location listed. The length for the Drilled Shafts shall be determined as the difference between the plan top of shaft elevation and the bottom of the permanent casing. The length of the Rock Socket shall be determined as the difference between the bottom of the permanent casing and the bottom of shaft elevation.

14.0 BASIS OF PAYMENT

This work will be paid for at the contract unit price for the items "DRILLED SHAFT" and "ROCK SOCKET" and shall include all costs for drilling, excavation, furnishing and placing concrete and reinforcing steel, furnishing and placing permanent casing and all incidental work and materials necessary to construct the shafts according to the plans and these special provisions.

For ROCK SOCKETS that extend past plan lengths payment will be based on the following:

Percentage Increase Applied to Additional Length (%) = 1% + (Additional Length in feet) %

For example, if plan ROCK SOCKET length is 50 ft, the contract unit price is \$1000/ft, and an additional 9.5ft is required, payment will be as follows:

$$\% \text{ Increase} = 1\% + 9.5\% = 10.5\%$$

$$(50\text{ft} \times \$1000/\text{ft}) + (9.5\text{ft} \times 1.105 \times \$1000/\text{ft}) = \$60497.50$$

If the test results indicate that the ROCK SOCKET length can be shortened, then payment will be based on length of ROCK SOCKET installed and the contract unit price.

No payment will be made for drilled shafts rejected due to installation tolerances. Clearing of all obstructions encountered during excavation shall be resolved as directed by the Geotechnical Engineer. No payment shall be made for the length of drilled shaft remaining above the finished elevation except where specifically authorized.

EXPANSION DEVICE INSTALLATION

Any expansion device installation that fails to meet the manufacturer's installation specification will be removed and replaced with a properly installed joint at the expense of the Contractor. No payment will be made unless the manufacturer's representative certifies the installation.

PREPARATION OF BRIDGE AT STATION 500+94.36

Description

Preparation of the existing bridge structure(s) shall be in accordance with the pertinent provisions of Section 704 of the Standard Specifications.

Removal Items

The work shall include all work prescribed in the plans necessary to prepare the existing bridge for repair including but not limited to any of the following that apply:

- a. The removal of existing concrete bridge components as shown in the plans
- b. The saw-cutting and breaking back of existing concrete structures to the limits shown in the plans
- c. The removal of the existing steel structures as indicated in the plans
- d. The removal of the existing bearing devices as indicated in the plans
- e. The cleaning and roughening of the existing concrete that comes into contact with the new work
- f. The cleaning, straightening and extending of the existing reinforcing steel into the new work
- g. The cleaning and removal of loose rusted areas of piling to be incorporated into the new work
- h. The removal of expansion devices and/or expansion joint material, if removal is not covered elsewhere in the contract documents or manufacturer's instructions
- i. Cutting down of bearing piles and sheet piles to 2'-0" below the finished grade, if applicable

Jackhammer Requirements

This paragraph shall apply to concrete removals for which specifications have not been provided elsewhere in the contract documents: When breaking existing concrete, the use of a 15 lb. maximum hammer applied at a 45° angle is required to chip along the edges of removal, and a 30 lb. maximum hammer applied at a 45 ° angle is required for all other concrete removal.

Exclusions

This provision shall not pertain to removals or preparation for some items of work that may be covered in other contract documents or manufacturer's installation instructions for those specific items.

Phasing

The existing structure may be used to maintain traffic during the phased construction. In such case, the work shall be done in phases according to the details shown on the plans.

Handling and Disposal of Materials

There is potential for lead-based paint to be found on the bridge structure. However, the paint on the existing structural steel has not been tested for lead. The Contractor is required to conduct their own monitoring at project start-up and adjust worker protection and work practices according to the results.

All other material resulting from the removal of specified bridge components; e.g., structural steel (painted or unpainted) shall become the property of the Contractor and shall be promptly removed from the right-of-way. It is the responsibility of the Contractor to handle materials that may contain toxic substances in accordance with federal, state and local regulations.

Extreme caution shall be exercised in removing the existing bridge components so that no material or debris falls or upon the roadway or into the channel (if so located) below the bridge. The Contractor shall take adequate precautions to protect all traffic and roadways.

Existing Reinforcing Encountered During Concrete Removal

When existing reinforcing steel is broken or has a section loss greater than 20%, the Contractor shall lap splice the existing bar with a bar of matching size. Lap splices shall be as given in the following table:

Bar #	Non-epoxy Length (in.)	Epoxy Length (in.)
4	15	18
5	20	24
6	26	31
7	33	39
8	45	54
9	59	71
10	74	89
11	95	139

The bar used to splice, shall lap, by the length given above, with a portion of the existing bar of which 80% or more of the full section is present, on either side of a break or deteriorated or damaged segment.

All existing reinforcing steel exposed during removal of defective concrete shall be incorporated into the new work. Such bars shall be blast cleaned to remove all rust and corrosion. The bars shall be either reformed, as required, to assume their original (intended) shape or bent to allow placement into the new work. Bars that are required to be cut shall be left as long as possible, reformed if necessary and incorporated into the new work. Deviations from these instructions shall be allowed only when clearly indicated in the plans.

For any reinforcing bar that has more than 2/3 of its diameter exposed, the existing concrete shall be removed so that a minimum clearance of 3/4" is provided all around the bar for the placement of new concrete.

CONTRACTOR'S ACCESS BRIDGE AT STATION 480+36.68

It will be the Contractor's option to use an access bridge for a temporary crossing to construct Structure S012 15983, the temporary bridge at Station 5478+62.22 and/or to gain access to the bridge at Station 500+94.36.

It shall be required that the absolute "low steel" for the Contractor's Access Bridge shall be above elevation 1236.4.

It will be the Contractor's responsibility to submit a plan of the access bridge to the Department of Transportation for approval.

Bidders must submit a bid for the Pay Item "Access Bridge at Station 480+36.68" in the schedule of items.

The Pay Item "Access Bridge at Station 480+36.68" will be paid for as a lump sum. The bid price shall be considered full compensation for all work required for the Contractor to construct, maintain, and remove the access bridge. The Contractor will only be paid for this item if they construct the access bridge. The Contractor will be paid 90% of the lump sum when the access bridge is installed. The remaining 10% of the lump sum will be paid when the access bridge is removed.

Crushed rock surfacing and erosion control items necessary for building and maintaining the approaches to the access bridge will not be paid for directly, but shall be considered subsidiary to the Pay Item "Access Bridge at Station 480+36.68".

If the Contractor does not plan to utilize an access bridge, they shall bid the Pay Item "Access Bridge at Station 480+36.68" at \$0. If the Contractor bids this item at \$0 and later decides to utilize an access bridge, it will be at the Contractor's expense.

No change orders will be approved to increase the cost of the "Access Bridge at Station 480+36.68" item after award of the contract.

REMOVE STRUCTURE AT STATION 5478+62.22

General

The item "Remove Structure at Station 5478+62.22" shall be in accordance with the pertinent provisions of Section 203 of the Standard Specifications and shall provide for removal of the bridge substructure elements associated with the TEMPORARY BRIDGE as detailed below. The Contractor is solely responsible for the safe and controlled removal of the bridge substructure elements.

Execution

All substructure elements including, but not limited to, steel bearing piles, reinforced concrete and granular backfill shall be fully removed prior to completion of the project.

Steel bearing piles associated with construction of the TEMPORARY BRIDGE shall be fully extracted. Pile cut-offs below grade will not be allowed for the abutments or bents.

Removal of riprap and other embankment material shall be in accordance with the roadway plans and provisions.

Disposal of Materials

All material resulting from the removal of the structure components shall become the property of the Contractor and shall be promptly removed from the right-of-way.

Basis of Payment

1.	Pay Item	Pay Unit
	Remove Structure at Station _____	1 Each (EA)

Payment shall be full compensation for removal of the bridge substructure elements as described above.

SEEDING

Subsection 801.02 in the Standard Specifications is amended to include the following:

Type "B"	Minimum Purity	Broadcast Application Rate in lb. of Pure Live Seed/Acre	Approved Mechanical Drill Application Rate in lb. of Pure Live Seed/Acre
Tall fescue	85	56	45
Perennial ryegrass	85	56	45
Kentucky bluegrass, Low Maintenance (Poa pratensis Low Maintenance)	85	5	4
Slender wheatgrass	85	18.75	15
Red fescue (Festuca rubra)	85	12.5	10
Hard fescue (Festuca trachyphylla)	85	12.5	10
Fults alkali grass (Puccinellia distans)	85	8.75	7
Oats/wheat (wheat in the fall)	90	31	20

All seeds shall be origin Nebraska, adjoining states, or as specified. A contractor proposing to use a substitute variety or origin shall submit for the Engineer's consideration a seed tag representing the seed, which shows the variety, origin and analysis of the seed.

Rate of application of commercial inorganic fertilizer shall be:

	Rate of Application per Acre (Minimum)
Available Nitrogen (N ₂)	32 or 36 lbs.
Available Phosphoric Acid (P ₂ O ₅)	92 or 96 lbs.

Rate of application of granular sulphur coated urea fertilizer shall be:

Nitrogen (Total Available)	0 lbs.
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The contractor may, at his option, apply granular urea formaldehyde in lieu of the sulphur coated urea fertilizer at the following rate:

Nitrogen (Total Available)	0 lbs.
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Paragraph 4.a. of Subsection 801.03 is void and superseded by the following:

- a. Seeding operations shall be performed only during the periods March 1 to July 1 and August 1 to December 1.

Paragraph 4. of Subsection 801.02 is void and superseded by the following:

4. Mulch shall be Hydromulch, Type HM2 as described in Section 807.

EROSION CONTROL

Subsection 810.02 in the Standard Specifications is amended to include the following:

Erosion Control	Minimum Purity (%)	Application rate in lb. of Pure Live Seed/1000 yd. ²
Perennial ryegrass – Linn, Norlea, Amazon	85	2
Western wheatgrass – Barton, Flintlock	85	1.25
Slender wheatgrass	85	1.25
Canada wildrye – Mandan, Homestead, NE or IA native	85	1.25
Kentucky fescue	85	2
Little bluestem – Aldous, Blaze, Camper	60	0.5
Sideoats grama – Butte, Pierre, Trailway	75	1
Switchgrass – Trailblazer, Blackwell, Cave-in-Rock, Pathfinder	90	0.5
Indiangrass - Oto, NE-54, Holt	75	0.5
Prairie cordgrass (Spartina pectinata)	85	0.4
Oats/wheat (wheat in the fall)	90	6

All seeds shall be origin Nebraska, adjoining states, or as specified. A Contractor proposing to use a substitute variety or origin shall submit for the Engineer's consideration a seed tag representing the seed, which shows the variety, origin and analysis of the seed.

Rate of application of inorganic fertilizer shall be:

	Rate of Application Per 1000 yd. ² (Min.)
Available Nitrogen (N ₂) -----	8 or 9 lb.
Available Phosphoric Acid (P ₂ O ₅) -----	23 or 24 lb.

Rate of application of granular sulphur coated urea fertilizer or urea-formaldehyde fertilizer shall be:

	Rate of Application Per 1000 yd. ² (Min.)
Nitrogen (Total Available) -----	0 lb.

**COVERCROP SEEDING
(8-6-1217)**

Paragraph 3. of Subsection 802.02 in the Standard Specifications is void and superseded by the following:

Fertilizer is not required for covercrop seeding.

Paragraph 6. of Subsection 802.03 is void.

**TEMPORARY SEEDING
(8-7-0218)**

Paragraph 3. of Subsection 803.02 in the Standard Specifications is void and superseded by the following:

Fertilizer is not required for temporary seeding.

Paragraph 3.c. of Subsection 803.03 is void.

Paragraph 2. of Subsection 803.04 is void and superseded by the following:

The mulch will not be measured for payment, but shall be considered subsidiary to the item "Temporary Seeding".

SOIL AMENDMENT

Paragraph 1. of Subsection 805.05, in the Standard Specifications is amended to include the following:

Pay Item	Pay Unit
Soil Amendment for Seeding	Ton
Soil Amendment for Erosion Control	Ton

**GUARDRAIL END TREATMENT, TYPE II
(9-2-0818)**

Section 902 in the Standard Specifications is amended to include "Guardrail End Treatment, Type II".

This work consists of furnishing and installing a guardrail end treatment system according to the details and at the locations shown in the plans.

The Contractor has the option of installing one of the following systems which meet NCHRP 350 or MASH TL-3:

- | | |
|------------------|---|
| 1.) SRT-31 | Manufactured by Trinity Industries, Inc.
2525 N. Stemmons Freeway
Dallas, TX 75207
(800) 644-7976 |
| 2.) FLEAT-SP-MGS | Manufactured by Road Systems, Inc.
3616 Old Howard County Airport
Big Springs, TX 79720
(915) 263-2435 |

The lengths of manufacturers' end treatments vary; the Contractor must install a total length of 53'-1.5", including the end treatment, to last post with curved end or rectangular "head" beyond the last post. The additional length required will be W-beam guardrail with the Midwest Guardrail System 31" design.

The Contractor will be required to furnish two sets of shop plans to the Department of the system to be installed. The guardrail end treatment shall be installed in accordance with the recommendations of the manufacturer.

GRANULAR SUBDRAINS

Subsection 915.02 of the Standard Specifications is void and superseded by the following:

Aggregate that is used in granular subdrains shall consist of crushed gravel or crushed rock and shall conform to the requirements of Paragraphs 1. and 2. of Subsection 1033.02.

Crushed gravel shall have a fine aggregate angularity value of 43.0 or greater. The specific gravity for calculation of the Fine Aggregate Angularity (FAA) shall be determined on a combined aggregate sample of the material passing the No. 8 (2.36 mm) sieve and retained on the No. 100 (150 µm) sieve as defined in AASHTO T 304 Method A, except the specific gravity material shall be washed over the No. 100 (150 µm) sieve. Gravel aggregate shall have a soundness loss of not more than 12 percent by weight at the end of 5 cycles using sodium sulfate solution.

Crushed rock shall consist of clean, hard particles of crushed limestone, quartzite, or dolomite. Crushed rock shall have a percent loss of not more than 14 at the end of 16 cycles of the freezing and thawing test.

The crushed gravel or crushed rock shall meet the following gradation requirements.

Granular Subdrains Gradation Requirements		
Sieve Size	Target Value (Percent Passing)	Tolerance
1 inch	100	0
No. 4	40	±20
No. 10	15	±15
No. 200	4	±4

Paragraph 5. of subsection 915.03 is void and superseded by the following:

Excavated material shall become the property of the Contractor and removed from the project or used for shoulder construction on the project. Excess material shall become the property of the Contractor and removed from the project.

Traffic will not be permitted to travel next to these trenched areas until the trench has been filled to top of the existing adjacent surfacing.

Earth Shoulder Construction shall be completed prior to granular subdrain installation.

Payment shall be full compensation for all work required to provide and install the system.

REMOVE AND SALVAGE RIP RAP

This work shall consist of the removal of riprap placed for temporary construction, and placing it at the permanent locations shown in the plans, in accordance with applicable requirements of Section 905 in the Standard Specifications. The item "Remove and Salvage Riprap" will be measured and paid for by the cubic yard. Payment shall be considered full compensation for all work required.

GUARDRAIL AND GUARD POSTS

Paragraph 1. of Subsection 902.05 in the Standard Specifications is amended to include the following:

Pay Item	Pay Unit
___ Bridge Approach Section	Each (ea)
Guardrail End Treatment ___	Each (ea)

**PORTLAND CEMENT
(10-8-1118)**

Paragraph 1. of Subsection 1004.04 is void and superseded by the following:

1. Portland and Interground/Blended cements shall be on the Nebraska Qualified Material Vendors List (NQMVL).

The reference to “the APL” in Paragraph 2. of Subsection 1004.04 is revised to “the NQMVL”.

Paragraph 2.a.(9) of Subsection 1004.04 is void and superseded by the following:

- (9) Report test results per ASTM C 1567 at 28 days and/or AASHTO T 380 at 56 days.

Paragraph 3. of Subsection 1004.04 is void and superseded by the following:

3. Alkali Silica Reaction Requirements and Testing:
 - a. Interground/Blended cement shall be tested according to the provisions of ASTM C 1567.
 - (1) The mortar bars shall be composed of Type IP, IS or IT Interground/blended cement and sand/gravel from an approved Platte River Valley (Saunders County) and/or Elkhorn River (Madison County) aggregate source.
 - (2) The mortar bars for the ASTM C 1567 shall not exceed 0.10% expansion at 28 days.
 - i. If the expansion is greater than 0.10% at 28 days, then the Interground/Blended cement shall be tested in accordance with AASHTO T 380 using sand/gravel from an approved Platte River Valley (Saunders County) and/or Elkhorn River (Madison County) aggregate source with an expansion not greater than 0.03% at 56 days.

Paragraph 2. of Subsection 1004.05 is void and superseded by the following:

2. Noncompliant material shall be tested in accordance with ASTM C 1567 and in accordance with Subsection 1004.04, Paragraph 3.a.(1).
 - a. The mortar bars for the ASTM C 1567 shall not exceed 0.10% expansion at 28 days.
 - b. If the expansion for ASTM C 1567 is greater than 0.10% at 28 days, then the Interground/Blended cement shall be tested in accordance with AASHTO T 380 using the most reactive aggregate from the project with an expansion not greater than 0.03% at 56 days.

- c. If the expansion for ASTM C 1567 is greater than 0.10% at 28 days or if the expansion for the AASHTO T 380 is greater than 0.03% at 56 days, then the Interground/Blended cement shall be subject to removal, 40% pay, and/or removal from NDOT's NQMV L in accordance with NDOT's Acceptance Policy on Portland and Interground/Blended Cements.

BITUMINOUS LIQUID COMPOUNDS FOR CURING CONCRETE (10-8-1217)

Subsection 1013.02 in the Standard Specifications is amended to include the following:

- 2. The Contractor has the option of using bituminous tack coat. The tack coat shall conform to all requirements of Section 504.

AGGREGATES (10-8-1118)

Paragraph 2. of Subsection 1033.02 in the Standard Specifications is amended to include the following:

- g. All Portland cement concrete aggregates - regardless of their source - will be sampled and tested by the Engineer for their potential alkali reactivity in accordance to ASTM C 1260. This testing is a part of the materials source and quarries approval process.
 - (1) The expansion shall not be greater than 0.57% at 28 days.
 - (2) If the expansion is greater than 0.57%, the aggregate shall not be used.

Paragraph 3.a.(8) of Subsection 1033.02 is void and superseded by the following:

- (8) Lightweight pieces (measured by percent volume values) shall not exceed 0.5%. For Class R aggregate, fine aggregate is defined as any material passing a No. 4 sieve.

Paragraph 3.b.(2) of Subsection 1033.02 is void and superseded by the following:

- (2) The percent of clay lumps, shale, or soft particles shall not exceed the following amounts:

Clay Lumps.....	0.5%
Shale	1.0%
Soft Particles.....	3.5%
Lightweight Pieces.....	0.5%

Paragraph 3.b.(8) of Subsection 1033.02 is void.

SUPERPAVE ASPHALTIC CONCRETE (10-11-0218)

Paragraph 8.d. of Subsection 1028.03 in the Standard Specifications is void and superseded by the following:

- d. Normally, 1 (one) sample for determination of density will be taken from each subplot at locations determined by the Engineer.

Table 1028.18 (SLX) of Subsection 1028.03 is void and superseded by the following:

**Table 1028.18 (SLX)
Acceptance Schedule
Air Voids – N_{des}**

Air voids test results for Asphaltic Concrete Type SLX	Pay Factor	
	Moving average of four	Single test
Less than 0.5%	50% or Reject	50% or Reject
0.5% to 0.9%	50% or Reject	50%
1.0% to 1.4%	50% or Reject	95%
1.5% to 1.9%	90%	95%
2.0% to 2.4%	100%	100%
2.5% to 3.5%	102%	104%
3.6% to 4.0%	100%	100%
4.1% to 4.5%	95%	95%
4.6% to 5.0%	90%	95%
5.1% to 5.5%	50% or Reject	90%
5.6% to 6.0%	50% or Reject	50%
6.1% and over	50% or Reject	50% or Reject

PREFORMED JOINT FILLER (10-13-0818)

Section 1015 in the Standard Specifications is void and superseded by the following:

1015.01 – Description

1. Preformed expansion joint filler shall be furnished in strips of the dimensions specified in the contract.

1015.02 – Material Characteristics

1. Nonextruding and Resilient Bituminous Type (Fiber Type) performed joint filler shall conform to the requirements of AASHTO M 213.
2. Bituminous Type (Asphalt Type) preformed joint filler shall conform to the requirements of AASHTO M 33 except it will not be subject to a requirement for brittleness.

3. Preformed joint filler (Sponge Rubber Type) shall be a flexible cellular rubber product meeting the classification requirements of the latest edition of ASTM D1056 for Type 2, Class A or B, Grade 2 or 3, except that reclaimed rubber shall not be used in the manufacture of the material. The color shall be gray.
4. Semi-Rigid, Closed-Cell Polypropylene Foam Type (Polypropylene Type) preformed expansion joint filler shall conform to the requirements of ASTM D8139.

1015.03 – Procedures

1. For structures, the Bituminous Type (Asphalt Type) or Preformed Joint filler (Sponge Rubber Type) shall be used, unless otherwise shown in the contract.
2. Except for structures, the Non-extruding and Resilient Bituminous Type (Fiber Type) or the Semi-Rigid Closed-Cell Polypropylene Foam Type (Polypropylene Type) shall be used, unless otherwise shown in the contract.

1015.04 – Acceptance Requirements

1. Preformed joint fillers that are on the Department's Approved Products List are acceptable.
2. The preformed joint fillers may be accepted based on manufacturer's certification of compliance letters when they are not on the Department's Approved Products List.

JOINT AND CRACK SEALING FILLER

Paragraph 1.a. of Subsection 1014.02 is void and superseded by the following:

- a. NE-3405 joint and crack sealer shall conform to the requirements of ASTM D6690, Type II. The material shall conform to the requirements of Table 1 with the following exceptions:

Table 1014.01 of Subsection 1014.02 is void and superseded by the following:

Table 1014.01

Silicone Joint Sealer Requirements		
Property	Requirement	Test
As supplied:		
Specific Gravity	1.010 - 1.515	ASTM D792
Work Time, minimum	10 minutes	
Tack-Free Time, at 77°F (25°C)	20 - 310 minutes	ASTM C679
Full Adhesion, maximum	21 days, 4 hours	
Cyclic Joint Movement Capacity	+100% to -50%	ASTM C719
Durometer Hardness:		
Non-Sag, Shore A	10 - 25	ASTM D2240
Self-Leveling, Shore 00, minimum	40	ASTM D2240
As cured, by standard laboratory conditions:		ASTM D5893
Ultimate Elongation, Method A, Die C, min.	600%	ASTM D412
Cure Evaluation, full cure, maximum	21 days, 4 hours	ASTM D5893
Non-immersed Bond	Pass 5 cycles	ASTM D5893
Water-immersed Bond	Pass 5 cycles	ASTM D5893
Tensile Stress, at 150% Elongation, max.	45 psi	ASTM D412

Paragraph 1.a.(2). of Subsection 1014.04 is void and superseded by the following:

- (2) Off-site (Proxy) sampling shall be in accordance with ASTM D5078.

**PROPOSAL GUARANTY
(1-37-1217)**

As an evidence of good faith in submitting a bid for this work, the bidder shall indicate the type of bid bond applied to this project in accordance with Subsection 102.14 of the Standard Specifications.

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