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: 850 CONTROL NO. SEQ. NO.: 81039 000 TENTATIVE START DATE: 05/26/2019 LOCATION: US-281, NIOBRARA RIVER BRIDGE AT HOLT/BOYD C/L IN COUNTIES: HOLT, BOYD CONTRACT ID: 8039 PROJECT NO.: ER-281-4(130) CONTRACT TIME: 742 CALENDAR DAYS

DBE GOAL: N/A

BIDDER

GROUP GROUP GROUP	3	GRADING CONCRETE PAVEMENT CULVERTS
GROUP	5	SEEDING
GROUP	6	BRIDGE AT STATION 846+58.79
GROUP	6A	BRIDGE AT STATION 7015+18.58
GROUP	6B	BRIDGE AT STATION 859+89.87
GROUP	7	GUARDRAIL
GROUP	10	GENERAL ITEMS



May 10 2019 Docu Sign.

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: <u>NDOT.EmergencyProjectQuestions@nebraska.gov</u>. **Questions will not be answered verbally.**

FHWA-1273 -- Revised May 1, 2012

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

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 designbuild 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.

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.

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 notifythe 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 nonminority 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-ofway 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 Federalaid 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 anyperson 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 contacting 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 towork 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, tobe 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 orto 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 Xin 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 setout 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 allower 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 bestof 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 forwork 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

X	Goal		Goal	
Economic Area	%	Economic Area	%	
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 Cuming, 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 Bon Homme,		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,	(10)	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,	1.0	145 Scottsbluff, NE:		
NE Sarpy		Non-SMSA Counties	5.3	
(in only)		NE Banner, NE Box Butte, NE Chey-	1.460	
		enne, NE Dawes, NE Deuel, NE		
		Garden, NE Kimball, NE Morrill,		
		NE Scotts Bluff, NE Sheridan, NE		
		Sioux, WY Goshen		
		bioba, it i Oballeli		

GOALS AND TIMETABLES FOR FEMALE PARTICIPATION IN EACH TRADE

	Goals
Timetables	(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:
 - "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);
 - 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 Contractor's failure to take good faith efforts to achieve the 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 1124'6, 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.

- - 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 offthe-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 dispositon 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.
- 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.
- 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 EEQ 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
* SUNE201	1-029 08/29/2011		

Fringes

Rates
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.

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.

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-281-4(130)

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: <u>https://negov.sharefile.com/f/fo1d591b-5f09-4f3d-b8bd-0f5f8c390786</u>
- b. Signed and notarized bids along with bid bonds may be submitted via email to: <u>NDOT.electronicbids@nebraska.gov</u> 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, 7 & 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 <u>www.nebraskatransportation.org/letting/index.htm</u>. 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.

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	2014 OJT
				Average	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).
 - If a Contractor exceeds the number of OJT hours assigned for a calendar year, a. 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 <u>not</u> 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 secretarialtype 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: <u>The monthly reporting requirements may change if/when on-line reporting is</u> <u>implemented by NDOT</u>.

- 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.

Aerial and/or underground utility facilities may exist within this project. The Contractor should request a utility status update at the project pre-construction conference, and/or prior to start work.

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 or dial 811.

The following utilities have facilities within the project area, and have been provided project plans:

Northeast Nebraska Telephone Company: Utility has been notified of the project. P.O.C. Jeff Herfel (402) 632-4321 x213

Black Hills Energy: Utility has been notified of the project. P.O.C. Cullen Sila (402) 371-7195

Nebraska Public Power District: No conflict at this time. P.O.C. Randy Jakubowski (402) 563-5893

Niobrara Valley Electric Membership Corporation: No conflict at this time. P.O.C. John Boyle (402) 336-2803

Boyd County Rural Water District: Utility has been notified of the project. P.O.C. Jody Kaczor (402) 589-1502

All utility rehabilitation will be accomplished prior to or 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:

Scott Angel, Ken D. Angel and Linda J. Angel, and Inspiration Acres, LLC.

Right-of-Way Tracts with Pay Items:

Tract Number	Pay Items
N/A	N/A

The Contractor will not be able to perform work on any tract listed as "Unacquired Right-of-Way Tracts" until legal and physical possession has been acquired by the State. If necessary, the Contractor will be granted an extension of time if a delay is caused because of the above tract(s) not being acquired.

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.
- The right of way has been acquired in accordance with the current Federal Highway Administration directives covering the acquisition of real property.
- All necessary arrangements have been made for the right of way clearance to be undertaken and completed before physical construction begins.
- All necessary rights of way, including control of access rights when pertinent, have been acquired; except for the above, but legal and physical possession have been obtained for all right of way.
- 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 742 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 US-281 shall be open and accepted by the Department by November 2, 2020.

All riprap work shown on plan sheets G12 and G15, shall be in place and accepted by the Department by March 15, 2021. The Contractor shall be responsible for all damage caused by high water if the riprap isn't in place by the March 15, 2021 deadline.

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 US-281 by November 2, 2020, shall result in the assessment of \$2,220 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 US-281. 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:

Cost = $[(1-\%T)(ADT)(\$ Pass) + (\%T)(ADT)(\$ Trucks)] \times D$ = $[(1-0.21)(1,185)(0.33) + (0.21)(1,185)(0.54)] \times 5$ = $[\$308.93 + \$134.28] \times 5$ = $\$2,216.05 \rightarrow$ Rounded to \$2,220/Calendar day. 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. 853+50 to 856+14, all Group 6B work, install new guardrail with surfacing under guardrail from Sta. 854+52 to 856+45 Lt & Rt, 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. <u>CONTRACT AMOUNT</u>

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. <u>CALENDAR DAY</u>

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 US-281 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. <u>USER COST</u>

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:

Cost = [(1-%T)(ADT)(\$ Pass) + (%T)(ADT)(\$ Trucks)] x D

- $= [(1-0.21)(1,185)(\$0.33) + (0.21)(1,185)(\$0.54)] \times 80$
- = [\$308.93 + \$134.28] x 80
- = \$35,464.80 → Rounded to \$35,465/Calendar day. By Administrative decision, this amount is adjusted to \$15,000/CD.

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:

TOTAL BID = ITEMS TOTAL + 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. <u>The amount of incentive payment will be capped at \$150,000</u>.

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 theStandard Specifications, where the value of "T" shall be:

T = the number of calendar days for Project ER-281-4(130) = 742.

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.

<u>Wetlands</u>

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:

• <u>http://outdoornebraska.gov/atriskspecies/</u>

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-steam 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
- 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 contractor shall 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), handdelivery, 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)

- 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)

- 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)

- 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)

- 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 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 ItemPay UnitStorm Event Restoration IncentiveEachStorm Event Restoration DisincentiveCalendar 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 ItemPay UnitEnvironmental Commitments Contractor ComplianceLump 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 associate 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.

		Depth Below		
Location	Soil Type	Finished	Minimum %	Maximum %
		Subgrade		
Soil materials	Silt – Clay	Upper 3 feet	Opt3	Opt. +2
receiving concrete	Silt- Clay	Greater than 3 feet	Opt3	Opt. +2
pavement	Granular	All Depths	**	**
Soil materials	Silt – Clay	Upper 3 feet	Opt2	Opt. +1
receiving flexible	Silt- Clay	Greater than 3 feet	Opt3	Opt. +2
pavement	Granular	All Depths	**	**
Soil materials				
receiving gravel	All materials	All Depths	**	**
surfacing				
Subgrade prep.	Silt – Clay	The upper 6	Opt3	Opt +2
Shoulder subgrade	One Oldy	inches of subgrade		Optitz
prep (concrete	Granular	soil	**	**
pavement)				
Subgrade prep.	Silt – Clay	The upper 6	Opt2	Opt +1
Shoulder subgrade	one only	inches of subgrade		Opt
prep (flexible	Granular	soil	**	**
pavement)				
Stabilized			See Specifications	
Subgrade				
Granular Structural				
Fill (MSE Walls,	Granular	All Depths	**	**
bridges, culverts,	0.0.10101			
et.)				

Table 1 - Moisture Requirements

** 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.

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".

EMBANKMENT REQUIREMENTS

Excavated materials within the project limits having a Liquid Limit greater than 50 shall be used a minimum of 2 feet below pavement subgrade. Offsite cohesive borrow with a Liquid Limit greater than 50 percent will not be allowed within the embankment.

FURNISHING AND PLACING TOPSOIL

The Contractor shall furnish and place 6-inches of topsoil at the slopes, ditches and river banks that are disturbed during construction of the project prior to seeding and placement of erosion control mat. The furnished topsoil shall be a fertile, friable, natural loam, dark in color (often black), generally free of subsoil, clay lumps, brush, weeds, roots, stumps, stones larger than 1-1/2" in any dimension, debris and other extraneous or toxic matter that would be harmful to plant growth. The allowable acidity range (pH) shall fall between 5.5 and 8.5. Existing topsoil that is salvaged and stockpiled at the site can be used but shall not be differentiated for payment.

Measurement and payment for providing and placing the topsoil shall be in accordance with the price bid per square yard for the pay item "Furnishing and Placing Topsoil". Said payment shall be full compensation for furnishing and placing a uniform 6-inch depth of topsoil across the disturbed turf areas or as directed by the Engineer including all loading, hauling, placement and other incidental items.

REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL

This work shall consist of removing and disposing of unsuitable material at the locations shown in the plans, or as directed by the Engineer, and backfilling with suitable embankment material.

The contractor shall dispose of the unsuitable material at a site off the project.

The work of removing and disposing of the unsuitable material will be measured by the cubic yard in place and shall be paid for at the contract unit price per cubic yard for the item, "Removal and Replacement of Unsuitable Material". This price shall be considered full compensation for all costs required for the removal and disposal of the material, including the embankment and water required to fill the void after the removal of the unsuitable material.

OVER-EXCAVATION

The Contractor shall be required to over-excavate existing in place, low density soils, to the depths shown on the plans or as directed by the Engineer. The over-excavated soils shall be recompacted to the proper density as shown on the plans. All work associated with the over-excavation and re-compaction of existing site soils shall be completed in accordance with the requirements for construction of embankments as outlined in Section 205 of the Standard Specifications for Highway Construction. All water required to achieve the required compaction shall be considered subsidiary to the pay item for the over-excavation.

The work associated with the over-excavation and re-compaction shall be paid for by the cubic yard in accordance with the price bid for the pay item "Additional Excavation". The volume for payment is an established quantity as shown on the plans and shall not be measured directly for payment. Any additional material required due to shrinkage of the on-site soils during compaction shall be subsidiary to the pay item "Additional Excavation".

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.
 - 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 sublot. 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.

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	

Table 307.02

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	Square Yard (SY)
	Course	[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

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.
- 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 x DTV. The frequency of testing deflection is 1 test at one location for every 1500 square yards or less.

SUBGRADE PREPARATION

If the Contractor elects to use cohesive soil for Embankment, the top 8" will be stabilized with Lime. And the work of Stabilized Subgrade Type Lime and its materials will be subsidiary to the Item "Subgrade Preparation."

STABILIZED SUBGRADE TYPE LIME - OPTIONAL

Description

The work of constructing the stabilized subgrade shall consist of reshaping the subgrade and constructing and compacting an 8 inch layer to the widths shown in the plans, of pulverized soil from the subgrade, hydrated lime and water to provide a firm, stable foundation for the subsequent construction. The stabilized subgrade shall be constructed in conformity with the lines, grades, quantity and material requirements, and typical cross section shown in the plans. The item "Stabilized Subgrade Type Lime" was established for this project assuming cohesive soils may be utilized for the subgrade material. Subgrade material shall be submitted to NDOT Materials and Research Division, Pavement Design Engineer, for evaluation prior to construction. If the NDOT Material and Research Division determines that the material is non-cohesive; then the items "Hydrated Lime", "Stabilized Subgrade Type Lime" and "Water" may be under-run in certain areas dependent upon the soil samples submitted for use in those areas.

Material Requirement

- 1. Pebble Quicklime or Hydrated lime shall conform to the requirements of ASTM C977. Pebble Quicklime may be used in lieu of Hydrated Lime if the dry placing method of application is used. If the Contractor elects to use Pebble Quicklime it shall be measured and paid as Hydrated Lime.
- 2. Water shall conform to the requirements of Section 1005 of the Standard Specifications.

Equipment

- 1. A recycler capable of pulverizing and mixing, to a homogeneous material, the subgrade soil with lime and water. The recyclers mixing chamber shall have a spray bar to incorporate water into the subgrade soil and lime.
- 2. Distributors used for applying water shall conform to the requirements of Subsection 301.02.
- 3. When hydrated lime slurry is used for the treatment, the Contractor shall furnish facilities for preparing the hydrated lime slurry and accurately determining the quantities of lime and water used in the mixer.
- 4. Equipment for use in trimming stabilized subgrade shall conform to the requirements of Section 302.
- 5. A minimum of one self-propelled pad foot compactor and one pneumatic roller shall be required. The pad foot compactor shall be vibratory and shall consist of one or more drums with pads or feet projecting no less than 6.5 in. The static load on the individual pads shall be no less than 200 psi exerted on a single row of pads or feet parallel to the axle of the drum.

Example: pad area = $4^{\circ}x6^{\circ}$ = 24 in2, 3 pads in a row make contact at one time, static load on drum is 16000 lbs., 16000 lbs. ÷ (24 in2x3) = 222 psi.

The pneumatic-tired roller shall have wide, smooth treads and uniform air pressure. The tires shall be staggered to provide complete coverage of the area. Sufficient weight is required to provide a minimum of 225 lbs. per inch of tire width. The tire pressure shall be no less than 60 psi with a tire variance no more than 5 psi.

Application of Hydrated Lime

- 1. Lime placement on the subgrade shall be accomplished by the methods hereinafter described as "Dry Placing", or "Slurry Placing" at the Contractor's option. Prior to the placement of the lime, the subgrade shall be adjusted to the typical cross section shown in the plans. The quantity of lime to be applied shall be determined by the Materials and Research Division Laboratory.
- 2. Dry Placing
 - a. After the subgrade has been adjusted to the typical cross section shown in the plans, the lime shall be placed on the surface of the subgrade and distributed in a layer of uniform thickness over the entire width of the area being treated. A spreading device for distribution of the lime shall be required if using a powdered lime. Powdered lime is defined as a lime with 100% passing the 3/8" sieve. The spreading device shall be capable of spreading the additive both laterally and longitudinally in an even and accurate manner. Spreading with a motorgrader will not be allowed when using powdered lime. The lime shall not be placed on the subgrade when the wind is blowing so that the loss of lime cannot be satisfactorily controlled. After the lime has been uniformly distributed, it shall be sprinkled with water. A motorgrader may be used to spread

coarse lime if it can be spread laterally and longitudinally in an even and accurate manner to the satisfaction of the Engineer.

- 3. Slurry Placing
 - A slurry shall be prepared by combining hydrated lime and water in a ratio of approximately one ton of hydrated lime to 500 gallons of water, either in a central mixing tank or directly in the tanks used for distribution. The mixing tank shall be equipped with means of agitating the slurry to provide a uniform mixture and prevent the lime from settling after mixing. Water shall be measured with a calibrated meter and the hydrated lime shall be weighed on approved scales or the quantity determined by a count of bags used.
 - b. After the subgrade has been adjusted to the typical cross section shown in the plans, the hydrated lime slurry shall be applied to the surface of the subgrade by means of distributors equipped with means of agitating the slurry during hauling and spreading. The number of applications and the rate of application shall be such that the total application of residual lime per square yard shall be uniformly deposited over the entire width of the area being treated and the quantity of slurry in any one application shall be such that run-off will not take place. The surface of the material being treated may be lightly scarified by use of a spike-tooth harrow or other comparable equipment closely following the distributor to facilitate absorption and prevent run-off.

Construction Methods

- 1. Materials and quantities used on the job shall be same used for the Mix Design. Any change in the quantities, quality or Suppliers shall be approved by the Materials and Research Pavement Design Engineer prior to its use on the project.
- 2. The Contractor shall provide adequate protection for the lime against moisture. Lime shall be hauled or stored in suitable moisture proof dry bulk trailers or containers. The use of tarpaulins for the protection of the lime will not be allowed. Lime which has become caked or lumpy shall not be used. Lime which has been spilled shall not be used.
- 3. The subgrade soil shall contain no frost and the atmospheric temperature shall be at least 40° F and rising.
- 4. The subgrade mixing procedure shall be the same for "Dry Placing" or "Slurry Placing" as hereinafter described.
- 5. The portion of the roadbed being treated shall be trimmed to within ½ inch of the finished elevation by use of conventional equipment, then scarified to loosen the subgrade soil to the full width and depth of the lime treated subgrade. If necessary the larger chunks or pieces of soil shall be broken down by the use of disc harrows, sheepsfoot rollers or other suitable equipment. If the plans show trimming of the subgrade to provide earth shoulder construction material, trimming shall be done prior to incorporating lime into the subgrade.

- 6. Preliminary mixing of lime and water shall be accomplished throughout the scarified material with a machine capable of pulverizing the existing subgrade to the depth required by these specifications and to a minimum width of not less than 8 feet in a single pass operation. The pulverizing machine shall be capable of blending and mixing, to a homogeneous material, the pulverized subgrade with the lime and water. The machine shall be equipped with standard automatic depth controls and be capable of maintaining a constant depth and width. Care shall also be taken to avoid mixing the lime with a greater quantity of the subgrade soil than is required to build the compacted thickness specified. During the preliminary mixing, water shall be added to provide a moisture content of 3 to 5 percentage points greater than optimum moisture content. The optimum moisture content shall be determined by NDOT T 99. Preliminary mixing shall be continued until all chunks of soil have been reduced to a maximum of 2 inch in size.
- 7. The material shall than be bladed into approximately the final cross section and rolled with pneumatic-tired rollers to seal in the moisture and to insure against excessive wetting from rain. The material shall be cured in this condition for a period of 48 hours in order for the reaction of the lime and water to soften the remaining chunks of soil. The surface shall be lightly sprinkled during this period to compensate for evaporation loss.
- 8. Following the curing period, final mixing shall be performed with the pulverizing machine until the mixture is uniform throughout and chunks of soil and lime have been broken down to the extent that all will pass a 1-inch sieve and not more than 30 percent will be retained on the No. 4 sieve. The moisture content at the completion of the mixing shall be within plus or minus two percentage points of the optimum moisture percentage, determined by NDOT T 99.
- 9. After mixing, the material shall again be shaped to the proper cross section and compacted with padfoot rollers. Final shaping with a motor grader and final rolling with pneumatic-tired rollers will then be accomplished. Water may be added during the compaction and finishing operations to compensate for evaporation loss.
- 10. a. After the required compaction has been attained, the subgrade shall be trimmed in accordance with the requirements of Subsection 302.03.
 - b. After the trimming operation has been completed, the surface of the stabilized subgrade shall be lightly sprinkled with water at frequent intervals to offset the effects of evaporation, for a period of 3 days. No construction traffic, except for water trucks, will be allowed on the surface of the stabilized subgrade during the curing period.
- 11. Any damage to the stabilized subgrade shall be repaired at the Contractors expense.

Maintenance of the Compacted Subgrade

Maintenance of the lime treated subgrade shall be the responsibility of the Contractor until the material for the subsequent construction has been placed. Water used to maintain the

subgrade after the 3-day curing period and the work of maintaining the subgrade, prior to the subsequent construction will not be paid for directly but shall be considered to be subsidiary to any or all of the items for which the contract provides that direct payment is made.

Sampling and Testing

Sampling and testing shall be completed according to Section 10 of the Materials and Tests Division Material Sampling Guide.

A minimum of one 150 pound sample(s) of subgrade soil and a 15 pound sample of the lime shall be submitted for acceptance testing and mix design a minimum of 21 days prior to beginning the Stabilized Subgrade work. Additional subgrade soil samples shall be submitted for each type of soil used on the project.

Compaction and Soil Stiffness Requirements

The soil stiffness is an in-place measurement of the deflection of the Stabilized Subgrade measured by NDOT personnel performing Light Weight Deflectometer measurements on the processed material 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. The first 3 drops are to be used to seat the LWD.
- 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. A single coverage is defined as the compacting of unbound material over a given point a single time.
- 4. 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.

- 5. The control strip dimensions have a minimum length of 200 feet.
- 6. The control strip construction shall be incidental to the pay item Stabilized Subgrade Type Lime.
- 7. The optimum moisture content shall be in an acceptable range of optimum moisture to plus 2%. The moisture content shall be determined by AASHTO T99 at the NDOT Materials & Research Central Lab.
- 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 processed material 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. A minimum of one pneumatic tire roller coverage is required.
- 10. The Deflection Target Value shall be re-evaluated when:
 - a. Deflection test measurements are consistently less than the DTV. (3 out of 5 consecutive deflection tests are less than 0.8 of the DTV).
 - b. Failing test results are consistently occurring and adequate compaction is observed.

Acceptance Testing

- 11. A passing deflection test is defined as a deflection value that is less than 1.10 x DTV.
- 12. The moisture content of soil shall be performed using NDOT approved equipment and methods. Approved equipment includes: 1) hot plates, stove, or microwave, 2) Speedy Moisture Method, or 3) Laboratory oven method. Moisture content results shall be reported to the nearest tenth of a percent.
- 13. The frequency of testing deflection and moisture content is 1 test at one location for every 1500 square yards or less.

CRUSHED ROCK BASE COURSE

Paragraph 1. of Subsection 305.02 of the Standard Specifications is void and superseded by the following:

1. Crushed rock and crushed rock screenings for the crushed rock base course shall conform to the requirements of Subsection 1033.02, Paragraphs 1. and 2., and Table 1033.03A, Class E.

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:

- 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.

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.

RUMBLE STRIPS (5-6-0318)

This work consists of cutting rumble strips in pavements to the dimensions, spacing, and at the locations shown in the plans or directed by the Engineer. The cutting head shall have the cutting tips arranged in a pattern as to provide a smooth cut [approximately 1/16" (2 mm) between peaks and valleys].

Alignment of the edge of the pattern will be randomly checked by the Engineer. Any rumble strips misaligned [+/- 2 inches (+/-50 mm)] shall be re-cut.

The Contractor shall demonstrate to the Engineer on an initial 500 foot (150 m) test section that the equipment and method will provide the desired milled rumble strip and surface inside each depression without tearing, snagging, or chipping the pavement. If the desired results are not being provided, as determined by the Engineer, the Contractor shall provide new equipment or method, or make necessary adjustments to provide the desired results. If the initial 500 foot (150 m) section results are unsatisfactory it will be repaired or replaced as determined by the Engineer, at no additional cost to the Department.

Excess waste material resulting from the operation shall be removed on a daily basis by use of a power broom or other method approved by the Engineer. Excess waste material shall be removed prior to opening the adjacent lane to traffic.

Any joint that had been previously sealed and then was damaged due to the installation of the rumble strip shall be resealed as directed by the Engineer.

The Contractor shall not place rumble strips on bridge decks and bridge approach slabs.

Method of Measurement

Each shoulder receiving rumble strips shall be measured separately in stations of 100 feet (100 meters). Centerline rumble strips shall be placed left and right of centerline in one pass, as shown in the plans. Centerline rumble strips shall be measured in stations of 100 feet (100 meters). Stations shall be measured horizontally along the project centerline between the beginning and ending points. Deductions will be made for all areas where rumble strips are not required.

Basis of Payment

Pay Item	Pay Unit
Rumble Strips, Asphalt	Station (Sta) Station (StaM)
Rumble Strips, Concrete	Station (Sta) Station (StaM)
Centerline Rumble Strips	Station (Sta) Station (StaM)

Payment is full compensation for all work required to install the rumble strips, and resealing joints as required. No additional payment will be made for the test sections that were deemed unsatisfactory.

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:

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.

EROSION CONTROL CURB (Station 831+10 – 832+96 Lt.)

If Surfacing 9" is asphaltic concrete, the erosion control curb shall be tacked to the surfacing.

If Surfacing 9" is Portland cement concrete, then the erosion control curb shall be tied to the vertical face of the surfacing.

In either case, the erosion control curb shall be subsidiary to the Item Surfacing 9".

A portion of the erosion control curb will be built after the Temporary Surfacing 9" is removed.

TEMPORARY SURFACING 9"

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 9" may be constructed using Class 47B-3500 Concrete, Class BX-3500 Concrete, or Asphaltic Concrete Type SPR, SPH, 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 ___".

The Foundation Course placed beneath the temporary road surfacing 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 9".

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 ___".

SURFACING 9"

The work shall consist of the construction of the 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".

At the Contractor's option the Surfacing 9" may be constructed using Doweled Concrete Pavement, Class 47B-3500, Asphaltic Concrete Type SPR, SLX, or SPH (0.5). Longitudinal concrete joints shall be tied. Whatever option is chosen shall be used throughout the project unless approved in writing by the Engineer. When the Surfacing is for shoulders, dowel bars can be omitted.

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

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

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 "Surfacing ____". Performance Graded Binder 58V-34 or 58E-34 shall be used if Asphaltic Concrete is chosen as the Surfacing 9".

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 "Surfacing ____".

Subsection 508.04 is amended to provide that the work of Joint Sealing -Asphalt to Concrete for Surfacing will not be measured for payment, but shall be considered subsidiary to the item "Surfacing ____".

Hydrated Lime/Warm Mix Asphalt used for surfacing will not be measured and paid for but shall be considered subsidiary to the item "Surfacing ___".

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

Any curb that is constructed for the Surfacing, shall be constructed of the same material used to build the Surfacing, and shall be considered subsidiary to the item "Surfacing ____".

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

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

Surfacing 9" Thickness Cores

The Contractor will be required to core the Surfacing for final thickness determination. The cores will be cut prior to opening the surfacing to traffic. One core shall be taken for each 3500 square yards, or fraction thereof, of 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 "Surfacing __".

BITUMINOUS SURFACE COURSE

Paragraph 1. of Subsection 512.01 in the Standard Specifications is amended to provide that the material shall be supplied by the Contractor.

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.

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 ¼ 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.

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 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.

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	

Table 704.03

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.

DEBONDING PRESTRESSING STRANDS (7-6-1217)

General

Where shown, debond prestressing strands by encasing the strands in plastic sheathing along the entire length shown and sealing the ends of the sheathing with waterproof tape.

Materials

Sheathing must:

- 1. Be split or un-split flexible polymer plastic tubing
- 2. Have a minimum wall thickness of 0.025 inch
- 3. Have an inside diameter exceeding the maximum outside diameter of the strand by 0.025 to 0.14 inch
- 4. Not react with the concrete or steel

Split sheathing must have a minimum overlap of 3/8 inch.

Waterproofing tape must be flexible adhesive tape.

Construction

Distribute the debonded strands symmetrically about the vertical centerline of the girder. The debonded lengths of pairs of strands must be equal. Do not terminate debonding at any one cross section of the member for more than 40 percent of the debonded strands or 4 strands, whichever is greater. Do not debond the outside strands. Thoroughly seal the ends of the sheathing encasing the strand with waterproof tape before placing the concrete to prevent the intrusion of water or cement paste. Do not debond the extended strands.

Payment

Full compensation for Debonding Prestressing Strands shall be considered as included in the contract price paid for the Pay Item "Precast-Prestressed Concrete Superstructure at Sta _____", and no separate payment will be made.

BRIDGE JOINT NOSING (7-7-1217)

Description

This work shall include sawing, removals (including existing angle irons), forming, and placing of the bridge joint nosing materials required at the expansion joint locations, as specified in the plans. This provision applies to:

- New construction, such as when a new approach slab is being constructed
- Breaking out concrete bridge deck or approaches and building new expansion joint seat
- Saw cutting existing concrete to allow installation of a new expansion joint
- Repairing broken edges of expansion joint gaps such as with nosing material
- Asphalt overlays on bridge decks and approaches

Material Requirements

Products for repair of expansion joint seats or gap edges or used to enhance the durability of gap edges are known as nosing materials. Such materials are given on the Approved Products List as "Bridge Joint Nosing Materials". Products not shown on the Approved Products List may be used as allowed by Materials and Research Division.

Equipment

Appropriate equipment, in good working order shall be employed to ensure proper mixing and timely application of nosing materials.

Construction Methods

Construction of expansion joint seats shall be done as shown in the plans and compliant with all applicable Special Provisions.

All faces of the joint gap or seat shall be laid out in a straight line (shall not deviate from a straight line by more than ¼ inch at any point). This rule is applicable to whatever method is used to construct the gap, whether it is saw cutting, concrete forming, placing nosing material, etc.

Nosing materials shall be used as prescribed by the manufacturer. In addition, or to augment the manufacturer's instructions as to preparation, all concrete surfaces against which repair or reconstruction material is to be placed, shall be thoroughly cleaned and free of all dust, laitance, moisture or any substances that may interfere with proper adhesion of the material to the concrete. Concrete against which nosing materials are applied shall have been cured for a period as specified by the nosing manufacturer.

Method of Measurement

The quantity of nosing for which payment will be made shall be computed by the Department in cubic feet from dimensions shown in the plans. No field measurement is required unless actual geometry deviates substantially from what is shown in the plans. No deduction shall be made for the amount of material displaced by reinforcement.

Basis of Payment

The Bridge Joint Nosing shall be paid by the cubic foot of the nosing installed and accepted by the Engineer. Preparation of the joint, including sawing, removals, sandblasting and forming will not be paid for directly but shall be considered subsidiary to the Bridge Joint Nosing.

Pay Item

Bridge Joint Nosing

Pay Unit

Cubic Feet (CF)

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 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 MPII. 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 MPII, 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 MPII.
- 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.

BACKFILLING CULVERTS (7-28-2017)

Paragraph 10. of Subsection 107.07 in the Standard Specifications is void.

Paragraph 3.a. of Subsection 702.03 is amended to include the following:

(13) Backfill for culverts shall not be placed on frozen soil.

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, trusstype 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 a 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 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 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 thereafter 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 on 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 7015+18.58.

PREPARATION OF BRIDGE AT STATION 859+89.87

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 cleaning and roughening of the existing concrete that comes into contact with the new work
- e. The cleaning, straightening and extending of the existing reinforcing steel into the new work
- f. The removal of expansion devices and/or expansion joint material, if removal is not covered elsewhere in the contract documents or manufacturer's instructions

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

If there are lead plates under the existing steel rail posts, the lead plates shall be recycled in accordance with Subsection 203.01 Paragraph 3 of the Standard Specifications for Highway Construction.

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.

Embankment Restoration

Existing erosion around the Abutments shall be restored using on-site material prior to repairs to the abutment and placement of granular backfill beneath the approach slab. The finishing of these surfaces shall be in accordance with the project roadway and bridge plans.

CONTRACTOR'S ACCESS BRIDGE AT STA. 846+58.79

Description

The Contractor will be required to use an access bridge for a temporary crossing to construct the bridge on this project. The access bridge must be at least as long or longer than the temporary bridge being constructed for US-281 traffic. The access bridge abutments shall generally align with the abutments for the Temporary Bridge.

Requirements

It shall be required that the ACCESS BRIDGE will utilize a total hydraulic length greater than or equal to the TEMPORARY BRIDGE, 600'-0" as measured from centerline to centerline of bridge abutments.

ACCESS BRIDGE abutment locations shall not extend into the main channel further than that of the project TEMPORARY BRIDGE.

It shall be required that the absolute "low steel" for the Contractor's Access Bridge shall be above elevation 1485.00.

Measurement and Payment

Bidders must submit a bid for the Pay Item "Access Bridge ____" in the schedule of items.

The Pay Item "Access Bridge ____" 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 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 ____".

No change orders will be approved to increase the cost of the "Access Bridge _____" item after award of the contract.

CONTRACTOR'S ACCESS CROSSING AT STA. 859+89.88

It will be the Contractor's option to use an access crossing to construct the bridge on this project.

Bidders must submit a bid for the Pay Item "Access Crossing _____" in the schedule of items.

The Pay Item "Access Crossing_____" 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 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.

Driven steel piling and sheet piling associated with the construction of the ACCESS CROSSING shall be fully extracted. Pile cut-offs below grade will not be allowed for the abutments or the intermediate bents.

If the Contractor does not plan to utilize an access crossing, they shall bid the Pay Item "Access Crossing _____" 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 Pay Item "Access Crossing ____".

No change orders will be approved to increase the cost of the "Access Crossing _____" item after award of the contract.

REMOVE STRUCTURE AT STA. 7015+18.58

General Items

The item shall be in accordance with the pertinent provisions of Section 203 of the Standard Specifications. The Contractor is solely responsible for the safe and controlled removal of the bridges.

This item shall provide for removal of bridge substructure elements associated with the project TEMPORARY BRIDGE as detailed further below.

Execution

All substructure elements including, but not limited to, steel driven pile, steel sheet piling, reinforced concrete, and granular backfill shall be fully removed prior to the completion of the project.

Driven steel piling and sheet piling associated with the construction of the TEMPORARY BRIDGE shall be fully extracted. Pile cut-offs below grade will not be allowed for the abutments or the intermediate bents.

Removal of riprap and other site grading material shall follow roadway plans and provisions.

Disposal of Materials Items

The existing abutments and bents (if applicable) shall be entirely removed.

All material resulting from the removal of specified bridge 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 STA. 7015+15.58	1 Each (EA)

Payment shall be full compensation for removal of the bridge substructure elements as described above.

RIPRAP FILTER FABRIC

The Contractor shall be required to furnish and install a riprap filter fabric at the locations shown in the contract and as directed by the Engineer.

Section 728.02 of the Standard Specification for Highway Construction shall be amended to read as follows:

- 1. The filter fabric to be used on this project shall be one of the following products, or an Engineer approved Equal:
 - a. Propex, Inc. Geotex 1601 (on Approved Products List)
 - b. Mirafi 1160N
 - c. Mirafi S1400
- 2. Filter fabric materials that are not listed above and that may be considered for use on this project shall have a minimum grab tensile strength of 350 pounds or greater. Products submitted for consideration shall have a manufacturer's certificate of compliance that the proposed substitute has equivalent or greater strength properties than the approved products listed above.

EROSION CONTROL

Subsection 810.02 in the Standard Specifications is amended to include the following:

Erosion Control "Class 1D"	Minimum Purity (%)	Application rate in lb. of Pure Live Seed/1000 yd. ²	
Canada wildrye – Mandan, Homestead, NE native	85	1.25	
Thickspike wheatgrass – Critana	85	1.25	
Slender wheatgrass	85	2.5	
Perennial ryegrass — Linn, Norlea, Amazon	85	3	
Western wheatgrass – Flintlock, Rodan, Rosana	85	1.25	
Blue grama – NE, KS, CO, SD, MN	30	0.4	
Sideoats grama – Butte, Pierre, Trailway	75	1	
Sand lovegrass – Nebraska-27, Nebraska native	90	0.25	
Sand dropseed (Sporobolus cryptandrus)	90	0.1	
Little bluestem — Camper, Pastura, Cimarron	60	0.5	
Purple prairie clover – Kaneb, inoculated	85	0.05	
Oats/wheat (wheat in the fall)	90	5	

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".

OPEN WEAVE TEXTILE, TYPE B

Section 810 in the Standard Specifications is amended to include Open Weave Textile, Type B. The work of installing the open weave textile shall be performed in accordance with all applicable portions of the Section 810 and the plans. The Open Weave Textile, Type B shall be on the Department's Approved Products List.

Paragraph 1. of Subsection 810.05 is amended to include the following:

Pay Item Open Weave Textile, Type B **Pay Unit** Square Yard (SY)

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.

Payment shall be full compensation for all work required to provide and install the system.

GRANULAR SUBDRAINS

Paragraph 1. of Subsection 915.01 of the Standard Specifications is amended to include the following:

In areas where the existing subgrade is determined to be granular, the granular subdrains will not be required at the discretion of the Engineer.

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 μ m) sieve as defined in AASHTO T 304 Method A, except the specific gravity material shall be washed over the No. 100 (150 μ m) 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.

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		

The crushed gravel or crushed rock shall meet the following gradation requirements.

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.

TYPE C ROCK RIPRAP

The Contractor may substitute Class C shot rock at the locations shown on the plans where Type C Rock Riprap is to be placed below the roadway embankment to provide a stable base. The Class C shot rock shall have the following gradation:

Size of Rock	Percent Smaller
800 Pounds	100%
150 Pounds	75 – 80%
10 Pounds	15 – 20%

Class C shot rock may be placed from the bed of the stream to approximately one foot above the water surface elevation or as directed by the Engineer. All rock riprap placed along the outside of the roadway embankment, channel banks, bridge abutments or piers at the temporary bridge shall be Type C Rock Riprap and shall meet the requirements outlined in the 2017 Standard Specifications for Highway Construction. Measurement and payment for the Class C shot rock shall not be differentiated from that made for the Type C Rock Riprap.

The quantities shown on the plans for Type C Rock Riprap are estimated and may vary significantly from the tonnage shown. The amount of rock riprap used at the inundated areas, to provide a stable base for the new roadway embankments, may increase or decrease from the tonnage shown on the plans. For the initial placement of riprap at the base of the embankments, the contractor shall carefully monitor the amount of riprap delivered to the site and limit this to the tonnage needed to provide a stable working base for construction of the roadway

embankment. The center portion of the riprap base shall extend approximately one foot above the water surface elevation at the time of installation of the riprap base or a minimum elevation of 1480.00 whichever is greater to allow for proper placement and compaction of the fill material as directed by the Engineer. Additional Type C Rock Riprap shall be placed at the foreslopes of the embankment and shall extend from the base up to the elevations shown on the plans.

VEHICLE GATE

This work shall consist of furnishing and installing a vehicle gate at the locations and in accordance with the details shown in the plans.

The vehicle gate shall be measured as single units and shall be paid for at the contract unit price per each for the item, "____ Vehicle Gate". This price shall be considered full compensation for furnishing and installing all materials, and for all labor, equipment, tools and incidentals necessary to complete the work.

REMOVE AND REPLACE 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 Replace Riprap" is the plan quantity and will be paid for by the ton. Payment shall be considered full compensation for all work required.

HYDRATED LIME FOR ASPHALT MIXTURES

1. General

Hydrated lime will be added to all aggregates (at the Contractor's option, limestone may be excluded) used for asphalt mixtures except Asphaltic Concrete used for Temporary Surfacing, and Asphaltic Concrete Type SPS, and SPL. Hydrated lime will be added to pre-moistened aggregates whether it is used directly into the mix or stockpiled for marinating purposes. The application of moisture and hydrated lime to the aggregates along with equipment calibration and procedures to prevent any "dusting" shall be documented and approved in the Contractor's Quality Control (QC) Plan.

2. Material Requirements

The lime shall meet the chemical and physical properties defined in AASHTO M 303 for Type I - High calcium-hydrated lime, or meet the requirements of ASTM 1097 for Type S Hydrated Lime.

The hydrated lime being used, whether for mix design or plant mix production, shall be stored in an enclosed container and must be used within 90 days. Stockpiles marinating shall also be used within 90 days. Lime that is stored over 90 days in a protected

storage silo environment may be submitted for chemical analysis to verify that it meets the specification for use in the mix.

Water shall conform to the requirements of Section 1005.

3. Construction

Prior to the addition of hydrated lime the aggregates shall have a minimum moisture content of 3% by weight of aggregate. The surface of the aggregate shall be uniformly dampened by water.

If additional moisture is required it shall be added at the entry end of an enclosed pug mill mixer and prior to the addition of hydrated lime.

Hydrated Lime shall be added at a rate of 1.25 percent by weight of virgin aggregate, including the weight of the limestone.

4. Equipment

The addition of lime shall be plant controlled, and blended with an enclosed twin-shaft pug mill with a production capacity rating that exceeds the aggregate feed rate. It shall be capable of effective mixing in the full range of asphaltic concrete production rates.

The pug mill set up shall be located in the system at a location where the mixed material can be readily inspected on a belt prior to entry into the drum.

The pug mill shall be designed such that the mixture of aggregate and hydrated lime is moved in a near horizontal direction (within 20 degrees of horizontal) by the mixing paddles without the aid of conveyor belts for a distance of at least three feet (900 mm). Mixing devices which permit the mixture of aggregate and hydrated lime to fall through the mixing blades onto a belt or chute are not acceptable.

A positive signal system and a limit switch device shall be installed in the plant at the point of introduction of the hydrated lime. The positive signal system shall be placed between a metering device and the drum plant, and utilized during production whereby an alarm is activated; alerting the plant that the hydrated lime is not being introduced into the mixture.

The hydrated lime storage silo shall have enough capacity for continuous production. The silo shall be replenished by pneumatic delivery from road tankers at a pressure that will not create dusting. Hydrated lime will be dispensed from the silo into the pug mill by a conventional vane feeder or a load cell pod system.

The mechanism for adding moisture to the aggregate will be configured and located to insure that all virgin aggregate is uniformly coated with moisture prior to the lime application.

5. Sampling and Testing

Hydrated lime shall be certified by the supplier stating its compliance to the specifications.

A physical inventory of hydrated lime usage will be required during mix production. A daily silo inventory, noting "beginning weight", "weight added during the day's production", and "end of day weight", will be recorded and made available for review by the Engineer. When a weigh pod system is used, an accumulative accounting method shall be used to calculate and review lime addition rates throughout production. When calculations indicate a hydrated lime usage of ± 0.15 percent from the design percentage the Contractor shall assume the responsibility to cease production and recalibrate the system prior to resuming mix production. Any asphaltic concrete placed having 0.15 percent below the design percentage shall be removed and replaced at no cost.

The percent of moisture shall be determined and documented: 1) from belt samples or 2) from stockpile samples, a minimum of once per day.

6. Mixture QC and Verification Testing

During an ignition oven burn off, lime will combine with the sulfur in the binder and produce ash. Therefore, when mix containing hydrated lime is being designed and produced a correction factor to the ignition oven burn off result of +0.30% shall be used. This correction factor shall be added to the ignition oven binder content reading in order for the actual binder content to be determined.

HYDRATED LIME SLURRY FOR ASPHALT MIXTURES

- 1. **General** The Contractor will have the option of using Hydrated Lime Slurry For Asphalt Mixtures or Hydrated Lime For Asphalt Mixtures. Hydrated lime slurry will be added to all aggregates (at the Contractor's option, limestone may be excluded) used for asphalt mixtures except Asphaltic Concrete used for Temporary Surfacing, and Asphaltic Concrete Type SPS and SPL. Hydrated lime slurry will be added to aggregates whether it is used directly into the mix or stockpiled for marinating purposes. The application of hydrated lime slurry to the aggregates along with equipment calibration and procedures shall be documented and approved in the Contractor's Quality Control (QC) Plan.
- 2. Material Requirements The lime shall meet the chemical and physical properties defined in AASHTO M 303 for Type I High calcium-hydrated lime, or meet the requirements of ASTM 1097 for Type S Hydrated Lime.

The dry hydrated lime being used, whether for mix design or plant mix production, shall be stored in an enclosed container and must be used within 90 days. Stockpiles marinating shall also be used within 90 days. Hydrated lime (dry or slurry) that is stored over 90 days in a protected storage silo or slurry tank may be submitted for chemical analysis to verify that it meets the specification for use in the mix.

Water shall conform to the requirements of Section 1005.

3. Construction — Hydrated Lime shall be added at a rate of 1.25 percent by weight of virgin aggregate, including the weight of the limestone.

4. Equipment — The addition of lime shall be plant controlled, and blended with an enclosed twin-shaft pug mill with a production capacity rating that exceeds the aggregate feed rate. It shall be capable of effective mixing in the full range of asphaltic concrete production rates.

The pug mill set up shall be located in the system at a location where the mixed material can be readily inspected on a belt prior to entry into the drum.

The pug mill shall be designed such that the mixture of aggregate and hydrated lime is moved in a near horizontal direction (within 20 degrees of horizontal) by the mixing paddles without the aid of conveyor belts for a distance of at least three feet (900 mm).

Mixing devices which permit the mixture of aggregate and hydrated lime to fall through the mixing blades onto a belt or chute are not acceptable.

A positive signal system and a limit switch device shall be installed in the plant at the point of introduction of the hydrated lime. The positive signal system shall be placed between a metering device and the drum plant, and utilized during production whereby an alarm is activated; alerting the plant that the hydrated lime is not being introduced into the mixture.

A minimum of two hydrated lime slurry tanks shall be used for blending and supply. Slurry shall be drawn for production from only one tank at a time. The hydrated lime slurry tanks shall have enough capacity for continuous production.

Hydrated lime slurry shall be dispensed from a slurry tank into the pug mill by a pressure regulated spray system having an electronic flow measurement system that has been calibrated to insure the proper application rates will be provided. Certificate of Calibration for the spray bar system should be provided by the Contractor with the calibration being performed by a third party every 12 months (minimum) or at the Engineer's request.

The electronic flow measurement system shall automatically record the flow rate of the lime slurry being fed to the pug mill. The data recorder system shall be capable of recording the flow rate (in gallons per minute) at intervals of not more than 5 minutes and shall have the capability of calculating the volume of lime slurry used each day, from each slurry tank, and shall be capable of printing a summary of the daily lime slurry usage for each tank. This printout of the daily lime slurry volumes shall be presented to the NDOT representative at the end of each day's production.

5. Blending and Supply Hydrated Lime Slurry — The Contractor shall determine the target hydrated lime slurry concentration (percent solids) that will be used to produce the asphalt mixture. This target concentration value shall be provided to the Engineer prior to production of the asphalt mixture and shall not be less than 30 percent. The target concentration value shall not be modified without the approval of the Engineer. It is the Contractors responsibility to control the concentration of the hydrated lime slurry.

Only valid weights of dry hydrated lime shall be added to the required quantity of water to provide uniform hydrated lime slurry having a dry solids content within ± 0.5 percent of the Contractor's target value. Water or dry hydrated lime shall not be added to a tank that is actively supplying hydrated lime slurry to the pug mill. Hydrated lime slurry shall

not be drawn from a tank that is not completely blended in accordance with the manufacturer's recommendations.

The hydrated lime slurry in the active supply tank shall be agitated prior to and during production in accordance with the manufacturer's recommendations. Dry hydrated lime shall be transferred at a pressure that will not create dusting.

- **5.1** If individual hydrated lime slurry tanks are dedicated to only blending or supply, then thoroughly mixed hydrated lime slurry may be added from the blending tank(s) to the supply tank during production, provided the concentrations are within ±0.5 percent.
- **5.2** If the hydrated lime slurry tanks are used for both blending and supply, the tanks shall be plumbed such that hydrated lime slurry can be supplied to the pug mill from any of the blending/supply tanks without disruption of the slurry supply.
- **6. Sampling and Testing** Hydrated lime shall be certified by the supplier stating its compliance to the specifications.

The concentration of the lime slurry shall be controlled within ± 0.5 percent of the target hydrated lime slurry concentration (percent solids). The concentration of the hydrated lime shall be determined in accordance with Section 6.1. It is the Contractor's responsibility to halt production to make adjustments when the concentrations fall out of compliance.

The concentration of the lime slurry shall be determined and recorded by the Contractor immediately following blending each batch of lime slurry for the project. These records shall include date and time of test, sample collection information, and the unit weight, temperature and concentration of slurry. These records shall be made available to the Engineer upon request.

A physical inventory of hydrated lime usage will be required during mix production. This inventory shall be used to verify the lime application rate, and for payment of the hydrated lime. The concentration of the lime slurry shall be determined and recorded by the Contractor at the beginning and at approximately the mid-point of each day's production. The hydrated lime slurry samples shall be collected from the supply line leading to the pug mill. These records shall include date and time of test, sample collection information, and the unit weight, temperature and concentration of slurry. These records shall be presented to the NDOT representative at the end of each day's production.

When calculations indicate that the application rate of "dry" hydrated lime to the aggregate is ± 0.15 percent from the design percentage the Contractor shall assume the responsibility to cease production and recalibrate the system prior to resuming mix production. Any asphaltic concrete placed having a "dry" hydrated lime application rate (applied to aggregate) of 0.15 percent below the design percentage shall be removed and replaced at no cost.

6.1 The Contractor shall determine the solids content (concentration) of the hydrated lime slurry using Table 1, Table 2 and the Slurry Worksheet. The Contractor shall provide and use the standard weight per 83.205-ml Gardner cup meeting the requirements of ASTM D 244.

After a batch of lime slurry has been produced, use the following procedures to verify that the intended percent solids have been achieved.

- 1. Fill a quart container 3/4 full with lime slurry. Samples can be taken from ports located at either end of the vessel. Do not use glass.
- 2. Weigh a dry, empty Gardner (WPG) cup and cover to the nearest 0.01 of a gram. Record this weight.
- 3. Shake the lime slurry sample well. Immediately fill the WPG cup.
- 4. Tap the WPG cup lightly on an immovable object to allow for the escape of air bubbles.
- 5. Slowly turn the cap of the WPG cup until it is completely seated. If the cover is pushed on quickly, lime slurry will squirt out through the hole in the center. Be sure to point the top of the WPG away from you (or others) while putting on the cap.
- 6. Hold the WPG cup by the top and bottom with thumb and forefinger. Be sure to cover the hole in the cap.
- 7. Rinse the WPG cup under running water to remove any lime from the outside of the cup.
- 8. Dry the outside of the cup thoroughly.
- 9. Weigh the dry, filled WPG cup to the nearest 0.01 of a gram. Record this weight.
- 10. Promptly remove the cover, insert thermometer and record the temperature.
- 11. Subtract the empty cup weight (from step 2) from the filled cup weight (step 9) and record the difference.
- 12. Multiply the difference by 0.1. This number is the density (lbs./gallon) of the lime slurry. Record this number.
- 13. Look up the temperature correction in Table 2 and record the value.
- 14. Multiply the slurry density times the temperature correction value. This is the adjusted slurry density. Record the adjusted slurry density on the slurry worksheet.
- 15. Find the nearest density to that recorded above on the "Slurry Solids Chart" on Table 1, Slurry Solids Chart - 24 degrees C. The corresponding number is the percent solids (concentration) of the lime slurry sample. Record on worksheet.

7. **Mixture QC and Verification Testing** — During an ignition oven burn off, lime will combine with the sulfur in the binder and produce ash. Therefore, when mix containing hydrated lime is being designed and produced a correction factor to the ignition oven burn off result of +0.30% shall be used. This correction factor shall be added to the ignition oven binder content reading in order for the actual binder content to be determined.

Slurry Solids Chart – 24°C							
Density	Slurry Solids	Density	Slurry Solids	Density	Slurry Solids	Density	Slurry Solids
lbs./gal.	%	lbs./gal.	%	lbs./gal.	%	lbs./gal.	%
9.108	15.1	9.402	20.1	9.715	25.1	10.050	30.1
9.114	15.2	9.406	20.2	9.722	25.2	10.057	30.2
9.120	15.3	9.414	20.2	9.728	25.3	10.064	30.3
9.128	15.4	9.420	20.4	9.735	25.4	10.071	30.4
9.131	15.5	9.426	20.5	9.741	25.5	10.078	30.5
9.137	15.6	9.433	20.6	9.748	25.6	10.085	30.6
9.143	15.7	9.439	20.7	9.755	25.7	10.092	30.7
9.148	15.8	9.445	20.8	9.761	25.8	10.099	30.8
9.154	15.9	9.451	20.9	9.768	25.9	10.106	30.9
9.160	16.0	9.457	21.0	9.774	26.0	10.113	31.0
9.166	16.1	9.463	21.1	9.781	26.1	10.120	31.1
9.171	16.2	9.469	21.2	9.787	26.2	10.127	31.2
9.177	16.3	9.476	21.3	9.794	26.3	10.134	31.3
9.183	16.4	9.482	21.4	9.800	26.4	10.141	31.4
9.189	16.5	9.488	21.5	9.807	26.5	10.148	31.5
9.195	16.6	9.494	21.6	9.814	26.6	10.155	31.6
9.200	16.7	9.500	21.7	9.820	26.7	10.163	31.7
9.206	16.8	9.506	21.8	9.827	26.8	10.170	31.8
9.212	16.9	9.513	21.9	9.833	26.9	10.177	31.9
9.218	17.0	9.519	22.0	9.840	27.0	10.184	32.0
9.224	17.1	9.525	22.1	9.847	27.1	10.191	32.1
9.230	17.2	9.531	22.2	9.853	27.2	10.198	32.2
9.235	17.3	9.538	22.3	9.860	27.3	10.205	32.3
9.241	17.4	9.544	22.4	9.867	27.4	10.212	32.4
9.247	17.5	9.550	22.5	9.873	27.5	10.220	32.5
9.253	17.6	9.556	22.6	9.880	27.6	10.227	32.6
9.259	17.7	9.563	22.7	9.887	27.7	10.234	32.7
9.265	17.8	9.569	22.8	9.894	27.8	10.241	32.8
9.271	17.9	9.575	22.9	9.900	27.9	10.248	32.9
9.277	18.0	9.581	23.0	9.907	28.0	10.255	33.0
9.282	18.1	9.588	23.1	9.914	28.1	10.263	33.1
9.288	18.2	9.594	23.2	9.920	28.2	10.270	33.2
9.294	18.3	9.600	23.3	9.927	28.3	10.277	33.3
9.300	18.4	9.607	23.4	9.934	28.4	10.284	33.4
9.306	18.5	9.613	23.5	9.941	28.5	10.292	33.5
9.312	18.6	9.619	23.6	2.948	28.6	10.299	33.6
9.318	18.7	9.626	23.7	9.954	28.7	10.306	33.7
9.324	18.8	9.632	23.8	9.961	28.8	10.314	33.8
9.330	18.9	9.638	23.9	9.968	28.9	10.321	33.9
9.336	19.0	9.645	24.0	9.975	29.0	10.328	34.0
9.342	19.1	9.651	24.1	9.982	29.1	10.335	34.1
9.348	19.2	9.658	24.2	9.988	29.2	10.343	34.2
9.354	19.3	9.664	24.3	9.995	29.3	10.350	34.3
9.360	19.4	9.670	24.4	10.002	29.4	10.358	34.4
9.366	19.5	9.677	24.5	10.009	29.5	10.365	34.5
9.372	19.6	9.683	24.6	10.016	29.6	10.372	34.6
9.378	19.7	9.690	24.7	10.023	29.7	10.380	34.7
9.384	19.8	9.696	24.8	10.030	29.8	10.387	34.8
9.390	19.9	9.703	24.9	10.037	29.9	10.394	34.9
9.396	20.0	9.709	25.0	10.044	30.0	10.402	35.0

Table 1, Page 1 Slurry Solids Chart – 24°C

	Slurry Solids Chart – 24°C							
Density	Slurry Solids	Density	Slurry Solids	Density	Slurry Solids	Density	Slurry Solids	
lbs./gal.	%	lbs./gal.	%	lbs./gal.	%	lbs./gal.	%	
10.409	35.1	10.795	40.1	11.210	45.1	11.658	50.1	
10.417	35.2	10.803	40.2	11.218	45.2	11.667	50.2	
10.424	35.3	10.811	40.3	11.227	45.3	11.677	50.3	
10.432	35.4	10.819	40.4	11.236	45.4	11.686	50.4	
10.439	35.5	10.827	40.5	11.244	45.5	11.695	50.5	
10.447	35.6	10.835	40.6	11.253	45.6	11.705	50.6	
10.454	35.7	10.843	40.7	11.262	45.7	11.714	50.7	
10.462	35.8	10.851	40.8	11.270	45.8	11.724	50.8	
10.469	35.9	10.859	40.9	11.279	45.9	11.733	50.9	
10.477	36.0	10.867	41.0	11.288	46.0	11.743	51.0	
10.484	36.1	10.875	41.1	11.297	46.1	11.752	51.1	
10.492	36.2	10.883	41.2	11.305	46.2	11.762	51.2	
10.499	36.3	10.892	41.3	11.314	46.3	11.771	51.3	
10.507	36.4	10.900	41.4	11.323	46.4	11.781	51.4	
10.514	36.5	10.908	41.5	11.332	46.5	11.790	51.5	
10.522	36.6	10.916	41.6	11.341	46.6	11.800	51.6	
10.530	36.7	10.924	41.7	11.349	46.7	11.809	51.7	
10.537	36.8	10.932	41.8	11.358	46.8	11.819	51.8	
10.545	36.9	10.941	41.9	11.367	46.9	11.828	51.9	
10.552	37.0	10.949	42.0	11.376	47.0	11.838	52.0	
10.560	37.1	10.957	42.1	11.385	47.1	11.848	52.1	
10.568	37.2	10.965	42.2	11.394	47.2	11.857	52.2	
10.575	37.3	10.974	42.3	11.403	47.3	11.867	52.3	
10.583	37.4	10.982	42.4	11.412	47.4	11.877	52.4	
10.591	37.5	10.990	42.5	11.421	47.5	11.886	52.5	
10.599	37.6	10.998	42.6	11.430	47.6	11.896	52.6	
10.606	37.7	11.007	42.7	11.439	47.7	11.906	52.7	
10.614	37.8	11.015	42.8	11.447	47.8	11.915	52.8	
10.622	37.9	11.023	42.9	11.456	47.9	11.925	52.9	
10.629	38.0	11.032	43.0	11.465	48.0	11.935	53.0	
10.637	38.1	11.040	43.1	11.475	48.1	11.945	53.1	
10.645	38.2	11.048	43.2	11.484	48.2	11.954	53.2	
10.653	38.3	11.057	43.3	11.493	48.3	11.964	53.3	
10.661	38.4	11.065	43.4	11.502	48.4	11.974	53.4	
10.668	38.5	11.074	43.5	11.511	48.5	11.984	53.5	
10.676	38.6	11.082	43.6	11.520	48.6	11.994	53.6	
10.684	38.7	11.090	43.7	11.529	48.7	12.004	53.7	
10.692	38.8	11.099	43.8	11.538	48.8	12.014	53.8	
10.700	38.9	11.107	43.9	11.547	48.9	12.023	53.9	
10.707	39.0	11.116	44.0	11.556	49.0	12.033	54.0	
10.715	39.1	11.124	44.1	11.566	49.1	12.043	54.1	
10.723	39.2	11.133	44.2	11.575	49.2	12.053	54.2	
10.731	39.3	11.141	44.3	11.584	49.3	12.063	54.3	
10.739	39.4	11.150	44.4	11.593	49.4	12.073	54.4	
10.747	39.5	11.158	44.5	11.602	49.5	12.083	54.5	
10.755	39.6	11.167	44.6	11.612	49.6	12.093	54.6	
10.763	39.7	11.175	44.7	11.621	49.7	12.103	54.7	
10.771	39.8	11.184	44.8	11.630	49.8	12.113	54.8	
10.779	39.9	11.193	44.9	11.639	49.9	12.123	54.9	
10.787	40.0	11.201	45.0	11.649	50.0	12.134	55.0	

Table 1, Page 2 Slurry Solids Chart – 24°C

	ection Factor to Adjust SI		
Temp (C)	Factor	Temp (C)	Factor
20	0.99927	61	1.01176
21	0.99944	62	1.01218
22	0.99962	63	1.01262
23	0.99981	64	1.01305
24	1.00000	65	1.01349
25	1.00002	66	1.01394
26	1.00041	67	1.01439
27	1.00063	68	1.01485
28	1.00085	69	1.01531
29	1.00109	70	1.01578
30	1.00132	71	1.01626
31	1.00157	72	1.01673
32	1.00182	73	1.01722
33	1.00208	74	1.01770
34	1.00234	75	1.01820
35	1.00261	76	1.01870
36	1.00289	77	1.01920
37	1.00318	78	1.01971
38	1.00347	79	1.02022
39	1.00376	80	1.02074
40	1.00407	81	1.02126
41	1.00438	82	1.02179
42	1.00469	83	1.02232
43	1.00501	84	1.02286
44	1.00534	85	1.02341
45	1.00567	86	1.02395
46	1.00601	87	1.02451
47	1.00635	88	1.02506
48	1.00670	89	1.02563
49	1.00706	90	1.02619
50	1.00742	91	1.02677
51	1.00779	92	1.02734
52	1.00816	93	1.02793
53	1.00854	94	1.02851
54	1.00892	95	1.02911
55	1.00931	96	1.02970
56	1.00970	97	1.03031
57	1.01010	98	1.03091
58	1.01051	99	1.03152
59	1.01092	100	1.03214
60	1.01134	101	1.03276

 Table 2

 Correction Factor to Adjust Slurry Densities for Temperature

				1	· · · · · · · · · · · · · · · · · · ·	r									1	·····
Percent	(Table 1)															
Adjust Density (Slurry Density x Temp. Corr. Factor)	(14)															
temp. correction Factor (Table 2)	(13)															
sample Temp. °C	(10)															
siurry Wt. x 0.10)	(12)															
sturry weight (Full-Empty)	(11)															
up weignt Empty	(2)															
Full	Step (9)															-
	Time															
	Date															
	Slurry Wt. x 0.10) Temp. °C Factor (Table 2) (Slurry Density X (Slurry Wt. x 0.10) Temp. °C Factor (Table 2) Temp. Corr. Factor)	Time Step (9) (2) (11) (12) (12) (10) (13) (13)	WFG CUp Weight Surry Weight Surry Weight Surry Vensity Full Empty (Full-Empty) (Slurry Wt. x 0.10) Temp. °C Factor (Table 2) (Slurry Density x Time Step (9) (2) (11) (12) (10) (13) (14)	Wrocup weight Surry weight Surry weight Surry weight Surry versity Full Empty (Full-Empty) (Slurry Wt. x 0.10) Temp. Correction Aquist Density Time Step (9) (2) (11) (12) (10) (13) (14)	When Cup weight Surry Weight Surry Vensity Sampe Temp. Correction Aglust Density Time Step (9) (2) (11) (12) (10) (13) (14) Time Step (9) (2) (11) (12) (10) (13) (14)	Werd cup weight Surry Weight Surry Weight Surry Weight Surry Weight Time Step (9) (2) (11) (12) (10) (13) (14) Time Step (9) (2) (11) (12) (10) (13) (14)	Time Step (9) (2) (11) (12) (10) (13) (14) Time Step (9) (2) (11) (12) (10) (13) (14)	Time Step (9) (2) (11) (12) (10) (13) (14) Time Step (9) (2) (11) (12) (10) (13) (14)	Full Empty Full Empty Surry Wergut Surry VK. X.0.10) Temp. Correction Addity Density Time Step (9) (2) (11) (12) (10) (13) (14) Time Step (9) (2) (11) (12) (10) (14) (14) Time Step (9) (2) (11) (12) (10) (14) (14) Time Step (9) (2) (11) (12) (10) (14) (14) Time Step (9) (2) (11) (12) (10) (14) (14) Time Step (9) (2) (11) (12) (10) (14) (14)	Time Step (e) (2) (11) (12) (10) (13) (14) Time Step (e) (2) (11) (12) (10) (13) (14) Time Step (e) (2) (11) (12) (10) (13) (14) Time Step (e) (2) (11) (12) (10) (14) Time Step (e) (2) (11) (12) (10) (14)	Time Step (e) (2) (11) (12) (10) (13) (14) Time Step (e) (2) (11) (12) (10) (13) (14) Time Step (e) (2) (11) (12) (10) (13) (14) Time Step (e) (2) (11) (12) (10) (13) (14) Time Step (e) (2) (11) (12) (10) (13) (14) Time Step (e) Step (e) (11) (12) (10) (13) Time Step (e) Step (e) Step (e) (11) (12) (11) Time Step (e) Step (e) Step (e) (11) (12) (11) Time Step (e) Step (e) Step (e) Step (e) (11) Time Step (e) Step	Time Step (b) (1) (12) (10) (13) (14) Time Step (b) (2) (11) (12) (10) (13) (14) Time Step (b) (2) (11) (12) (10) (14) Time Step (b) (11) (12) (10) (14) (14) Time Step (b) (10) (12) (10) (14) (14) Time Step (b) (11) (12) (10) (13) (14) Time Step (b) (11) (12) (10) (13) (14) Time Step (b) (11) (12) (10) (14) (14) Time Step (b) (11) (12) (10) (14) (14) Time Step (b) Step (b) (11) (12) (14) (14) Time Step (b) Step (b) Step (b) (14) (14) (14) Time Step (b) <	Time Stapp (e) Clain Empty Full Surry versity surry versity (cultEmpty) Surry versity (surry Mx. X.010) Temp. C Factor (faale 2) Time Step (e) (2) (11) (12) (10) (13) Time Step (e) (2) (11) (12) (10) (14) Time Step (e) (11) (12) (10) (13) (14) Time Step (e) (11) (12) (10) (13) (14) Time Step (e) (11) (12) (10) (13) (14) Time Step (e) (11) (12) (10) (14) Time Step (e) (11) (12) (11) (14) Time Step (e) Step (e) (11) (12) (14) Time Step (e) Step (e) (11) (12) (14) Time Step (e) Step (e) (11) (12) (14) Time<	Time Stap (e) (1) (12) (10) (13) (14) Time Stap (e) (2) (11) (12) (10) (13) (14) Time Stap (e) (2) (11) (12) (13) (14) Time Stap (e) (13) (14) (14) (14) (14) Time Stap (e) (12) (12) (14) (14) (14) Time Stap (e) Stap (e) (12) (12) (14) (14) Time Stap (e) Stap (e) Stap (e) (14) (14) (14) Time Stap (e) S	Time Starty Taskin Starty Taskin <th>Time Suny version suny version (suny version) Suny version version version version Suny version version version <t< th=""></t<></th>	Time Suny version suny version (suny version) Suny version version version version Suny version version version <t< th=""></t<>

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 NQMVL 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 sublot at locations determined by the Engineer.

Table 1028.18 (SLX) of Subsection 1028.03 is void and superseded by the following:

Air Voids – N _{des}						
Air voids test results for Asphaltic Concrete	Pay Factor					
Type SLX	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				

Table 1028.18 (SLX) Acceptance Schedule Air Voids – N_{des}

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:

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		

Table 1014.01 of Subsection 1014.02 is void and superseded by the following:

Table 1014.01

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.

850INFMAY19

INDEX

ACCEPTANCE TESTING OF SOILS BY USE OF THE LIGHT WEIGHT DEFLECTO (LWD) SCOPE	
AGGREGATES	
ASCHEGATES	120
	00
(Cold Weather Asphaltic Concrete Placement)	86
AWARD AND EXECUTION OF CONTRACT	50
BACKFILLING CULVERTS	
BITUMINOUS LIQUID COMPOUNDS FOR CURING CONCRETE	
BITUMINOUS SURFACE COURSE	
BRIDGE DECK CRACK SEALING	
BRIDGE JOINT NOSING	95
CERTIFICATION FOR FEDERAL-AID CONTRACTS	
CONCRETE CONSTRUCTION	92
CONCRETE PAVEMENT	
(Compressive Strength of Cores)	90
CONCRETE PROTECTION BARRIERS	
CONDITIONAL STATUS OF RIGHT OF WAY	
CONSTRUCTION DETAILS	
CONSTRUCTION METHODS	
CONSTRUCTION STORMWATER MANAGEMENT CONTROL	
CONTRACTOR'S ACCESS BRIDGE AT STA. 846+58.79	
CONTRACTOR'S ACCESS BRIDGE AT STA. 840+38.79	
CRUSHED ROCK BASE COURSE	
DEBONDING PRESTRESSING STRANDS	04
DISADVANTAGED BUSINESS ENTERPRISES	
(Prime Contractor Reporting of DBE Payments) DOWELING INTO CONCRETE STRUCTURES - POST INSTALLED ADHESIVE AN	
DOWELING INTO CONCRETE STRUCTURES - POST INSTALLED ADHESIVE AN	
	00
ELECTRONIC VIBRATOR MONITORING	
ENVIRONMENTAL COMMITMENT	
ENVIRONMENTAL COMMITMENT DOCUMENT	
ENVIRONMENTAL COMMITMENT ENFORCEMENT	
EROSION CONTROL	109
EROSION CONTROL CURB	
(Station 831+10 – 832+96 Lt.)	86
FOUNDATION COURSE	69 75
(Compaction and Stiffness)	
FURNISHING AND PLACING TOPSOIL	
GENERAL CONDITIONS	20
GRANULAR SUBDRAINS	
GUARDRAIL END TREATMENT, TYPE II2	
GUARDRAIL END IREATIVIENT, ITPE II2	

HAZARDOUS MATERIALS MANAGEMENT	
HYDRATED LIME FOR ASPHALT MIXTURES	113
HYDRATED LIME SLURRY FOR ASPHALT MIXTURES	115
JOINT AND CRACK SEALING FILLER	127
LIABILITY INSURANCE	49
LIMITATION OF OPERATIONS	51
MEASUREMENT AND PAYMENT	
(Partial Payment)	48
NOTICE TO BIDDERS	27
OPEN WEAVE TEXTILE, TYPE B	
OVER-EXCAVATION	69
PARTIAL PAYMENT FOR STRUCTURAL STEEL	94
PERMITS, LICENSES, AND TAXES	
(Contractor Site Use Approval)	47
PILES AND PILE DRIVING	93
PORTLAND CEMENT	
PREFORMED JOINT FILLER	
PREPARATION OF BRIDGE AT STATION 859+89.87	
PROPOSAL GUARANTY	
PROPOSAL GUARANTY BID BOND (BID BOND)	47
REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL	
REMOVE AND REPLACE RIP RAP	113
REMOVE ASPHALT SURFACE	
REMOVE STRUCTURE AT STA. 7015+18.58	107
REQUIRED SUBCONTRACTOR/SUPPLIER QUOTATIONS LIST	
RIPRAP FILTER FABRIC	108
RUMBLE STRIPS	85
SEALING JOINTS	90
SPECIAL PROSECUTION AND PROGRESS	
(A + B Bidding Conditions)	40
(Accelerated Timeframe)	
(Construction Schedule & Internal Liquidated Damages)	
(Federal Immigration Verification System)	46
STABILIZED SUBGRADE TYPE LIME - OPTIONAL	
STATUS OF UTILITIES	
STORM WATER DISCHARGES	
STORM WATER POLLUTION PREVENTION PLAN (SWPPP)	
SUBGRADE PREPARATION	77
SUPERPAVE ASPHALTIC CONCRETE	126
SURFACING 9"	
SURFACING UNDER GUARDRAIL	84

TEMPORARY BRIDGE	
TEMPORARY SEEDING	110
TEMPORARY SURFACING 9"	86
TEMPORARY TRAFFIC CONTROL SIGNS AND DEVICES	83
TEMPORARY WATER POLLUTION CONTROL	50
TRAINING SPECIAL PROVISIONS	
AMENDMENT TO CONSTRUCTION TRAINING REPORT REQUIREMENTS	
TYPE C ROCK RIPRAP	112
VEHICLE GATE	113
WAGES AND CONDITIONS OF EMPLOYMENT	
(Employment of Labor – Payrolls)	
WORK ZONE TRAFFIC CONTROL SIGNS	
WORKER VISIBILITY	46



May 10 2019 Docu Sign.