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

NEBRASKA DEPARTMENT OF ROADS LETTING DATE: July 27, 2006

CALL ORDER: 200 CONTRACT ID: 2786X

CONTROL NO./SEQ. NO.: 21786 /000 PROJECT NO.: STPD-31-2(108)

TENTATIVE START DATE: 09/25/06 CONTRACT TIME: 195 WORKING DAYS

LOCATION: N-31, IN ELKHORN

IN COUNTY: DOUGLAS

BIDDER

GROUP 1 GRADING

GROUP 3 CONCRETE PAVEMENT

GROUP 4 CULVERTS

GROUP 4A SANITARY SEWER

GROUP 8B ELECTRICAL

GROUP 10 GENERAL ITEMS

THIS PROPOSAL CONTAINS A DBE GOAL OF 8.0 %.

SEE SPECIAL PROVISIONS FOR GROUP TIES

NOTES

 UNT OF WORK WI	 	•
 HIS LETTING IS	WHICH WILL	BE•

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 directed to Construction Division personnel at (402) 479-4568 or (402) 479-4529.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

		Page
I.	General	1
H.	Nondiscrimination	1
III.	Nonsegregated Facilities	3
IV.	Payment of Predetermined Minimum Wage	3
V.	Statements and Payrolls	6
VI.	Record of Materials, Supplies, and Labor	6
VII.	Subletting or Assigning the Contract	7
VIII.	Safety: Accident Prevention	7
IX.	False Statements Concerning Highway Project	s 7
X.	Implementation of Clean Air Act and Federal	
	Water Pollution Control Act	8
XI.	Certification Regarding Debarment, Suspension	n,
	Ineligibility, and Voluntary Exclusion	8
XII.	Certification Regarding Use of Contract Funds	for
	Lobbying	_

ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

- 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.
- 2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
- A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
- 4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4, and 7; Section V, paragraphs 1 and 2a through 2g.

- 5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 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 DOL, or the contractor's employees or their representatives.
- Selection of Labor: During the performance of this contract, the contractor shall not:
- a. discriminate against labor from any other State, possession, or territory of the United States (except for employment

preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- 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 and 41 CFR 60) 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 Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American 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 State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
- b. The contractor will accept as his 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, preapprenticeship, and/or on-the-job training."

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

Form FHWA-1273 (Rev. 3-94)

- 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 minority group employees.
- 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 minority groups 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 minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
- c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group 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.
- The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve

such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:
- a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
- b. The contractor will use best efforts to incorporate an 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 SHA and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Execu-

FOIIII FHVVA-1273

tive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

- 8. 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 notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
- b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.
- c. The contractor will use his best efforts to ensure sub-contractor compliance with their EEO obligations.
- 9. 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 completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
- a. The records kept by the contractor shall document the following:
- (1) The number of minority and non-minority group members and women employed in each work classification on the project;
- (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
- (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
- (4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.
- b. The contractors will submit an annual report to the SHA 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. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
- c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers 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 (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) 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. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, 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 paragraphs 4 and 5 of this Section IV.

- b. 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.
- c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

- a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
- the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
- (2) the additional classification is utilized in the area by the construction industry;
- (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- (4) with respect to helpers, when such a classification prevails in the area in which the work is performed.
- c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification 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 DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour 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.
- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional 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. Said 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

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

- a. 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 or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.
- b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a 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.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

- (1) 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 DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/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 Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
- (2) The allowable ratio of apprentices to journeymanlevel employees 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 employee 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 listed in 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 or subcontractor 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-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.
- (3) 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 journeyman-level 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 for

Form FHWA-1273 (Rev. 3-94)

the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

- (1) 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 DOL, Employment and Training Administration.
- (2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. 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.
- (3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level 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-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.
- (4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor 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. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

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

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor 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, as 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 SHA contracting officer 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.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her 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, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies 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 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

- a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof 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. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found 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 and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.
- c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form

desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
- (2) that such 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 the Regulations, 29 CFR 3;
- (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- e. 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 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, 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 SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions 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.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

- 1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
- a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
- b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of

Form FHWA-1273 (Rev. 3-94)

-6-

the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

- c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
- At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 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 State. 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).
- a. "Its own organization" shall be construed to include only workers employed and paid directly 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, assignee, or agent of the prime contractor.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
- The contract amount upon which the requirements set forth in paragraph 1 of Section VII 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 SHA 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 SHA 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 SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

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 SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees

Form FHWA-1273 (Rev. 3-94)

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. 333).
- 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. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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, the following notice 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:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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

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

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

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

Shall be fined not more that \$10,000 or imprisoned not more than 5 years or both."

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

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

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

- 1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
- 3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
- 4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

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

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective 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 primary 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 department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant know-

ingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary 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," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- f. The prospective primary 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 primary 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 Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- i. 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.
- 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.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

Form FHWA-1273 (Rev. 3-94)

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement 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;
- c. 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 1b of this certification; and
- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- 2. Where the prospective primary 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 Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- 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," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- 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.
- 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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- 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 Covered Transactions:

- 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 participation in this transaction 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.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(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.

Form FHWA-1273 (Rev. 3-94)

- 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 his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

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

- 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

	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 BonHomme,		NE Boone, NE Boyd, NE Brown,	
SD Clay, SD Union, SD Yankton		NE Buffalo, NE Chase, NE Cherry,	
142 Lincoln, NE:		NE Clay, NE Custer, NE Dawson,	
SMSA Counties:		NE Dundy, NE Franklin, NE Frontier,	
4360 Lincoln, NE	2.8	NE Furnas, NE Garfield, NE Gosper,	
NE Lancaster		NE Grant, NE Greeley, NE Hall, NE	
Non-SMSA Counties	1.9	Hamilton, NE Harlan, NE Hayes,	
NE Butler, NE Fillmore, NE Gage,		NE Hitchcock, NE Holt, NE Hooker,	
NE Jefferson, NE Johnson, NE Nemaha,		NE Howard, NE Kearney, NE Keith,	
NE Otoe, NE Pawnee, NE Polk, NE		NE Keya Paha, NE Lincoln, NE Logan,	
Richardson, NE Saline, NE Seward,		NE Loup, NE McPherson, NE Merrick,	
NE Thayer, NE York		NE Nance, NE Nuckolls, NE Perkins,	
143 Omaha, NE:		NE Phelps, NE Red Willow, NE Rock,	
SMSA Counties:		NE Sherman, NE Thomas, NE Valley,	
5920 Omaha, NE-IA	7.6	NE Webster, NE Wheeler	
IA Pottawattamie, NE Douglas,		145 Scottsbluff, NE:	
NE Sarpy		Non-SMSA Counties	5.3
• • •		NE Banner, NE Box Butte, NE Chey-	
		enne, NE Dawes, NE Deuel, NE	
		Garden, NE Kimball, NE Morrill,	
		NE Scotts Bluff, NE Sheridan, NE	
		Sioux, WY Goshen	

GOALS AND TIMETABLES FOR FEMALE PARTICIPATION IN EACH TRADE

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

- 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its action. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female 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 disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.

- 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.
- The contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the

November 3, 1980

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: NE20030001 06/23/2006 NE1

Date: June 23, 2006

General Decision Number: NE20030001 06/23/2006

Superseded General Decision Number: NE020001

State: Nebraska

Construction Types: Heavy and Highway

Counties: Douglas, Sarpy, Saunders and Washington Counties in

Nebraska.

HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects, and railroad construction; bascule, suspension & spandrel arch bridges; bridges designed for commercial navigation; bridges involving marine construction; other major bridges) SAUNDERS COUNTY (EAST OF HWY. #109 EXTENDED NORTH AND SOUTH TO THE COUNTY LINE)

Modification	Number	Publication Date
0		06/13/2003
1		02/27/2004
2		03/05/2004
3		04/16/2004
4		05/14/2004
5		05/21/2004
6		05/28/2004
7		06/18/2004
8		06/25/2004
9		07/02/2004
10		07/30/2004
11		10/22/2004
12		01/21/2005
13		03/11/2005
14		06/03/2005
15		06/24/2005
16		09/02/2005
17		10/07/2005
18		12/09/2005
19		01/20/2006
20		04/07/2006
21		06/23/2006

* CARP0444-002 06/01/2005

Carpenter	7.38 7.38	

ELEC0022-002 06/01/2004

DOUGLAS AND SARPY COUNTIES; SAUNDERS COUNTY (east of Hwy. #109 and north of U.S. Alternate Highway No. 30 (Route 92)); AND

WASHINGTON COUNTY:

	Rates	Fringes
Electrician\$	26.52	9.25+4%

ELEC0265-001 06/01/2004

SAUNDERS COUNTY (east of Hwy. #109 and south of U.S. Alternate Hwy. No. 30 (Route 92)):

	Rates	Fringes
Electricians:		
Zone 1\$	21.81	4.5% + 7.15
Zone 2\$	22.11	4.5% + 7.15
Zone 3\$	22.41	4.5% + 7.15
Zone 4\$	22.81	4.5% +7.15
ZONE DEFINITIONS:		

Zone 1: 0 to 35 miles from the main Post Office in Lincoln, $\ensuremath{\text{NE}}$

Zone 2: 36 to 50 miles from the main Post Office in Lincoln, NE

Zone 3: 51 to 75 miles from the main Post Office in Lincoln, $\ensuremath{\text{NE}}$

Zone 4: 76 miles and over from the main Post Office in Lincoln, NE

FOOTNOTE:

Work on scaffolds, hanging scaffolds, boatswains chairs or ladders, etc., in any area where the worker is in a position to fall 40 ft. or more, or where objects above the worker can fall 40 ft. or more: to be paid one and one-half times the straight- time rate of pay.

ZONE DEFINITIONS:

Zone 1: 0 to 35 miles from the main Post Office in Lincoln, $\ensuremath{\text{NE}}$

Zone 2: 36 to 50 miles from the main Post Office in

Lincoln, NE

Zone 3: 51 to 75 miles from the main Post Office in

Lincoln, NE

Zone 4: 76 miles and over from the main Post Office in Lincoln, NE

ELEC1525-001 01/01/2002

LINE CONSTRUCTION:

	Rates	Fringes
Line technicians: Cable splicer; Line welder\$ Ground person\$ Line equipment operator\$	14.80	27.75%+2.45 27.75%+2.45 27.75%+2.45

Line technician\$ Truck driver\$		
ELEC1525-002 09/01/2000		
	Rates	Fringes
Traffiic signal, street light and underground work: Cable splicer; Line welder\$ Equipment operator\$ Ground person\$ Line technician\$ Truck driver\$	19.74 14.23 21.99	27.75%+2.00 27.75%+2.00 27.75%+2.00 27.75%+2.00 27.75%+2.00
ENGI0571-003 05/01/2005		
	Rates	Fringes
Power equipment operators: Off-road heavy hauler, Rough Roller dozer, rough blade, Ferguson-type tractors (Workbull with high tecco), asphalt roller.\$ Oiler, greaser, air compressor, welding machine, pump, roller, forklift, hydrohammer, pug mill, concrete pump, cure and tyne machine, rubber- tired farm tractor\$ One and two drum hoists, tugger, trencher, concrete		6.60
spreader & finishing machine, dozer loader, spread oiler, bantam-type tamper, rubber-tired tractor backhoe, oil distributor-finish roller dozer\$ Trimmer, crane, backhoe, mechanic, slip form paver, asphalt plant-concrete plant, laydown machine, concrete pump truck, finish blade, scraper\$		6.60

FOOTNOTES:

Operation of an articulating, Pitman type boom truck with single axle truck and lift capacity of less than 5,000 lbs., used to put construction materials in place: 90% of the group 2 rate.

When two (2) scraper units or two push cat units capable of operating separately are hooked together in tandem for single operation, the operator shall receive twenty-five cents (\$0.25) over the classification worked.

When air compressors are used for operating the hammer when pulling or driving pile and the compressor operator is required to operate the air valve for such hammer, such compressor operator shall receive the top wage rate.

Operators working in tunnels and caverns under compressed or free air shall receive forty cents (\$0.40) above their classification.

Hazardous waste removal work requiring the wearing of personal protective equipment and/or suits, to be paid as follows:

Class A: \$3.00 additional per hour Class B: 2.00 additional per hour Class C: 1.00 additional per hour

Class D: no premium pay.

IRON0021-003 06/01/2005

	Rates	Fringes	
Ironworker	\$ 23.16	8.86	
LABO1140-001 06/01/2004			

DOUGLAS and SARPY COUNTIES; SAUNDERS COUNTY (east of Hwy. #109)

	Rates	Fringes
Laborer Form setter, pre-cast manhole setter, inlet		
builder\$	15.59	6.35
General Laborer\$	14.86	6.35
Mortar mixer, Concrete saw operator, Pipelayer and		
Chain saw operator\$	15.15	6.35

LABO1140-003 06/01/2004

WASHINGTON COUNTY

	Rates	Fringes
Laborers: Form setter, pre-cast manhole setter, inlet builder\$	15.59	6.40
PAIN0081-010 06/01/2005		
	Rates	Fringes

FOOTNOTES:

Work performed above 75 ft. on suspended staging: \$.50 per hour additional.

Painter....\$ 19.03

6.95

Spray machine operator: \$.50 per hour additional.

Nozzle operator for sandblasting and waterblasting (waterblasting more than 10,000 PSI) (including all side arm grinder operators engaged in removing paint or preparing for painting): \$.50 per hour additional.

SUNE1988-001 12/20/1988

Ra	ates	Fringes
Cement Mason\$ 13	3.62	3.00

CITATE 1002 001 00/0E/1002

SUNE1993-001 08/05/1993		
	Rates	Fringes
Sprinkler Installer (lawn)\$	5.15	
TEAM0554-001 01/01/2006		

Rates Fringes Truck drivers: Low Boy Driver.....\$ 16.57 7.15 All Other Work.....\$ 15.32 7.15 ------

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

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)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can
- * 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

SPECIAL PROVISIONS FOR FEDERAL AID PROJECT NO. STPD-31-2(108)

GENERAL CONDITIONS

Bids for the work contemplated in this proposal form will be received at the office of the Nebraska Department of Roads in Room 104 of the Central Office Building at 1500 Highway 2 at Lincoln, Nebraska, on July 27, 2006, until 1:30 P.M.

- a. Bids submitted by mail should be addressed to the Nebraska Department of Roads, c/o Contract Lettings Section, P.O. Box 94759, Lincoln, NE 68509-4759.
- b. Bids submitted electronically over the internet, shall be submitted using www.bidx.com.

The 1997 English 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 Supplemental Specifications to the 1997 English Edition of the Standard Specifications for Highway Construction dated July 12, 2001, including all amendments and additions thereto effective at the date of the contract, are made part of these Special Provisions, through reference.

The Required Contract Provisions, Form FHWA 1273, (Rev. 3-94), 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 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, 4A, 8B AND 10 ARE TIED TOGETHER AND BIDDING PROPOSAL FORMS FOR THIS WORK WILL BE ISSUED AND A CONTRACT AWARDED TO A CONTRACTOR WHO IS QUALIFIED FOR CONCRETE PAVEMENT.

DISADVANTAGED BUSINESS ENTERPRISES (S1-8-0801)

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.

USE OF DISADVANTAGED BUSINESS ENTERPRISES (S1-9-0406)

I. INTRODUCTION: The specific requirements of the use of Disadvantaged Business Enterprises, hereinafter referred to as DBEs, are set forth in these Required Contract Provisions and are imposed pursuant to the *Code of Federal Regulations, Title 49, Part 26 and the Nebraska Department of Roads' Disadvantaged Business Enterprise (DBE) Program,* which are hereby made a part of and incorporated by this reference into this proposal. Copies of these documents are available, upon request, from the Nebraska Department of Roads, Disadvantaged Business Enterprise Office, P.O. Box 94759, Lincoln, Nebraska 68509-4759.

A. Definitions:

- 1. Whenever "NDOR" is used within these special provisions it shall refer to the Nebraska Department of Roads.
- 2. Whenever "DOT" is used within these special provisions, it shall refer to the United States Department of Transportation.
- 3. For the purpose of these special provisions, the following definitions will apply:
 - a. Disadvantaged Business Enterprise (DBE) means a for profit small business concern, as defined pursuant to Section 3 of the Small Business Act and Small Business Administration regulations implementing it, which is independently owned and controlled by one or more socially and economically disadvantaged individuals.
 - b. Owned and controlled means a business:
 - (1) Which is at least 51 percent (51%) owned by one or more socially and economically disadvantaged individuals or women, or, in the case of a public owned business, such individuals must own at least 51 percent (51%) of each class of voting stock and 51 percent of the aggregate of all stock outstanding.

- (2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged owners.
- Socially and economically disadvantaged individual means a person who
 is a citizen (or lawful permanent resident) of the United States, and who
 is:
 - (1) "African American," which includes persons having origins in any of the Black racial groups of Africa;
 - (2) "Hispanic American," which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
 - (3) "Native American," which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
 - (4) "Asian-Pacific American," which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;
 - (5) "Subcontinent Asian American," which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
 - (6) A Woman;
 - (7) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

II. DBE CONTRACT GOALS:

- A. DBE goals are set by the NDOR for specific contracts. The specific DBE contract goals are stated on the Required DBE Participation Form included in the proposal. The Contractor must meet or exceed the goal or demonstrate good faith efforts to meet the goal. Requirements for submission of DBE good faith effort information are contained in Section IV of these special provisions.
- B. A current list of certified DBE firms will be posted on the NDOR website (www.dor.state.ne.us). Only the DBE firms whose names appear on the list will be considered in meeting the contract goal for this project. The DBE firms will be considered only for the items of work listed under the heading, "Nature of Business." DBE firms may request to have additional items of work added to their "Nature of Business," however, no items of work will be added after 5:00 p.m., ten (10) calendar days preceding the letting.

- C. Contractors shall, as a minimum, seek DBE subcontractors in the same geographic area in which they seek subcontractors generally for a given solicitation. If the contractor cannot meet the DBE goals using DBEs from the normal area, the contractor will expand its search to a reasonably greater geographic area.
- D. Contractors are required to make good faith efforts to replace a DBE subcontractor that is unable to perform with another DBE. In order to ensure compliance with this requirement, any substitution of DBE subcontractors after execution of the contract must be approved by the NDOR.
- E. Contractors are also encouraged to use the services of banks owned and controlled by minorities and women; however, this will not be counted toward the contract DBE goal.
- III. MEETING DBE CONTRACT GOAL CRITERIA: The award of the contract will be made upon satisfaction of the requirements of these special provisions. The apparent low bidder must either meet or exceed the DBE goals for the contract or satisfy the NDOR that good faith efforts were made to meet the goals.
- A. REQUIRED DBE PARTICIPATION INFORMATION: All bidders are required to submit to the NDOR the "Required DBE Participation Form" with their bid proposal on the form provided in this proposal.
- B. THE REQUIRED DBE PARTICIPATION FORM SHALL INCLUDE:
 - 1. The names and addresses of the DBE subcontractors that will actually participate in meeting the contract goal.
 - 2. A complete description (by item number or group, etc.) of the work each named DBE subcontractor will perform.
 - 3. The dollar amount of participation by each named DBE subcontractor.
 - 4. Written and signed documentation from the bidder of commitment to use a DBE subcontractor whose participation it submits to meet a contract goal.
 - 5. The apparent low bidder must submit written and signed confirmation from each DBE that it is participating in the contract as provided in the prime contractor's commitment, by 5:00 p.m. on the fifth (5th) calendar day following the letting.
 - 6. If the contract goal is not met, evidence of good faith efforts.
- C. The proposal will not be read if the "Required DBE Participation Form" is not included.

If no DBE participation is intended, the form must indicate that good faith effort documentation will be submitted. A blank form that is signed will be interpreted as meaning no DBE participation is intended and will be read.

Listing options and/or alternates for DBE subcontractors and/or items or groups of work to be performed is not allowed, and will cause this bid to be declared non-responsive.

Required DBE information shall not be subject to revision after bids are opened.

- D. The information submitted on the DBE Participation Form will be verified by the NDOR. Errors in addition will be treated in accordance with current NDOR specifications and procedures.
- E. If the use of non-certified firms or the use of DBE firms not certified for the type of work indicated results in under achievement of the goal, the bid will be declared non-responsive.
- F. If, at any time prior to execution of the contract, previously undetected errors result in under-achievement of the goal, the low bidder, along with the other bidders on the project, will be given 5 days from receipt of notification by the NDOR to submit good faith information as outlined in Section IV of these specifications.
- G. <u>REQUIRED SUBCONTRACTOR/SUPPLIER QUOTATIONS LIST</u>: All bidders must provide to the NDOR the identity of all firms who provided quotations on DOT-assisted projects, including both DBEs and non-DBEs.

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

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

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

whether the good faith efforts are acceptable will be made jointly by a committee comprised of the NDOR Highway Civil Rights Coordinator, the Contracts Letting Manager, and an at-large NDOR staff member appointed by the Director.

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

- F. Establishing Good Faith Efforts: To demonstrate good faith efforts to meet the DBE contract goals, documentation shall be maintained and submitted to the NDOR as set forth above. Such documentation may include any or all of the following: This list is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
 - 1. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all Certified DBE firms that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE firms to respond to the solicitation. The bidder must determine with certainty if the DBE firms are interested, by taking steps to follow up initial solicitations.
 - 2. Selecting portions of the work to be performed by DBE firms in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform work items with its own workforce.
 - 3. Providing interested DBE firms with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
 - 4. (1) Negotiating in good faith with interested DBE firms. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers, and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation should include the names, addresses, and telephone numbers of DBE firms that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE firms to perform the work.
 - (2) A bidder using good business judgement would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE firms, is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own

- organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBE firms if the price difference is excessive or unreasonable.
- 5. Not rejecting DBE firms as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection, or non-solicitation of bids in the contractor's efforts to meet the project DBE goal.
- 6. Making efforts to assist interested DBE firms in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
- 7. Making efforts to assist interested DBE firms in obtaining necessary equipment, supplies, materials, or related assistance or services.
- 8. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- G. If the NDOR's preliminary finding is that the bidder did not demonstrate a satisfactory effort to meet the contract goal, the bidder may appeal the decision by submitting a written request for reconsideration within three (3) days of the decision. The bidder may then present information either in a written narrative supporting its good faith effort submittal, or may appear in person. Any new information not included in the original submittal will not be used in the final determination. The appeal will be heard by a Hearing Officer appointed by the NDOR Director. The Hearing Officer will be an individual who is knowledgeable about the DBE Program and its good faith efforts provision, but who had no part in the initial decision.

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

V. COMMERCIALLY USEFUL FUNCTION:

A. A contractor may count toward its DBE goals only expenditures to DBE firms that perform a commercially useful function in the work of a contract. A DBE firm is considered to perform a commercially useful function when it is responsible for the execution of a distinct element of the work of a contract, and carrying out its responsibilities by actually performing, managing, and supervising the work involved. The DBE firm must also be responsible for materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, installing (where applicable), and paying for the material.

Guidelines:

1. As a general rule, it is expected that workers on a DBE subcontract shall be regular employees of the DBE subcontractor, and shall be listed on the subcontractor's payroll. A regular employee is a person who would normally be

working for the DBE firm on any other subcontract with any other prime contractor, and whose immediate past employment has not been with the prime contractor on the present project, or with the renter-lessor of equipment being used on the present project.

On DBE subcontracts, the DBE must perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or the DBE will not be considered to be performing a commercially useful function. (If a DBE subcontracts part of its work to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.)

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

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

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

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

VI. PROHIBITED PRACTICES:

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

VII. ADMINISTRATION OF THE DBE PROGRAM:

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

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

Situation #1:

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

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

Situation #2:

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

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

Situation #3:

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

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

Situation #4:

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

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

Situation #5:

Prime Contractor "A" is buying supplies from a DBE supplier or contractor to fulfill the DBE goal. This is only acceptable if the DBE firm is a true supplier. The mere fact that the DBE firm purchases the material from another supplier, then adds some cost and sells the material to a prime contractor, does not constitute the DBE as being a supplier. A supplier must have an inventory and be generally recognized as a material supplier.

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

The NDOR is more than willing to discuss particular situations with either DBE firms or prime contractors prior to a letting in the hope of developing DBE firms.

VIII. INVESTIGATORY POWERS, ADMINISTRATIVE PROCEDURES FOR ENFORCEMENT AND PENALTIES

A. INVESTIGATORY POWERS:

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

B. ADMINISTRATIVE PROCEDURES FOR ENFORCEMENT:

Whenever the NDOR believes a contractor, subcontractor or DBE firm may not be operating in compliance with the terms of these provisions, the NDOR will conduct an investigation. If the NDOR finds any person or entity not in compliance with these provisions, the NDOR will notify such person or entity in writing as to the specific instances or matters found to be in non-compliance. At the option of the NDOR, the person or entity shall then be allowed a reasonable time to correct any deficiencies noted, and to come into compliance. In the event that the person or entity cannot, thereafter, come into compliance, or fails or refuses to do so, then the NDOR may impose one or more of the penalties hereafter provided for. It is specifically provided by the NDOR that any person or entity will be found to be out of compliance with these provisions if an investigation reveals any violation or act of such serious or compelling nature that the violation or act indicates a serious lack of business integrity or honesty.

C. PENALTIES:

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

DISADVANTAGED BUSINESS ENTERPRISE (DBE) GOAL (S1-9-0603)

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

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

Bidders shall assume the responsibility of determining if they are the apparent low bidders by contacting the Nebraska Department of Roads, Contract Lettings Section in Lincoln, Nebraska. Such information is made public 24 hours after the announced time for opening bids. This information is available from the NDOR Internet web site (http://www.dor.state.ne.us/).

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

The standard NDOR procedure concerning subcontractors and suppliers shall apply.

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

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

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

VERIFICATION OF DBE GOAL COMMITMENTS

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

- A. DR Form 411, DBE I. This form shall be filled out and submitted by the prime contractor, indicating the DBE firms used, actual work performed, the total amount of money paid to the DBE firms, and the date on which is was paid.
- B. DR Form 442, DBE II. This form shall be filled out and submitted by the DBE subcontractor, indicating the name of the DBE firm, actual work performed, the

- total amount of money received from the prime contractor, and the date on which it was received.
- C. The above referenced forms will be sent out by the DBE Office when notification of the project completion has been received. The forms are also available on NDOR's website, www.dor.state.ne.us.

SUBLETTING OR ASSIGNING OF CONTRACT (\$1-9-0603)

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

PROMPT PAYMENT CLAUSE:

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

The failure by the prime contractor to carry out the requirements of the "Prompt Payment Clause" and/or timely return of retainage, without just cause, is a material breech of this contract, which may result in the NDOR withholding the amount of payment from the prime contractor that should have been paid to the subcontractor, termination of this contract, or other such remedy as the NDOR deems appropriate.

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

DBE GOAL CREDIT (S1-9-0603)

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

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

The entire amount of that portion of a construction contract that is performed by the DBE firm's own forces is counted toward the goal. This includes the cost of supplies and materials obtained by the DBE firm for the work of the contract, including supplies purchased or equipment leased by the DBE, but not supplies or equipment the DBE purchases or leases from the prime contractor or its affiliate.

Example: A DBE firm furnishing and erecting steel or concrete superstructure members, furnishing and driving piling for bridge structures, furnishing and placing prestressed concrete deck panels, and furnishing and placing panels for retained earth walls will be considered a commercially useful function for attaining contract goals for disadvantaged business enterprise (DBE) participation unless the supplies or materials are purchased from the prime contractor or its affiliate.

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

Paragraph 8.a. (5) of Subsection 109.07 in the 1997 English Edition of the Standard Specifications is void and superseded by the following:

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

B. Manufacturers, Suppliers, and Haulers:

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

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

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

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

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

DESCRIPTIONS (S1-9-0704)

<u>Manufacturer</u> - To be certified as a manufacturer, a DBE firm must operate or maintain a factory or establishment that produces, on the premises, the materials, supplies, articles or equipment required under the contract and of the general character described by the specifications.

<u>Supplier</u> - A DBE supplier, or regular dealer, is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment of the general character described by the specifications, and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a supplier or regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.

A DBE firm may be a supplier or regular dealer in such bulk products as petroleum products, steel, cement, gravel, stone, or asphalt without owning a place of business if the DBE firm both owns and operates distribution equipment for the products. Any supplementing of a DBE

supplier's or regular dealer's own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.

Rebar Supplier Installer - If a DBE is going to be used only as a supplier, as specified in 49 CFR Part 26.55(e)(2)(ii)(A) and (B), of rebar, the prime contractor will receive credit for 60 percent of the cost of the rebar. The DBE must be responsible for negotiating price, determining quantities, ordering, and paying for the rebar with the DBE's own funds. No two-party checks will be allowed to pay for the rebar.

If a DBE is going to be used <u>only</u> to install rebar, the prime contractor will receive credit for 100 percent of the cost of the installation. The DBE must be responsible for actually performing, managing, and supervising the work.

If a DBE is going to be used to <u>both</u> supply and install rebar, the prime contractor will receive 100 percent credit for both the cost of the rebar and the cost of the installation. However, the DBE must be responsible for negotiating price, determining quantities, ordering, and paying for the rebar with the DBE's own funds; and for actually performing, managing, and supervising the installation of the rebar. <u>No two-party checks will be allowed to pay for the rebar</u>.

The above-cited provisions will be closely monitored by NDOR for compliance. If the provisions are violated in any manner, the Department will impose penalties as prescribed in the contract provision, "USE OF DISADVANTAGED BUSINESS ENTERPRISES," paragraph VIII. C. 1., a. thru i.

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

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

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

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

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

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

If a DBE firm performs in the manner outlined above, it will be performing a commercially useful function.

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

CERTIFICATION (S1-9-0603)

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

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

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

DBE GOAL CREDIT TABLE

DBE Manufacturer & DBE Hauler DBE Manufacturer & DBE Manufacturer & DBE Manufacturer & Non-DBE Hauler No Credit for Materials & Non-DBE Manufacturer & DBE Hauler No Credit for Materials & DBE Hauler DBE Supplier & DBE Manufacturer & DBE Supplier & No Credit for Materials & Non-DBE Hauler No Credit for Hauling			
DBE Hauler DBE Manufacturer & Non-DBE Hauler No Credit for Materials & Non-DBE Manufacturer & DBE Hauler No Credit for Materials & DBE Hauler DBE Supplier & DBE Hauler DBE Supplier & DBE Hauler DBE Supplier & No Credit for Materials & No Credit for Materials & No Credit for Materials & No Credit for Hauling DBE Supplier & No Credit for Hauling	DBE Manufacturer	100% Credit for Materials	
DBE Manufacturer &	&	&	
& Non-DBE Hauler No Credit for Hauling Non-DBE Manufacturer No Credit for Materials & & & & & & & & & & & & & & & & & & &	DBE Hauler	100% Credit for Hauling	
Non-DBE Hauler No Credit for Hauling Non-DBE Manufacturer &	DBE Manufacturer	100% Credit for Materials	
Non-DBE Manufacturer & & & & & & & & & & & & & & & & & & &	&	&	
BE Supplier BE Su	Non-DBE Hauler	No Credit for Hauling	
DBE Supplier & & & & & & & & & & & & & & & & & & &	Non-DBE Manufacturer	No Credit for Materials	
DBE Supplier &	&	&	
BE Hauler DBE Supplier & Control Co	DBE Hauler	100% Credit for Hauling	
DBE Hauler 100% Credit for Hauling DBE Supplier 60% Credit for Materials & Non-DBE Hauler No Credit for Hauling	DBE Supplier	60% Credit for Materials	
DBE Supplier 60% Credit for Materials & Non-DBE Hauler No Credit for Hauling	&	&	
& & & Non-DBE Hauler No Credit for Hauling	DBE Hauler	100% Credit for Hauling	
Non-DBE Hauler No Credit for Hauling	DBE Supplier	60% Credit for Materials	
	&	&	
Non-DBE Manufacturer No Credit for Materials	Non-DBE Hauler	No Credit for Hauling	
	Non-DBE Manufacturer	No Credit for Materials	
& &	&	&	
DBE Hauler 100% Credit for Hauling	DBE Hauler	100% Credit for Hauling	

CERTIFICATION FOR FEDERAL-AID CONTRACTS (\$1-11-1104)

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 24, 2006.

Utility facilities, aerial and/or underground may exist within this project. The contractor should request a utility status update at the project preconstruction conference, and/or prior to starting 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 The Diggers Hotline of Nebraska at 1-800-331-5666.

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

Qwest Communications: Existing Telephone lines are in the area. Utility relocation is in progress and will be accomplished prior to or concurrent with highway construction. Utility rehabilitation should be completed by June 2006.

<u>Cox Communications</u>: Existing cable lines are in the area. Utility relocation is in progress and will be accomplished prior to or concurrent with highway construction. Utility rehabilitation should be completed by June 2006.

<u>Metropolitan Utility District</u>: Existing electrical lines are in the area. Utility relocation is in progress and will be accomplished prior to or concurrent with highway construction. Utility rehabilitation should be completed by June 2006.

<u>Aquila</u>: Construction for gas lines crossing Highway 31 will be accomplished concurrent to construction due to the removal of existing highway and new sewer pipes to be installed.

<u>City of Elkhorn</u>: Sewer lines, valves and shut offs will be included in the construction of this project.

<u>Omaha Public Power District</u>: Existing electrical lines are in the area. Utility relocation is in progress and will be accomplished prior to or concurrent with highway construction. Utility rehabilitation should be completed by June 2006.

State of Nebraska contractor to schedule and allow 3 concurrent working days for westbound lanes and 3 concurrent working days for eastbound traffic lanes for OPPD contractor to install ductline across Highway 64 at Sta. 1169+06. OPPD contractor working days shall start after the State of Nebraska contractor has installed traffic control and has removed existing pavement. State of Nebraska contractor to allow 3 working days advance notice to OPPD's contractor for utility locates and mobilization.

State of Nebraska contractor to schedule and allow 3 concurrent working days for northbound lanes and 3 concurrent working days for southbound traffic lanes for OPPD contractor to install ductline across Highway 31 at Sta. 316+48. OPPD contractor working days shall start after the State of Nebraska contractor has installed traffic control and removed existing pavement. State of Nebraska contractor to allow 3 working days advance notice to OPPD's contractor for utility locates and mobilization.

All utility rehabilitation will be accomplished prior to or concurrent with construction.

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:

Tract Number	Status of Tract	Hearing Date
None	None	None

Right-of-Way Tracts with Pay Items:

Tract Number	Pay Items
22, 25, 31	Tract 22 – brick pillars (Sta. 313+17 Lt., 313+35 Lt.), Tract 25 – signs (Sta. 323+00 Lt., 323+30 Lt., 1168+25 Lt., 1168+70 Lt.), Tract 31 – signs (Sta. 331+70 Lt., 332+60 Lt., 333+35 Lt., 334+00 Lt.)

- Signs and/or bases may be removed by the owners prior to construction.
- No encroachments on the old right of way.
- 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 concurrently with the highway construction.
- All necessary rights of way, including control of access rights when pertinent, have been acquired including legal and physical possession.
- The State certifies that all individuals and families have been relocated to decent, safe and sanitary housing or the State has made available to relocatee's adequate replacement housing in accordance with Federal Highway Administration directives.
- Steps relative to relocation advisory assistance and payments as required by the current Federal Highway Administration directives covering the administration of the Highway Relocation Assistance Program have been taken.

PROSECUTION AND PROGRESS

Paragraph 3 of Subsection 108.02 in the Standard Specifications is amended to provide that the working day count on this project will be suspended from December 2, 2007, through March 30, 2008. The Contractor will be permitted to work on this project during this time period without charging of working days against the contract time allowance. In the event that the project is not completed during this period, the working day count will resume on March 31, 2008, in accordance with the Standard Specifications, unless otherwise directed by the Engineer.

SPECIAL PROSECUTION AND PROGRESS (Phasing and Tentative Start Date)

I. Tentative Start Date

The Tentative Start Date for this project is September 25, 2006. The count of working days shall begin on April 2, 2007. Work performed between September 25, 2006, and April 1, 2007, shall be performed without the count of working days.

II. Phasing

The plans 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.

From September 25, 2006, to December 2, 2006, the Contractor shall be allowed to work on grading and drainage, which is associated with the temporary surfacing, the temporary surfacing and the temporary traffic signals required for Phase 1 construction. During this same period and over the winter of 2006-2007, the Contractor shall also be allowed to work on operations that do not affect traffic.

From September 25, 2006, until April 1, 2007, traffic shall be maintained at all times on the existing pavement, sideroads, intersections and driveways. Daytime lane closures will be allowed when necessary to operations immediately adjacent to the roadway. At night and at times when the Contractor is not working, all traffic lanes shall be open to normal traffic. Through traffic will not be allowed to use the temporary surfacing until April 2, 2007, or unless otherwise directed by the Engineer.

It should be noted that upon completion of the temporary surfacing, delineation of the temporary surfacing shall be accomplished with temporary striping and vertical panels cored into the temporary surfacing. Barrels and Type III barricades shall not be used for delineation.

SPECIAL PROSECUTION AND PROGRESS (Roadway Lighting)

In the interest of public safety, the following two concerns shall be realized:

The Contractor shall implement a plan (approved by the Engineer) that will ensure that the greatest number of lighting units (existing and new) are operational throughout the time the project is under construction.

All new lighting units associated with Phase 1 construction shall be installed, accepted and in working order before traffic will be allowed to be directed to the newly constructed roadway.

INFORMAL PARTNERING

The prime contractor and subcontractors will be required to participate in an informal partnering effort for this project.

Prior to the start date of the project, the Engineer will call a meeting with the affected property owners and other interested citizens to advise them of procedures that will be used to maintain local access during construction. The superintendent and applicable subcontractors for this project will attend this meeting and provide details of these procedures. Access to local properties will be maintained according to Nebraska Department of Roads (NDOR) Standard Specifications.

Meetings will also be held at regular intervals with the owners or operators of the affected properties, interested local citizens and the superintendent of this project to advise of any proposed changes in procedures, and to resolve any problems. Attendance should include the project manager, the contractors and subcontractors for this project, representatives of local government and businesses and area residents.

The prime contractor and applicable subcontractors will be required to attend a weekly meeting with the project manager to discuss the work schedule for the upcoming week and to resolve any problems encountered in the previous week, and to coordinate the work so as to present a minimum of disruptions to the public.

Informal partnering will not be measured for payment and shall be considered subsidiary to other items of work for which direct payment is made, as per Section 113 of the NDOR Standard Specifications.

NOTICE TO BIDDERS (Storm Water Pollution Prevention Plan) (S1-49-0206)

The Contractor shall understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site. For reference, the general permit is posted on the Department's website.

Additionally, the Contractor, as evidenced by their signature on this proposal, agrees and understands that, if awarded the contract on this project, he/she:

- 2) is legally bound to comply with the Clean Water Act to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under the NPDES permit and the terms of the NPDES permit; and
- 3) will hold the owners harmless for damages or fines arising as a result of noncompliance with the terms of the storm water permits and authorizations associated with the work on this project.

SPECIAL PROSECUTION AND PROGRESS (Migratory Birds) (S1-42-0604)

The Department of Roads will, to the extent practicable, schedule the letting of projects such that bridge demolition activities or clearing and grubbing can occur outside of the primary nesting season in Nebraska which has been determined to generally occur between April 1 and July 15.

The Contractor shall, to the extent possible, schedule bridge demolition and clearing and grubbing activities for highway projects to occur outside the primary nesting season in Nebraska. However, if circumstances dictate that project construction or demolition must be done when nesting migratory birds may be present, a survey of the number of active nests and species of birds shall be conducted by qualified personnel representing the Contractor, and assisted by the Project Manager (PM), NDOR Environmental Section staff, or the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) - Wildlife Services Office.

The following guidance is provided for compliance with the Migratory Bird Treaty Act for construction of NDOR projects:

- 1. The Contractor shall submit a plan to the NDOR regarding how he intends to accomplish bridge demolition or clearing and grubbing of the project to avoid conflict with nesting migratory birds.
- 2. The Contractor must submit a temporary erosion control plan tailored to fit the plan for clearing and grubbing.
- 3. If construction operations result in unavoidable conflict with nesting migratory bird's eggs or young, which will result in "taking" nests and their contents, the Contractor should notify the NDOR Project Manager (PM). The PM shall notify the Environmental Section of Planning and Project Development by telephone at 402-479-4410 or 4412.
- 4. The NDOR Environmental Section will then determine if assistance in conducting the survey will be provided by the NDOR Environmental Section (if available) or from the USDA APHIS Wildlife Services Office and arrange for assistance with the survey of nest numbers, bird species, etc. Results of the survey shall be maintained by the NDOR until project completion. The Contractor will reimburse the Department of Roads for each survey required at \$1,000 per survey.
- 5. USDA and NDOR can assist the Contractor in completing Form 37 and Form 3-200 to apply for a depredation permit allowing removal and handling by the Contractor.
- 6. The Contractor shall submit the completed application materials to the following address: U.S. fish and Wildlife Service, Office of Migratory Bird Management (Permits), P.O. Box 245486, DFC (60154), Denver Colorado, 80225-0486. A \$25 fee must be submitted with the application. A copy of the permit application shall be submitted to the Nebraska Ecological Services Field Office of the U.S. Fish & Wildlife Service.

- 7. The U.S. Fish & Wildlife Service Office of Migratory Bird Management (Denver, CO) will process road construction depredation permit applications as soon as practicable, recognizing the concerns for public safety and economic impact of delays.
- 8. It is the Contractors' responsibility to schedule his work to accommodate the process of conducting a survey(s) and obtaining the necessary permit(s) if avoidance is not practicable. The Contractor shall be responsible for using any legal and practical method to prevent the nesting of birds in order to prevent the need for any survey and prevent the need for additional surveys. Should the construction be delayed through no fault of the Contractor, the Department may consider time extensions to cover the relevant time.

REQUIRED SUBCONTRACTOR/SUPPLIER QUOTATIONS LIST (S1-43-1205)

All bidders must provide to the NDOR 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 NDOR 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.

CONTROL OF WORK (S1-43-0901)

Subsection 105.08 in the 1997 Standard Specifications is void and replaced by the following:

105.08 - Authority and Duty of the Inspector

Department inspectors are authorized to inspect all work performed and all materials furnished. Such inspection may extend to the preparation, fabrication, or manufacture of the materials. The inspector has the authority to reject work or materials until any issues can be decided, including the right to suspend work. The inspector is not authorized to alter or waive the provisions of the contract or act as a supervisor for the Contractor.

105.13 – Tentative Acceptance of Portions of the Project

Paragraph 3.a. of Subsection 105.13 is amended by deleting the word "normal".

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC (\$1-43-1001)

107.14 – Opening of Sections of the Project to Traffic

Subsection 107.14 Paragraphs 2.b.(1) and (2) are void and replaced by the following:

- 2.b. (1) Whenever the Department permits the public use of a highway undergoing construction, repair, or maintenance in lieu of a detour route, the Contractor shall not be held responsible for damages to those portions of the project upon which the Department permitted public use, when such damages are the result of no proximate act or failure to act on the part of the Contractor.
 - (2) If the traveling public should cause damage to the roadway, the Contractor shall assist the State in identifying the responsible party and the Contractor shall as a minimum if present at the time of the damage record pertinent information regarding the accident. (Who caused the damage; when the damage occurred; and how the damage occurred.)

107.15 - Contractor's Responsibility for Work

Subsection 107.15 is amended by adding Paragraph 1.b.(3) as follows:

(3) The Contractor shall not be held responsible for damage caused by the traveling public on those portions of the project where the Department has permitted public use of the road in lieu of using a detour route and the damage as not the result of any proximate act or failure to act on the part of the Contractor.

MEASUREMENT AND PAYMENT (S1-43-0901)

109.08 - Acceptance, Final Payment, and Termination of Contractor's Responsibility

Subsection 109.08 Paragraph c. amended by deleting the word "normal".

Subsection 109.08 Paragraph d. is void and replaced by the following:

d. If the traveling public should cause damage to the roadway the Contractor shall assist the State in identifying the responsible party and the Contractor shall as a minimum if present at the time of the damage record pertinent information regarding the accident. (Who caused the damage; when the damage occurred; and how the damage occurred.)

LIABILITY INSURANCE (S1-43-1103)

Paragraph 2.a. of Subsection 107.13 in the Standard Specifications is void and superseded by the following:

The General Liability coverage for bodily injury liability shall be not less than a. \$1,000,000 for injuries, including accidental death, in any one occurrence, and subject to an aggregate limit of not less than \$2,000,000.

Paragraph 2.b. of Subsection 107.13 is void and superseded by the following:

The amount of property damage liability insurance shall be not less than b. \$1,000,000.

GENERAL INFORMATION, DEFINITIONS, AND TERMS (S1-45-0805)

Section 101 in the Standard Specifications and Supplemental Specifications is void and superseded by the following:

Section 101

101.01 ABBREVIATIONS AND DEFINITIONS USED IN CONTRACTS AND PROPOSAL FORMS. Whenever in the Nebraska Standard Specifications for Highway Construction or in other contract documents, the following terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

101.02 ABBREVIATIONS:

1. Whenever the following abbreviations and acronyms are used in the Standard Specifications or in the Plans, they are to be construed the same as the respective expressions represented:

AAN American Association of Nurserymen.

AASHTO American Association of State Highway and Transportation Officials.

ACI American Concrete Institute.

AISC American Institute of Steel Construction. **ANSI** American National Standards Institute.

ASTM American Society for Testing and Materials.

AWG American Wire Gage.

AWPA American Wood Preservers Association.

Code of Federal Regulations.

AWS American Welding Society. CFR

DBE Disadvantaged Business Enterprises.

EBS Electronic Bidding System. FHWA Federal Highway Administration.

IMSA International Municipal Signal Association.ICEA Insulated Cable Engineers Association.ITE Institute of Transportation Engineers.

MUTCD Manual on Uniform Traffic Control Devices

NDOR Nebraska Department of Roads.

NEC National Electrical Code.

NEMA National Electrical Manufacturers Association.

SAE Society of Automotive Engineers.
SSPC Steel Structures Painting Council.

UL Underwriters Laboratories.VEP Value Engineering Proposal.

2. Common engineering and construction abbreviations for measurements and work items are:

Items of Work and Units of Measurement

A Ampere
a Acre
cd Candela
cm Centimeter
Conc. Concrete

m³ Cubic Meter

m³/s Cubic Meters per Second

ea Each

gal, G or g Gallon

gpm or GPM Gallons Per Minute gps Gallons per Second

h Hour
Hz Hertz
in Inch
J Joule

kg Kilogram

kip 1000 Pounds

km/h Kilometers per hour

kN Kilonewton kPa Kilopascal lb Pound

LF Linear Foot

L Liter

L/h Liters per Hour
L/min. Liters per Minute
L/s Liters per Second

Im Lumen
LS Lump Sum

lx Lux

MGal 1000 Gallon
Mg Megagram
MHz Megahertz
MPa Megapascal

M Meter

μm Micrometer mil 1/1000 Inch

Mi or M Mile

MPH Miles Per Hour

mm Millimeter

N Newton

Pa Pascal

PVC Polyvinyl Chloride

psi Pounds Per Square Inch

s Second

m2 Square Meter

Sta Station

StaM Station (Metric)

 St.
 Steel

 T
 Ton

 V
 Volt

 W
 Watt

yd³/s Cubic Yards Per Second

yd² or SY Square Yards

101.03 DEFINITIONS

<u>101.0301 ACCESS CONNECTION:</u> Any roadway facility by means of which vehicles can enter or leave an arterial highway. Included are intersections at grade, private driveways, and ramps or separate lanes connecting with cross streets or frontage roads.

<u>101.0302 ADDENDUM:</u> A written and/or graphic document, issued to all bidders and identified as an addendum prior to bid opening, which modifies or supplements the bid documents and becomes a part of the contract.

<u>101.0303</u> ADVERTISEMENT: A public announcement inviting bids for work to be performed or materials to be supplied.

<u>101.0304 ARTERIAL HIGHWAY:</u> A highway primarily for through traffic, usually on a continuous route.

<u>101.0305 AUXILIARY LANE:</u> The portion of the roadway adjoining the traveled way for parking, speed change, or for other purposes supplementary to through traffic movement.

101.0306 AWARD: The decision of the Department to accept the bid of the lowest responsible bidder for the work, subject to the execution and approval of a satisfactory contract therefore and bond to secure the performance thereof, and to such other conditions as may be specified or otherwise required by law.

<u>101.0307 BACKSLOPE:</u> The surface of a cut that slopes downward toward the roadway.

<u>101.0308 BALANCE FACTOR:</u> A ratio used to equate the amount of excavation to the amount of fill. Excavation generally will exceed the amount of fill because, in handling, soil shrinkage occurs.

<u>101.0309 BID:</u> A bidder's offer on Department provided forms to perform stated work at the quoted prices. It includes all documents as set forth in paragraph 003.04.

<u>101.0310 BIDDER:</u> Any individual, firm, corporation, or joint venture of individuals, firms, or corporations submitting a bid for the work contemplated, acting directly or through a duly authorized representative.

<u>101.0311 BORROW SITE:</u> The source of approved material required for the construction of embankments, or other portions of earthwork requirements, from locations shown in the Plans or approved by the Engineer.

<u>101.0312 BRIDGE:</u> A structure, including supports, erected over a depression or any obstruction, as a water course, highway, or railway, and having a track or passageway for carrying traffic or other moving loads and having a length measured along the centerline of a roadway of more than 20 feet (6.0 m) between undercopings of abutments or extreme ends of openings for multiple boxes.

<u>101.0313 BRIDGE LENGTH:</u> The overall length along the centerline of the bridge from end to end of the bridge floor.

<u>101.0314 CALENDAR DAY:</u> Every day shown on the calendar, including Sundays and holidays, beginning and ending at midnight.

<u>101.0315 CHANGE ORDER:</u> A written order issued by the Engineer to the Contractor, covering changes within the scope of the contract.

101.0316 CHANNEL: A natural or artificial waterway.

101.0317 COMMISSION: The Nebraska State Highway Commission.

101.0318 CONTRACT:

- The written agreement executed between the Department and/or any other political subdivision and the successful bidder, covering the performance of the work and the furnishing of labor and material, by which the bidder is bound to construct, reconstruct, improve, maintain and/or repair roads, bridges, buildings, and their appurtenances and furnish the labor and materials, and by which the Department is obligated to compensate him/her therefore at the mutually established and accepted rate or price.
- 2. The Contract includes the "Notice to Contractors", proposal form, bid, contract form and contract bond, Standard Specifications, supplemental specifications, special provisions, general and detailed plans, notice to proceed, and any change orders and agreements that are required to complete the construction of the work in an acceptable manner, including authorized extensions thereof, all of which constitute one instrument.

<u>101.0319 CONTRACT BOND:</u> The security executed by the bidder and the bidder's surety or sureties furnished to the Department or political subdivision to guarantee complete performance of the contract.

101.0320 CONTRACT ITEM: An item of work specifically described and for which a price, either unit or lump sum, is provided. It includes the performance of all work and the furnishing of all labor, equipment, and materials described in the text of the Standard Specification item included in the contract or described in any subdivision of the text of the Supplemental Specification or Special Provision of the Contract.

<u>101.0321 CONTRACTOR:</u> The prequalified individual or legal entity contracting with the Department and/or any other political subdivision for the construction, reconstruction, improvement, maintenance, and/or repair of roads, bridges, and their appurtenances.

101.0322 CONTRACT PERIOD: The period from the specified date of commencing work to the date that the specified number of working days or calendar days, as the case may be, has elapsed, both dates inclusive, or from the specified date of commencing work to the specified date for completion, both dates inclusive, as specified in the contract.

101.0323 CONTRACT TIME OR COMPLETION DATE: The number of working or calendar days specified in the proposal form as the time allowed for the completion of the work contemplated in the Contract, including authorized time extensions. When a calendar date of completion is shown in the proposal form, in lieu of a number of working or calendar days, the work contemplated shall be completed by that date.

- <u>101.0324 CONTROL OF ACCESS</u>: The condition where the right of owners or occupants of abutting land or other persons to access, light, air, or view in connection with a highway is fully or partially controlled by public authority.
- <u>FULL CONTROL OF ACCESS</u>: The authority to control access is exercised to give preference to through traffic by providing access connections with selected roads only and by prohibiting crossings at grade or direct private driveway connections.
- 2. <u>PARTIAL CONTROL OF ACCESS:</u> The authority to control access is exercised to give preference to through traffic to a degree that, in addition to the access connections with selected public roads, there may be some crossings at grade and some private driveway connections.
- <u>101.0325 COUNTY:</u> The County in which the work is to be done, represented by its Board of Commissioners or Supervisors. Reference to any County officer shall be taken to mean such officer of the County as now defined.
- <u>101.0326 CULVERT:</u> Any structure not classified as a bridge which provides an opening under any roadway.
- <u>101.0327 CURRENT CONTROLLING OPERATION:</u> The operation that must be performed on the current day to prevent delay in the final completion of the work.
- 101.0328 DEPARTMENT: The Nebraska Department of Roads.
- <u>101.0329 DETOUR:</u> A temporary official route using existing roads to divert traffic around a roadway project. Detours are maintained and marked by the State or other proper authority.
- <u>101.0330 DIVIDED HIGHWAY:</u> A highway with separated roadways for traffic in opposite directions.
- <u>101.0331 EARTHWORK MEASURED-IN-EMBANKMENT:</u> The calculated volume of the embankment shown in the Plans where balance factors do not apply.
- <u>101.0332 EASEMENT (RIGHT-OF-WAY)</u>: A right acquired by public authority to use or control property for a designated highway purpose.
- 101.0333 EMBANKMENT: A raised soil structure.
- 101.0334 EMPLOYEE: A person working on a Department project for the Contractor.
- <u>101.0335 ENGINEER:</u> The Director, acting directly or through a representative duly authorized by the Director, such representative acting within the scope of the particular duties assigned to him/her or of the authority given to him/her.
- <u>101.0336 EQUIPMENT:</u> All machinery and supplies necessary for the construction, performance, and completion of the Contract.
- <u>101.0337 EXPRESSWAY:</u> A divided arterial highway for through traffic with full or partial control of access and which may have grade separations at intersections.
- <u>101.0338 EXTRA WORK:</u> An item of work and/or provisions for materials not included in the original contract.

- <u>101.0339 FEDERAL AGENCIES AND OFFICERS:</u> Agencies, officers, and their successors of the United States Government.
- <u>101.0340 FINAL ACCEPTANCE:</u> Final acceptance is the date a final payment document is drawn by the Department.
- 101.0341 FINAL TENTATIVE ACCEPTANCE: Final tentative acceptance is the date of the "Final Tentative Acceptance" letter to the contractor accepting all of the work. The Engineer's "Final Tentative Acceptance" letter relieves the contractor of responsibility for the care and maintenance of the completed work; of public liability; and for damages due to the actions of the elements or the action of traffic.
- <u>101.0342 FORESLOPE</u>: The surface sloping downward and away from shoulder line.
- 101.0343 FREEWAY: An expressway with full control of access.
- 101.0344 FRONTAGE STREET OR FRONTAGE ROAD: A local street or road adjacent to a highway for service to abutting property.
- 101.0345 GRADE SEPARATION: A crossing of two highways at different elevations.
- <u>101.0346 HIGHWAY:</u> A road or street, including the entire area within the right-of-way, which has been designated a part of the State Highway System.
- 101.0347 HOLIDAYS: Nebraska legal holidays occur on January 1, the third Monday in January and February, the last Friday in April, the last Monday in May, July 4, the first Monday in September, the second Monday in October, November 11, the fourth Thursday and the following Friday in November, and December 25. If the date falls on Sunday, the following Monday shall be the holiday. If the date falls on Saturday, the preceding Friday shall be the holiday. All dates are subject to possible revision by State Statute or by proclamation of the Governor.
- <u>101.0348 INSPECTOR:</u> The Engineer's authorized representative assigned to make detailed inspections of the work performed and materials furnished by the Contractor.
- <u>101.0349 LABORATORY:</u> The testing laboratory of the Department or any other testing laboratory which may be designated by the Engineer.
- <u>101.0350 LETTING:</u> The public opening and reading of bids received from prequalified bidders for work advertised by the Department.
- <u>101.0351 MATERIALS:</u> Any substance specified for use in the construction of the project. All materials shall be new unless otherwise stated in the Plans or Special Provisions.
- 101.0352 MEDIAN: The portion of a divided highway separating the traveled ways.
- <u>101.0353 MEDIAN LANE:</u> A speed-change lane within the median to accommodate left-turning vehicles.
- <u>101.0354 MITIGATION SITE:</u> Those areas that will replace waterways, including wetlands, impacted in highway construction. The mitigation site must be constructed to insure that it meets the criteria of a wetland.
- <u>101.0355 NOTICE TO CONTRACTORS:</u> The advertisement of the provisions, requirements, and instructions pertaining to the work on which bids are to be received, manner and time of submitting bids as prepared for the information of bidders.

- <u>101.0356 NOTICE TO PROCEED</u>: A written notice to the Contractor establishing the date the Contractor shall begin the contracted work.
- <u>101.0357 PAVEMENT STRUCTURE</u>: The combination of sub-base, base course, foundation course, and surface course placed on a subgrade to support the traffic load and distribute it to the roadbed.
- <u>101.0358 PLANS</u>: The official Plans, profiles, typical cross sections, general cross sections, summary of soil and materials survey information, aerial photo maps, earthwork computations, design data, and supplemental drawings, or exact reproductions thereof, approved by the Engineer, which show the location, character, dimensions and details of the work to be done, and which are to be considered as a part of the contract supplementary to the Standard Specifications.
- <u>101.0359 POINT OF DELIVERY:</u> A place, determined by the contract or the Engineer, where materials will be received or placed.
- <u>101.0360 PROFILE GRADE:</u> The trace of a vertical plane intersecting the top of the proposed wearing surface, usually along the longitudinal centerline of the roadbed. Profile grade means either elevation or gradient of the trace depending on the context.
- 101.0361 PROJECT: The construction to be performed under the contract.
- 101.0362 PROPOSAL FORM: Includes the description of the location of the work, time and place where bids will be accepted, the general conditions and special provisions. It also includes, by reference, the plans and specifications.
- 101.0363 PROPOSAL GUARANTY BID BOND (BID BOND): A bond provided by the bidder and obtained from a Surety Company authorized to contract in Nebraska, which secures the bidder's bid until the Contract Bond becomes effective.
- <u>101.0364 QUALITY ASSURANCE:</u> All those planned and systematic actions the Department takes to determine that a product or service will satisfy specified quality requirements.
- <u>101.0365 QUALITY CONTROL</u>: All Contractor/supplier operational techniques and activities that are performed or conducted to fulfill the Contract requirements.
- <u>101.0366 RAMP</u>: A connecting roadway between two intersecting highways at an interchange.
- 101.0367 RIGHT-OF-WAY: Real property used for transportation purposes.
- 101.0368 ROAD: A public way for the purposes of vehicular travel, including the entire area within the right-of-way. A road designated as part of the State Highway System may be called a highway, while a road in an urban area may be called a street.
- <u>101.0369 ROADBED</u>: That portion of a roadway upon which the base course, surface course, shoulders and medians are constructed. Divided highways are considered to have two roadbeds.
- <u>101.0370</u> ROADSIDE: The area within the right-of-way, excluding the traveled way, auxiliary lanes, and the shoulders.
- <u>101.0371 ROADSIDE DEVELOPMENT:</u> Improvements placed or constructed for the preservation or enhancement of landscape features, rehabilitation and prevention of erosion, and increasing the effectiveness and enhancing the appearance of the highway.

- 101.0372 ROADWAY: The portion of a highway, including shoulders, for vehicular use. A divided highway has two or more roadways.
- 101.0373 ROADWAY WIDTH: The clear width measured at right angles to the centerline and measured between the bottom inside face of the curbs, rails, or shoulder breaks.
- 101.0374 SCHEDULE OF ITEMS: A list of the contract items for which the bidder is to provide a price to complete the work described by that item.
- <u>101.0375 SETBACK LINE:</u> A line outside of the right-of-way, established by public authority, on the highway side of which the erection of buildings or other permanent improvements is controlled.
- 101.0376 SHOOFLY: A Contractor built, marked, and maintained route around a specific construction site. When an entrance and/or exit ramp must be built to provide access to a "DETOUR," the ramps will be considered to be shooflies. Maintenance excludes snow removal.
- <u>101.0377 SHOULDERS:</u> The portion of the roadway contiguous with the traveled way for accommodation of vehicles stopped for emergencies and for lateral support of the pavement structure.
- <u>101.0378 SOIL:</u> Those materials listed in Bureau of Reclamation and Corps of Engineers Unified Soil Classification System.
- <u>101.0379 SPECIAL PROVISIONS</u>: Additions and revisions to the Nebraska Standard Specifications for Highway Construction and Supplemental Specifications To The Standard Specifications for Highway Construction.
- 101.0380 SPECIFICATIONS: The general term comprising all the directions, provisions, and requirements contained in the Nebraska Standard Specifications for Highway Construction, together with such as may be added or adopted as Supplemental Specifications To The Standard Specifications for Highway Construction or Special Provisions, all of which are necessary for the proper performance of the Contract.
- <u>101.0381 SPEED-CHANGE LANE:</u> An auxiliary lane, including tapered areas, primarily for the acceleration or deceleration of vehicles entering or leaving the through traffic lanes.
- 101.0382 STATE: The State of Nebraska acting through its authorized representatives.
- <u>101.0383 STATION:</u> The point on the ground which is part of the line defining the profile of the survey. Distance between full stations is 100 feet (100 m). The beginning point of a survey is station 0, unless otherwise designated.
- <u>101.0384 STREET:</u> A public way for the purpose of vehicular travel in a city or village and shall include the entire area within the right-of-way.
- <u>101.0385 SUBCONTRACTOR:</u> Any individual, firm, or corporation to whom the Contractor or Subcontractor, with the written consent of the Department, sublets any part of the contract.
- <u>101.0386 SUBGRADE:</u> The upper portion of the roadbed, upon which the pavement structure and shoulders are constructed. Usually the subgrade depth is 6-inches (150 mm).

<u>101.0387 SUBSIDIARY</u>: Work and material requirements that are not measured for payment and for which no direct payment is made. The bidder must include the cost of performing these requirements in another item that is identified in the Plans or Specifications.

101.0388 SUBSTRUCTURE:

- 1. The part of the structure below:
 - a. The simple and continuous span bearings.
 - b. The bottom of the girder or bottom slab soffit.
 - c. 001.91C Construction joints at the top of vertical abutment members or rigid frame piers.
- 2. Substructures include endwalls, wingwalls, barriers, railings attached to the wingwalls, and cantilever barriers and railings.)
- <u>101.0389 SUPERINTENDENT:</u> The Contractor's authorized representative in responsible charge of the work.
- 101.0390 SUPERSTRUCTURE: The entire structure above the substructure.
- 101.0391 SUPPLEMENTAL AGREEMENTS: Written agreements executed by the Contractor and the Department or other contracting agency, subsequent to having entered into the contract, covering alterations in the Plans or unforeseen items of construction.
- 101.0392 SUPPLEMENTAL SPECIFICATIONS: Specifications adopted subsequent to the current edition of the Nebraska Standard Specifications for Highway Construction. Supplemental Specifications shall prevail over those published in the Nebraska Standard Specifications for Highway Construction whenever in conflict therewith.
- <u>101.0393 SURETY:</u> The corporate body registered and/or licensed to do business in Nebraska bound with and for the bidder for the acceptable performance of the contract, the completion of the work, and for the payment of all just claims arising therefrom.
- <u>101.0394 TRAFFIC LANE:</u> The portion of a traveled way for the movement of a single line of vehicles.
- <u>101.0395 TRAVELED WAY:</u> The portion of the roadway for the movement of vehicles, exclusive of shoulders.
- 101.0396 UNBALANCED BID, MATERIALLY: A bid that generates a reasonable doubt that award to the bidder submitting a mathematically unbalanced bid will result in the lowest ultimate cost to the Department. May cause a bid to be disqualified.
- 101.0397 UNBALANCED BID, MATHEMATICALLY: A bid containing lump sum or unit bid items that do not reflect reasonable actual costs plus a reasonable proportionate share of the bidder's anticipated profit, overhead costs, and other indirect costs.
- 101.0398 VALUE ENGINEERING PROPOSAL: A proposal developed by the Contractor for modifying the Plans, Specifications, or other requirements of the Contract for the purpose of reducing the total cost of the construction without reducing the design capacity or quality of the finished product.

101.0399 WEIGHT:

- 1. A Weight is a measure of force in the English (Metric) system and the units are pounds (Newtons). Mass is measured in slugs or pounds (grams). Most scales used in the highway construction industry measure an object's gravitational force at the scale location. However, the unit of measurement on most scales is grams and these readings are generally not corrected for the existing gravitational force to allow conversion of the measured force to the object's true mass.
- 2. Certified scale measurements are considered by the Department to be acceptable measures of an object's mass.

101.0400 WETLANDS: Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. (Wetlands generally include swamps, marshes, bogs, and similar areas.)

<u>101.0401 WORK</u>: Work shall be understood to mean the furnishing of all labor, materials, equipment, and other incidentals necessary or convenient to the successful completion of the project by the Contractor and the carrying out of all duties and obligations imposed by the Contract.

101.0402 WORKING DAY

- A working day is any calendar day, Monday through Friday, when the Contractor is not prevented by weather, soil conditions, or other conditions beyond his/her control from working on the current controlling operation for more than 50 percent of the hours in his/her normal schedule with more than 80 percent of his/her normal working force.
- 2. If any work requiring engineering or inspection by the Department is performed on a Sunday, New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the day after Thanksgiving Day, or Christmas Day, then that day will be considered a working day.
- 3. Except as noted in paragraph 2. above, Saturdays, Sundays, and Nebraska holidays will not be counted as working days.

101.0403 WORKING DRAWINGS: Shop drawings, shop plans, erection plans, falsework plans, framework plans, cofferdam cribbing and shoring plans, bending diagrams for reinforcing steel, or any other supplementary plans or similar data, including a schedule of submittal dates for working drawings where specified, which the Contractor must submit to the Engineer.

<u>101.0404</u> WORK ORDER: A written order directing the performance of work or furnishing of materials not included in the original contract.

Section 102

Section 102 in the Standard Specifications and Supplemental Specifications is void and superseded by the following:

REQUIREMENTS FOR BIDDERS ON CONTRACTS AWARDED BY THE DEPARTMENT 102.01 PREQUALIFICATION OF BIDDERS

- All persons, (any individual, co-partnership, association, corporation or joint stock 1. company) proposing to bid on a contract for the construction, reconstruction, improvement, maintenance, or repair of roads, bridges and their appurtenances to be let by the Department shall submit a statement showing his/her experience, equipment, and financial condition; except that such statement shall not be required for contracts for repair and maintenance where the estimate of the Engineer for such repair and maintenance is less than twenty-five hundred dollars, or of an emergency nature. Such statement shall be under oath and on a form to be provided by the Department and shall be submitted not later than ten days before the letting of the Contract or Contracts. The statement shall develop fully the financial ability, adequacy of plant and equipment. organization, prior experience, and such other pertinent and material facts as may be desirable. The Department may require additional information at any time. The statements of bidder's experience, equipment, and financial condition will not be retained in the active file of qualified bidders after the financial condition shown is of a date fifteen months prior. Any person whose qualification will expire on or before the date of a letting must submit a new statement and request to be qualified at least ten days before the letting at which he/she desires to bid. Any person who desires a change in his/her qualification must submit a new statement or a request in writing at least ten days before the letting at which the change would be effective. Upon the compliance with all laws and rules and regulations relating thereto, such person will be gualified for the amount and class of work to which he/she is entitled. All information furnished the Department shall be confidential.
- The financial showing required in such statement shall be certified by a public accountant holding a currently valid permit from the Nebraska Board of Public Accountancy or by any certified public accountant holding a currently valid permit.
- 3. The use of a "Letter of Credit" as an alternate means of showing financial condition will be permitted when the net amount of the "Letter of Credit" does not exceed five hundred thousand dollars. The "Letter of Credit" must be from a licensed or chartered financial institution. The "Letter of Credit" shall be certified by a public accountant holding a currently valid permit from the Nebraska Board of Public Accountancy or by any certified public accountant holding a currently valid permit.

102.02 QUALIFICATION

- 1. Each person will be qualified upon such statement for an amount of work which he/she can perform properly as evidenced by his/her financial statement and supplementing documents, and his/her competency and responsibility as evidenced by the amount, condition, and availability of equipment, experience of personnel, and previous record with this and other awarding authorities.
- 2. Each person will be notified of the "maximum qualification" established in his/her case by the Department. The "maximum qualification" established may be increased or decreased at any time if, as determined by the Department, the performance record of the bidder warrants such action.

- 3. A new statement may be requested at any time if, in the opinion of the Department, significant changes in the responsibility or financial ability of the person have occurred.
- 4. The Department may determine that a bidder is qualified to bid on any one or combination of the following groups of work:

Group Number	Work Class
1	Grading
2	Aggregates
3	Concrete Pavement
4	Culverts
5	Landscaping
6	Bridges
7	Guard Rail
7b	Fence
8	Specialty
8a	Building Construction
8b	Electrical
8c	Signing
8d	Painting
8e	Demolition
9	Bituminous
10	General (All Classes)

5. Any bidder who desires a change in the class or classes of work for which he/she is qualified to bid must submit a request in writing for such change at least ten days before the letting at which he/she desires to bid with the new classification.

102.03 DRUG-FREE WORKPLACE The State of Nebraska requires all bidders on all construction, maintenance, or improvement contracts let by the Department to file a written Drug-Free Workplace Policy with the Department. By signing the bid signature page the bidder certifies that the company is operating under a written Drug-Free Workplace Policy on file with the Department.

102.04 EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS, AND SITE OF WORK

- 1. The Department will provide detailed Plans and Specifications. The bidder, before submitting a bid, shall carefully examine:
 - a. The site of the proposed work.
 - b. The proposal form.
 - c. The Plan
 - d. The Specifications.
 - e. The Supplemental Specifications.
 - f. The Special Provisions.
 - g. Other required forms.
 - h. The permit conditions.
 - i. The addendums.
- 2. The submission of a bid is considered conclusive evidence that the bidder made the examinations required in Paragraph 1. of Subsection 102.04 above and that the bidder is satisfied with and understands the conditions to be encountered in performing the work and other requirements in the Contract.

102.05 FEDERALLY FUNDED CONTRACTS - EQUAL EMPLOYMENT OPPORTUNITY

- 1. Each Contractor and Subcontractor submitting a bid must certify that he/she has or has not participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Federal Executive Order 11246, and that he/she has or has not filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity all reports due under the applicable filing requirements.
- 2. The certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b)(1)), and must be submitted by bidders and proposed Subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts or subcontracts of \$10,000 or less are exempt.)
- 3. Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations. Standard Form 100 (EEO-1) must be filed by:
 - a. Employers covered by Title VII of the Civil Rights Act of 1964 and employers covered by Federal Executive Order 11246 who have 100 or more employees in the payroll period for which they are reporting, normally any payroll period in December, January, or February preceding the filing of the report.
 - b. If Standard Form 100 (EEO-1) was not filed because the bidder has less than the 100 employees requirement, it is proper for the bidder to state that he/she has submitted all required compliance reports due.

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

102.06 CURRENT QUALIFICATION

Each bidder desiring to bid on work for which prequalification of bidders is required shall submit a request for proposal forms and with such request shall submit, on forms provided by the Department, a complete report of all work then under contract, including subcontracts, and the amount of work not completed on all such contracts. A current qualification based on this statement and the bidder's "maximum qualification" will be established by the Department taking into account the rate of progress which is being made in performing the uncompleted work, the requirements for the performance of the work for which the bidder desires to bid, and any other pertinent information that is available to the Department. This current qualification determines the amount of work for which any person is qualified at the particular letting and for which he/she may be awarded a contract or contracts, except that the Department may use a tolerance of not more than twenty-five percent of a bidder's current qualification and award the contract or contracts in a total amount which does not exceed by more than twenty-five percent the current qualification established by the Department.

102.07 AFFIRMATIVE ACTION

The Department, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Department of Transportation (49 CFR, Part 21), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that the Contract entered into will be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, sex, or national origin.

102.08 BID REQUIREMENTS

- 1. A proposal form for work for which prequalification of bidders is required will be issued only to those qualified to bid. A bidder will not be considered as qualified for any particular letting if the bidder's qualification will expire on or before the date of the letting.
- 2. Bidders submitting two or more bids in a total amount exceeding their current qualification by more than 25 percent shall submit the same, subject to the limitations of their current qualification, plus a tolerance of 25 percent. Nothing in these Rules and Regulations shall prevent the Department from rejecting any bid where, in the opinion of the Department, other circumstances and developments have changed the qualification or responsibility of the bidder.
- 3. If the qualification of the low bidder expires before the award of a contract, such contract will not be awarded until the qualification of the low bidder has been renewed.
- 4. A proposal form for work for which prequalification of bidders is required will be labeled with the name of the bidder to whom they are issued and shall not be transferable. Any bid submitted by a bidder other than the person or company to whom the proposal form was issued shall be void.
- 5. A proposal form will not be issued to any bidder later than 5:00 p.m. of the day preceding the letting.

6. A proposal form for any contract for which prequalification of bidders is required may be issued, at the discretion of the Department, to two or more qualified bidders jointly if the classes of work for which the prospective bidders are qualified to perform satisfy, in the aggregate, the qualification requirements for the particular contract. Two or more qualified bidders may not bid jointly to perform any contract for which prequalification of bidders is required unless a proposal form is issued by the Department to those bidders jointly for that purpose.

102.09 INTERPRETATION OF QUANTITIES IN THE SCHEDULE OF ITEMS

The quantities listed in the schedule of items are considered to be approximations, unless otherwise provided, and are to be used for the comparison of bids. Payments to the Contractor will be made for the actual quantities or Plan quantities, if specified, of work performed or materials furnished in accordance with the contract. It is understood that the quantities of work to be done and materials to be furnished may each be increased, diminished, or omitted as hereinafter provided without in any way invalidating the unit bid prices, except as provided in Subsection 104.02 of the current edition of the Nebraska, Standard Specifications for Highway Construction or Supplemental and Special Provisions.

102.10 PREPARATION OF BIDS

- 1. The bidder shall use the Department authorized Electronic Bidding System Software when submitting a bid.
- 2. The bid shall be submitted in the envelopes provided by the Department, or submitted by using a Department authorized online bidding exchange, or as directed by the Department.
- 3. The Department may reject a bid if an error or warning message appears in the electronic bidding submission received by the Department.
- 4. In the event there is a discrepancy between the information submitted on the diskette or any electronic submission and the paper copy of the schedule of items submitted with the bid, the figures on the paper copy of the schedule of items will prevail.
- 5. The bidder shall pay applicable fees charged by the company providing the electronic bidding software or user fees for Internet services to submit a bid.
- 6. The blank spaces in the schedule of items must be filled in correctly, in ink, typed, or electronically for each item and document necessary to submit a complete bid.
- 7. The bid shall be clearly legible or it shall be rejected.
- 8. Signatures.
 - a. Written signatures must be in ink on the line provided in the form. Printed names below the line provided or located in other areas of the form will not be considered. All corrections and other entries not made by the EBS software must be in ink or typed.
 - b. Bids submitted over the internet must be signed using electronic signatures as provided by the Department-authorized internet service provider.
 - c. Failure of the bidder to properly sign the bid shall make the bid incomplete, and the bid will be rejected.

- 9. The Schedule of Items must be properly completed. The following rules will apply:
 - a. The schedule of items must state the unit price for each item of work contemplated.
 - b. If the unit price is left blank and the quantity of the item is one and an amount is shown in the "Bid Amount" column, then the amount in the "Bid Amount" column will be considered the unit price.
 - c. If the bidder enters an amount in the "Unit Price" column when "Lump" is shown in that column, the "Unit Price" shall govern in the extension of that item.
 - d. The bidder shall also show the product of the respective unit prices and quantities in the column provided for that purpose and the total amount for each group and combination of groups, as indicated in the schedule of items, necessary for a complete bid for the work on which the bidder wishes to bid.
 - e. If the unit price is indicated with a line, the unit price will be considered free no matter what amount is shown in the "Bid Amount" column.
 - f. If the unit price is left blank and the quantity of the item is greater than one, the bid is incomplete and the bid is rejected.
 - g. If the "Unit Price" and "Bid Amount" columns are left blank, the bid will be considered incomplete and rejected except when alternate or single groups are bid and a bid is not being submitted for those items which were left blank.
 - h. When the schedule of items is divided into groups, a price shall be submitted on each item of work within the group on which the bidder wishes to bid.
 - i. On alternate groups when the bidder does not intend to submit a bid for a group, the bid for that group must be left blank.

102.11 CONTENTS OF BID.

- 1. The bidder shall include the following in each bid submitted to the Department. Failure to submit any of the following shall cause the bid to be rejected.
 - a. A Schedule of Items.
 - b. Required DBE Participation form (if applicable).
 - c. Certification of Previous EEO Performance (if applicable).
 - d. Equipment Assessment Certification (if applicable).
 - e. Hiring Practice Certification.
 - f. Drug-Free Workplace Policy Certification.
 - g. Noncollusion Declaration.
 - h. Compliance Certification for Standard Specifications for Highway Construction Sections 102 and 103.
 - i. Bid Bond or approved confirmation of a Bid Bond (See Subsection 102.15).
 - j. Other forms, as required by the Department.

- k. An envelope with separate pockets for the bid and bid bond respectively when required by the Department.
- I. Bid Signature Page. Written bid signature pages must be signed and notarized. Electronic signatures must have authorized digital signatures. Each bidder, in signing the bid signature page by or on behalf of the person, firm, association, or corporation submitting the bid, certifies that:
 - (1) Such person, firm, association, or corporation has not either directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid.
 - (2) All equipment has been assessed for the current year.
 - (3) The company is operating under a Drug-Free Workplace Policy, a copy of which is on file with the Department.
 - (4) A contract bond for the contract amount will be furnished.
 - (5) Reports have been filed regarding Equal Opportunity participation (Federally funded projects only).
 - (6) Disadvantaged Business Enterprises (DBE) goals on designated Federally funded projects will be achieved or "good faith" documentation provided.
- m. Failure to submit a bid signature page as part of the bid will make the bid nonresponsive. False statements in any of the certifications will constitute perjury.

102.12 BID SUBMISSION.

- Bids must comply with all plans, special provisions, addendums, the Specifications (as defined in Subsection 101.0380), Supplemental Specifications To The Standard Specifications for Highway Construction, and the Nebraska Rules and Regulations regarding bid preparation and bid submittal.
- 2. Bids shall be received until the date and hour set forth for the opening and must be, by that time, delivered to the place indicated in the "Notice to Contractors." At the Department's discretion there are two options to submit bids. The bidder can deliver to the Contracts Office a bid (as defined in Subsection 102.11) in the Department provided envelopes or authorized bidders can submit the bid electronically over the Internet.
 - a. OPTION 1 The bid and Bid Bond shall be placed in separate sealed envelopes, attached to each other, and furnished by the Department. If an "Annual Bid Bond" is applicable the bidder shall indicate this in writing on the Bid Bond envelope. The envelope containing the bid shall be marked by the bidder to indicate its contents.
 - b. OPTION 2 Bidders may submit bids electronically over the Internet using a Department authorized on-line bidding service.
- 3. The Department retains the discretion to accept as responsive a non-electronic bid.

102.13 TIES AND LIMITATIONS

- 1. A bid shall not be tied to any other bid except as may be indicated in the proposal form. If the bidder desires to tie his/her bid to his/her bid on any or all of the other bids which may be indicated in the proposal form, such tie shall be clearly indicated in the space provided. The bidder shall not indicate a tie by means other than those shown.
- 2. If the bidder does not designate a preference in the space provided, it will be assumed that he/she does not desire to tie his/her bid to any of the bids listed therein; and the bid will be considered on that basis. The bidder shall not insert a tie in any other place in his/her bid except in the space provided in the bid.
- 3. The Engineer reserves the right to make awards that will be in the best interest of the State, and any comment in a bid limiting or qualifying this reserved right shall constitute an irregular bid. However, the bidder may specify one or more of the following:
 - a. The maximum monetary value of awards that will be accepted.
 - b. The total number of contracts that will be accepted.
 - c. The number of contracts of any particular class or classes of work that will be accepted.
- 4. Such limitations must be indicated in the space provided in the bid. Any limitation in the number of contracts of any particular class or classes of work that the bidder will accept will be considered as applying only to the class or classes of work mentioned.
- 5. The bidder shall not make a conditional deduction or reduction in any unit price in any bid.

102.14 IRREGULAR BIDS

- 1. Any tie, statement, qualification, or limitation made by the bidder in violation of, or not permitted by, Subsection 102.13 will cause the bid to be considered void.
- Bids may be rejected if they show any alterations of forms, additions not called for, conditional bids, alternate bids, incomplete bids, erasures, or irregularities of any kind. Each bidder shall make an honest attempt to show correct extensions and totals in his/her bid. If, in the opinion of the Engineer, such an attempt is not made, such bids may be rejected.
- 3. In the event of a discrepancy between unit bid prices, extensions, and/or totals, the unit price shall govern.

102.15 PROPOSAL GUARANTY BID BOND (BID BOND)

- 1. Each bid shall be bonded with a bid bond made payable to the Department in an amount equal to at least five (5) percent of the amount bid. Bid bonds must be executed by corporations authorized to contract as a surety in the State of Nebraska. Any alterations, conditions, or limitations added to the Department's bid bond form will be unacceptable and cause the bid not to be opened and read. All bid bonds must be current as of the time of the letting and must contain a provision preventing termination of such bond no later than 5 days prior to the letting. There are two options to submit the proposal guaranty bid bond. In the event the low bidder fails to comply with any requirement regarding the execution of the contract, the Department shall immediately be entitled to recover the full amount of the bid bond as liquidated damages.
 - a. OPTION 1 (Project Specific Paper Bid Bond). The bid bond shall be executed on the Department bid bond form, copies of which may be obtained from the Department. The bid bond shall be delivered to the Department with the bid.
 - b. OPTION 2 (Annual Bid Bond). The Department at its discretion may allow a bidder to place an "Annual Bid Bond" on file with the Department. This bond would cover all projects the bidder bids for a 12-month period shown in the bond. The bidder must indicate in the bid submittal to the Department that their "annual bid bond" applies to the submitted bid. The annual bid bond shall be executed on the Department of Roads Bid Bond Form, copies of which may be obtained from the Department.

102.16 WITHDRAWAL OF BIDS

- 1. A bidder may withdraw an unopened bid at any time prior to the bid opening time specified in the "Notice to Contractors."
- 2. To withdraw a bid, the bidder shall provide written notice (letter, telegram, or FAX) to the Department's Contracting Office prior to the time established for the bid opening. The notice shall be signed by a person authorized to bid.
- 3. An agent authorized by the bidder in writing (letter, telegram or FAX) may resubmit withdrawn bids.
- 4. The Department will not accept bids after the bid opening time specified in the "Notice to Contractors."

102.17 PUBLIC OPENING OF BIDS

- 1. Except when specifically authorized in writing by the Department and except as authorized in Subsection 102.16, bids will be opened and read publicly at the time and place indicated in the "Notice to Contractors." Bids and bid bonds not filed with the Department as authorized in Subsections 102.12 and 102.15 will not be opened and read. Errors by the bidder in filing his/her bid will not be cause for waiving any of the above requirements and will not be the responsibility of the Department.
- 2. The "Total Bid" for each bid will be read publicly. The group totals and unit prices for individual bids may be read at the sole discretion of the Department.

102.18 DISQUALIFICATION OF BIDDERS AND DEBARMENT POLICY AND PROCEDURES

1. DISQUALIFICATION

Any one or more of the following causes shall be considered as sufficient for the disqualification of a bidder and the rejection of his/her bid or bids:

- a. More than one bid on any one project from an individual, a firm or partnership, a corporation, or an association under the same or different names. Reasonable grounds for believing that any bidder has interest in more than one bid for the work contemplated will cause the rejection of all bids in which such bidder is interested.
- b. <u>EVIDENCE OF COLLUSION AMONG BIDDERS</u>. Any or all bids will be rejected If there is reason for believing that collusion exists among the bidders or if the bidder has been found unacceptable to bid due to collusion prior to award of the contract. Following conclusive evidence of collusion among bidders, participating bidders in such collusion will receive no recognition as bidders for any future work of the Department until such participants are reinstated as qualified bidders.
- c. Bids in which the prices are obviously unbalanced.
- d. <u>BIDS WHICH ARE MATERIALLY UNBALANCED</u>. A bid is unbalanced if lump sum prices or unit bid prices do not reflect reasonable actual costs and there is a reasonable doubt that the lowest ultimate cost under the contract will be achieved.
- e. Bids which are accompanied by bid bonds on forms that are not authorized by the Department or by bid bond forms which are incorrectly completed or are incomplete.
- f. Bids in which the bid signature page is incorrectly completed or is incomplete.

2. <u>DEBARMENT</u>

- a. The Director may, in his/her sole discretion, debar an individual, a bidder, or its affiliates from bidding, subcontracting, or supplying materials on Department contracts for any illegal activity involving bidding evidenced by any of the following:
 - (1) An indictment or conviction of a bidding crime; any plea of guilty or nolo contendere to a charge of a bidding crime; any public admission of a bidding crime; any presentation of an unindicted co-conspirator; or any testimony protected by a grant of immunity of any bidder in any jurisdiction indicating involvement in a bidding crime.
 - (2) Conviction of any offense indicating a lack of moral or ethical integrity as may reasonably be perceived to relate to or reflect upon the business practices of the bidders.
 - (3) Debarment by any other State or Federal agency for substantially any of the reasons listed above.
 - (4) Any other activities of an individual, bidder, or its affiliates of a serious or compelling nature that are reasonably perceived to relate to their work as a Contractor.

- (5) Making materially false statements on a bid.
- b. An individual or a bidder shall be given a debarment hearing if either so requests before or after debarment. The determination as to whether the debarment hearing will be held before or after debarment shall be at the sole discretion of the Director.
 - (1) The written request for a debarment hearing must be received by the Director no later than ten days after the receipt of the written notice from the Director. Unless otherwise mutually agreed in writing, the debarment hearing shall be held no later than fourteen days after receipt of the individual's or bidder's request for a debarment hearing.
 - (2) <u>DEBARMENT AFTER HEARING</u>. In those situations where the Director decides to hold a debarment hearing prior to deciding whether debarment is proper, he/she shall send written notice to the affected individual, bidder, or their agents by certified or registered mail stating:
 - (i) That debarment is being considered.
 - (ii) The general reasons that suggest the debarment.
 - (iii) That the bidder will be afforded an opportunity for a debarment hearing if requested.
 - (3) <u>DEBARMENT BEFORE HEARING</u>. In those situations where the Director determines that debarment is appropriate prior to a debarment hearing, he/she shall send written notice to the affected individual, bidder, or their agents by certified or registered mail stating:
 - (i) That the bidder or individual has been debarred.
 - (ii) The general reasons for the debarment.
 - (iii) That the bidder or individual shall be accorded the opportunity for a debarment hearing if they so request in writing within ten days of the receipt of the written notice of debarment.
 - (4) If the bidder or individual notifies the Director that he/she desires a hearing, the debarment hearing will be held no later than fourteen days after receipt of the individuals or bidder's request unless mutually agreed otherwise in writing. The Director shall determine in writing whether the individual or bidder will be reinstated.
- c. The Director shall appoint a Hearing Examiner to conduct all debarment hearings. The Hearing Examiner shall make a recommendation to the Director, and such recommendation shall include findings of fact and conclusions of law.
- d. Except as modified by the Rules and Regulations of the Department, debarment hearings before the Hearing Examiner shall conform to the Code of Civil Procedure applicable to the District Courts of the State. Practice before the Hearing Examiner shall be governed by the Department's Rules and Regulations, Title 407.
- e. Debarment shall be for a period of thirty-six months or, in the case of a reciprocal debarment as provided for under paragraph 2.a.(3) of Subsection 102.18, the

- term of the debarment shall be for the same period as the debarment imposed by the other State or the Federal government.
- f. The Director may suspend a debarment at anytime he/she determines it is in the public interest to do so. Mitigating circumstances may be considered in the decision to lift or suspend a debarment and may include, but shall not be limited to:
 - (1) The degree of culpability of the debarred individual or bidder.
 - (2) Restitution by the debarred individual or bidder to the State for any perceived overcharges or damages resulting from the actions of the debarred individual or bidder.
 - (3) Cooperation by the debarred individual or bidder with the State, the United States, and/or any other political governmental subdivision in the investigation of bidding crimes, including a full and complete account of the individual's or bidder's particular involvement therein.
 - (4) Disassociation with individuals and firms that have been involved in a bidding crime.
- g. The Director, at his/her discretion, may hold a hearing, no later than fifteen days prior to the last day of the debarment, and require the debarred individual or bidder to show cause why the debarment should not continue. If the Director, in his/her sole discretion, determines that a debarred individual or bidder has failed to become a responsible bidder, then the Director may continue the debarment for up to twelve additional months. The same show cause procedures shall continue for each successive extension of the original debarment until such time as the Director has determined that the debarred individual or bidder meets the criteria of a responsible bidder.
- h. For purposes of debarment, the conduct of a bidder or an individual shall be fully imputed to:
 - (1) Business firms with which they are or were associated.
 - (2) Business firms by whom the individual was or is employed.
 - (3) Parent or subsidiary companies of the bidder.
 - (4) Business firms in which the individual or bidder has a controlling interest.
- i. Debarment of a bidder shall in no way affect the obligations of the bidder to the State for services to the Department already under contract.
- j. Every bidder currently qualified by the Department to bid on its contracts shall have a duty to notify the Director if it, any of its employees, officers, board members, or associates are indicted or convicted of a bidding crime within thirty days of the indictment or conviction. Failure to do so is a serious and compelling offense sufficient to result in debarment.
- k. Every bidder qualified by the Department to bid on its contracts shall have a duty to notify the Director if the bidder, any of its employees, officers, board members, or associates are contacted by any person with the purpose of engaging in any illegal activities in connection with bidding on contracts let by the Department or

- contracts involving federal aid. Notice shall include the name of the person making such overture or bid proposal, the time and place thereof, and the specific nature of the overture or bid proposal.
- A copy of Section 004 of the Department's Rules and Regulations shall be mailed to each prequalified bidder and to each bidder heretofore debarred or suspended.

3. PROCEDURES FOR CERTIFICATION REGARDING DEBARMENT

- a. By signing and submitting a bid, the bidder is providing the certification set out below.
- b. The inability of a person to provide the certification required below will not necessarily result in denial of participation in a contract. The bidder shall submit an explanation of why he/she cannot provide certification. The certification or explanation will be considered in connection with the Department's or agency's determination whether to enter into this transaction. However, failure of the bidder to furnish a certification or an explanation shall disqualify the bid.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the Department determined to enter into this transaction. If it is later determined that the bidder knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the Department may terminate this transaction, cause prosecution for perjury, bring debarment proceedings, or any combination of the above.
- d. The bidder shall provide immediate written notice to the Department if at any time the bidder 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," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "bid proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Federal Executive Order 12549. The Department may be contacted for assistance in obtaining a copy of those regulations.
- f. The bidder agrees by submitting this bid that, should the proposed covered transaction be entered into, he/she 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.
- g. The bidder further agrees by submitting this bid that he/she will include this Subsection (102.18), without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- h. A bidder in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction unless he/she knows that the certification is erroneous. A bidder may decide the method and frequency by which he/she determines the eligibility of his/her principals.
- i. Except for transactions authorized under paragraph 3.f. of Subsection 102.18 of these specifications, if a bidder 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 contract, in addition to other remedies available to the Federal Government, the Department may terminate this contract for cause or default, cause prosecution for perjury, bring debarment proceedings, or any combination of the above.

- j. The bidder swears, to the best of his/her knowledge and belief, that he/she and the principals:
 - (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal Department or Agency.
 - (2) Have not within a three-year period preceding this bid been convicted of or had a civil judgment rendered against them for:
 - (i) 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.
 - (ii) Violation of Federal or State antitrust statutes.
 - (iii) Commission of embezzlement, theft, forgery, bribery, or falsification or destruction of records.
 - (iv) Making false statements.
 - (v) 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 3.j.(3) of Subsection 102.18 of this Specification.
 - (4) Have not within a three-year period preceding this bid had one or more public transactions (Federal, State, or local) terminated for cause or default.
- k. Where the bidder is unable to certify to any of the statements in the certification, an explanation shall be attached to his/her bid.

Section 103

Section 103 in the Standard Specifications is void and superseded by the following:

REQUIREMENTS FOR CONTRACT AWARD, CANCELLATION, AND EXECUTION

103.01 CONTRACT AWARD

The award of the contract will be made in Lincoln, Nebraska, by the Director to the lowest responsible bidder whose bid complies with all the requirements prescribed. The award will not be made until all necessary investigations have been made into the responsibility of the bidder to whom it is proposed to award the contract; but, in any case, the award shall be made within thirty days after the opening of the bids. The right is reserved to limit the work awarded one bidder to the amount that he/she is considered capable of handling, taking into account both his/her capacity to perform work and contracts in force. The successful bidder will be notified by letter, mailed to the address shown on his/her bid, that his/her bid has been accepted and that he/she has been awarded the contract.

103.02 CONSIDERATION OF BIDS

- 1. Following the bid opening, the Department will compare the responsive bids. Unless otherwise defined in the bid, the comparison will be based on the summation of the quantities and the unit bid prices shown in the bid schedule. The comparison will be available to the public after one working day.
- 2. The right is reserved to reject any and all bids and to waive technical errors as may be deemed in the Department's best interest.
- 3. The Department may consider both tied and untied bids to determine the lowest responsible bidder when entire projects have been tied at the option of the bidder. When untied bids are not received on all tied projects, the Department may award the contract to a bidder submitting the lowest tied bid, regardless of whether an untied bid on a single project is lower than the tied bid. The Department will act in the best interest of the State when making this determination.
- 4. The right is reserved to require from any or all bidders on any project, including the apparent low bidder, prior to award of the Contract, all documents and information used in the preparation of their bids. Failure to furnish the documents and information shall result in a period of disqualification that is determined by the Director.

103.03 CANCELLATION OF AWARD

The Department reserves the right to cancel the award of any contract anytime before the execution of the said contract by all parties without any liability against the Department.

103.04 REQUIREMENTS WITH RESPECT TO CONTRACT BOND

The bidder to whom the Contract is awarded shall furnish within thirty days after the award a Contract bond in a sum equal to the full amount of the Contract. The Contract bond must be executed on the form furnished by the Department. Contract bonds must be executed by corporations authorized to contract as a surety in Nebraska.

103.05 EXECUTION OF CONTRACT

The Contract shall be signed by the successful bidder and returned, together with a satisfactory bond, within thirty days from the date of award. The Department will not execute a contract until satisfactory bonds, certificate of insurance, and other required documents have been received. No bid shall be considered binding upon the Department until the execution of the Contract.

103.06 FAILURE TO EXECUTE CONTRACT

- 1. A contract is not executed if the bidder:
 - a. Fails to file an acceptable contract bond within 30 days from the date of award.
 - b. Fails to complete and submit all required forms and documents within 14 days after the opening of bids.
 - c. Gives written notice expressing intent not to execute the Contract.
- 2. When a contract is not properly executed, the Department may:
 - a. Annul the award and cancel the bid with forfeiture of the proposal guaranty bid bond (forfeiture not imposed as a penalty, but in liquidation of damages sustained).
 - b. Proceed with the execution of the Contract after the 30-day period when all required documents have been correctly submitted and adjust the bidder's prequalification downward as specified in Paragraph 2. of Subsection 102.02.
 - c. Award to the lowest, succeeding, responsive bidder and recover the differences from the defaulting bidder.

103.07 SPECIAL ARRANGEMENTS

The right is reserved, unless otherwise stated in the proposal form, to consider bids and award separate contracts for each group of items as shown in the proposal form. All awards under the Standard Specifications are subject to the approval of the Department before becoming effective as contracts.

103.08 MATERIAL GUARANTY

Before any contract is awarded, the successful bidder may be requested to furnish a complete statement of the origin, composition, and manufacture of any materials to be used in the construction of the work, together with samples which may be subjected to the tests provided for in the Standard Specifications to determine their quality and fitness for the work.

CONSTRUCTION DETAILS

FUEL COST ADJUSTMENT PAYMENT (S2-1-0506)

Section 205 in the Standard Specifications and Supplemental Specifications is amended to include the following:

Payment will be made to the contractor for monthly fluctuations in the cost of diesel fuel used in performing the items of work, "Excavation", "Excavation, Borrow", "Excavation, Established Quantity", and/or "Earthwork Measured in Embankment" when the fuel cost fluctuates by more than 5% from the base price defined below. Payments may be positive, negative, or nonexistent depending on the circumstances. Payments or deductions will only be calculated on that portion of the fuel cost fluctuation that exceeds the 5% specified above.

Payments or deductions for the fuel cost adjustment will be included in the contractor's progress estimates; and the payment or deduction authorized for each estimate will be based upon the algebraic difference between the quantities for "Excavation", "Excavation, Borrow", "Excavation, Established Quantity", and/or "Earthwork Measured in Embankment" on the current estimate and the quantities shown on the previous estimate.

The fuel cost adjustment for the current estimate will be computed according to the following formula:

FCA=QFD where

- FCA = Fuel cost adjustment, in dollars;
- Q = The algebraic difference between the quantities (in cubic yards or cubic meters) for "Excavation", "Excavation, Borrow", "Excavation, Established Quantity", and/or "Earthwork Measured in Embankment" on the current estimate and the quantities shown on the previous estimate;
- F = English

The fuel use factor for diesel fuel, in gallons per cubic yard. For the items of work "Excavation", "Excavation, Borrow", and "Excavation, Established Quantity", "F" shall be equal to .20. For the item of work "Earthwork Measured in Embankment", "F" shall be equal to .27.

Metric

The fuel use factor for diesel fuel, in liters per cubic meter. For the items of work "Excavation", "Excavation, Borrow", and "Excavation, Established Quantity", "F" shall be equal to .99. For the item of work "Earthwork Measured in Embankment", "F" shall be equal to 1.32.

D = Allowable price differential.

The allowable price differential, "D", for the current estimate will be computed according to the following formula:

When the current price, P, is greater than the base price, P(b).

D = P - 1.05P(b), but not less than zero.

When the current price, P, is less than the base price, P(b).

D = P - .95P(b), but not greater than zero.

In either case, P(b) shall be the base diesel price, in dollars per gallon (liter), defined as the average of the minimum and maximum prices for No. 2 Diesel Fuel (Oklahoma) published in the first issue of "Platt's Oilgram Price Report" for the month in which bids for the work were received.

In either case, P, shall be the current diesel price, in dollars per gallon (liter), defined as the average of the minimum and maximum prices for No. 2 Diesel Fuel (Oklahoma) published in the first issue of "*Platt's Oilgram Price Report*" for the month in which the progress estimate is generated.

WATER (S2-1-0603)

Paragraph 4.a. of Subsection 205.04 in the Standard Specifications is amended to include the following:

Payment shall be made at the established contract unit price.

BORROW SITE APPROVAL (S2-1-1104)

Paragraph 7. of Subsection 205.02 in the Standard Specifications is amended to provide that all references to the details and locations of borrow and waste sites shall also include the details and locations of the haul roads.

EROSION CONTROL PLAN (S2-3-0304)

Paragraph 8. of Subsection 204.01 in the Standard Specifications is void and superseded by the following:

The Contractor must submit an Erosion Control Plan prior to the start of any work. The Contractor shall not begin work until the Erosion Control Plan has been approved by the Engineer and appropriate erosion control measures are in place. Payment for work done shall be withheld until in the opinion of the Engineer adequate erosion control measures are in place.

Neither the approval of the Erosion Control Plan, nor the approval to increase the maximum surface area, nor any payment for, or acceptance of any or all of the work shall operate as a waiver of the Contractor's responsibility as prescribed in Section 204.

Subsections 204.04 and 204.05 are void and superseded by the following:

The temporary erosion control items will be measured for payment in accordance with the requirements stated elsewhere in these specifications.

REMOVE TRAFFIC SIGNAL

Section 203 in the 1997 Edition of the Standard Specifications for Highway Construction is amended to include the following:

1 ea. Remove Traffic Signal at Jct. N-31/N-64

1 ea. Remove Traffic Signal at N-31 & Douglas St.

Salvage the controllers and cabinets for the Nebraska Department of Roads. Contact Don Wood, (402) 595-2534, Ext. 237.

Salvage any emergency vehicle preempt detectors for the Elkhorn Fire Department. Contact Steven Morrisey at (402) 289-4422.

All other removed material shall become the property of the Contractor and shall be removed from the site.

REMOVE LIGHTING UNIT

When the lighting unit to be removed is no longer required as determined by the Engineer, the Contractor will disassemble the luminaire from the mast arm, the mast arm from the pole, the pole from the transformer base and the transformer base from its concrete foundation.

The Contractor will remove the concrete pole foundation, including reinforcing steel and anchor bolts, to a minimum of two feet below finish grade; backfill the excavation with clean soil and compact the soil to the density requirements of the project. The Contractor may, at his option, remove the foundation as an entire unit. Abandon existing unused conduit and cable in place.

Prior to their removal, the Engineer or his representative shall inspect all lighting units to determine which units will be salvaged for State stock and which will be given to the Contractor.

All components of the existing lighting units, with the exception of the luminaires, will be salvaged for State stock if not damaged and in good condition. The luminaire and all damaged components will become the property of the Contractor and must be removed from the project. The project manager or his representative will determine which components will be salvaged. The salvaged components will be taken to the NDOR supply yard at 5001 South 14th Street, Lincoln, Nebraska. Contact the Stock Control Manager at (402) 479-4322 two days prior to delivery.

All components to be salvaged shall be carefully disassembled and cleaned. Poles shall be free of internal wiring, have their hand hole cover and pole cap in place and mast arm bolts attached. Transformer bases shall have their covers in place and all associated bolts, nuts, and washers attached.

All items being delivered to the State yard for insertion into State stock must be accompanied by the properly completed Department of Roads' Form 147 "Stock Return for Credit." This form will be filled out and signed by the project manager and must be presented to the yard foreman at the time the materials are delivered. The Contractor will not be allowed to "offload" any material if all of the above requirements are not complied with.

Any material "offloaded" by the Contractor without first contacting the yard foreman and presenting her/him with a properly executed Form DR 147, shall be considered as material not having been received and the monetary worth of the item(s) will be assessed the Contractor. Charges to the Contractor will be based upon the used price of like item(s) as listed in the latest edition of the Logistic Division's "Stock Status Report."

It shall be the Contractor's responsibility to protect the salvaged material from damage during removal and delivery to the State yard in Lincoln. The Contractor will place the items in the yard at the locations designated by the yard foreman.

Method of Measurement and Basis for Payment

The item "Remove Lighting Unit" will be measured and paid for as a complete unit for each lighting unit removed, accepted by the Engineer and delivered to stock in Lincoln. This work shall include, but not be limited to, the following: Removing, salvaging, preparing, storing, and delivering the existing lighting units; removing existing concrete foundations; all necessary excavation, backfilling, and disposal of surplus material; for the termination and abandonment of existing underground feeders and for all materials, labor, equipment, tools and incidentals necessary to complete the work.

SUBGRADE PREPARATION (S3-1-0801)

Paragraph 2.a. of Subsection 302.03 in the Standard Specifications is amended to include that trimming on narrow, irregular or roadway grading of 1/2 mile (0.8 km) or less may be accomplished using conventional methods.

BITUMINOUS FOUNDATION COURSE

Paragraph 2.b. of Subsection 307.02 in the Standard Specifications is void and superseded by the following:

2.b. All salvaged bituminous material must be less than 3 inches (75 mm) in maximum dimension and shall not contain more than 5 percent by weight of material retained on a 2-inch (50 mm) sieve just prior to its use.

(1) Contractor Production

- (i) All salvaged bituminous material produced by the Contractor from pavement removal or by cold milling material from the existing pavement structure 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.
- (ii) 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.
- (iii) On projects that allow multiple foundation course materials to be used, the Engineer may direct that the remaining salvaged bituminous material continue to be placed for bituminous foundation course to the extent this material is available and can be utilized on the project.
- (iv) Unless otherwise shown in the plans or special provisions, all Contractor produced salvaged bituminous material including oversized remaining at the end of the bituminous foundation course operation shall become the property of the Contractor and removed from the project.

(2) State Provided Stockpiles

- (i) If the salvaged bituminous material is to be obtained from existing stockpiles described in the special provisions or the plans, 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 State.
- (ii) If, after screening, there is insufficient material to produce the plan quantity, the Engineer may order the oversized bituminous material to be further processed prior to the delivery to the roadway. Processing shall mean crushing, pulverizing, re-screening, or a combination of these methods.

Method of Measurement

Subsection 307.04 is amended to include the following:

- 4.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.

Basis of Payment

Paragraph 6. of Subsection 307.05 is void and superseded by the following:

- 6. Screening of salvaged bituminous material shall be considered subsidiary to the bituminous foundation course item.
- 7. Processing of salvaged bituminous material, ordered by the Engineer, which contains excessive oversize material due to the Contractors production methods, shall be considered subsidiary to the bituminous foundation course item.
- 8. 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".
- 9. Payment is full compensation for all work prescribed in this Section.

CRUSHED ROCK EMBEDMENT

This work shall consist of spreading a 2 inch layer of crushed rock for surfacing over the surface of the roadbed as shown in the plans, scarifying to uniformly blend the crushed rock into the upper four inches of the subgrade soil and compacting the area with a sheepsfoot roller until firm and stable as determined by the Engineer.

Water shall be added as necessary to facilitate compaction.

Crushed rock for embedment shall conform to the requirements of Crushed Rock for Surfacing in Paragraph 7. of Subsection 1033.02 in the 1997 English Edition of the Standard Specifications.

After the crushed rock embedment is completed the Contractor shall place and spread approximately 1 inch of crushed rock on the roadway. Additional crushed rock shall be placed and spread during the life of the project if requested by the Engineer.

Water will not be measured and paid for but shall be considered subsidiary to the Crushed Rock Embedment.

Crushed Rock embedment shall be measured by the Station, measured horizontally along the project centerline, of completed and accepted work.

The work of scarifying and compacting the roadbed, measured as provided herein, will be paid for at the contract unit price per Station for the item "Crushed Rock Embedment." This price shall be full compensation for scarifying, smoothing, and compacting the subgrade and for all labor, equipment, tools, and incidentals necessary to complete the work.

Crushed rock used in the work will be measured and paid for in accordance with Section 310 in the 1997 English Edition of the Standard Specifications.

FOUNDATION COURSE 4"

The Contractor shall have the option of using either Aggregate Foundation Course-D, Crushed Concrete Foundation Course or Bituminous Foundation Course; and the Contractor shall bid the pay item "Foundation Course 4"" 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.

Regardless of the type of material used it shall be measured and paid for as Foundation Course 4".

Amend Subsection 307.05 of the 1997 English Edition of the Standard Specifications to include the following:

1. Pay Item	Pay Unit
Foundation Course	Square Yard

AGGREGATE FOUNDATION COURSE-D

Amend Section 307 of the 1997 English Edition of the Standard Specifications to include Aggregate Foundation Course-D:

- 1. Material Requirements
 - a. Foundation Course-D shall consist of mineral aggregate.
 - b. Aggregate shall conform to the quality requirements of Subsection 1033.02, Paragraphs 1., 2., and 9.
 - c. At least 14 days before beginning foundation course production, the Contractor shall submit a proposed mix design along with a 90 pound sample of each aggregate to the NDR Materials and Research laboratory for approval. The mix design will:
 - (1) Result in an aggregate mix that meets the gradation requirements of Table 1.
 - (2) Propose single defined values for the percentage passing each sieve on the gradations of Table 1.
 - (3) Include the average aggregate(s) gradations used to calculate the mix design.

- (4) Create a fine aggregate angularity value of 43.0 or greater according to AASHTO T 304 Method A.
- d. The NDR Materials and Research laboratory will determine the specific moisturedensity values for the proposed foundation course design.

Table 1

	1 4 5 1 1					
Aggregate Foundation Course-D Gradation Requirements						
Sieve Size	Target Value (Percent Passing)	Tolerance				
1/2 inch	100	0				
3/8 inch	100	-4				
No. 4	93	±4				
No. 10	55	±10				
No. 30	25	±5				
No. 40	20	±4				
No. 200	3	±3				

Construction Methods

- a. The Contractor shall place, compact and profile the foundation course as shown in the plans.
- b. The foundation course shall be spread in a uniform layer and compacted to at least 100 percent of the maximum density as determined by NDR T 99.
- c. After compaction the foundation course shall be trimmed such that the thickness will not vary from the plan thickness by more than 1/2 inch.

CRUSHED CONCRETE FOUNDATION COURSE

Paragraph 3.d.of Subsection 307.02 of the 1997 English Edition of the Standard Specifications is void and superseded by the following:

The crushed concrete gradation shall be determined as prescribed in NDR T 27 (washed test). The gradation requirement for the crushed concrete foundation course is shown below.

Crushed Concrete Foundation Course Gradation Requirements							
Sieve Size	Target Value (Percent Passing)	Tolerance					
1-1/4 inch	100	0					
1 inch	95	±5					
3/4 inch	75	±12					
No. 4	30	±12					
No. 10	16	±11					
No. 40	9	±5					
No. 200	3	±3					

PREFORMED PAVEMENT MARKING TAPE, TYPE 4 IN GROOVED PAVEMENT (S4-6-0801)

Paragraph 6. a. of Subsection 424.03 in the Supplemental Specifications is void and superseded by the following:

a. The permanent preformed pavement marking, Type 4 dashed lines on this project, shall be applied to the pavement in Contractor installed grooves.

TEMPORARY TRAFFIC CONTROL DEVICES (\$4-9-0104)

Subsection 422.01 in the Standard Specifications and Supplemental Specifications is amended to include the following:

Temporary signs shall not be in place longer than 3 days. Any sign that is to be in place longer than 3 days shall be post mounted.

All stub steel posts used for temporary traffic control devices shall be removed immediately by the Contractor when a sign is no longer required at that location.

Paragraphs 2.a. of Subsection 422.05 in the Standard Specifications is void and superseded by the following:

2.a. If signs are not returned or are returned damaged, and the damage is beyond reasonable "wear and tear" and the damage was caused by the Contractor, then the Contractor shall be charged the value of the missing or damaged items. These charges shall be deducted from monies due the Contractor upon final payment.

TYPE B HIGH INTENSITY WARNING LIGHTS (\$4-9-1002)

All references in the plans to Type B High Intensity Warning Lights shall be considered void. The plans will not be revised to reflect this change.

TEMPORARY TRAFFIC CONTROL DEVICES (Temporary Signs) (S4-9-0405)

The specification pertaining to temporary signs identified in the Supplemental Specifications as the addition of Paragraph 1.h. to Subsection 422.03 is re-labeled as Paragraph 1.i. of Subsection 422.03.

TEMPORARY TRAFFIC CONTROL DEVICES (Type II Barricades, Reflectorized Drums, 42" (1070 mm) Reflective Cones, and Vertical Panels) (S4-9-0405)

Paragraph 2.b. of Subsection 422.04 of the Standard and Supplemental Specifications is void and superseded by the following:

- b.(i) Type II Barricades, Reflectorized Drums, and 42" (1070 mm) Reflective Cones shall be counted as "Barricades, Type II" and measured for payment by the number of calendar days each is in place and positioned as shown in the plans or as directed by the Engineer.
 - (ii) Vertical Panels shall be measured for payment as permanent "Sign Days" (by the each) by the number of calendar days each vertical panel unit is in place and positioned as shown in the plans or as directed by the Engineer.

Paragraph 2.c. of Subsection 422.04 of the Standard Specifications (as amended in the Supplemental Specifications) is further amended to include Reflectorized Drums.

Paragraphs 3. and 4. of Subsection 422.05 of the Standard and Supplemental Specifications are void and superseded by the following:

- 3. a. The pay item "Barricade, Type II" is used to pay for three items ("Barricades, Type II", "42" (1070 mm) Reflectorized Cones", and "Reflectorized Drums").
 - b. "Barricades, Type II", which includes "42" (1070 mm) Reflectorized Cones", and "Reflectorized Drums", is paid for as an "established" contract unit price item. The established unit price is identified on the "Schedule of Items" shown in the Proposal.
- 4. Payment for vertical panels includes all posts, brackets, or hardware necessary to install and maintain the vertical panel units.

CONTRACTOR FURNISHED SIGNS (S4-11-0303)

"Contractor Furnished Sign Day" shall consist of approved retroreflective fluorescent orange or white signs mounted on NCHRP-350 approved traffic control devices, i.e. Type III Barricades or Plastic Drums. The Contractor furnished sign, mounted on a traffic control device, shall together be NCHRP-350 Test Level 3 approved. The signs shall be of the size and shape required by the plans. The color and design of the signs shall be as required by the MUTCD and the NDR Traffic Engineering Division. Sign legends and symbols shall be of professional quality workmanship and in uniformity with the Standard Highway Signs design guide. Contractor furnished Signs shall meet the requirements of the American Traffic Safety Services Association (ATSSA), "Quality Standard for Work Zone Traffic Control Devices", hand printing or poor workmanship shall not be allowed.

Rigid sign substrates that have been approved to NCHRP 350 (TL-3) mounted on a traffic control device may be used.

Retroreflective orange fluorescent sheeting used for Contractor Furnished Signs shall be 3M diamond grade, Avery Dennison 6500 sheeting or other approved equal material.

Subsection 422.03 is amended by adding Paragraph 1.h.

Contractor Furnished Signs shall be installed as shown in the plans, or as directed by the Engineer. Contractor Furnished Signs shall be installed as prescribed in the MUTCD.

Paragraph 1.a. of Subsection 422.04 is void and superseded by the following:

1.a. Sign days of permanent, temporary and Contractor furnished signs installed in accordance with the plans, or as directed by the Engineer, will be measured and paid for by the each.

Paragraph 1. of Subsection 422.05 is amended to include the following:

Pay Item Pay Unit
Contractor Furnished Sign Day Each (ea)

TRAFFIC CONTROL MANAGEMENT

Description and General Requirements

Paragraph 1. of Subsection 422.01 of the Specifications is void and superseded by the following:

This work consists of furnishing, installing at the locations shown on the plans, operating, maintaining, and when work is complete, removing the temporary traffic control devices described in this Section. This work shall also consist of providing Traffic Control Management by furnishing one or more qualified individuals who shall be specifically responsible for performing or supervising the installation, inspection, maintenance, and removal of those devices.

- When project conditions warrant, the Engineer may suspend the need for Traffic Control Management and will notify the Contractor accordingly. The Contractor shall be given at least three days' notice of the suspension, but the work may be suspended in a lesser time if mutually acceptable to the Department and the Contractor. During periods when no payment is being made for Traffic Control Management under this Special Provision, this provision will not apply.
- 3. Traffic Control Management shall be utilized from September 25, 2006, to December 2, 2006, from April 2, 2007, to December 1, 2007, and from March 31, 2008, to July 19, 2008, or as otherwise directed by the Engineer.

Paragraphs 2.i., 2.j.(2)(ii), and 2.k. of Subsection 422.01 of the Specifications are void; and Paragraph 2. of Subsection 422.01 of the Specifications and Supplemental Specifications is amended to include the following:

- p.(1) The Contractor shall designate an individual, other than the Project Superintendent, to be the Traffic Control Manager for the project. This person shall be certified as a Traffic Control Supervisor or Traffic Control Technician by the American Traffic Safety Services Association (ATSSA). Other certifications may be accepted if approved by the Engineer. The Traffic Control Manager shall also possess a current Flagger Certification Card. Copies of the Traffic Control Manager's certifications shall be provided to the Engineer prior to the installation of any traffic control devices on the project.
 - (2) The Contractor may also designate one or more Assistant Traffic Control Managers for the project. These individuals shall possess a valid Flagger Certification Card and be qualified by certification as a Traffic Control Technician by the American Traffic Safety Services Association (ATSSA) or by certification according to the Department's certification program for Assistant Traffic Control Managers.
 - (3) In order to be qualified according to the Department's Certification Program, the prospective assistant traffic control manager must:
 - i. View the 47-minute video "Training and Certification of Assistant Traffic Control Managers."
 - ii. Correctly answer 80 percent of the questions on an examination that accompanies the video.
 - (4) Upon satisfactory completion of the training and examination procedure, the prospective assistant traffic control manager shall be issued an Assistant Traffic Control Manager Certification Card by the examining contractor. The assistant traffic control manager's name, social security number, and test score shall be reported to the Construction Engineer on DR Form 90a, "Certification Report for Assistant Traffic Control managers."
 - (5) The video examination forms, Assistant Traffic Control Manager Cards, and Certification Reports for Assistant Traffic Control Managers shall be furnished by the Department.
- q. The Traffic Control Manager or Assistant Traffic Control Manager shall be available and reasonably accessible (within 30 minutes) to the project during

normal working hours on every day that work is being performed on the project and always on call at other times. During other than normal working hours, these individuals shall respond and be on the project within 60 minutes of notice being given that traffic control items on the project are in need of attention. The Contractor may elect to have an employee or employees perform this function simultaneously on more than one project, but shall not be relieved from the sanctions or disincentives that may be imposed for failure to meet the deadlines specified herein.

- r. The Traffic Control Manager's or Assistant Traffic Control Manager's activities on the project shall be dedicated to the purpose of monitoring and maintaining the traffic control devices. The performance of other crafts or trades will be permitted, but shall be secondary to the performance of duties associated with traffic control.
- s. The Contractor shall provide prior to the installation of any traffic control devices on the project two to four telephone numbers where the Traffic Control Manager or an Assistant Traffic Control Manager may be reached 24 hours a day, seven days a week.
- t. The Traffic Control Manager or Assistant Traffic Control Manager shall have available at all times an approved, current version of the Traffic Control Plan.
- u. If corrective action is not taken by the Contractor within the times specified in Paragraph 2.q., the Engineer may suspend all work on the project until the problem is corrected. The Engineer shall make reasonable allowance for existing weather conditions in the case of materials whose installation is governed by temperature or other atmospheric conditions.

Construction Methods

Subsection 422.03 of the Standard Specifications is amended to include the following:

- 19. The Traffic Control Manager's or Assistant Traffic Control Manager's duties shall include:
 - a. Insuring that all traffic control devices are functioning properly, are clean, and are correctly located as shown on the Traffic Control Plan or as directed by the Engineer. This provision in no way restricts the cleaning, repair, and maintenance of traffic control devices to the Traffic Control Manager or his or her assistants.
 - b. Inspecting all traffic control devices on every calendar day that traffic control devices are in place, whether in use or covered. Inspections shall take place a minimum of twice daily, and at least two inspections shall be eight hours apart. However, during or following periods of inclement weather or when the situation warrants for other reasons, inspections shall be done more frequently. At least one inspection each week shall occur during hours of darkness. The Traffic Control Manager or Assistant Traffic Control Manager shall perform the inspections.
 - c. Monitoring the cleaning and maintenance of all traffic control devices and the placement of temporary pavement markings.

- d. Completing a Traffic Control Inspection form provided by the Engineer at the completion of each inspection. These forms shall be submitted daily to the Engineer, either in person or via facsimile transmission.
- e. Monitoring flagging operations on the project. The Traffic Control Manager or Assistant Traffic Control Manager shall not act as a flagger, except in an emergency or when providing relief for short periods of time.
- f. Coordinating all traffic control operations, including those of subcontractors and suppliers.
- g. Coordinating traffic-related activities with the appropriate law enforcement, fire, and emergency medical agencies.
- h. Attending all project scheduling meetings.

Method of Measurement

Subsection 422.04 of the Standard Specifications and Supplemental Specifications is amended to include the following:

- 21.(1) Traffic Control Management is measured by the day for the actual number of days management and inspection are required and provided. Payment will only be made for one day of Traffic Control Management during each midnight-to-midnight period regardless of the number of Traffic Control Managers or assistants required to adequately perform the work.
 - (2) No measurement will be made when the Engineer has suspended the need for Traffic Control Management and notified the Contractor accordingly.

Basis of Payment

Paragraph 1. of Subsection 422.05 of the Standard Specifications and Supplemental Specifications is amended to include the following:

Traffic Control Management

Day (d)

Paragraph 15. of Subsection 422.05 of the Supplemental Specifications is renumbered to be Paragraph 16. Subsection 422.05 of the Standard Specifications and Supplemental Specifications is amended to include the following:

- 15. With regard to inspection, maintenance, and repair of temporary traffic control devices, an assessment in the amount of \$500 per occurrence per day shall be charged to the Contractor when any of the following occur (these assessments shall be in addition to any other liquidated damages which may be assessed):
 - a. The Contractor fails to respond within the timeframe specified in Paragraph 2.q. of the amended Subsection 422.01 of the Standard Specifications. Response time shall begin when:
 - 1) The Engineer notifies the Contractor of deficiencies in person;
 - 2) The Engineer makes notification of deficiencies via the 24-hour phone number(s) provided by the Contractor; or
 - 3) The Engineer leaves a message or receives no answer at the number(s) provided;
 - b. The Contractor fails to begin corrective actions to repair, replace, remove, relocate, or clean any traffic control devices or pavement markings within two hours of the completion of an inspection that uncovers deficiencies or within two hours of notification of deficiencies by the Engineer.
 - c. The Contractor fails to begin corrective actions to repair, replace, remove, relocate, or clean any traffic control devices or pavement markings within two hours of documented notification by an official law enforcement agency.
 - d. The Contractor fails to make or report the inspections prescribed in this specification.
 - e. The Engineer observes and documents any occurrence of the Contractor or his or her subcontractors flagrantly disregarding the necessary maintenance of traffic control devices that are in obvious need of attention.

TEMPORARY PAVEMENT MARKING (S4-16-0505)

Paragraph 6. of Subsection 422.03 in the Standard Specifications and Supplemental Specifications is amended to include the following:

This work shall consist of installing and removing reflectorized temporary pavement lines of the color, width, and line configuration shown in the plans or as designated by the Engineer.

Temporary paint markings will be used on this project. The use of Type I tape will not be permitted and Type II tape may be used for short durations only, as directed by the Engineer. Temporary paint stripes shall be a minimum 4" (100 mm) wide, 10' (3 m) long with a 30-foot (9 m) gap or a minimum 4" (100 mm) wide solid line as shown on the plans.

Temporary pavement marking which is no longer applicable shall be removed as directed by the Engineer.

Section 1069 in the Standard Specifications is amended to include the following:

1. Prior to the initial placement of the markings, temporary paint, or Type II tape the pavement upon which the markings are to be placed shall be dry, cleaned and properly prepared by sand or shot blasting, as a minimum, and to the extent recommended by the manufacturer so that all contaminants, loose debris, and other foreign material are completely removed. Surface preparation for any subsequent application shall consist of air blasting and brushing the roadway surface to remove all loose dirt, mud or other debris and to dry the surface. Each additional application of paint shall be applied over the previously painted stripes.

Prior to placing the temporary pavement markings on the prepared surface, the Contractor shall layout, spot or string line the proposed temporary marking location. The temporary markings shall be aligned in such a way as to provide a smooth and gradual transition to and from the existing markings, and throughout both straight and horizontally curved sections of the project.

2. The material used for temporary paint marking shall be a commercially available alkyd resin Type II traffic paint that dries to no pickup in 4 minutes and shall be applied with a minimum of 6 pounds (0.7 kg) of glass beads per gallon (liter). The paint shall be applied at a minimum width of 4 inches (100 mm) and a wet thickness of approximately 15 mils (380 μm) {approximately 16.5 gallons (39 liters) of paint per mile (kilometer) of solid line}. The equipment used to paint the line shall be a machine designed for the purpose of applying long line traffic lane markings of the type, width and thickness required, and shall be self-propelled or truck mounted and be equipped with an adjustable guide-on to assure proper placement of the line. Hand application, walk behind equipment or towing of the equipment will not be allowed.

Temporary paint lines shall be used on new or existing concrete pavement and asphaltic concrete pavement.

Any temporary painted line or segment of line, placed before December 1, which fails to adhere to the roadway surface for a minimum of 60 days under normal vehicular traffic or which appears wavy, nonuniform, thin, poorly applied, misaligned, beadless or nonreflective, shall be replaced as directed by the Engineer. For temporary painted pavement markings placed between December 1 and March 15, the minimum time requirement shall be 15 days with the same conditions applicable. No direct payment will be made for replacement within the 60 day or 15 day warranty periods.

After the minimum 60 day or 15 day warranty periods, the Contractor may be required to repaint the temporary traffic markings, as directed by the Engineer. Direct payment will be made for each additional application. However, should the additional application fail within the 60 day or 15 day warranty periods, the provisions as stated in the previous paragraph shall apply.

The Contractor must begin each additional repainting application within 72 hours after notification by the Engineer. Should the Contractor fail to begin repainting within this 72 hour period, the Engineer may use State forces or hire a private contractor to repaint the temporary traffic markings. The Contractor will be assessed any costs above the contract unit price "Temporary Pavement Marking, Type Paint" incurred by the State as a result of performing the corrective action by others, and the project will be shut down until the painting is completed.

When painting is required with air temperatures between 38° F (3° C) and 50° F (10° C), the paint shall be heated according to the manufacturer's recommendation prior to application on the dry, clean and properly prepared pavement. Any paint application made when the air temperature is below 38° F (3° C) will be paid for by the State, even if the application falls within either the 60 day or 15 day warranty periods previously described.

- 3. Temporary pavement marking tape Type II shall be a mixture of high quality polymeric materials and pigments, with glass beads throughout the pigmented portion of the film, and a reflective layer of high index of refraction glass beads bonded to the top surface. The film shall be precoated with a pressure-sensitive adhesive. Unless otherwise specified, the temporary pavement marking shall be 4 inches (100 mm) wide and the reflectorizing glass beads shall be incorporated to facilitate removal of the tape easily from asphalt and Portland cement concrete surfaces intact or in large pieces, at temperatures above 40° F (4° C), either manually or with a recommended roll up device. Removal shall be accomplished without the use of heat, solvents, grinding, or sandblasting.
- 4. The use of paint, as provided above, shall be paid at the contract unit price per linear foot (meter) for the item "Temporary Pavement Marking, Type Paint".
- 5. Temporary pavement marking tape Type II shall be paid at the contract unit price per linear foot (meter) for the item "Temporary Pavement Marking, Type II".
- 6. The removal of temporary paint pavement marking, as directed by the Engineer, shall be paid at the contract unit price per linear foot (meter) for the item "Pavement Marking Removal".
- 7. Initial surface preparation requiring sand or shot blasting shall be paid at the contract unit price per linear foot (meter) for the item "Temporary Pavement Marking, Surface Preparation". Surface preparation for repainting, consisting of air blasting and brushing, shall be subsidiary to other items for which payment is made.

TEMPORARY TRAFFIC SIGNAL

Section 422 in the 1997 English Edition of the Standard Specifications for Highway Construction is amended to include the following:

- 1 ea. Temporary Traffic Signal at Jct. N-31/N-64
- 1 ea. Temporary Traffic Signal at N-31 & Douglas St.
- 1 ea. Temporary Traffic Signal at N-31 & Hopper St.

The Contractor shall contact Steve Meisenbach, Omaha Public Power District, at (402) 552-5836, to request electric power service for the temporary signals.

The Contractor shall furnish, construct, maintain and remove the temporary traffic signal as directed by the project manager. The Contractor shall furnish all equipment and material except the traffic signal controllers, and the video detection cameras. All equipment and material furnished by the Contractor shall remain the Contractor's property.

The Nebraska Department of Roads shall supply 170 style traffic signal controllers and the video detection cameras. These items shall be available to the Contractor at the Department of Roads maintenance yard in Omaha. Contact Don Wood, (402) 595-2534, ext. 237, to arrange pickup and delivery of these items.

The Contractor shall install the video cameras at the locations shown on the plan. The cameras shall be mounted 35 to 40 feet above the roadway. The Contractor shall furnish and install the power cable, control cable, and coax cable from the controller cabinet to each camera. the Department of Roads Traffic Engineering Division will assist the Contractor with the cabinet connections and aiming the cameras. Contact Kent Wohlers at (402) 479-4594.

Wire the signal heads so that the heads for each approach can be operated independently. A minimum of two signal heads are required for each approach. The signal heads for each approach shall have a minimum horizontal separation of 10 feet as viewed by the driver. When two signal heads are placed on an approach with only one through lane the heads shall be evenly spaced over the through lane. The Contractor shall realign the signal heads as required for each phase of the project as directed by the project manager.

All traffic signal lamps shall be LED. Only traffic signal lamps listed on the NDOR Approved Products List for use on span wire supported signals shall be used.

The Contractor shall maintain each temporary signal for the duration of its use at no additional cost to the State. The State of Nebraska will maintain the controllers. The Contractor shall assist with the maintenance of the cameras by providing labor and equipment when requested by the project manager.

TEMPORARY LIGHTING SYSTEMS

There will be three temporary lighting systems installed under this contract. One system will be located at the N-31/Douglas Street intersection, one will be located at the N-31/Hopper Street intersection, and the third at the N-31/N-64 intersection.

Temporary Lighting System at N-31/Douglas Street

The lighting contractor shall mount a state furnished 400 watt HPS "offset" type luminaire with photo control on each of the two wood poles being used for temporary span wire traffic signals at this intersection. The state furnished luminaires are each fitted with a knuckle slipfitter for use with standard 2 inch pipe (2 3/8" diameter tenon). The Contractor shall furnish and install a single arm, "bullhorn" style, 2" diameter pipe bracket within a foot of the top of each pole on which to mount the luminaire. Use aerial cable to electrically connect the two luminaires.

Temporary Lighting System at N-31/Hopper Street

The lighting contractor shall mount a state furnished 400 watt HPS "offset" type luminaire with photo control on each of the two wood poles being used for temporary span wire traffic signals at this intersection. The state furnished luminaires are each fitted with a knuckle slipfitter for use with standard 2 inch pipe (2 3/8"diameter tenon). The Contractor shall furnish and install a single arm, "bullhorn" style 2" diameter pipe bracket within a foot of the top of each pole on which to mount the luminaires. Use aerial cable to electrically connect the two luminaires.

Temporary Lighting System at Junction N-31/N-64

The lighting contractor shall mount a state furnished 400 watt HPS "offset" style luminaire with photo control on each of the four wood poles being used for temporary traffic signals at this intersection. The state furnished luminaires are each fitted with a knuckle slipfitter for use with standard 2 inch pipe (2 3/8" tenon). The Contractor shall furnish and install a single arm, "bullhorn" style, 2 inch diameter pipe bracket near the top of each of the four wood poles to mount the luminaire. Use aerial cable to electrically connect the four luminaires.

Other than the eight wood poles and the eight "offset" luminaires, the Contractor shall provide all materials required for a complete and working system and shall install all materials in accordance with project specifications and applicable NEC regulations.

The Contractor shall arrange with the project manager to obtain the state furnished materials at the Nebraska Department of Roads' Supply Yard at 5001 South 14th Street, Lincoln, Nebraska. Contact Dan Van Slyke at (402) 479-4322 two days prior to pickup. The Contractor will be responsible for transporting material from the yard to the job site. The project manager will supply the Contractor with a completed Stock Requisition Form DR 146. The Contractor will not be allowed to withdraw material from stock without a properly executed copy of this form. Use activity No. 6242, AFE Z301.

The Contractor shall be responsible for providing and paying for the electrical power for the lighting system. The source of the power may be an electric utility servicing the area, if such a source is available; or, it may be an engine-generator set furnished, operating and maintained by the Contractor. The power source must be a dependable, well-regulated source of 240 volt – 60 HZ AC power adequate for the requirements of the safety lighting system.

At the completion of construction when the temporary lighting system is no longer needed as determined by the Engineer, the lighting system shall be removed by the Contractor. The luminaires, and "bullhorn" mounting brackets shall be removed as individual components, and delivered to the Department of Roads' Supply Yard at 5001 South 14th Street, Lincoln, Nebraska. The aerial cable will become the property of the Contractor and shall be removed from the project.

All items must be accounted for and returned in good working condition. The Contractor must replace missing or damaged components before final payment can be made.

All items being delivered to the State yard for insertion into State stock must be accompanied by a properly completed Department of Roads' Form 147 "Stock Return for Credit." This form will be signed by the project manager and must be presented to the yard foreman at the time the materials are delivered. The Contractor will not be allowed to "offload" any material if all of the above requirements are not complied with.

Abandon existing direct buried cable in place.

Method of Measurement and Basis of Payment

A safety lighting system as described in the Plans and Special provisions, complete, in place and accepted by the Engineer, shall be measured for payment as a single unit and paid for at the contract unit price, per each, for the item "Temporary Lighting System." This price and payment shall be full compensation for installing the lighting system including luminaires, lamps, all necessary overhead wiring, all direct buried feeder cable, all materials, labor, equipment, tools; for providing electrical power for the system, for all transportation, storage, and for all

incidentals necessary to complete the work. Payment shall be made in accordance with the following schedule: Two-thirds (2/3) of the contract unit price to be paid when the system is installed, in place and approved by the Engineer; one-third (1/3) of the contract unit price to be paid when the system is removed and delivered to the Department of Roads as specified.

OPERATION AND MAINTENANCE OF TEMPORARY LIGHTING SYSTEM

There are three temporary lighting systems on this project. The Contractor will be responsible for the proper operation and maintenance of each. The lighting units of each system shall operate from dusk to dawn for as long as the lighting system is needed as determined by the Engineer.

Any malfunction of the temporary lighting system shall be promptly corrected. The State will have additional luminaires available in stock for replacement in the event they are needed. It will be the Contractor's responsibility to pick up any needed parts from the supply yard in Lincoln and to protect these items from damage during transportation and installation.

The Contractor will be responsible for the electrical energy required for the operation of the lights of the temporary lighting systems.

Method of Measurement and Basis of Payment

Operation and maintenance of all temporary lighting systems on the project shall be measured for payment by the number of calendar days the lighting system is in operation. Payment shall be made at the contract unit price, per day, for the item "Operation and Maintenance of Temporary Lighting System, ***." This price and payment shall be full compensation for all electrical energy used, for all repairs, replacements, rentals, fees, fuel, labor, equipment, tools, transportation and incidentals related to the proper operation and maintenance of the temporary lighting systems as set out in the plans and specifications.

SECONDARY ELECTRICAL CONNECTIONS

Paragraph 1 of Subsection 401.06 in the 1997 Edition of the Standard Specifications for Highway Construction is void and superseded by the following:

1.a. Roadway and Sign Lighting Systems:

Cable connections shall only be made in pull boxes, pole bases, luminaries, and junction boxes. Connections will not be allowed in earth or conduit. All connections shall be made in accordance with the cable manufacturer's recommendations and the National Electric Code. Submersible, secondary, mechanical connectors meeting ANSI C119.1 are required in all pull boxes, and at other locations susceptible to moisture.

1.b. Traffic Signal Systems:

(1) Traffic signal cable and detector lead-in cable shall not be broken and spliced between the controller cabinet and the cables final destination without the approval of the Nebraska Department of Roads Traffic Engineering Division. Approved splices shall only be made in cabinets, pull boxes, junction boxes, pole bases, and signal heads. Splices will not be allowed in earth, conduit, or exposed aerially.

- (2) Conductors to be spliced shall be twisted together to form a mechanically and electrically secure connection, secured with a wire nut or solder, and waterproofed. The waterproofing shall extend a minimum of 1 inch over the conductor insulation. Splices in cabinets shall not be waterproofed. Waterproofing shall be accomplished with one of the following methods:
 - (a) Self-vulcanizing rubber electrical tape wrapped through the crotch of the splice, then half-lapped over the entire splice. Cover the rubber tape with a half-lapped layer of plastic electrical tape.
 - (b) Direct Bury Splice Kits as shown on the NDR Approved Products List.
- (3) Finished splices shall be positioned upright and shall not be left laying in the bottom of pull boxes, pole bases, or cabinets. The splice shall be within 6 inches of pull box lids and above hand holes in the poles.
- (4) Ends of spare conductors shall be sealed with flexible electrical coating compound.

FURNISH AND INSTALL NEW LUMINAIRE

Existing lighting units EP-1 and EP-30 thru EP-32 will be used in place but the old style drop lens cobra head luminaire on each unit will be replaced with a new flat lens cobra head luminaire meeting project specifications.

The item "Luminaire, Type HPS ***" will be measured and paid for as a complete unit, in place and accepted by the Engineer. The contract unit price shall be full compensation for removing the existing luminaire from the pole; for removing the luminaire from the project; for furnishing and installing a new HPS cobra head luminaire of the size and type required; for making all required electrical connections and for all labor, equipment, tools, materials and incidentals necessary to complete the work.

RELOCATE EXISTING LIGHTING UNIT

The Contractor shall relocate existing lighting units EP-16 thru EP-25 and EP-33 thru EP-39 as indicated in the plans. The existing lighting units carry 200 watt HPS and 400 watt HPS luminaires on a 12-foot mast arm mounted 40 feet and 45 feet above the roadway, respectively. The lighting units have breakaway transformer bases and are mounted on concrete foundations.

Each lighting unit to be relocated shall be carefully dismantled, stored and protected from damage until installed at its new location. The Engineer may designate specific areas for the temporary storage of the salvaged materials. It will be the Contractor's responsibility to protect all material from damage during removal and storage.

The Contractor shall remove the existing concrete foundation, including steel and anchor bolts, to a minimum depth of two feet below finished grade, backfill the excavation with clean soil and compacted to the density requirements of the project. All debris resulting from the foundation removal shall be taken from the project. The Contractor may, at his option, remove the concrete foundation as an entire unit.

The salvaged lighting units shall be installed at their new locations and connected electrically as shown. Foundations may be either concrete or power driven.

Each relocated lighting unit will be provided with a new 200 watt HPS luminaire with lamp and new internal wiring consisting of in-line fuse holder, fuse and No. 12 AWG stranded copper wire type THW or THWN. The luminaire must meet specification requirements.

Method of Measurement and Basis of Payment

The item "Relocate Street Lighting Unit" shall be measured and paid for as a complete unit, in place and accepted by the Engineer. The contract unit price shall be full compensation for removing, salvaging, cleaning and storing of the removed lighting unit; for all necessary excavation, backfilling and disposal of surplus materials; for the disconnecting and abandonment of existing underground feeder circuits; for the installation of a new pole foundation; for the furnishing and installation of a new luminaire with lamp and for all labor, equipment, tools, materials and incidentals necessary to complete the work.

The relocation of existing lighting units EP-33 thru EP-39 will include the removal of a transformer base from each of the seven units and delivery to the State stock in Lincoln. This work will not be paid for directly but will be considered subsidiary to the item "Relocate Street Lighting Unit."

LOCAL MATERIAL SOURCES (\$5-1-0801)

Information regarding possible sources of local materials is available at the Materials and Research Division of the Department of Roads, Lincoln, Nebraska.

ASPHALTIC CONCRETE (S5-5-0801)

Paragraph 5. of Subsection 503.02 in the Standard Specifications is void.

TEMPORARY SURFACING

The work shall consist of the construction and removal of the temporary surfacing on this project in accordance with plans and these Special Provisions.

The Temporary Surfacing depth shall be as shown in the plans. This provision is applicable to all Temporary Surfacing depths shown in the plans.

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

Prepare the underlying subgrade, prior to placing the temporary surfacing, in accordance with the requirements of Section 302 in the 1997 English Edition of the Standard Specifications.

At the Contractor's option, the surfacing may be constructed using "Class BX-3000" Concrete or Asphaltic Concrete Type SP4. 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 sampled and tested as shown in the Special Provisions. The incentive, disincentive pay tables do not apply, however, any asphaltic concrete not meeting the specifications will be subject to removal.

however, any asphaltic concrete not meeting the specifications will be subject to removal.
Subsection 302.04 is amended to provide that the work of subgrade preparation, as well as all water applied as directed by the Engineer, will not be measured for payment but shall be considered subsidiary to the item "Temporary Surfacing"
Subsection 304.04 is amended to provide that the work of shoulder construction, as well as all water applied as directed by the Engineer, will not be measured for payment, but shall be considered subsidiary to the item "Temporary Surfacing"
Subsection 503.05 is amended to provide that Asphaltic Concrete and P.G. Binder used in asphaltic concrete will not be measured for payment, but shall be considered subsidiary to the item "Temporary Surfacing" Performance Graded Binder 64-22 may be used if asphaltic concrete is chosen as the temporary surfacing.
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 10. of Subsection 603.03 is amended to provide that concrete used in the 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 ______."

ADJUST FIRE HYDRANT TO GRADE

This work shall consist of adjusting the existing hydrant to the new grade.

All work shall conform to the Specifications, Codes and regulations of the utility owner The hydrant may be raised or lowered by use of extension kits, provided the minimum depth of bury is maintained. If the hydrant is lowered so that the depth of bury is less than the minimum required by the utility owner, the unit shall be adjusted by lowering the pipe and valve.

Payment will be made at the contract unit price per each for the item "Adjust Fire Hydrant to Grade." This price shall be considered full compensation for all excavation, labor, materials, backfilling, tools, tapping fees if required, and incidentals necessary to complete the work.

ADJUST VALVE BOX TO GRADE (S6-7-0801)

This work shall consist of adjusting valve boxes, (RW) roadway boxes and (c.c.) corporation cocks boxes to finish grade as shown on the plans or as directed by the engineer.

All work shall conform to the Specifications, Codes and regulations of the Utility owner.

The adjustment required may be on either water or gas lines.

Existing boxes shall be used for adjustment if not damaged. If damaged, a new box or any part of it shall be installed. Adjustment shall be made by turning the screw part in or out, or by adding or removing extension pieces. After the adjustment has been made the box shall have a straight vertical continuous barrel.

Adjusting valve boxes to grade will be measured as a single unit and payment will be made at the contract unit price per each for the item "Adjust Valve Box to Grade". This price shall be full compensation for all labor, equipment, new parts (if needed), tools and incidentals necessary to complete the work.

CONCRETE IMPRINTED SURFACING

1. Description

This work shall consist of furnishing and placing colored concrete at the locations shown in the plans, and then creating a brick pattern on the surface by use of special imprint forms. This work shall be performed in accordance with the applicable requirements of Section 607 in the 1997 English Edition of the Standard Specifications and these Special Provisions.

2. Material Requirements

The color hardener shall be an extra heavy duty product and red in color. The color hardener and color of red shall be as approved by the Engineer.

The colorwax curing and finishing compound shall conform to ASTM C 309 as a curing membrane. The Contractor shall submit six copies of the brochures of the color hardener and color of red to the Engineer for approval.

The forms to imprint the concrete shall be of a brick pattern as shown in the plans. The Contractor shall submit six copies of the brick pattern to the Engineer for approval.

3. Installation Process

The imprinted concrete surfacing shall not be done until all other items of construction in the immediate area have been completed.

The concrete mix shall be placed and screeded to the proper grade and wood floated to a uniform surface.

Expansion joints shall be placed as shown in the plans. Expansion joints shall be sealed with a sealing compound colored to match the colored concrete.

Contraction joints shall be made with a pointed trowel cutting completely through the concrete prior to imprinting. Contraction joint lines shall be neatly cut along "bond lines" of the brick pattern.

While the concrete is still in the plastic stage of set, the forming tools shall be applied to make the brick patterned surface.

Colorwax, in matching color to the color hardener, thinned in the proportions of 4 parts wax to 3 parts mineral spirits (paint thinner) shall be applied uniformly for curing with a motor driven power sprayer. The coverage shall be approximately 68 to 70 square yards per gallon of unthinned colorwax.

After the initial curing, the surface shall be polished by a fine brush.

A test sample of the brick concrete imprint pattern, including the selected color hardener, shall be prepared for approval by the Engineer prior to installation on the project.

4. Method of Measurement

Paragraph 1. of Subsection 607.04 is amended to include imprinted concrete surfacing.

5. Basis of Payment

Paragraph 1. of Subsection 607.05 is amended to include the item "Concrete Class 47B-3000 Imprinted Surfacing."

CONCRETE IMPRINTED MEDIAN SURFACING

1. Description

This work shall consist of furnishing and placing colored concrete at the locations shown in the plans, and then creating a brick pattern on the surface by use of special imprint forms. This work shall be performed in accordance with the applicable requirements of Section 607 in the 1997 English Edition of the Standard Specifications and these Special Provisions.

2. Material Requirements

The color hardener shall be an extra heavy duty product and red in color. The color hardener and color of <u>red</u> shall be as approved by the Engineer.

The colorwax curing and finishing compound shall conform to ASTM C 309 as a curing membrane. The Contractor shall submit six copies of the brochures of the color hardener and color of red to the Engineer for approval.

The forms to imprint the concrete shall be of a brick pattern. The Contractor shall submit six copies of the brick pattern to the Engineer for approval.

3. Installation Process

The imprinted concrete surfacing shall not be done until all other items of construction in the immediate area have been completed.

The concrete mix shall be placed and screeded to the proper grade and wood floated to a uniform surface.

Expansion joints shall be placed as shown in the plans. Expansion joints shall be sealed with a sealing compound colored to match the colored concrete.

Contraction joints shall be made with a pointed trowel cutting completely through the concrete prior to imprinting. Contraction joint lines shall be neatly cut along "bond lines" of the brick pattern.

While the concrete is still in the plastic stage of set, the forming tools shall be applied to make the brick patterned surface.

Colorwax, in matching color to the color hardener, thinned in the proportions of 4 parts wax to 3 parts mineral spirits (paint thinner) shall be applied uniformly for curing with a motor driven power sprayer. The coverage shall be approximately 68 to 70 square yards per gallon of unthinned colorwax.

After the initial curing, the surface shall be polished by a fine brush.

A test sample of the brick concrete imprint pattern, including the selected color hardener, shall be prepared for approval by the Engineer prior to installation on the project.

4. Method of Measurement

Paragraph 1. of Subsection 607.04 is amended to include imprinted concrete median surfacing.

5. Basis of Payment

Paragraph 1. of Subsection 607.05 is amended to include the following:

Pay Item
Concrete Class 47B-3000 Imprinted
Median Surfacing

Pay Unit Square Yards (SY)

DOWELED CONCRETE PAVEMENT (S6-20-0203)

Section 603 in the Supplemental Specifications and the Standard Specifications is amended to include Doweled Concrete Pavement.

Transverse Joints for doweled concrete pavement shall be constructed perpendicular to the roadway on 16'-6" (5 meter) centers.

The dowel bars shall meet the requirements of Section 1022.

The dowel bars shall be placed within a tolerance of 1/4 inch (6 mm) in both the horizontal and vertical planes. The Contractor shall check with a suitable template approved by the Engineer, the placement of each assembly and the position of the bars within the assembly. If the assembly is found to be placed outside any one of the tolerances, the placement shall be corrected.

Dowels for transverse joints furnished in approved assemblies shall be suitable for the joint layout shown in the plans. The assemblies shall be dipped in MC-70, RC-70, RC-250, CRS-1, CRS-2, CSS-1H, HFMS-2h, or HFMS-2s prior to delivery to the work site.

For areas with pavement widening, the Department requires that dowel baskets be placed in all contraction joints which are 6 feet (1.8 m) or wider.

When basket assemblies are used, the baskets shall be placed at all transverse joints where doweled concrete is required, and shall be securely pinned to the grade to prevent any movement during the paving operation. Pins shall be placed at a maximum distance of three feet (1 meter) apart and shall be a minimum of 12 inches (300 mm) in length. All lateral support braces, which would restrict movement of the dowel bars, shall be cut after the baskets are secured and prior to placing the concrete.

Assemblies that are damaged prior to placement shall not be used. Assemblies damaged after placement shall be replaced prior to paving.

If normal vibration is found inadequate to thoroughly consolidate the plastic concrete within and around the dowel basket assemblies, additional hand vibration or other procedures may be required by the Engineer.

Precautions shall be taken to assure that the sawed contraction joint is located directly over the center of the dowel bars.

CRACKS IN CONCRETE PAVEMENT (S6-20-0901)

Transverse cracks which form in the concrete pavement panels between load transfer joints shall be secured with a minimum of 1 1/2 inch x 18 inch (38 mm x 450 mm) epoxy coated deformed reinforcing bars as shown in the plans. The reinforcing bars shall conform to the requirements of Sections 1020 and 1021. The dowel bars shall be secured using a resin adhesive listed on NDOR approved products list. No payment will be made for this work.

SANITARY SEWER

Description

This work shall consist of excavating sewer trenches, constructing and laying sewer piping, fittings and accessories, backfilling sewer trenches to the dimensions shown on the plans and testing and cleaning of the sanitary sewer pipe. Existing sanitary sewer main operation/flow shall remain unobstructed throughout construction work.

Material Requirements

- 1. The types of sewer pipe and fittings allowed shall be designated in the bid proposal Schedule of Items.
- Sewer main and service pipe shall conform to ANSI/AWWA C900, "Polyvinyl Chloride" (PVC) Pressure Pipe, 4 inch through 12 inch. Pressure Class 150 pipe shall meet the requirements of DR 18. The bell shall consist of an integral wall section with a factory installed, solid cross section flexible elastomeric gasketed ring which conforms to the requirements of ASTM D 3139/ASTM F 477.
- 3. Fittings shall conform to ANSI/AWWA C907, "Polyvinyl Chloride" (PVC) injection-molded fittings with push-on rubber gasketed joints, 4 inch through 8 inch. Pressure Class 150 fittings shall meet the requirements of DR 18. The bell shall consist of an integral wall section with a factory installed, solid cross section flexible elastomeric gasketed ring which conforms to the requirements of ASTM D 3139/ASTM F 477.
- 4. Restraint Joint PVC pipe and coupling shall conform to ANSI/AWWA C900, "Polyvinyl Chloride" (PVC) Pressure Pipe, 4 inch through 12 inch. Pressure Class 150 pipe shall meet the requirements of DR 18. Pipe and coupling designed as an integral system using high strength flexible thermoplastic splines inserted into mating, precision machined grooved which align when the pipe is fully inserted providing full 360 degrees restraint with evenly distributed loading. Pressure Class 150 coupling twin elastomeric sealing gasket shall meet the requirements of ASTM D 3139/ASTM F 477.
- 5. Service joints/tees connected to restraint joint PVC shall be saddle type flexible couplings cast-in NDOR 47B-3500 concrete thrust restraint.
- 6. Flexible couplings shall be installed at locations indicated on the drawings.

- 7. General fill shall consist of subsoil excavated on-site. It shall be graded, free of lumps larger than 3 inches, rocks larger than 2 inches and debris conforming to ASTM D 2487 Group Symbol CL.
- 8. Granular bedding shall consist of natural washed stone; free of shale, clay, friable material and debris, graded in accordance with NDOR Specification Section 1033, Table 1033.02A, Class D.
- 9. Approved Manufacturer Products shall conform to all applicable ASTM and AWWA requirements.

Construction Methods

- 1. Trenching, Compaction and Backfilling
 - Notify Engineer of unexpected subsurface conditions and discontinue work in affected areas until notified to resume work.
 - b. The contractor shall use a shoring box for excavation of trench, stepping of backslope trench embankment will not be allowed.
 - c. Bottom width of trench shall not be less than 8 inches nor more than 12 inches on each side of pipe when measured 1 foot above top of pipe.
 - d. Hand trim excavation for accurate placement of pipe and fittings to elevations indicated. Remove loose material.
 - e. Remove large stones and other hard matter which could damage piping or impede consistent backfilling or compaction.
 - f. Remove excavated material that is unsuitable for reuse from site...
 - g. The contractor shall stockpile excavated material to be reused in area designated on site as directed by Engineer.
 - h. The contractor shall install the sanitary sewer main to the depth of bury indicated in the drawings.
 - Pace and compact embedment materials for bedding, haunching and initial backfill according to manufacturer's recommendations, drawings and ASTM D 2321.
 - j. Maintaining optimum moisture content of fill materials to attain required compaction density is responsibility at Contractor's expense.
 - k. Granular bedding and backfill shall be installed and compacted to PVC pipe springline per requirements of ASTM D 2321, Class 1A.
 - I. Backfill around sides and to top of pipe with cover fill, tamp in place and compact; then complete backfilling placed in layers approximately 6 inches thick to the finished elevations illustrated in the drawings.

- m. Backfill to contours and elevations illustrated on the drawings using non frozen materials.
- n. Compaction density with general fill unless otherwise specified or indicated, shall be 95 percent of maximum dry density.
- Compaction density testing shall be performed on compacted fill in accordance with ASTM D1556, ASTM D 2167, ASTM D 2922, ASTM D 3017 and/or NDR T 99.
- p. Compaction density testing shall be performed with the following requirements: 2 tests per 100 feet of sewer main, 1 at midpoint of excavation and 1 at finished grade or as directed by Engineer.
- q. If soil compaction tests indicate work does not meet specified requirements, remove work, replace and retest at no additional cost to the Department.
- r. Protect pipe from damage and displacement while backfilling and compacting.
- s. Remove unused stockpiled materials as directed by Engineer, leave area in clean and neat condition. Grade stockpiled area to prevent standing surface water.
- t. Refer to NDOR Specification Section 702 and drawings for additional requirements.

2. Pipe and Fitting Installation Methods

- Install pipe and appurtenances in accordance with manufacturer's recommendations and applicable AWWA standard. Begin at lowest point of section being installed. Lay bell ends pointing upstream.
- b. Deliver to trench in sound, undamaged condition using web slings, end hooks not allowed.
- c. The contractor shall inspect and sound all pipes for cracks and other defects. Replace defective, damaged or unsound pipe and appurtenances.
- d. The contractor shall clean pipe interior of foreign material before lowering into trench.
- e. The contractor shall securely close open pipe ends and fittings with watertight plugs during non-working periods including; when pipe laying is not in-progress, lunch breaks, nights and weekends.
- f. The contractor shall use methods recommended by the manufacturer when cutting pipe.
- g. The contractor shall use methods recommended by the manufacturer for joining pipe. Use minimum amount of gasket lubricant and apply to gasket only, not inside of bell. All joints shall be watertight.

- h. Pipe deflections shall only be allowed with permission of the Engineer or as illustrated in the drawings. The manufacturer's recommendations shall not be exceeded for type and size of pipe/joint installation.
- i. The contractor shall lay all pipe to the line and slope gradient established in the drawings using laser equipment.
- j. Granular bedding and backfill shall be installed and compacted to PVC pipe springline per requirements of ASTM D 2321, Class 1A.
- k. The contractor shall maintain a minimum of 10 feet horizontal separation of water mains from sewer lines. Measured from face of pipe to face of pipe.
- I. The contractor shall maintain a minimum of 18 inches vertical separation where sewer and water lines cross. Measured from face of pipe to face of pipe. Center 1 full length (approximately 20 feet) of water main pipe at sewer line crossing. Correct any misalignment and/or loosened joints of sewer line prior to backfilling. Carefully compact backfill beneath sewer line to prevent misalignment. Repair any damage to sewer line at no cost to the Department. Use Engineer approved method of repair.
- m. The contractor shall wrap ductile iron, steel pipe and fittings with polyethylene encasement per ANSI/AWWA C 105.

Directional Boring

- a. The locations of directional boring are indicated in the drawings.
- b. The contractor shall install all pipe to the line and grade established in the drawings.
- c. The contractor shall examine the project site to verify horizontal and vertical alignment, review soils report, verify depth and location of waterlines and other utilities and shall notify the Engineer immediately of any observations affecting the work.
- d. The diameter of the bore hole shall only be large enough to properly install sanitary sewer without causing excessive stress on pipe.
- e. The contractor shall not exceed maximum bending radius of pipe as recommended by restraint joint pipe manufacturer.
- f. The contractor shall plot the actual horizontal and vertical alignment of the pilot bore at intervals not to exceed 30 feet.

4. Sanitary Sewer Services

- a. The locations of sanitary sewer services are indicated in the drawings.
- b. The minimum nominal inside diameter shall be 4 inches.
- c. The sanitary sewer service material shall be PVC (C900).

- d. The sanitary sewer service shall connect to the pressure rated C900 PVC sewer main with a watertight gasketed joint tee. The tee shall be rotated 30 degrees up from horizontal.
- e. The sanitary sewer service shall connect to the restraint joint pressure rated C900 PVC sewer main with a watertight, rubber gasketed joint saddle. Solvent weld saddle to PVC main and hold in place with stainless steel straps. The saddle shall be rotated 30 degrees up from horizontal.
- f. Granular bedding and backfill shall be installed and compacted to PVC pipe springline per requirements of ASTM D 2321, Class 1A.
- g. The contractor shall connect the new sanitary sewer service pipe to existing sewer service with a watertight flexible coupling approved by the Engineer.
- 5. The contractor shall clean the sanitary sewer pipe after installation. The contractor shall plug downstream manholes, flush and clean sewer lines and manholes prior to testing. Remove debris from manholes and do not allow debris to enter existing sewer system.
- 6. The alignment tolerance for an open cut gravity sewer line shall be ¼ inch or less from true grade line (vertical) and 1 inch or less from true line (horizontal). Alignment shall be checked with a laser beam or lamping.
- 7. The alignment tolerance for a directional bored gravity sewer line shall be 1 percent +/- of proposed grade (vertical) and 1 foot left or right of true line (horizontal).
- 8. Sags in the pipeline shall not exceed 25 percent of the nominal pipe diameter. Sags will only be allowed where entering and exiting grades are adequate to provide a velocity of 2 feet per second or more. No more than 1 sag will be allowed between any 2 manholes.
- 9. The contractor shall perform a "Low Pressure Air Test of the Gravity Flow PVC Sewer Pipe" in accordance with ASTM F 1417. If the installation does not meet these requirements, the pipe shall be removed and replaced at no additional cost to the Department.
 - a. The contractor shall test individual section(s) between pneumatic plugs.
 - b. Minimum test pressure at start of test shall be 3.5 psi.
 - c. Maximum allowable pressure drop during test time shall be 1.0 psi, if psi loss is more than 1.0 psi than test has failed.
 - d. The contractor shall flush the sewer pipe prior to the test eliminate debris and wet the pipe surface.
 - e. The contractor shall securely install pneumatic plugs at ends of test section(s) with no more than 9.0 psi regulator or relief valve.
 - f. The contractor shall pass all air through single control point.
 - g. The contractor shall verify pneumatic plugs are installed and properly seated to form seal. Add air to internal pressure of 4.0 psi. Allow pressure to stabilize 2 to

5 minutes depending on pipe size. Reduce pressure to 3.5 psi to begin test period. Refer to Table 1 for minimum specified time required to complete low pressure air test.

TABLE 1 - Minimum Specified Time Required for a 1.0 psig Pressure Drop for Size and Length of Pipe Indicated for Q = 0.0015

Note 1 = See Practice UNI-B-6-90.

Note 2 - Consult with pipe and appurtenances manufacturer for maximum test pressure for pipe size greater than 30 in. in diameter.

Pipe Diameter	Minimu m Time,	Length for	Time for Longer	3 () ,							
, in. min:s Mi	Minimu Length, m Time, ft.	100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft		
4	3:46	597	0.380 L	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	0.854 L	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24
8	7:34	298	1.520 L	7:34	7:34	7:34	7:34	7:36	8:52	10:08	11:24
10	9:26	239	2.374 L	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48

- h. The contractor shall repair or replace defective materials and/or workmanship based on results of leakage test, then repeat low pressure air test.
- i. The contractor shall provide alignment and deflection test for PVC gravity flow sewer pipe 30 days or as directed by Engineer, after backfilling trench. Use rigid ball or mandrel having not less than 95 percent of base inside diameter or average inside diameter of pipe depending on which is specified in ASTM to which the pipe is manufactured. The internal diameter of the PVC gravity flow sewer pipe shall not be reduced by more than 5 percent of its design diameter. Mechanical pulling devices not allowed. If the installation does not meet these requirements, the pipe shall be removed and replaced at no additional cost to the Department.
- j. The contractor shall provide a televised inspection of completed sanitary sewer system performed by testing laboratory, independent Contractor or method approved by Engineer. The televised inspection shall include a video tape, written log of: service tees as measured from manhole, location of defects in pipe or joints, location of debris in pipe and location of any sags. If defective materials and/or workmanship is detected that do not meet specified requirements, contractor shall repair and/or replace pipe and repeat televised inspection at no additional cost to the Department.

Method of Measurement

- 1. Service tee and fittings shall be measured by the unit, Each.
- 2. Flexible couplings shall be measured by the unit, Each.
- 3. Granular bedding, compaction and backfill will not be measured for payment.
- 4. Excavation, compaction and backfill for sewer pipe installation will not be measured for payment.

- 5. Cleaning and testing for sewer main and services will not be measured for payment.
- 6. Over-excavated work or replacement materials will not be measured for payment.

Basis of Payment

- 1. Service tee and fittings pay unit shall be by the unit, Each for each respective size and type of tee shown on the bid tab schedule.
 - a. Included: hand trimming excavation, furnishing fitting, placement, assembly, granular bedding, backfill, fittings, connection to pipe and incidentals thereto.
- 2. Service joints/tees connected to restraint joint PVC pay unit shall be by the unit, Each for each respective size and type of tee shown on the bid tab schedule.
 - a. Included: hand trimming excavation, furnishing fitting, placement, assembly, granular bedding, backfill, fittings, connection to pipe, NDOR 47B-3500 concrete thrust restraint and incidentals thereto.
- 3. Flexible coupling pay unit shall be by the unit, Each for each respective size and type of flexible coupling shown on the bid tab schedule.
 - a. Included: hand trimming excavation, furnishing fitting, placement, granular bedding, backfill, fittings, connection to pipe and incidentals thereto.
- 4. Connection to existing sewer main or manhole pay unit shall be by the unit, Each as shown on the bid tab schedule.
 - a. Included: hand trimming excavation, bedding and backfilling, adapters, fittings, couplings, coring the wall of the existing manhole, gaskets and incidentals thereto.
- 5. Unsuitable soils pay unit shall be by the cubic yard, change ordered to the project cost as directed by the Engineer.
 - Included: excavating soils which are determined by the Engineer to be unsuitable as subgrade for pipe and/or structures, loading and removal of unsuitable material from site and furnish and backfill with compacted general fill or granular material.
- 6. Granular bedding, compaction and backfill shall be subsidiary to the appropriate sewer pipe pay item.
- 7. Excavation, compaction and backfill for sewer pipe installation shall be subsidiary to the appropriate sewer pipe pay item.
- 8. Cleaning and testing shall be subsidiary to the appropriate sewer pipe pay item.
- 9. Payment is full compensation for all work prescribed in this Section.

METAL HANDRAIL

Paragraph 1. of Subsection 716.05 in the Standard Specifications is amended to include the following:

Pay item Pay Unit Metal Handrail Linear Foot (LF)

JACKING CULVERT PIPE, SEWER PIPE, AND CASING

Subsection 731.05 in the Standard Specifications is amended to include the following:

Pay item			Pay Unit	
Jacking	inch(mm)	Pipe, Type	, Class	Linear Foot (LF) [Meter(m)]

SEEDING

Subsection 803.02 in the 1997 English Edition of the Standard Specifications is amended to include the following:

Type "B"	Minimum Purity (%)	Broadcast or Hydraulic Seeder Appli- cation Rate in lb. of Pure Live Seed/Acre	Approved Mech. Drill Application Rate in lb. of Pure Live Seed/Acre
Perennial ryegrass – Linn	85		5
Sheep fescue	85		2
Slender wheatgrass	85		5
Western wheatgrass – Flintlock	85		10
Blue grama – NE, KS, CO	30		1.5
Buffalograss – Sharps II, Cody	80		3
Sideoats grama – Butte	75		5
Purple prairie clover – Kaneb, inoculated	90		2
Blue flax	90		2
Oats/Wheat*	90		25

^{*} Wheat in the fall

All seed 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.

Rates of application of commercial inorganic fertilizer shall be:

	Rate of Application Per Acre (Minimum)
Available Nitrogen (N2)	32 or 36 lb.
Available Phosphoric Acid (P2O5)	92 or 96 lb.

Rate of application of granular sulphur coated urea fertilizer shall be:

Nitrogen (total available)	0 lb.
	I

The contractor may, at his option, apply granular urea formaldehyde in lieu of the sulphur coated urea fertilizer at the following rate:

Nitrogen (total available)	0 lb.
----------------------------	-------

EROSION CONTROL

Subsection 807.02 in the 1997 English Edition of the Standard Specifications is amended to include the following:

Erosion Control	Minimum Purity (%)	Approved Mechanical Drill Application Rate in lb. of Pure live Seed/1000 SY
Virginia wildrye – NE, IA	85	4
Slender wheatgrass	85	2
Western wheatgrass – Flintlock	85	3
Indiangrass – Oto, NE-54	75	1
Big bluestem – Pawnee, roundtree	80	1
Little bluestem – Blaze	60	1
Sideoats grama – Butte	75	2
Illinois bundleflower – inoculated	90	0.5
Purple prairie clover – inoculated, Kaneb	90	0.5
Mexican red hat (Ratibida columniofera, red)	90	0.25
New England aster (Aster novae-angliae)	90	0.1
Oats/Wheat*	90	10

^{*} Wheat in the fall

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 engineers consideration a seed tag representing the seed, which shows the variety, origin and analysis of the seed.

Rate of application of commercial inorganic fertilizer shall be:

	Rate of Application Per Acre (Minimum)	
Available Nitrogen (N ₂)	8 or 9 lbs.	
Available Phosphoric Acid (P ₂ O ₅)	23 or 24 lbs.	

Rate of application of granular sulphur coated urea fertilizer shall be:

Nitrogen (Total Available)	0 lbs.
----------------------------	--------

EROSION CONTROL, TYPE "AAA"

This work shall consist of placing the "AAA" Erosion Control Blanket, seed, fertilizer, and soil fill at the locations shown in the plans. The installation shall be as shown in the plans and as directed by the Engineer.

Paragraph 1. of Subsection 807.02 in the Standard Specifications is void and superseded by the following:

The area for the culvert shall be shaped and graded as per plan. Place the "AAA" Erosion Control Mat over the culvert to allow a three foot ± piece of material on top of the pipe. Cut the hole for the culvert, leaving an area uncut that will be tucked under the culvert and in front of the culvert as shown in the plans. Pin the "AAA" Erosion Control Mat and trench the material as shown in the plans. Seed and fertilize the area and soil fill with approximately one-half inch of soil, raking it into the material. When this is done to the satisfaction of the Engineer, the area shall be overlain with an erosion control blanket from the Approved Products List under the item, Erosion Control "C-1". The Erosion Control "C-1" shall be pinned in place.

Paragraph 2. of Subsection 807.02 of the Standard Specifications is void and superseded by the following:

The pins for the "AAA" Erosion Control Mat shall be a minimum of 8 or 9 gauge wire, U-shaped pins with 8"-10" legs and a 1" or 2" throat.

AREA INLET SEDIMENT FILTER (S8-20-0904)

Description

This work shall consist of furnishing, installing and removing an area inlet sediment filter and the installing of a temporary silt check around the inlet if required.

Material Requirements

The area inlet sediment filter shall be selected from the Approved Products List.

Construction Methods

The area inlet sediment filter shall be installed according to the manufacturer's instructions. The Engineer shall be given a copy of the instructions before any are placed on the project.

Maintenance of the Area Inlet Sediment Filter

The area inlet sediment filter shall remain in place throughout the life of the project. Silt removal shall be performed after each storm event.

Removal of the Area Inlet Sediment Filter

- 1. The area sediment filter shall be removed at the completion of the project and shall remain the property of the Contractor.
- 2. The Engineer may determine that inlet protection is still required and order that a temporary silt check be placed around the inlet. The temporary silt check installation and the area inlet sediment filter removal shall occur in the same day.

Method of Measurement

- 1. The Area Inlet Sediment Filter shall be measured by the each.
- 2. Cleaning the Area Inlet Sediment Filter will be measured as prescribed in Paragraph 2. of Subsection 809.04 in the Standard Specifications.

Basis of Payment

Pay Item Pay Unit
 Area Inlet Sediment Filter Each (ea)

- 2. Payment for cleaning the Area Inlet Sediment Filter shall be as prescribed in Subsection 809.05.
- 3. Payment is full compensation for all work prescribed in this section.

SPECIAL PROSECUTION AND PROGRESS FOR SILT SAVER AREA INLET SEDIMENT FILTER

Prior to installation, the Contractor must supply the Engineer with the manufacturer's installation details. The Engineer shall determine the appropriate Filter Hat to use for each location based upon the following guidelines and the existing conditions in the field.

Anchor pockets of the Silt Saver hat shall be filled flush with the grade level only. Overfilling or berming around the base of the Silt Saver frame can cause water to be diverted around the Area Inlet.

Area Inlet Sediment Filters shall be inspected every 10 days and/or at the conclusion of each rain event to check functionality and the amount of sediment being withheld. All filters shall be cleaned out when the bottom third of filter is filled with silt. The Silt Saver shall be removed by the Contractor after permanent seeding and erosion control measures have been installed.

Filter Frame

Two frames are available for the Silt Saver.

- 1. SS-100A Round Base will fit up to a 48" precast riser.
- 2. SS-200A Square Base will fit up to a 60" precast riser.

Prior to installation the Engineer shall determine the appropriate type of frame for use on the project based upon the existing field conditions.

Low Flow Filter Hat

The Low Flow Filter Hat is one in which the non-woven filter fabric extends to the top of the filter frame, connecting to High Flow material at the top. This hat provides the maximum amount of filtration and shall be installed over Area Inlets in situations where road overtopping is not a concern.

Half and Half Filter Hat

The Half and Half Filter Hat has the non-woven low flow filter fabric extending from the bottom of the filter frame, halfway up the side. High flow material is attached to the low flow material and utilized for the top half of the frame as well as over the top of the filter frame. This hat may be installed over area inlets in medians when the ditch grade is less severe and the median cross section is such that ponded water will not overtop the roadway. It may also be used in any area inlet location where the ponded water depth is a concern.

High Flow Filter Hat

The High Flow Filter Hat has a woven, high flow filter fabric extending over the entire filter frame. This hat may be installed in medians with steeper ditch grades, at the lowest inlets on a ditch run, and must be installed in any location where water must be drained quickly to avoid ponding water on the traveled surface.

COVERCROP SEEDING (S8-21-0603)

Subsection 812.02 in the Standard Specification is void and superseded by the following:

812.02 - Material Requirements

1. The covercrop seed shall comply with the following requirements and shall be applied at the rates shown in Table 812.01.

Table 812.01					
Covercrop Seed Requirements					
Covercrop Seed and Limitations Minimum Purity (%) Minimum Germination (%) Approved Broadcast or Hydraulic Seeder Application Rate Approved Mech. Drill Application Rate					
Oats: Jan. 1 – Aug. 31	80	60	96 lbs/acre (107 kg/ha)	96 lbs/acre (107 kg/ha)	
Pearl Millet or Foxtail Millet: May 2 – July 15	80	60	25 lbs/acre (27 kg/ha)	25 lbs/acre (27 kg/ha)	
Winter Wheat: Sept. 1 – Dec. 31	80	60	120 lbs/acre (134 kg/ha)	120 lbs/acre (134 kg/ha)	
Annual Ryegrass, Urban Areas: Jan. 1 – Dec. 31	80	80	50 lbs/acre (55 kg/ha)	50 lbs/acre (55 kg/ha)	

- 2. The seed for covercrop shall be delivered in bags and tagged with the purity and germination shown on the tag. Bulk seed may be used on this project also, but it too will need a current purity and germination test.
- 3. Fertilizer is required for covercrop seeding. Rate of application of commercial inorganic fertilizer shall be:

Rate of Application

Available Nitrogen (N2)

66 lbs./acre (73 kg/ha)

4. Subsection 812.03 2.b. in the Standard Specifications is void and superseded by the following:

The covercrop seed may be drilled or broadcast and harrowed. If the seed is broadcast and harrowed, the covercrop shall be considered "guaranteed to grow". If replanting is necessary due to failure to obtain an erosion controlling stand of covercrop, the reseeding shall be done at the Contractor's expense.

Subsection 812.03 is amended to include the following:

The fertilizer shall be applied prior to seeding and incorporated into the soil.

The Contractor shall apply the seed at the rate shown in Table 812.01.

TEMPORARY SILT FENCE (\$8-25-0504)

This work shall consist of installing Temporary Silt Fence as shown on the Contractors erosion control plan, and as required to control erosion during the construction of the project.

Material Requirements

- 1. The temporary silt fence material may be on the NDR Approved Products List for high or low porosity silt fence, or from other commercially available sources. The material shall be at least 36 inches (900 mm) in height.
- 2. The stakes may be as shown on the Silt Fence Plan, or as described in Section 809 of the Standard Specifications, or they may be wood posts that are furnished already fastened to the silt fence. Pre-fastened wood stakes may have a spacing of 6 to 8 feet (1.8 m to 2.4 m). If metal studded "T" posts are used, they need not be new.

Construction Methods

- 1. The temporary silt fence shall be constructed as shown on the Silt Fence Plan.
- 2. The temporary silt fence may also be "plowed" in the soil instead of trenched.
- 3. The Contractor shall maintain the temporary silt fence in good working condition at all times. Good working condition includes fabric repair, post repair, and silt removal.
- 4. The temporary silt fence shall be removed as directed by the Engineer at the end of its usefulness. Any silt remaining in the temporary silt fence shall be disposed of properly.

Method of Measurement

- 1. Temporary silt fence is measured by the length of the temporary silt fence in linear feet (meters).
- 2. Cleaning the temporary silt fence will be measured based on the equipment rental provisions of Section 919.

Basis of Payment

1.	Pay Item	Pay Unit
	Temporary Silt Fence	Linear Foot (LF) [Meter (m)]
	Rental of Skid Loader, Fully Operated	Hour (h)
	Rental of Loader, Fully Operated	Hour (h)
	Rental of Crawler Mounted Hydraulic Excavator, Fully Operated	Hour (h)
	Rental of Dump Truck, Fully Operated	Hour (h)

2. Payment is full compensation for all work prescribed in this Section.

EROSION CONTROL, TYPE C-1 (S8-27-0704)

Section 807 of the Standard Specifications is amended to include Erosion Control, Type C-1. Erosion Control, Type C-1 shall be as shown on the NDR Approved Products List and shall be installed as shown on the Plan for Erosion Control, Type "HV". The erosion control pins are the same as for Erosion Control, Type "HV".

FABRIC SILT FENCE (HIGH POROSITY AND LOW POROSITY)

Paragraph 4. of Subsection 809.03 in the Standard Specifications is amended to include the following:

The silt fence shall be removed at the completion of the project and disposed of as directed by the Engineer. The area shall be graded to conform to the typical cross-sections or as directed by the Engineer.

Paragraph 1. of Subsection 809.05 is amended to include the following:

Pay item Pay Unit

Rental of Crawler Mounted

Hydraulic Excavator, Fully Operated Hour (h)

CURB INLET SEDIMENT FILTER

DESCRIPTION

This work shall consist of furnishing, installing and removing curb inlet sediment filter.

MATERIAL REQUIREMENTS:

The curb inlet sediment filters shall be selected from the approved products list.

CONSTRUCTION METHODS:

The curb inlet sediment filters shall be installed according to the manufacturer's instructions. The Engineer shall be given a copy of the instructions before any are placed on the project.

MAINTENANCE OF THE CURB INLET SEDIMENT FILTERS:

The curb inlet sediment filters shall remain in place throughout the life of the project. Silt removal shall be performed after each storm event.

REMOVAL OF THE CURB INLET SEDIMENT FILTERS:

The curb inlet sediment filters shall be removed at the completion of the project and shall remain the property of the Contractor.

The Engineer may determine that inlet protection is still required in order that a temporary silt check be placed around the inlet. The temporary silt check installation and the curb inlet sediment filter removal shall occur in the same day.

MEASUREMENT AND PAYMENT:

All work and materials described herein shall be included in the item "CURB INLET SEDIMENT FILTERS." The curb inlet sediment filters shall be measured and paid for on an each basis.

EQUIPMENT RENTAL (Crawler Mounted Hydraulic Excavator) (S9-5-0604)

Subsection 919.02 in the Standard Specifications is amended to include the following:

14. Crawler Mounted Hydraulic Excavators shall be crawler-type units capable of excavating soil in its original position and loading the excavated material into dump trucks. The minimum operating weight shall be 12 metric tons.

REMOVE AND RESET CHAIN-LINK FENCE

This work shall consist of removing and resetting the existing chain-link fence at the locations shown in the plans or as designated by the Engineer.

The fence shall be removed by the Contractor and all materials stored or stockpiled in such locations and manner as may be necessary to preserve them intact for future resetting. Responsibility for the care of the materials shall be the obligation of the Contractor.

The chain-link fence shall be reset in a manner similar to the existing fence. The Contractor shall replace all materials damaged during removal if directed by the Engineer.

Removing and resetting chain-link fence shall be measured by the linear foot of chain-link fence reset.

The total length of chain-link fence, which is reset and accepted by the Engineer, will be paid for at the contract unit price per foot for the item "Remove and Reset Chain-Link Fence." This price shall be considered full compensation for removing, necessary excavation and backfill, storing and resetting the fence, concrete if required, all labor, equipment, tools and incidentals necessary to complete the work, including replacement of damaged or lost materials.

FLY ASH (S10-5-0801)

Subsection 1008.01 in the Standard Specifications is void and superseded by the following:

Fly ash shall be Class C or F meeting the requirements of ASTM C 618.

STRUCTURAL STEEL (S10-5-0801)

Section 1045 of the Standard Specifications is amended to include the following:

1045.03 -- Steel Plate Substitution

The Contractor may use either English or Metric steel plates in accordance with Table 1045.01.

Table 1045.01				
English-Metric Steel Plate Substitution Table				
Metric (millimeters)	English (inches)	Metric (millimeters)	English (inches)	
9	3/8	32	1 1/4	
10	3/8	35	1 3/8	
11	7/16	38	1 1/2	
12	1/2	40	1 5/8	
14	9/16	45	1 3/4	
16	11/16	50	2	
18	3/4	55	2 1/4	
20	13/16	60	2 3/8	
22	7/8	70	2 3/4	
25	1	80	3 1/4	
28	1 1/8	90	3 1/2	
30	1 ¼			

REPAIR OF DAMAGED METALLIC COATINGS (\$10-5-0801)

Paragraph 2. of Subsection 1061.01 in the Standard Specifications is void and superseded by the following:

2. The material used for repair shall provide a minimum coating thickness of at least 50 µm with one application.

CORRUGATED METAL PIPE (\$10-5-0801)

Table 1035.01 in Section 1035 of the Supplemental Specifications is amended by deleting the title "Steel and Aluminum Culvert Thickness".

METAL FLARED-END SECTIONS (\$10-5-0801)

Table 1036.01 in Section 1036 of the Supplemental Specifications is amended by deleting the title "Steel and Aluminum Flared-End Thickness".

REINFORCED CONCRETE PIPE, MANHOLE RISERS, AND FLARED-END SECTIONS (S10-5-0801)

Paragraph 3.a. of Subsection 1037.02 in the Supplemental Specifications is void and superseded by the following:

3.a. Round reinforced concrete pipe shall conform to the requirements of AASHTO M 170-95 with the exception of the minimum circumferential reinforcing (in2/ft. (mm 2/m) of pipe wall) for 15, 21, and 24 inch (380, 460, 600 mm) Class III pipe, as shown below:

Paragraph 3.b. of Subsection 1037.02 is void and superseded by the following:

b. AASHTO M 170-95 Specifications are modified as follows:

Paragraph 4. of Subsection 1037.02 is void and superseded by the following:

 Reinforced concrete arch pipe shall conform to the requirements of AASHTO M 206-95.

Paragraph 5. of Subsection 1037.02 is void and superseded by the following:

5. Reinforced concrete elliptical pipe shall conform to the requirements of AASHTO M 207-95.

Paragraph 7. of Subsection 1037.02 is void and superseded by the following:

7. Concrete flared-end sections shall be of the design shown in the plans and in conformance with the applicable requirements of AASHTO M 170-95, Class II pipe, AASHTO M 206-95, Class A-II pipe, or AASHTO M 207-95, Class HE-II pipe for the diameter of pipe which it is to be installed.

HIGH TENSILE BOLTS, NUTS, AND WASHERS (\$10-5-1001)

Subsection 1058.02 in the Supplemental Specifications is void.

Paragraph 4.b.(5) in the Standard Specifications is void and superseded by the following:

(5) The bolt, nut, and washer assembly shall be assembled in a Skidmore-Wilhelm calibrator or an acceptable equivalent device. For bolts that are too short to be assembled in the calibrator, see Subsection 1058.03, Paragraph 4.b.(9).

ELASTOMERIC BEARINGS AND LAMINATED BEARING PADS (\$10-5-0903)

Paragraph 2. of Subsection 1068.02 in the Standard Specifications is void and superseded by the following:

2. Samples and Certification shall be furnished in accordance with NDR's *Materials* Sampling Guide.

Paragraph 3. of Subsection 1068.02 is void.

STEEL BARS FOR CONCRETE REINFORCEMENT (\$10-5-1201)

Section 1020 in the Standard Specifications is void and superseded by the following:

1020.01 - Description

Steel tie bars for longitudinal joint reinforcement in concrete pavements shall be epoxy coated and deformed Grade 40 or 60 billet steel as shown in the plans, specifications or Special Provisions.

1020.02 - Material Characteristics

- 1. Billet-steel bars shall conform to the requirements of ASTM A 615/A 615M.
- 2. Epoxy coatings shall conform to the requirements in Section 1021 of the Standard Specifications and Supplemental Specifications.

1020.03 - Acceptance Requirements

Acceptance shall be based on sampling, testing, and certification requirements in accordance with the NDR *Materials Sampling Guide*.

EPOXY COATED REINFORCING STEEL (\$10-5-0403)

Table 1021.01 in Section 1021 of the Standard Specifications is void and superseded by the following:

Table 1021.01					
	Bend Test Requirements				
Eng	English Metric				
Bar No.	Mandrel Diameter (inches)	Mandrel Diameter Bar (millimeters			
3	3	10	75		
4	4	13	100		
5	5	16	125		
6	6	19	150		
7	7	22	175		
8	8	25	200		
9	9	29	230		
10	10	32	250		
11	11	36	280		
14	17	43	430		
18	23	57	580		

TYPE IP CEMENT (S10-5-0305)

Paragraph 2. of Section 1004.02, in the Standard Specifications is void and superseded by the following:

- 2. Type IP (Portland pozzolan) cement may be used in any application where fly ash modified concrete is allowed. Type IP cement shall conform to the requirements as prescribed in ASTM C 595 and the following requirements:
 - a. The pozzolan content shall be 25 ± 2 percent of the cementitious material by weight.
 - b. The pozzolan shall be Class F fly ash or a Class N natural pozzolan.
- c. Additional fly ash substitution shall not be allowed with Type IP cement containing Class F fly ash. If Class N natural pozzolan is used in the cement, fly ash substitution is allowed to a total pozzolan content of 25 ± 2 percent.
 - d. A water reducing admixture shall be used in concrete produced with Type IP cement.

- e. Mortar bars made and tested according to the provisions of ASTM C 1260 shall have an expansion of no more than 0.10 percent after 28 days. The mortar bars shall be composed of Type IP cement, limestone, and sand and gravel in the proportions used for 47B concrete. The limestone shall be from a Weeping Water, NE, source and the sand/gravel shall be from an eastern Platte River Valley source.
- f. 47B concrete made with Type IP shall have a Durability Factor not less than 70 and a mass loss not greater than five percent after 300 freeze/thaw cycles when tested in accordance with ASTM C 666. The freeze/thaw testing shall be conducted according to Procedure A.

TIMBER AND LUMBER (S10-5-0706)

Paragraphs 2.a. and 2.b. of Subsection 1075.02 in the Standard Specifications are void and superseded by the following:

- 2.a. The creosote, pentachlorophenol and copper naphthenate preservative treatment for timber and lumber shall be by the Empty-cell (Rueping) Process; and, where allowed, the ammoniacal copper arsenate (ACA), chromated copper arsenate (CCA), and ammoniacal copper zinc arsenate (ACZA) preservative treatment for timber and lumber shall be by the Full-cell (Bethel) Process. Treatment shall conform to the requirements as specified in T1-Use Category System: User Specification for Treated Wood of the American Wood-Preservers' Association Standards and AASHTO M 133. Preservatives shall meet the requirements of Section 1076.
- b. Preservative Treatment. The preservative treatment and minimum retentions for timber and lumber shall conform to the requirements as specified in U1-Use Category System: User Specification for Treated Wood of the American Wood Preservers' Association Standards as amended herein. Minimum retentions for all timber and lumber shall conform to Use Category UC4A. Minimum retentions for fence posts shall conform to Use Category UC4A. Timber and lumber to be treated with ammoniacal copper arsenate or ammoniacal copper zinc arsenate shall be dried to the fiber saturation point required to put the timber into satisfactory condition to accept the preservative and attain the required preservative retention and penetration. After treatment, with the exception of offset blocks and posts for guardrail terminals systems, the material shall be redried and have a moisture content of not more than 30 percent at the time or shipment to the job site.

WOOD PRESERVATIVES (S10-5-0405)

Subsection 1076.01 in the Standard Specifications is amended to include the following:

4. Copper naphthenate solution in petroleum for use as a wood preservative shall consist of 1 percent copper metal by weight in a suitable petroleum solvent.

Subsection 1076.02 is amended to include copper naphthenate.

Subsection 1076.03 is amended to include the following:

6. Copper naphthenate shall be analyzed in accordance with AWPA A5.

PERFORMANCE GRADED BINDER

Section 503 in the Standard Specifications and Supplemental Specifications is amended to include Performance Graded Binders.

I. Description

The performance graded binder to be used on this project shall be PG Binder 64-22 supplied by a Certified Supplier.

Certified Supplier

A supplier must be certified by the Nebraska Department of Roads to be allowed to supply Performance Graded Binder in Nebraska. A certified supplier must be a participant in one or more of the following PG Binder groups.

- 1. AASHTO Materials Reference Laboratory (AMRL)
- 2. Western Cooperative Testing Group
- 3. Combined States Binder Group

The supplier must maintain and follow the requirements of the group or groups in which they participate in, to maintain certification by the Nebraska Department of Roads. In addition, active participation is required to maintain certification by the Department. Active participation will include submitting of round robin sample results, along with meeting other requirements of the group or groups. Failure to do so will result in loss of certification by the Department.

A certified supplier may be asked to supply to the Department, past round robin results, laboratory inspection reports, reasons for and investigative reports on out lying results, quality control testing, and/or technician training and proficiency testing reports.

The binder supplier agrees to inspection of their plant or terminal without notice anytime during production or supplying of material to the Department. The inspection may also include the supplier's laboratory.

Supplier Certification

A supplier may request certification by contacting the Nebraska Department of Roads, Materials and Research Division, Flexible Pavement Engineer at (402) 479-4675. A temporary certification may be issued for a period of up to one year. Split sample testing will be required prior to receiving a temporary certification. Split sample testing will be done on all grades of binder that the supplier intends to supply during the temporary certification. The supplier will have up to one year to become certified by participating in and following the requirements of one or more of the approved binder groups.

A supplier may become certified through active participation in other binder certification/round robin groups that are approved by the Department. The Department may request from the supplier prior to approval, past or current round robin results, quality control testing, laboratory inspection reports, and/or technician training and proficiency testing reports.

II. Binder Sampling and Testing:

- 1. Lots. Each 3750 tons (3400 Mg) of HMA produced will be a binder lot.
- 2. A binder lot will include only one PG Binder grade or a blend as allowed in paragraph 6.e.
- 3. A binder lot will only include one supplier of the PG Binder or a blend as allowed in paragraph 6.e.
- 4. Blending of different binder grades and binders from different suppliers will be allowed with restrictions as noted in paragraph 6.e. The Engineer must be notified of the intent to blend prior to actual blending.
- 5. All binders shall be sampled at the rate of at least one sample per lot with a minimum of three samples per project.
 - a. The sample shall consist of two one-quart (liter) cans and shall be taken by the Contractor's Certified Sampling Technician. The sample shall be taken at the plant from the line between the storage tank and the mixer or from the tank supplying material to the line, at a location at which material sampled is representative of the material in the line to the mixer. One can will be tested for compliance with AASHTO M320 specifications and the other can portion will be saved for dispute resolution, if needed. The sampling process shall follow procedures of the NDR Materials Sampling Guide and NDR T 40.
 - b. Testing. When the tested PG Binder is in compliance, the binder lot will be accepted and both cans of the sample can be discarded. If the tested PG Binder does not comply, then the price of the PG Binder lot represented by the sample shall be adjusted according to Tables 2, 3, 4 and 5. Overall project average testing requirements and price adjustments will also apply, as stated in Table 6.

6. Material Requirements

- a. Performance graded binder, as specified in the contract items shall be in accordance with the PG+ specifications as noted, and AASHTO M320 with the exception of Direct Tension.
- b. Substitution of a PG Binder, which exceeds the upper and lower grade designations from the specified, requires advance notification of the Engineer, and be documented by a no cost change order. The bill of lading or delivery ticket shall state the binder grade and specific gravity.
- c. Material Certification A Material Certification shall be submitted prior to construction, stating the type of modifier being used, and the recommended mixing and compaction temperatures for the Hot Mix Asphalt. The Material Certification must state that acid has not been used. The Material Certification must also state that the material has not been air blown or oxidized.

- d. The Contractor shall receive from the supplier, instructions on the proper storage and handling of each grade and shipment of PG Binder.
- e. Blending of PG Binders at the hot mix plant site will be allowed only when transitioning to an asphalt mixture requiring a different grade of binder and with the following restrictions:
 - (1) The resultant blend will meet AASHTO M320 specifications when tested as ±3° C of the specified PG binder. The sample of the blended material will 1) be considered as a lot sample, 2) be taken during initial production following the blending of the binders, and 3) deductions when not meeting M320, will apply. On the blended sample's identification form will be a note explaining the blending conditions and a statement that the sample is a blend of materials. The next lot sample, following the sample representing the blend, will be tested as the specified binder grade for the asphalt mixture being produced and shall meet M320 specifications.
 - (2) Modified Binders When a type of modification is used and stated in the Material Certification as required in paragraph 6.c., it will not be allowed to be blended with a binder containing a different type of modification. Blending of the same type of modifiers will be allowed.
- f. When PG 64-28, 70-28 and 76-28 are specified the following PG+ specifications (Table 1) and AASHTO M320 with the exception of Direct Tension) will apply:
 - (1) The performance graded binder shall be a binder, which incorporates a blend of base asphalt and elastomer modifiers of styrene-butadiene (SB), styrene-butadiene-styrene (SBS) or styrene-butadiene-rubber (SBR). Acid shall not be used. Air blown and/or oxidized asphalt will not be allowed. The supplier must certify that the binder is not acid modified, and that acid was not used. The binder supplier must also certify that air blowing or oxidization has not been done/used to modify the binder or used to change the properties of the binder. The composite material shall be thoroughly blended at the asphalt refinery or terminal prior to being loaded into the transport vehicle. The polymer modified binder shall be heat and storage stable and shall not separate when handled and stored per the suppliers storage and handling recommendations.
 - (2) Samples of binder proposed for use and production lot samples shall be submitted to the Materials and Research, Bituminous Laboratory for testing to insure the binder is of a modification system in which no acid is used. ARR-MAZ AD-here LOF65-00, amine anti strip will be added at the rate of 0.5% to sample(s) that have been heated to 300 degrees F or until viscous and stirred for a minimum of 5 minutes. The resultant blend will then be tested for PG grading and compared to PG grading prior to the blending. The resultant blend shall meet M320 specifications and shall not show a drop of G*/sin(delta) of more than 25% when compared to

the result(s) of the sample prior to blending the anti strip. If the resultant blend does not meet M320 specification or shows a drop of greater than 25%, the material that is represented by the sample will be rejected.

- (3) Approval for initial use will be based on the sample(s) meeting the PG+ specifications as stated in Table 1 and M320 specifications. Approval for use will also be based on PG grading when comparing results after blending anti strip to PG grading prior to the addition of anti strip.
- (4) Lot samples of the binder shall meet or exceed the PG+ specifications as listed, in addition to M320 specifications. For PG+, Table 1 specification testing, material will be tested on original unaged binder for phase angle specification and RTFO aged material for elastic recovery. Anti strip will also be added to project lot samples as described in 6.g.(2).
- (5) When it is determined that material does not meet Table 1 specifications, Table 2, 3 and 4 will apply, depending on the grade of binder. When it is determined that a single sample(s) does not meet M320 specifications, Table 5 will apply.
- (6) All project samples will be tested for PG+ specification compliance.

Table 1
Additional Specifications for PG 64-28, 70-28 and 76-28

	PG 64-28	PG 70-28	PG 76-28
Elastic Recovery; AASHTO T301 tested at 77°F (RTFO Aged AASHTO T301)	Minimum 60%	Minimum 70%	Minimum 75%
Phase Angle; degrees (Max) (Original Binder)	77.0	75.0	70.0

Table 2
Single Sample Tolerance and Pay Factor Table
PG 64-28

	(1) Pay Factor of 0.75	(2) Pay Factor of 0.50 or Removal
Elastic Recovery Percentage (RTFO Aged AASHTO T301)	54 to 57.5%	Less than 54%
Phase Angle (degrees) (Original Binder)	78.5 – 79.0	Greater than 81.0°

Table 3
Single Sample Tolerance and Pay Factor Table PG 70-28

	(1) Pay Factor of 0.75	(2) Pay Factor of 0.50 or Removal
Elastic Recovery Percentage (RTFO Aged AASHTO T301)	64 to 67.5%	Less than 64%
Phase Angle (degrees) (Original Binder)	78.5 – 79.0	Greater than 79.0°

Table 4
Single Sample Tolerance and Pay Factor Table PG 76-28

	(1) Pay Factor of 0.75	(2) Pay Factor of 0.50 or Removal
Elastic Recovery Percentage (RTFO Aged AASHTO T301)	65 to 70%	Less than 65%
Phase Angle (degrees) (Original Binder)	71.5 – 75.0	Greater than 75.0°

Table 5
Single Sample Tolerance and Price Factor Table

	Pay Factor of 0.75 ¹	Pay Factor of 0.50 or Removal ²
Tests on Original Binder Dynamic Shear, G*/Sin δ, kPa	0.86-0.92	< 0.86
Tests on Rolling Thin Film	1.60-1.80 ³	< 1.60 ³
Oven Residue Dynamic Shear, G*/Sin δ , kPa	1.76-1.97	< 1.76
Tests Pressure Aging Vessel Residue Dynamic Shear, G*Sin δ, kPa	5601-6200	> 6200
Creep Stiffness S, mPa	325-348	> 348
m-Value	0.270-0.284	< 0.270

NOTE: If more than one test fails to meet requirements, the largest individual price reduction (pay factor of 0.75 or 0.50) will be used to calculate price reduction for the asphalt binder.

The pay factor will be applied to the quantity of material that the sample represents.

Overall Project Average - Price Reduction Based on Complete M320 Testing

Overall Project Averages does not apply to tested samples after the addition of anti strip. Samples not meeting PG+ specifications and the requirements after the addition of anti strip will be rejected.

PG+, Table 1 specifications do not apply to Overall Project Averages. PG+, Table 1 specification testing will be conducted on each Lot sample.

Out of specification material will be determined by the specifications outlined in AASHTO M320, excluding Direct Tension.

The Nebraska Department of Roads, Materials and Research, Bituminous Laboratory will do complete testing, per M320 specifications, on a minimum of three samples or 20% of the total samples from the project, whichever is the greatest. The Department will randomly select one sample for complete M320 testing out of every five samples received. When any test result shows sample not meeting M320 specifications, the previous and following sample received will be tested for complete M320 compliance. Testing will continue in this manner until tested samples meet all of M320 specifications, or there are no more lot samples to be tested.

Original Dynamic Shear Rheometer testing will be completed on all samples. When a sample being tested for only Original Dynamic Shear Rheometer compliance falls out of M320 specification, it will then be tested for complete M320 specification compliance. Adjacent samples will be tested when results, other than the Original Dynamic Shear Rheometer result, do not meet specification. This additional complete testing for M320 compliance is in addition to the minimum number of samples that will be tested for complete M320 compliance.

At the completion of testing, all complete M320 test results will be averaged. For averages that do not meet M320 specifications, the largest reduction shown in Table 6 will be applied to all the Performance Graded Binder used on the project.

¹ Price Reduction will be based on contract unit price of asphalt binder.

² The Engineer will determine if the non-compliant material will be removed. Removal and replacement will be at no additional cost to the Department. If the non-compliant material is accepted, a price factor of 0.50 will be applied. The price factor will be applied to the contract unit price of asphalt binder.

³ For PG Binder 76-28 only.

Table 6
Overall Project Average – Pay Factor Table

	Range of Average	Pay Factor Applied
Tests on Original Binder Dynamic Shear, G*/Sin δ, kPa Min. 1.00 kPa	< 1.00 - 0.98 < 0.98 - 0.96 < 0.96 - 0.94 < 0.94	0.98 0.95 0.92 0.85
Tests on Rolling Thin Film Oven Residue Dynamic Shear, G*/Sin δ, kPa Min. 2.20 kPa	< 2.20 - 2.156 < 2.156 - 2.09 < 2.09 - 2.024 < 2.024	0.98 0.95 0.92 0.85
Tests Pressure Aging Vessel Residue Dynamic Shear, G*Sin δ, kPa Max. 5000 kPa	< 5000 - 5100 < 5100 - 5250 < 5250 - 5400 < 5400	0.98 0.95 0.92 0.85
m-Value Min. 0.300	< 0.300 - 0.298 < 0.298 - 0.293 < 0.293 - 0.290 < 0.290	0.98 0.95 0.92 0.85
Creep Stiffness S, mPa Max. 300 mPa	< 300 - 306 < 306 - 315 < 315 - 324 < 324	0.98 0.95 0.92 0.85

Single Sample Reduction and Overall Project Average Reduction

A sample representing a lot, not meeting M320 Specification, will have a reduction for the material that the sample represents. Only the largest reduction from Table 5, will apply when more than one result of a single sample does not meet M320 specifications. Only the largest overall project average reduction from Table 6, will apply when more than one test average falls out of M320 specifications. Pay Factors based on both Table 5 and Table 6 test results are separate from each other and both will be applied.

Investigation of Verification Lot Samples That Do Not Meet Specifications

When the lot sample shows test results out of specification limits, the process of resolving the sample failure will include the following actions as appropriate:

- 1. The Bituminous Lab may conduct retesting of the remaining portion of the original can sample as determined necessary to confirm or disaffirm the original test result(s).
- The Flexible Pavement Engineer will notify the Contractor who will arrange to investigate all aspects of the testing, loading, handling and delivery of the material in question. The Contractor shall report findings to the Central Laboratory, Flexible Pavement Engineer.

- 3. The Department will collect and compile all information and prepare a report. A copy of the report will be distributed to the District and the Contractor.
- 4. The Bituminous Laboratory will issue the standard report of tests for all samples tested, to include any resulting pay factor deductions. A copy of the report of tests will be distributed to the District, Construction Division, and Contractor.

Dispute Resolution

After testing and investigations have been completed on the one can of the sample and there is still a dispute, the Department will select an independent laboratory for referee testing to take place on the second can of the sample. If the independent lab's tests indicate failing results and pay deductions equal to or greater than the Department's, the Contractor will reimburse the Department for the cost of testing. If the independent lab's tests indicate that the material meets specification or is at a pay deduction less than the Department's, the Department will assume the cost of testing. When the independent lab's tests indicate a pay deduction, the lesser of the Department's and the independent lab's deductions will be applied.

Basis of Measurement

PG Binder shall be measured in accordance with Subsection 503.05 in the Standard Specifications and Supplemental Specifications.

Basis of Payment

Subsection 503.06 in the Standard Specifications and Supplemental Specifications is amended to provide that PG Binder, accepted by the Engineer for use in asphaltic concrete, will be paid for at the contract unit price per ton (Megagram) for the item "Performance Graded Binder ______", less any deductions as prescribed in the tolerance and price reduction tables.

SUPERPAVE ASPHALTIC CONCRETE

Section 1028 of the Standard Specifications and Supplemental Specifications is void.

Asphaltic Concrete Type SP4 shall use the 0.5 inch gradation band.

Paragraph 2.b.(1) of Subsection 503.04 of the Supplemental Specifications is void and superseded by the following:

The contractor shall take at least four (4) control strip mixture samples and record the test results for the mixture properties identified in Paragraph 4.g.(3) of Subsection 1028.03. The contractor will also record compaction density values and rolling pattern information. This data will be for information only and shared with the Engineer.

SECTION 1028 -- SUPERPAVE ASPHALTIC CONCRETE (S10-7-0506)

1028.01 -- Description

- 1. a. Superpave Asphaltic Concrete is a Contractor-designed mix.
 - b. The Contractor will be required to define properties using a gyratory compactor that has met the Superpave evaluation test procedures, during mix design and production.
- a. Before production of asphaltic concrete, the Contractor shall submit, in writing, a tentative job mix formula on the NDOR Mix Design Submittal Form for verification to the NDR Flexible Pavement Engineer at the Lincoln, Nebraska Central Laboratory.
 - b. The job mix formula shall identify the virgin mineral aggregates, RAP, if used, hydrated lime and mineral filler, if needed, with the value of the percent passing each specified sieve for the individual and blended materials.
 - c. (1) The Contractor shall submit 1 uncoated proportioned 22 lb. (10,000-gram) sample of the blended mineral aggregates for consensus properties and gravity testing at least 15 NDR working days before production of asphaltic concrete. The Contractor has the option of submitting all, or a portion, of the following six 95 mm gyratory pucks compacted to 7% ±0.5% air voids, and two 75 mm gyratory pucks compacted to 4% ± 0.5% air voids for testing and 3 proportioned 22 lb. (10,000-gram) samples of the blended mineral aggregates (2 of which that are precoated with hydrated lime and 1 that is not coated) and two one-quart (liter) samples of the proposed PG Binder to be used in the mixture to the NDR Materials and Research Central Laboratory at least 15 NDR working days before production of asphaltic concrete. If submitted, these samples will be used to verify the Contractor's Superpave mix design test results and mix properties.
 - (2) Submitted with these samples shall be a copy of the Contractor's results for all Superpave mix design tests.
 - (3) This mix design shall include at a minimum:
 - (i) The bulk specific gravity (Gsb) of the blended uncoated aggregate. Whenever RAP is used it shall be processed through an ignition oven and then combined proportionally with the virgin aggregate. The bulk specific gravity shall be determined for the blend from an unwashed sample of the - #4 and a washed sample of + #4 material in accordance with AASHTO T 84 and AASHTO T 85 respectively.
 - (ii) The target binder content. The percent of PG Binder will be computed by ignition oven results. A correction factor of 0.4% will be added to the ignition oven results for mixes containing hydrated lime.
 - (iii) The supplier and grade of PG Binder.

- (iv) The maximum specific gravity of the combined mixture (Rice).
- (v) The bulk specific gravity and air voids at N initial (Nini), N design (Ndes) and N maximum (Nmax) of the compacted gyratory specimens.
- (vi) Voids in the Mineral Aggregate (VMA) and Voids Filled with Asphalt (VFA) at Ndes.
- (vii) Fine Aggregate Angularity (FAA) and its specific gravity, Coarse Aggregate Angularity (CAA), Flat and Elongated Particles and Clay Content of the aggregate blend.
- (viii) Location description and/or legal descriptions and producers of materials used in the mix.
- (ix) Dust to Binder Ratio
- (x) PG Binder recommended mixing and compaction temperatures.
- (xi) Type of PG Binder modification, if modified.
- (xii) The hydrated lime content.
- d. If requested by the Contractor, before the mix design is approved, the Materials and Research Laboratory shall test all properties. This approval is on the submitted laboratory materials, and allows the contractor to begin plant production test strip and verification testing with the QA/QC Program.
- 3. PG Binder in Recycled Asphalt Pavement:
 - a. The Contractor may approach the State with a proposal to supplement the virgin aggregates of the asphaltic concrete mix with a Contractor's specified percentage of recycled asphalt pavement (RAP). The State may accept or reject the proposal based on whether the mix design meets the specified criteria of the asphaltic concrete proposed. The RAP may come from the project or an existing stockpile. The Contractor is responsible for investigating the quality and quantity of the RAP material.
 - b. In recycled asphaltic concrete mixtures, the allowable maximum percent of Reclaimed Asphalt Pavement (RAP) will be as shown in Table 1028.01. If the Contractor elects to exceed these values, the Contractor will be required to lower the minimum pavement design temperature of the PG Binder, one grade, according to AASHTO M320.

Table 1028.01

Asphaltic Concrete Type	Percent, Maximum RAP
SPS	50
SP1	35
SP2	25
SP3	25
SP4 Special	25
SP4	15
SP5	15

4. Quality Control Program:

- a. The Contractor shall establish, provide, and maintain an effective Quality Control(QC) Program. The QC Program shall detail the methods and procedures that will be taken to assure that all materials and completed construction conforms to all contract requirements.
- b. Although guidelines are established and certain minimum requirements are specified herein and elsewhere in the contract, the Contractor shall assume full responsibility for placing a pavement course that meets the target field values.
- c. The Contractor shall establish a necessary level of control that will:
 - (1) Adequately provide for the production of acceptable quality materials.
 - (2) Provide sufficient information to assure both the Contractor and the Engineer that the specification requirements can be met.
 - (3) Allow the Contractor as much latitude as possible in developing control standards.
- d. (1) The Contractor shall develop and keep on file with the Materials and Research Flexible Pavements Engineer a copy of their QC Program. A copy of the QC Program shall be kept on file in the QC lab trailer. This Program shall be updated as needed and submitted annually for review.
 - (2) The Contractor shall not begin any construction or production of materials without an approved QC Program.
- e. The QC Program shall address, as a minimum, the following items:
 - (1) QC organization chart.
 - (2) Submittals schedule.

- (3) Inspection requirements.
 - (i) Equipment.
 - (ii) Asphalt concrete production.
 - (iii) Asphalt concrete placement.
- (4) QC testing plan.
- (5) Documentation of QC activities.
- (6) Requirements for corrective action when QC and/or acceptance criteria are not met.
- (7) Any additional elements deemed necessary.
- (8) A list, with the name and manufacturers model number, for all test equipment used during laboratory testing.
- (9) A description of maintenance and calibration procedures, including the frequency that the procedures are performed.
- f. The QC organization chart shall consist of the following personnel:
 - (1) A Program Administrator:
 - (i) The Program Administrator shall be a full-time employee of the Contractor or a Subcontractor (Consultant) hired by the Contractor.
 - (ii) The Program Administrator shall have a minimum of 5 years experience in highway construction.
 - (iii) The Program Administrator need not be on the job site at all times but shall have full authority to institute any and all actions necessary for the successful implementation of the QC Program.
 - (iv) The Program Administrator's qualifications and training shall be described in the QC Program.
 - (2) One or more Quality Control Technicians:
 - (i) The quality control technicians shall report directly to the Program Administrator and shall perform all sampling and quality control tests as required by the contract.
 - (ii) The QC technicians shall be certified by the NDR Materials and Research Division.
 - (iii) Certification at an equivalent level by a state or nationally recognized organization may be acceptable.

- (iv) The QC technician's credentials and NDR training records shall be submitted to the NDR Materials and Research Division.
- (v) The Contractor may have a non-certified technician working under the direct supervision of a certified technician for no more than one construction season.
- g.(1) Inspections shall be performed daily to ensure continuing compliance with contract requirements until completion of the work.
 - (2) QC test results and periodic inspections shall be used to ensure the mix quality and to adjust and control mix proportioning.
- h. QC Testing Plan:
 - (1) The testing plan shall include the NDR statistically based procedure of random sampling for acquiring test samples.
 - (2) The Contractor may add any tests necessary to adequately control production.
 - (3) All QC test results shall be reported on the latest version of NDR provided Superpave software by the Contractor with a copy provided to the Engineer within 1 week after the tests are complete. Daily review by the Engineer will be allowed if requested. At the completion of the project, the Contractor shall submit a final copy of the Superpave test results on a CD.
- i. Corrective Action Requirements:
 - (1) The Contractor shall establish and utilize QC charts for individual QC tests. The requirements for corrective action shall be linked to the control charts.
 - (2) The Contractor's QC Program shall detail how the results of QC inspections and tests will be used to determine the need for corrective action.
 - (3) (i) A clear set of rules to determine when a process is out of control and the type of correction to be taken to regain process control will be provided.
 - (ii) As a minimum, the plan shall address the corrective actions that will be taken when measurements of the following items or conditions approach the specification limits:
 - (I) Plant produced mix gradations at laydown.
 - (II) Binder content.
 - (III) Air voids.
 - (IV) VMA
 - (V) VFA (mix design only)
 - (VI) FAA AASHTO T 304 CAA ASTM D 5821

- (VII) Dust to Binder Ratio
- (VIII) Density
- (iii) Corrective actions that will be taken when the following conditions occur:
 - (I) Rutting
 - (II) Segregation
 - (III) Surface voids
 - (IV) Tearing
 - (V) Irregular surface
 - (VI) Low Density
 - (VIII) Contaminants

1028.02 -- Material Characteristics

- 1. The type of PG Binder shall be shown in the plans or special provisions.
- 2. Aggregates:
 - a. Aggregates for use in superpave asphaltic concrete shall be tested on an individual basis.
 - b. With the exception of Asphaltic Concrete Type SPS the blended mineral aggregate shall not contain more than 60 percent limestone on the final surface lift of asphaltic concrete.
 - c. Crushed rock material for use in asphaltic concrete, 1/4 inch (6.35 mm) down, screenings and manufactured sand shall have a Sodium Sulfate loss of not more than 12 percent by mass at the end of 5 cycles. One 20-lb. (10-kg) sample shall be taken by NDR personnel at the project for every 5,000 tons (4500 Mg) of aggregate used, with a minimum of one per project for quality testing.
 - d. Quartzite, granite, and chat shall conform to the requirements of Subsection 1033.02, Paragraph 4, a. (8). One 60-lb. (30 kg) sample shall be taken by NDR personnel at the project every 5,000 tons (4500 Mg) of aggregate used, with a minimum of one per project for quality testing.
 - e. Crushed rock (Limestone) and Dolomite shall conform to the requirements of Paragraph 4.a. (4), (5) and (6). of Subsection 1033.02 of the Standard Specifications, Sampling size and frequency shall adhere to the current NDR Materials Sampling Guide. (Some aggregate can be adversely affected by ignition ovens resulting in erroneous reading for asphalt content and gradation unless corrected for.)

- f. Amend Paragraph 4.a. (7) of Subsection 1033.02 to provide that soundness tests shall not be required for fine sand.
- g. Amend Subsection 1033.02 to provide that once the satisfactory quality of aggregates from a source has been established, sufficient additional soundness tests will be performed to insure the continued satisfactory quality of the material.
- h. Aggregate consensus properties shall be performed on material that does not contain hydrated lime.
- i. The coarse aggregate angularity value of the blended aggregate material shall meet or exceed the minimum values for the appropriate asphaltic concrete type as shown in Table 1028.02

Table 1028.02 Coarse Aggregate Angularity (ASTM D 5821)

Asphaltic Concrete Type	CAA (minimum)
SPS	35
SP1	55
SP2	65
SP3	75
SP4 Special	85/80*
SP4	85/80*
SP5	95/90*

^{*} Denotes two faced crushed requirements

j. The fine aggregate angularity value of the blended aggregate material shall meet or exceed the minimum values for the appropriate asphaltic concrete type as shown in Table 1028.03.

Note: 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. The Contractor will determine the specific gravity to be used in the calculation of FAA mixture design value(s) and, if verified by the NDR Aggregate Laboratory, this same value can be used throughout production. The verification value determined by the NDR Aggregate Laboratory will be on a combined aggregate sample supplied by the Contractor that is representative of the material proposed or being used during production. The specific gravity to be used throughout production to calculate FAA values will be the Contractor's verified value or the NDR determined value (whenever verification is not made) and will be noted on the Mix Design. Changes in aggregate percentages during production may require determination of a revised specific gravity for FAA.

Table 1028.03
Fine Aggregate Angularity
(AASHTO T304 Method A)

Asphaltic Concrete Type	FAA (minimum)
SPS	
SP1	40.0
SP2	43.0
SP3	43.0
SP4 Special	45.0
SP4	45.0
SP5	45.0

k. The coarse aggregate shall not contain flat and elongated particles exceeding the maximum value for the appropriate asphaltic concrete type category shown in these provisions according to Table 1028.04.

Table 1028.04
Flat and Elongated Particles*
(ASTM D 4791)

Asphaltic Concrete Type	Percent, Maximum
SPS	25
SP1	10
SP2	10
SP3	10
SP4 Special	10
SP4	10
SP5	10

^{*}Criterion based on a 5:1 maximum to minimum ratio by using actual percent retained on each sieve and add together.

I. The sand equivalent of the blended aggregate material from the fine and coarse aggregates shall meet or exceed the minimum values for the appropriate asphaltic concrete type shown in these provisions according to Table 1028.05.

Table 1028.05 Clay Content Criteria (AASHTO T 176)

Asphaltic Concrete Type	Sand Equivalent, Minimum
SPS	30
SP1	40
SP2	40
SP3	45
SP4 Special	45
SP4	45
SP5	45

- m. The blended aggregate shall conform to the gradation requirements specified below for the appropriate nominal size.
 - (1) It is recommended that the selected blended aggregate gradation does not pass through the restricted zones as specified in the following control points for nominal size. The plot of the blended aggregate gradation of Superpave mix designs with FAA values of less than 43.0 will not enter the limits of the restricted zone. The plot of the blended aggregate gradation of Superpave mix designs with FAA values of 43.0 to less than 45.0 passing through the restricted zone must intersect both the upper and lower limits of the restricted zone between 1) any two consecutive sieves used to define the restricted zone limits, or 2) two vertical lines plotted between the #8 and #50 sieve a distance apart no greater than 1/3 the horizontal distance between the #8 (2.36-mm) and #50 (300-μm) sieves. Superpave mix designs with FAA values of 45.0 or greater will not be restricted from passing through the restricted zone.

Table 1028.06
Gradation Control Points for 0.375 Inch (9.5 mm) Nominal Size

	Control Points (percent passing)		Bour	ed Zone ndary passing)
English Sieve (Metric)	Minimum	Maximum	Minimum	Maximum
1/2 inch (12.5 mm)	100.0			
3/8 inch (9.5 mm)	90.0	100.0		
No. 4 (4.75 mm)		90.0		
No. 8 (2.36 mm)	32.0	67.0	47.2	47.2
No. 16 (1.18 mm)			31.6	37.6
No. 30 (600 μm)			23.5	27.5
No. 50 (300 μm)			18.7	18.7
*No. 200 (75 μm)	2.0	10.0		

^{*} see note following Table 1028.08

Table 1028.07
Gradation Control Points for 0.5 Inch (12.5 mm) Nominal Size

	Control Points (percent passing)		Restricted Zone Boundary (percent passing)	
English Sieve (Metric)	Minimum	Maximum	Minimum	Maximum
3/4 inch (19 mm)	100.0			
1/2 inch (12.5 mm)	90.00	100.00		
3/8 inch (9.5 mm)		90.00		
No. 8 (2.36 mm)	28.0	58.0	39.1	39.1
No. 16 (1.18 mm)			25.6	31.6
No. 30 (600 μm)			19.1	23.1
No. 50 (300 μm)			15.5	15.5
* No. 200 (75 μm)	2.0	10.0		

^{*} see note following Table 1028.08

Table 1028.08
Gradation Control Points for 0.75 Inch (19 mm) Nominal Size

	Control Points (percent passing)		Restricted Zone Boundary (percent passing)	
English Sieve (Metric)	Minimum	Maximum	Minimum	Maximum
1 inch (25 mm)	100.0			
3/4 inch (19 mm)	90.0	100.0		
1/2 inch (12.5 mm)		90.0		
No. 8 (2.36 mm)	23.0	49.0	34.6	34.6
No. 16 (1.18 mm)			22.3	28.3`
No. 30 (600 μm)			16.7	20.7
No. 50 (300 μm)			13.7	13.7
* No. 200 (75 μm)	2.0	8.0		

^{*} Dust to binder ratio is the ratio of the percentage by weight of aggregate finer than the No. 200 (75 μ m) sieve to the asphalt content expressed as a percent by weight of total mix. The dust to binder ratio shall be between 0.70 and 1.70.

n. The combined mineral aggregate for Asphaltic Concrete, Type SPS, shall be an aggregate or a combination of aggregates, and mineral filler if needed.

Table 1028.09
Gradation Control Points for Type SPS

	Control Points (percent passing)		
English Sieve (Metric)	Minimum	Maximum	
1 inch (25 mm)	100.0		
3/4 inch (19 mm)	94	100.0	
½ inch (12.5 mm)	81	94	
No. 8 (2.36 mm)	42	70	
No. 16 (1.18 mm)	29	43	
No. 30 (600 μm)	19	34	
No. 50 (300 μm)	11	20	
* No. 200 (75 μm)	2	8	

^{*} see note following Table 1028.08

o. Mineral filler shall consist of pulverized soil, pulverized crushed rock, broken stone, gravel, sand-gravel, sand or a mixture of these materials that conforms to the following requirements.

Table 1028.10
Mineral Filler for Type SPS

	Min.	Max.
Total Percent Passing the No. 50 (300 μm) Sieve	95	100
Total Percent Passing the No. 200 (75 μm) Sieve	80	100
Plasticity Index (material passing the No. 200 (75 μm) Sieve, except soil	0	3
Plasticity Index for Soil	0	6

3. Contractor's Lab Equipment:

- a. The Contractor shall calibrate and correlate the testing equipment according to the procedures prescribed for the individual tests and conduct tests in conformance with specified testing procedures.
- b. The Contractor shall have the following equipment (or approved equal) at or near the project location:
 - (1) An AASHTO approved gyratory compactor and molds.
 - (2) An AASHTO approved Asphalt Content Ignition Oven.
 - (3) Rice equipment specified in AASHTO T 209, procedure 9.5.1, Weighing in Water. The thermometer being used to measure water temperature will be as specified in T 209.
 - (4) FAA equipment
 - (5) To test density of compacted asphaltic concrete, a minimum 6000 gm balance, 0.1 gm resolution, with under body connect and water container large enough to conveniently place specimen in the basket and

completely submerge the basket and specimen without touching the sides or bottom is required.

(6) QC Laboratory (suggested size 8 ft. x 45 ft.) (2.4 m x 13.7 m) which contain the following:

Air conditioner.

Dedicated phone (where available).

FAX machine.

Xerox type copy machine.

Sample storage.

Work table.

Bulletin board.

Running water.

Desk and chair.

Separate power supply.

Incidental spoons, trowels, pans, pails.

- (7) Diamond saw for cutting cores.
- (8) Diamond core drill 6 inch (150 mm) and 4 inch (100 mm) diameter core.
- (9) Oven, 347°F (175°C) minimum, sensitive <u>+</u>5°F. (<u>+</u>2°C).
- (10) USA Standard Series Sieves for coarse and fine aggregate with appropriate shakers (12 inch (300 mm) recommended).
- (11) Personal Computer capable of running and creating a CD copy of the latest version of NDR Superpave software and Color Printer.

1028.03 -- Acceptance Requirements

- 1. Volumetric Mix Design
 - a. The job mix formula shall be determined from a mix design for each mixture. A volumetric mixture design in accordance with AASHTO R 35 as modified within this special provision will be required. However, the mixture for the Superpave specimens and maximum specific gravity mixture shall be short-term aged for two hours.
 - (1) Practice for Short and Long-Term Aging of Hot Mix Asphalt (HMA), AASHTO R30
 - (2) Method for Preparing and Determining the Density of Hot Mix Asphalt Specimens by Means of the SHRP Gyratory Compactor, AASHTO T312
 - b. The optimum binder content shall be the binder content that produces 4.0 percent air voids at Ndes. The design shall have at least four binder content points, with a minimum of two points above and one point below the optimum. For Type SPS Asphaltic concrete, the optimum binder content shall be that which produces air voids at Ndes of 1.5 percent to a maximum of 5.0 percent.

- c. The Contractor shall inform the Engineer when changes in mixture properties occur for any reason, such as, but not limited to, the result of changes in the types or sources of aggregates are made or when changes in grades, sources, properties or modification procedures (if modified) of PG Binders are made. These changes may require a new job mix formula, mix design and moisture sensitivity test. The new proposed job mix formula shall be in accordance with the requirements as stated above and submitted 5 working days prior to use for verification.
- d. Superpave mixtures shall contain 1% hydrated lime as specified in the Special Provision "Hydrated Lime for Asphaltic Mixtures". Each Superpave mixture shall be tested for moisture sensitivity in accordance with AASHTO T 283. The loose mixture shall be short-term aged for two hours in accordance with AASHTO R30. The 6-inch (152-mm) specimens shall be compacted in accordance with AASHTO T 312 to seven percent air voids at 95-mm in height and evaluated to determine if the minimum Tensile Strength Ratio (TSR) of 80 percent has been met. If the mixture has not met the minimum TSR value, additional lime shall be added, such that the mix will meet the minimum TSR of 80 percent. All data shall be submitted with the mix design verification request. During production of Lot #1, the Contractor shall provide to the NDR Central laboratory properly prepared gyratory samples for AASHTO T 283 testing and 2-75 mm APA pucks at 4% voids (± 0.5%) for all mixtures. A TSR test result of less than 80 percent will require mixture modification(s) and a sample from subsequent lots will be tested until a TSR value of at least 80 percent is achieved. Moisture sensitivity testing is not required for Asphaltic Concrete Type SPS.

e. Design Criteria:

(1) The target value for the air voids of the asphaltic concrete design shall be 4 percent at the Ndes number of gyrations. For Type SPS Asphaltic concrete the air voids at Ndes shall be a minimum of 1.5 percent with a maximum of 5.0 percent.

Table 1028.11
Gyratory Compaction Effort
(Average Design High Air Temperature ≤39 degrees C)

Asphaltic Concrete Type	Nini	Ndes	Nmax
SPS	6	40	62
SP1	7	68	104
SP2	7	76	117
SP3	7	86	134
SP4 Special	7	76	117
SP4	8	96	152
SP5	8	109	174

(2) The design criteria for each mixture shall be determined from Tables 1028.12, 1028.13, and 1028.14.

Table 1028.12

Mix Criteria	SPS, SP1	SP2	SP3, SP4 Special, SP4, SP5
Voids In Mineral Aggregate	See Table 1	028.13	
Voids Filled with Asphalt	See Table 1028.14		
%Gmm at Nini	91.5*	90.5	89.0
%Gmm at Nmax	98.0*	98.0	98.0

^{*} No specification requirement for SPS, only %Gmm at Ndes = 95 to 98.5

Table 1028.13 Voids in Mineral Aggregate Criteria at Ndes

Nominal Maximum Aggregate Size (Metric)	Minimum VMA, Percent*
3/8 inch (9.5 mm)	15.0
1/2 inch (12.5 mm)	14.0
3/4 inch (19 mm)	13.0

^{*} No specification requirement for SPS

Table 1028.14 Voids Filled with Asphalt Criteria at Ndes (for mix design only)

(ioi iiiix doolgii oiii)		
Asphaltic Concrete Type	Design VFA, Percent	
SPS	N/A	
SP1	70 – 80	
SP2	65 – 78	
SP3	65 – 78	
SP4 Special	65 - 75	
SP4	65 – 75	
SP5	65 – 75	

- 2. The Contractor shall make Mix adjustments when:
 - a. Air voids, VMA, FAA, CAA or Binder content do not meet the currently approved criteria.
 - b. Surface voids create a surface and/or texture that does not meet the criteria of Sections 502 and 503 in the 1997 English and Metric Edition of the Standard Specifications.
 - c. Pavement does not meet any other design criteria.
 - d. Rutting occurs.

- 3. Mix adjustments at the plant are authorized within the limits shown in Table 1028.15 as follows:
 - a. The adjustment must produce a mix with the percent air voids and all other properties as stated in these specifications.
 - b. All adjustments must be reported to the Engineer.
 - c. The adjustment values in Table 1028.15 will be the tolerances allowed for adjustments from the NDR verified mix design "Combined Gradation" target values which resulted from production or mix design adjustments, but cannot deviate from Superpave gradation criteria, or violate restricted zone criteria specified in paragraph 2. I. (1) of Subsection 1028.02. Mix adjustments for individual aggregates, including RAP, greater than 25% of the original verified mix design proportion or greater than 5% change in the original verified mix design percentage, whichever is greater, may require the Contractor to submit a new mix design, as determined by the Engineer. The contractor is responsible for requesting new mix design targets as they approach these tolerances, failure to do so may result in a suspension of operations until a new mix design is approved.

Table 1028.15

Aggregate Adjustments		
Sieve Size	Adjustments	
1 inch (25 mm), 3/4 inch (19 mm), 1/2 inch (12.5 mm), 3/8 inch (9.5 mm)	± 6%	
No. 8 (2.36 mm), No. 16 (1.18 mm), No. 30 (600 μm), No.50 (300 μm)	± 4%	
No. 200 (75 μm)	± 2%	

4. Sampling and Testing:

- a. The Contractor shall take samples at frequencies identified by the Engineer, according to the NDR statistically based procedure. The samples shall be approximately 75 pounds (34 kg) and split according to NDR T-248 either at: 1) the sampling location, with the NDR taking custody of their sample at that time or 2) after being transported to the test facility in an insulated container, as determined by the Engineer. The details of sampling, location, splitting etc. shall be determined at the pre-construction conference.
- b. All samples transported to the test facility and companion samples within the Lot shall be identified by attaching the lab calculation sheet from the latest version of the superpave software, stored, and retained by the Contractor until the NDR has completed the verification testing process.

- c. (1) The sample shall be taken from the roadway, behind the paver before compaction or from the windrow.
 - (2) At least one QC sample shall be tested for every 750 tons (680 Mg) of plant produced mix.
 - (i) If, at the completion of the project, the final lot consists of less than 3,750 tons (3,400 Mg)of asphaltic concrete, 1 sample for each 750 tons (680 Mg) or fraction thereof, shall be taken and tested.
 - (3) Additional sampling and testing for the Contractor's information may be performed at the Contractor's discretion. Any additional testing will not be used in pay factor determination.
 - (4) At least 1 sample shall be taken between the first 110 tons (100 Mg) and 300 tons (270 Mg) at the following times: 1) at the project start-up, 2) when a test result, identified in Paragraph 4,h,(3) of Subsection 1028.03, is out of specification, and 3) when a substantial aggregate proportion or other major mix change has been made. This sample, when other than at start-up, will be in lieu of the next scheduled random sample location.
 - (5) The Contractor will be notified what sublot sample must be tested for FAA and CAA according to the NDR random sampling schedule. The FAA and CAA may be sampled from the blended cold feed material prior to hydrated lime coating, but in addition the Contractor will be required to test FAA and CAA from a roadway sample using an ignition oven sample for correlation. If the coarse portion of the blend is all ledge rock the CAA tests can be waived. If the samples tested with the ignition oven meet the CAA and FAA minimum requirement, then the cold feed sample does not have to be tested. When both ignition oven and cold feed samples are being tested the acquisition of the samples shall be timed such that each sample represents, as close as possible, the same aggregate being fed into the plant.
 - (6) For projects using RAP material the FAA shall be established as follows:
 - A RAP sample will be processed through an ignition oven and then combined with the proportioned amount of virgin aggregate defined by the mix design and then proceeding with FAA and CAA testing.
- d. The sample shall be compacted immediately while still hot (additional heating may be required to raise the temperature of the sample to compaction temperature).
- e. Each production sample shall be tested as follows:
 - (1) (i) Bulk Specific Gravity (Gmb) shall be determined for each specimen in accordance with AASHTO T 166- Bulk Specific Gravity of Compacted Bituminous Mixtures Using Saturated Surface Dry Specimens. One specimen shall be compacted for each production sample.
 - (2) One Theoretical Maximum Specific Gravity (Gmm) test for each production sample of uncompacted mixture shall be determined in

- accordance with AASTHO T 209 procedure 9.5.1. Weight in water -Maximum Specific Gravity of Bituminous Paving Mixtures.
- (3) (i) The Blended Aggregate Bulk Specific Gravity (Gsb) shall be determined from a combined aggregate blend not coated with hydrated lime, including any RAP following ignition burn-off, on the + #4 and - #4 material. This test and recalculation will be required if the mix design changes according to the tolerances in Paragraph 3.c. of subsection 1028.03 and/or table 1028.15.
 - (ii) AASHTO T 84 Specific Gravity and Absorption of Fine Aggregate.
 - (iii) AASHTO T 85 Specific Gravity and Absorption of Coarse Aggregate.
- (4) The laboratory air voids shall be determined in accordance with the following:

Table 1028.16

Gmb(corr)@Nany = Gmb(meas)@Nmax x (height@Nmax ÷ height@Nany) %Gmm(corr)@Nany = 100 x (Gmb(corr)@Nany ÷ Gmm(meas)) % Air Voids@Nany = 100 - %Gmm(corr)@Nany $VMA@Ndes = 100 - (Gmb(corr)@Ndes \times Ps \div Gsb)$ VFA@Ndes = 100 x ((VMA@Ndes - % Air Voids@Ndes) ÷ VMA@Ndes) Measured = (meas)Corrected = (corr)

- (5) (i) The percent of PG Binder shall be determined for each QC test. The percent of PG Binder will be computed by ignition oven results. A correction factor of 0.4% will be added to the ignition oven results for mixes containing hydrated lime.
 - (ii) The gradations shall be determined for each QC test using AASHTO T 30.
- (6) Except as noted in this Subsection, all sampling and testing shall be done as prescribed in the NDR Materials Sampling Guide and Standard Method of Tests.
- f. Testing Documentation:
 - (1) All test results and calculations shall be recorded and documented on data sheets using the latest version of NDOR provided "Superpave" software. A copy containing complete project documentation will be provided to the Materials and Research Division at the completion of the project.

g. QC Charts:

- (1) QC charts shall be posted at the asphalt production site and kept current with both individual test results and moving average values for review by the Engineer.
- (2) Control charts shall include a target value and specification limits.
- (3) As a minimum, the following values shall be plotted or reported on NDR provided software:
 - (i) Laboratory Gyratory density
 - (ii) Ignition oven or cold feed aggregate gradations for all Superpave sieves will be reported.
 - (iii) PG Binder content shall be plotted to the nearest 0.1 percent by ignition oven results in accordance with AASHTO T 308 as stated in paragraph 4.e.(5)(i) of Subsection 1028.03..
 - (iv) The theoretical maximum specific gravity (Rice) to the nearest 0.001 percent will be reported.
 - (v) Laboratory Gyratory air voids at Ndes shall be plotted to nearest 0.1 percent. Laboratory Gyratory air voids, at Nini, Ndes and Nmax shall be reported to nearest 0.1 percent.
 - (vi) FAA and CAA of the asphaltic concrete for both cold feed and ignition oven samples will be reported to the nearest 0.1 percent.
 - (vii) VMA content shall be plotted to nearest 0.1 percent and VFA shall be reported to the nearest 0.1 percent.
 - (viii) Dust to Binder ratio to the nearest 0.01 will be reported.
- h. Independent Assurance (IA) Review of Testing:
 - (1) The Contractor will allow NDR personnel access to their laboratory to conduct IA review of technician testing procedures and apparatus. Any deficiencies discovered in testing procedures will be noted and corrected.
 - (2) During IA review, NDR personnel and the Contractor will split a sample for the purpose of IA testing. The sample(s) selected will be tested in the NDR Branch Laboratory. Any IA test results found to be outside of defined testing tolerances will be noted. The Contractor must then verify the testing apparatus and make corrections if the apparatus is out of tolerance.

(3) Testing Tolerances

(i) Asphaltic Concrete and Asphaltic Concrete Aggregates.

Table 1028.17

Test	Tolerance
Asphalt Content by Ignition Oven	0.5%
Gyratory Density	0.020
Maximum Specific Gravity	0.015
Bulk Dry Specific Gravity (Gsb)	0.020
FAA	0.5%
CAA	10.0%
Field Core Density	0.020

(4) Aggregate Gradation (Blended Aggregate)

Table 1028.18

14510 1020.10		
Size Fraction Between Consecutive Sieves, %	Tolerance	
0.0 to 3.0	2%	
3.1 to 10.0	3%	
10.1 to 20.0	5%	
20.1 to 30.0	6%	
30.1 to 40.0	7%	
40.1 to 50.0	9%	

- 5. a. In response to tests results, the Contractor shall notify the Engineer whenever the process approaches the Specification limits.
 - b. When any single test result(s), on the same mix property, from two consecutive QC samples fall outside the allowable production tolerances in Table 1028.19, the material represented by these tests will be accepted with a 20% penalty or rejected, as determined by the Engineer.

Table 1028.19 Production Tolerances*

Test	Allowable Single Test
	Deviation from Specification
Voids in the Mineral Aggregate	- 1.00% to + 1.25% from Min.
Dust to Asphalt Ratio	None
Coarse Aggregate Angularity	- 5% below Min.
Fine Aggregate Angularity	- 0.50% below Min.

^{*} These tolerances are applied to the mix design specification values, not the submitted mix design targets.

c. The Contractor shall assume the responsibility to cease operations when specifications other than those stated in Table 1028.19 are not being met and production shall not be started again without approval of the Engineer.

6. Verification Sampling and Testing:

- a. The NDR will select and test at random one of the sublot samples (750 tons, 680 Mg) within a Lot (3750 tons, 3400 Mg) for verification and report results in a timely manner.
- b. The results of Contractor QC testing will be verified by NDR verification tests. On any given Lot, if the results of Air Void verification testing and its companion QC testing are within 1.4 percent air voids, the Air Void verification for the entire Lot is complete and the Contractor test results will be used to determine the pay factors. If the Air Void verification test results and the companion QC test results are outside the above tolerance, the results from the verification test will be used to determine the pay factor for that sublot. Any or all of the remaining four NDR sublot samples may be tested and the NDR sublot test results may be applied to the respective sublots and the resulting pay factors will apply.
- c. When verification test results show a consistent pattern of deviation from the QC results, the Engineer may cease production and request additional verification testing or initiate a complete IA review.
- d. If the project personnel and the Contractor cannot reach agreement on the accuracy of the test results, the Materials and Research Laboratory will be asked to resolve the dispute, which will be final.

7. Acceptance and Pay Factors

- a. Acceptance and pay factors for Asphaltic Concrete Type SPS will be based on compacted in place average density.
- b. Acceptance and pay factors for Asphaltic Concrete Type SP1, SP2, SP3, SP4 Special, SP4 and SP5 will be based on single test air voids, running average air voids, compacted in place average density, and production tolerances pay factor as stated in Paragraph 5.b. subsection 1028.03

(1) When there is a production tolerance pay factor penalty as stated in Paragraph 5.b. Subsection 1028.03, this penalty percentage will be entered in the Superpave Asphalt Pay Factor Summary under production specifications for each sublot affected. These four individual pay factors will then be multiplied by each other to determine a total pay factor for each sublot [(750 tons) (680 Mg)].

8. Asphaltic Concrete Air Voids

- a. Normally, 1 sample for testing will be taken from each sublot [(750 tons) (680 Mg)] at locations determined by the Engineer.
- b. The pay factors for the single test air voids and moving average of four air voids pay factors will be determined in accordance with table 1028.20.
- c. If the average air voids pay factor is (50% or reject) the NDR will have the first option of accepting or rejecting the asphaltic concrete represented in this sublot. If the NDR accepts this sublot the Contractor will have the second option of replacing this asphaltic concrete for no pay on the removal and for whatever pay factor that applies to the replacement.
- d. In the case of removal, the foremost limits of the removal will be defined as the tonnage (mass) at which the production and placement was halted and a design change was made. The rear limits will be at the tonnage (mass) where linear interpolation with the previous test return to an accepted range and out of rejection limits or at the limit(s) of the defective material as determined by additional core samples taken and tested by the Contractor which show result(s) in an acceptable range and out of rejection limits to the satisfaction of the Engineer.

Table 1028.20

Acceptance Schedule Air Voids - N _{des}		
Air voids test results	Moving average of four	Single test
Less than 1.5%	Reject	Reject
1.5% to less than 2.0%	Reject	50%
2.0% to less than 2.5%	50% or Reject	95%
2.5% to less than 3.0%	90%	95%
3.0% to less than 3.5%	100%	100%
3.5% to 4.5%	102%	104%
Over 4.5% to 5.0%	100%	100%
Over 5.0% to 5.5%	95%	95%
Over 5.5% to 6.0%	90%	95%
Over 6.0% to 6.5%	50% or Reject	90%
Over 6.5% to 7.0%	Reject	50%
Over 7.0%	Reject	Reject

9. Asphalt Concrete Density Samples:

- a. Density tests will be performed by the Contractor under direct observation of NDR personnel. The Contractor will establish the method of testing in the preconstruction conference and shall be tested in accordance with the AASHTO T 166 or NDR T 587. The Contractor will insure that the proper adjustment bias and/or correction factors are used and accessible to NDR personnel along with all other inputs when NDR T 587 is selected. All correlation factors and test results shall be generated and reported on the NDOR Density spreadsheet. All disputed values determined using NDR T 587 shall be resolved using AASHTO T 166.
- b. Density of samples shall be determined by comparing the specific gravity of the core sample to the Maximum Specific Gravity (Rice) as follows:

where:

Sp. Gr. of Core =
$$\frac{\text{Wt. of Core in Air}}{\text{Wt. of SSD Core - Wt. of Core in Water}}$$

Note: The individual QC test value of the Maximum Mix Specific Gravity (Rice) will be used to calculate the density of each corresponding core.

c. Core samples shall be cut by the Contractor the first day of work following placement of the mixture.

- d. Normally, 1 sample for determination of density will be taken from each sublot (750 tons) (680 Mg) at locations determined by the Engineer.
- e. The theoretical maximum density for each lot (3,750 tons) (3,400 Mg) shall be calculated using AASHTO T 209.
- f. The average density of the lot shall be used to compute the pay factor for density. Exceptions to the sampling and testing of core samples for the determination of density are as follows:
 - (1) When the nominal layer thickness is 1 inch (25 mm) or less, the sampling and testing of density for this layer will be waived.
 - (2) When the average thickness of the 5 cores for a lot is 1 inch (25 mm) or less, the testing of density samples for this lot will be waived.
 - (3) When the nominal layer thickness and the average of the original 5 cores for a lot are both more than 1 inch (25 mm), but some of the cores are less than 1 inch (25 mm) thick, additional cores shall be cut at randomly selected locations to provide 5 samples of more than 1 inch (25 mm) thickness for the determination of the pay factor for density.
- g. The pay factor for density shall be computed in accordance with Table 1028.21.
- h. (1) If, at the completion of the project, the final lot consists of less than 3,750 tons (3400 Mg) of asphaltic concrete, a minimum of 3 samples, or 1 sample for each 750 tons (680 Mg) or fraction thereof, whichever is greater, shall be taken and tested for density.
 - (2) The test results shall be averaged and the density pay factor based on the values shown in Table 1028.21.
 - (3) Should the average of less than 5 density tests indicate a pay factor less than 1.00, additional density samples to complete the set of five shall be taken at randomly selected locations and the density pay factor based on the average of the 5 tests.

Table 1028.21

Acceptance Schedule Density of Compacted Asphaltic Concrete		
Average Density		
(5 Samples, Percent		
of Voidless Density)	Pay Factor	
Greater than 92.4	1.00	
Greater than 91.9 to 92.4	0.95	
Greater than 91.4 to 91.9	0.90	
Greater than 90.9 to 91.4	0.85	
Greater than 90.4 to 90.9	0.80	
Greater than 89.9 to 90.4	0.70	
89.9 or Less	0.40 or Reject	

i. If requested by the Contractor, check tests for all density tests in the original set, taken no later than two days following completion of the lot will be allowed in lots with a density pay factor of less than 1.00. No re-rolling will be allowed in these lots. Locations for checks tests will be determined by a new random sampling schedule provided by the Engineer. The average density obtained by the check tests shall be used to establish the density pay factor for the lot.

10. PG Binder Sampling

- At least one sample (2-1 quart cans) (2-1 liter cans) of PG Binder will be sampled by the Contractor's QC Technician for every Lot (3750 tons) (3400 Mg) of asphalt concrete mixture produced.
- b. Samples will be taken in accordance with NDR Standard Method T40.
- c. The QC Technician will include on the Sample Identification form all information required by the contract.

PROPOSAL GUARANTY (S1-38-1104)

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 the Proposal Guaranty Bid Bond Section of these Special Provisions.

* * * *

200INFJUL06

INDEX

ADJUST FIRE HYDRANT TO GRADE	
ADJUST VALVE BOX TO GRADE	99
AGGREGATE FOUNDATION COURSE-D	82
AREA INLET SEDIMENT FILTER	112
ASPHALTIC CONCRETE	
BITUMINOUS FOUNDATION COURSE	70
BORROW SITE APPROVAL	
CERTIFICATION FOR FEDERAL-AID CONTRACTS	
CONCRETE IMPRINTED MEDIAN SURFACING	
CONCRETE IMPRINTED SURFACING	
CONSTRUCTION DETAILS	
CONTRACTOR FURNISHED SIGNS	
CONTROL OF WORK	
CORRUGATED METAL PIPE	
COVERCROP SEEDING	
CRACKS IN CONCRETE PAVEMENT	
CRUSHED CONCRETE FOUNDATION COURSE	
CRUSHED ROCK EMBEDMENT	
CURB INLET SEDIMENT FILTER	117
DISADVANTAGED BUSINESS ENTERPRISE (DBE) GOAL	35
CERTIFICATION	
DBE GOAL CREDIT	36
DBE GOAL CREDIT TABLE	40
DESCRIPTIONS	37
SUBLETTING OR ASSIGNING OF CONTRACT	
USE OF DISADVANTAGED BUSINESS ENTERPRISES	25
DISADVANTAGED BUSINESS ENTERPRISES	24
DOWELED CONCRETE PAVEMENT	
ELASTOMERIC BEARINGS AND LAMINATED BEARING PADS	121
EPOXY COATED REINFORCING STEEL	
EQUIPMENT RENTAL	122
(Crawler Mounted Hydraulic Excavator)	118
EROSION CONTROL	
EROSION CONTROL PLAN	
EROSION CONTROL, TYPE "AAA"	112
EROSION CONTROL, TYPE C-1	
FABRIC SILT FENCE (HIGH POROSITY AND LOW POROSITY)	117
FLY ASHFLY	
FOUNDATION COURSE 4"	 ດວ
FUEL COST ADJUSTMENT PAYMENT	02
FURNISH AND INSTALL NEW LUMINAIRE	<i>70</i>
I ONGO I AND INCLASE NEW LOWINAINE	90
GENERAL CONDITIONS	
GENERAL INFORMATION, DEFINITIONS, AND TERMS	49
HIGH TENSILE BOLTS, NUTS, AND WASHERS	121
, -, - -	

INFORMAL PARTNERING	44
JACKING CULVERT PIPE, SEWER PIPE, AND CASING	110
LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC	40
LIABILITY INSURANCE	
LOCAL MATERIAL SOURCES	97
MEASUREMENT AND PAYMENT	48
METAL FLARED-END SECTIONS	
METAL HANDRAIL	
NOTICE TO BIDDERS (Storm Water Pollution Prevention Plan)	45
OPERATION AND MAINTENANCE OF TEMPORARY LIGHTING SYSTEM	95
PERFORMANCE GRADED BINDER	124
PREFORMED PAVEMENT MARKING TAPE, TYPE 4	
IN GROOVED PAVEMENT	84
PROPOSAL GUARANTY	
PROSECUTION AND PROGRESS	
TROOLOG FION AND I ROOKEGO	
REINFORCED CONCRETE PIPE, MANHOLE RISERS, AND FLARED-END SECTIONS.	
RELOCATE EXISTING LIGHTING UNIT	
REMOVE AND RESET CHAIN-LINK FENCE	
REMOVE LIGHTING UNIT	
REMOVE TRAFFIC SIGNAL	
REPAIR OF DAMAGED METALLIC COATINGS	
REQUIRED SUBCONTRACTOR/SUPPLIER QUOTATIONS LIST	47
SANITARY SEWER	103
SECONDARY ELECTRICAL CONNECTIONS	
SECTION 1028 SUPERPAVE ASPHALTIC CONCRETE	
SEEDING	
SPECIAL PROSECUTION AND PROGRESS	
(Phasing and Tentative Start Date)	44
(Roadway Lighting)	
SPECIAL PROSECUTION AND PROGRESS (Migratory Birds)	46
SPECIAL PROSECUTION AND PROGRESS FOR SILT SAVER AREA INLET SEDIMEN	1T
FILTER STATUS OF RIGHT OF WAY	113
STATUS OF RIGHT OF WAY	42
STATUS OF UTILITIES	
STEEL BARS FOR CONCRETE REINFORCEMENT	121
STRUCTURAL STEEL	
SUBGRADE PREPARATION	
SUPERPAVE ASPHALTIC CONCRETE	
TEMPORARY LIQUETING OVOTENO	
TEMPORARY LIGHTING SYSTEMS	
TEMPORARY PAVEMENT MARKING	
TEMPORARY SILT FENCE	
TEMPODADY CLIDEACING	07

TEMPORARY TRAFFIC CONTROL DEVICES	
(Temporary Signs)	85
(Type II Barricades, Reflectorized Drums, 42" (1070 mm) Reflective Cones,	
Panels)	85
TEMPORARY TRAFFIC SIGNAL	92
TIMBER AND LUMBER	123
TRAFFIC CONTROL MANAGEMENT	86
TYPE B HIGH INTENSITY WARNING LIGHTS	85
TYPE IP CEMENT	122
WATER	77
WOOD PRESERVATIVES	123

PAGE: 1 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	1	APPROX. QUANTITY	UNIT PRICE	BID AMOUNT	
110	BISCRIFTION	AND UNITS	DOLLARS CTS	DOLLARS CTS	
SECTI(ON 0001 GROUP 1 GRADING				
0001	0030.10 MOBILIZATION	 LUMP 	 LUMP 	 	
	1000.00 LARGE TREE REMOVAL 	 1.000 EACH	 .	 	
	1009.00 GENERAL CLEARING AND GRUBBING 	 LUMP 	 LUMP 	 	
0004	1011.00 WATER 	 273.000 MGAL	11.00000	3003.00	
	1012.00 RIGHT-OF-WAY MARKERS 	 25.000 EACH	 		
	1030.00 EARTHWORK MEASURED IN EMBANKMENT 	 18783.000 CY	 		
0007	1033.00 ROADWAY GRADING 	 8.210 STA	 .	 .	
0008	1101.00 REMOVE PAVEMENT 	 43196.000 SY	 .	 .	
0009	1101.25 SAWING PAVEMENT 	 20.000 LF	2.50000	 50.00	
	1102.00 REMOVE ASPHALT SURFACE 	 2880.000 SY	 	 	

PAGE: 2 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	I	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
0011	1106.00 REMOVE DRIVEWAY 	 1918.000 SY	 	 .
0012	1107.00 REMOVE WALK 	 992.000 SY		
	1122.01 REMOVE CONCRETE MEDIAN SURFACING 	 597.000 SY		 .
0014	1123.00 REMOVE CONCRETE DITCH LINER 	 11.000 SY		
0015	1125.00 CLEAR TRACT AT STA. 315+94.49 TO STA. 316+67.89 LT.	 1.000 EACH		
	1701.24 24" DRIVEWAY CULVERT PIPE, TYPE 2,3,4, 5,6,7 OR 8	 56.000 LF		
0017	4035.00 REMOVE FLARED-END SECTION 	 4.000 EACH		
0018	4093.80 WALL MATERIALS 	 4633.000 SF		
0019	4095.15 COMPACTED EARTH LEVELING PAD	 853.500 LF		
0020	6406.06 METAL HANDRAIL 	 87.000 LF		
0021	7017.00 REMOVE GUARDRAIL 	 785.000 LF		

PAGE: 3 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE NO	ITEM	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
	7150.50 REMOVE AND RESET CHAIN-LINK FENCE 	 215.000 LF	 	 .
0023	8024.50 SELECT GRANULAR BACKFILL FOR RETAINED EARTH STRUCTURE	 817.000 CY	 	 .
	L006.00 COVER CROP SEEDING	7.000 ACRE		
	L020.04 EROSION CONTROL, TYPE C-1 	4269.000 SY	 	
	L020.09 EROSION CONTROL, TYPE AAA 	 86.000 SY		
	L022.11 FABRIC SILT FENCE-LOW POROSITY 	 5042.000 LF	 	 .
	L022.12 FABRIC SILT FENCE-HIGH POROSITY 	 154.000 LF	 	 .
	 SECTION 0001 TOTAL			
SECTI	ON 0002 GROUP 3 CONCRETE	PAVEMENT		
0029	0030.30 MOBILIZATION 	 LUMP 	 LUMP 	 .
0030	2009.51 CRUSHED ROCK EMBEDMENT 	 8.210 STA	 	

PAGE: 4 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
0031	2010.03 CRUSHED ROCK SURFACE COURSE 	 229.000 TON	 	
0032	3011.25 CONCRETE CLASS 47B-3500 CURB TYPE II 	 276.000 LF	 	
0033	3013.13 CONCRETE CLASS 47BD-4000 BARRIER CURB 	 200.000 LF		
0034	3016.21 CONCRETE CLASS 47B-3000 SIDEWALKS 	 5726.000 SY		
0035	3017.19 CONCRETE CLASS 47B-3000 IMPRINTED SURFACING	3156.000 SY	 	
0036	3017.44 CONCRETE CLASS 47B-3000 IMPRINTED MEDIAN SURFACING	2520.000 SY		
0037	3020.24 CONCRETE CLASS 47B-3500 DRIVEWAY 	 1251.000 SY		·
0038	3075.42 9" CONCRETE PAVEMENT, CLASS 47B-3500 	2303.000 SY		
0039	3075.52 10" CONCRETE PAVEMENT, CLASS 47B-3500 	 6638.000 SY		
0040	3075.56 10" DOWELED CONCRETE PAVEMENT, CLASS 47B-3500	 53784.000 SY	 	
0041	3089.25 TEMPORARY SURFACING 10" 	9253.000 SY		

PAGE: 5 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE NO	TTEM DESCRIPTION	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	AND UNITS	DOLLARS CTS	DOLLARS CTS
	4015.00 ADJUST MANHOLE TO GRADE 	 6.000 EACH		
	4764.35 4" PERFORATED PIPE UNDERDRAIN 	 11280.000 LF		
	6010.40 CLASS 47BD-4000 CONCRETE FOR BARRIER 	 11.300 CY		
0045	6131.61 EPOXY COATED REINFORCING STEEL FOR BARRIER	 1415.000 LB		
	7500.19 THRU ARROW, PREFORMED PAVEMENT MARKING, TYPE 4	 3.000 EACH		
0047	7500.21 RIGHT/THRU ARROW, PREFORMED PAVEMENT MARKING, TYPE 4	 1.000 EACH		
	7500.32 ARROW, PREFORMED PAVEMENT MARKING, TYPE 4	 49.000 EACH	 	·
	7500.38 ONLY, PREFORMED PAVEMENT MARKING, TYPE 4	 9.000 EACH	 	·
0050	7502.04 4" WHITE PREFORMED PAVEMENT MARKING, TYPE 4	 114.000 LF		
0051	7502.14 4" WHITE PREFORMED PAVEMENT MARKING, TYPE 4, GROOVED	 11000.000 LF		

PAGE: 6 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE NO	ITEM DESCRIPTION	APPROX.	 UNIT PRICE 	BID AMOUNT
NO	DESCRIPTION	AND UNITS	DOLLARS CTS	DOLLARS CTS
0052	7503.04 4" YELLOW PREFORMED PAVEMENT MARKING, TYPE 4	 1562.000 LF	 	
0053	7503.14 4" YELLOW PREFORMED PAVEMENT MARKING, TYPE 4, GROOVED	 9200.000 LF	 	
0054	7508.14 12" WHITE PREFORMED PAVEMENT MARKING, TYPE 4, GROOVED	 2300.000 LF		
0055	7509.14 12" YELLOW PREFORMED PAVEMENT MARKING, TYPE 4, GROOVED	 600.000 LF	 	
	8029.25 FOUNDATION COURSE 4"	 60422.000 SY	 	
	8060.05 GRANULAR SUBDRAIN	 20.000 EACH		
0058	9111.00 WATER	 232.000 MGAL		
0059	9170.00 EARTH SHOULDER CONSTRUCTION	 157.152 STA		
0060	9170.50 MEDIAN CONSTRUCTION	 8.700 STA	 	
0061	9173.20 SUBGRADE PREPARATION	 64009.000 SY		

PAGE: 7 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	TTEM DESCRIPTION		ROX.	UNIT P	BID AMOUNT	
NO	DESCRIPTION	AND U			DOLLARS	CTS
	9185.50 MILLING CONCRETE CURB 	 LF	1790.000	 	 	
0063	L001.02	 ACRE	7.250	 	 	
0064	L010.00 SODDING 	 SY	4253.000	 	 	
0065	L032.75 MULCH 	 TON	16.500		 	
0066	W600.03 ADJUST VALVE BOX TO GRADE 	 EACH	2.000	 	 	
	W600.21 ADJUST FIRE HYDRANT TO GRADE 	 EACH	1.000	 	 	
	 SECTION 0002 TOTAL			 	 	· ·
SECTI	ON 0003 GROUP 4 CULVERTS					
0068	0030.40 MOBILIZATION	 LUMP 		 LUMP 	 	
0069	1117.00 REMOVE MANHOLE 	 EACH	11.000			
0070	1119.00 REMOVE INLET 	 EACH	33.000	 	 	

PAGE: 8 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	l	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	 DOLLARS CTS	DOLLARS CTS
0071	1119.50 REMOVE JUNCTION BOX 	 1.000 EACH	 	
	4002.00 CAST IRON COVER AND FRAME 	9000.000 LB		
	4003.00 CAST IRON COVER, FRAME, AND FLANGE 	 1160.000 LB		
	4004.50 CAST IRON GRATE AND FRAME 	 1010.000 LB		
	4005.00 CAST IRON RING AND COVER 	 2070.000 LB	 .	 .
	4016.00 MANHOLE AT STA. 282+50 RT. 	 1.000 EACH	 	 .
	4016.01 MANHOLE AT STA. 284+75 RT. 	 1.000 EACH	 .	 .
	4016.02 MANHOLE AT STA. 285+80 RT. 	 1.000 EACH	 - .	 .
	4016.03 MANHOLE AT STA. 291+00 RT. 	 1.000 EACH	 .	 .
	4016.04 MANHOLE AT STA. 291+64 RT. 	 1.000 EACH	 .	
	4016.05 MANHOLE AT STA. 297+09 RT. 	 1.000 EACH		

PAGE: 9 DATE: 06/09/06

DATE: 06/09/00

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	<u>!</u>	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	 DOLLARS CTS
	4016.06 MANHOLE AT STA. 297+87 RT. 	 1.000 EACH		 .
	4016.07 MANHOLE AT STA. 1182+80 RT. 	 1.000 EACH		 .
	4018.00 TAPPING EXISTING STRUCTURE 	 1.000 EACH	·	
0085	4018.50 TAPPING EXISTING PIPE 	 2.000 EACH		
	4035.00 REMOVE FLARED-END SECTION 	 6.000 EACH	·	
	4035.25 REMOVE AND SALVAGE FLARED-END SECTION	 2.000 EACH	·	
	4040.00 REMOVE HEADWALLS FROM CULVERTS 	 1.000 EACH	·	
	4043.50 REMOVE SEWER PIPE 	 4428.000 LF	·	 .
0090	4050.01 EXCAVATION FOR PIPE, PIPE-ARCH CULVERTS, AND HEADWALLS	 141.000 CY		 - .
0091	4105.59 CLASS 47B-3000 CONCRETE FOR INLET AND JUNCTION BOX	 311.480 CY		
0092	4107.07 CLASS 47B-3000 OR AX-3000 CONCRETE FOR CONCRETE COLLARS	 2.720 CY		

PAGE: 10 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	I	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	 DOLLARS CTS	 DOLLARS CTS
	4130.06 CLASS 47B-3000 OR AX-3000 CONCRETE FOR PIPE CULVERT PLUG	 0.220 CY	 	
	4155.50 REINFORCING STEEL FOR INLET AND JUNCTION BOX	 18465.000 LB	 	
	4157.00 REINFORCING STEEL FOR COLLARS	 217.000 LB	 	
0096	4310.24 24" FLARED-END SECTION	 1.000 EACH		
	4362.36 INSTALL 36" METAL FLARED-END SECTION 	 2.000 EACH	 - -	 .
	4875.24 JACKING 24" STORM SEWER PIPE, TYPE 1 CLASS IV	 164.000 LF	 - -	 .
0099	4900.24 AREA INLET SEDIMENT FILTER 	 1.000 EACH		
	4900.25 CURB INLET SEDIMENT FILTER 	 61.000 EACH		
	P300.36 36" CULVERT PIPE, TYPE 3,4 OR 5 	 33.000 LF		
0102	P700.15 15" STORM SEWER PIPE, TYPE 1,7 OR 8 	 1773.000 LF		
0103	P700.18 18" STORM SEWER PIPE, TYPE 1,7 OR 8 	 786.000 LF	 	

PAGE: 11 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS CTS	BID AMOUNT DOLLARS CTS	
	P700.24 24" STORM SEWER PIPE, TYPE 1,7 OR 8	 3047.000 LF	: 	: 	
	P700.30 30" STORM SEWER PIPE, TYPE 1,7 OR 8 	 458.000 LF	 	 .	
	P700.36 36" STORM SEWER PIPE, TYPE 1,7 OR 8 	 970.000 LF	 	 .	
	P702.15 15" STORM SEWER PIPE, TYPE 1 	 7.000 LF	 	 	
	P702.24 24" STORM SEWER PIPE, TYPE 1 	 169.000 LF	 	 	
	P702.42 42" STORM SEWER PIPE, TYPE 1 	 477.000 LF	 	 	
	P704.15 15" STORM SEWER PIPE, TYPE 3,4,5 OR 6 	 46.000 LF	 	 .	
	P705.24 24" STORM SEWER PIPE, TYPE 1 CLASS IV 	 164.000 LF	 	 .	
	 SECTION 0003 TOTAL		 		
SECTI(SECTION 0004 GROUP 4A SANITARY SEWER				
0112	0030.40 MOBILIZATION	 LUMP	 LUMP		

PAGE: 12 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE NO	I	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	AND UNITS	DOLLARS CTS	DOLLARS CTS
0113	1090.01 ABANDON MANHOLE 	 8.000 EACH	 	
	4002.00 CAST IRON COVER AND FRAME 	 7575.000 LB	 	
	4016.00 MANHOLE AT STA. 285+39 LT. 	 1.000 EACH		
	4016.01 MANHOLE AT STA. 285+55 LT. 	 1.000 EACH		
	4016.02 MANHOLE AT STA. 288+47 LT. 	 1.000 EACH		
	4016.03 MANHOLE AT STA. 291+10 LT. 	 1.000 EACH		 .
	4016.04 MANHOLE AT STA. 291+43 RT. 	 1.000 EACH	 .	 .
	4016.05 MANHOLE AT STA. 294+12-19' LT. 	 1.000 EACH	 .	 .
	4016.06 MANHOLE AT STA. 294+12-52' LT. 	 1.000 EACH	 .	 .
	4016.07 MANHOLE AT STA. 297+35 LT. 	 1.000 EACH	 .	
	4016.08 MANHOLE AT STA. 297+36 LT. 	 1.000 EACH		

PAGE: 13 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE NO	ITEM DESCRIPTION	APPROX.		BID AMOUNT
		AND UNITS	DOLLARS CTS	DOLLARS CTS
	4016.09 MANHOLE AT STA. 300+61 LT. 	 1.000 EACH		
	4016.10 MANHOLE AT STA. 300+62 LT. 	 1.000 EACH		
	4016.11 MANHOLE AT STA. 300+62 RT. 	 1.000 EACH	·	
0127	4016.12 MANHOLE AT STA. 303+90-18.5' LT. 	 1.000 EACH	·	
0128	4016.13 MANHOLE AT STA. 303+90-53' LT. 	 1.000 EACH	·	
	4016.14 MANHOLE AT STA. 304+19 RT. 	 1.000 EACH	·	
	4732.08 8" P.V.C. SANITARY SEWER PIPE 	 1766.000 LF	·	
	4764.74 4" P.V.C. SEWER PIPE 	 701.000 LF	·	
	4764.78 8" P.V.C. SEWER PIPE RESTRAINT JOINT 	 650.000 LF	·	
	4900.54 CONNECT TO EXISTING MANHOLE/SEWER MAIN	 5.000 EACH		
0134	W208.02 SADDLE TYPE FLEXIBLE JOINTS/TEES 	9.000 EACH		

PAGE: 14 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	I .	APPROX. QUANTITY	UNIT PR	ICE	BID AM	OUNT
NO		AND UNITS	DOLLARS	CTS	DOLLARS	CTS
	W224.85 4" FLEXIBLE COUPLING 	 22.000 EACH	 		 	
	W356.09 8" X 4" TEE P.V. C. INJECTION MOLDED	 12.000 EACH	 		 	
	 SECTION 0004 TOTAL		 			
SECTI(ON 0005 GROUP 8B ELECTRIC	AL				
	0003.76 TEMPORARY TRAFFIC SIGNAL AT JUNCTION N-31/N-64	 1.000 EACH	 		 	
	0003.77 TEMPORARY TRAFFIC SIGNAL AT N-31 & DOUGLAS STREET	 1.000 EACH	 		 	
	0003.78 TEMPORARY TRAFFIC SIGNAL AT N-31 & HOPPER STREET	 1.000 EACH	 		 	
0140	0030.81 MOBILIZATION	 LUMP 	 LUMP 		 	
	A001.01 PULL BOX, TYPE PB-1 	 16.000 EACH	 		 	
	A001.02 PULL BOX, TYPE PB-1A 	 17.000 EACH	 		 	
	A001.06 PULL BOX, TYPE PB-2A 	24.000 EACH	 		 	

PAGE: 15 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	 DOLLARS CTS
	A001.12 PULL BOX, TYPE PB-5 	 4.000 EACH		
	A001.16 PULL BOX, TYPE PB-6 	1.000 EACH		
	A004.00 TRAFFIC SIGNAL, TYPE TS-1 	 16.000 EACH		
	A004.04 TRAFFIC SIGNAL, TYPE TS-1LL	2.000 EACH	·	
	A004.10 TRAFFIC SIGNAL, TYPE TS-1A 	 4.000 EACH	·	
	A004.20 TRAFFIC SIGNAL, TYPE TS-1L 	 5.000 EACH	·	
	A004.28 TRAFFIC SIGNAL, TYPE TS-1RR 	3.000 EACH	·	
	A005.28 TRAFFIC SIGNAL CONTROLLER, TYPE TC-2070 	2.000 EACH	·	
	A006.15 PEDESTRIAN SIGNAL, TYPE PS-1 	 16.000 EACH	·	
	A006.70 PEDESTRIAN PUSHBUTTON, TYPE PPB 	 16.000 EACH		
0154	A006.86 PEDESTAL POLE, TYPE PP-12 	 4.000 EACH		

PAGE: 16 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	I .	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
	A006.98 VEHICLE DETECTOR, TYPE A PREFORMED	 59.000 EACH		
	A007.00 VEHICLE DETECTOR, TYPE B PREFORMED	 40.000 EACH	 	·
	A007.08 VEHICLE DETECTOR, TYPE TD-3	 24.000 EACH		
0158	A007.16 VEHICLE DETECTOR,	 2.000 EACH		
	A008.80 STREET LIGHTING UNIT, TYPE SL-A-40-6-0.	 1.000 EACH		
	A008.96 STREET LIGHTING UNIT, TYPE SL-A-40-8-0.	 21.000 EACH		
	A009.48 STREET LIGHTING UNIT, TYPE SL-A-45-8-0. 40	 3.000 EACH		
	A009.49 STREET LIGHTING UNIT, TYPE SL-A-45-8-0.	 3.000 EACH		
	A009.54 STREET LIGHTING UNIT, TYPE SL-A-45-12-0. 40	 3.000 EACH	 	
0164	A009.66 STREET LIGHTING UNIT, TYPE SL-A-45-10-0. 20	 6.000 EACH		
0165	A009.67 STREET LIGHTING UNIT, TYPE SL-A-45-10-0.	 6.000 EACH		

PAGE: 17 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE NO	TTEM DESCRIPTION	APPROX.	UNIT PRICE	BID AMOUNT
		AND UNITS	DOLLARS CTS	DOLLARS CTS
	A010.05 LUMINAIRE, TYPE HPS-200	 1.000 EACH		·
	A010.07 LUMINAIRE, TYPE HPS-400	 3.000 EACH		
0168	A011.40 COMBINATION MAST ARM SIGNAL AND LIGHTING POLE, TYPE CMP-35-12	 1.000 EACH		
0169	A011.65 COMBINATION MAST ARM SIGNAL AND LIGHTING POLE, TYPE CMP-40-12	 1.000 EACH	·	·
	A012.05 COMBINATION MAST ARM SIGNAL AND LIGHTING POLE, TYPE CMP-45-12	 2.000 EACH		
	A012.95 COMBINATION MAST ARM SIGNAL AND LIGHTING POLE, TYPE CMP-65-12	 3.000 EACH	·	
	A013.02 COMBINATION MAST ARM SIGNAL & LIGHTING POLE, TYPE CMP-75-12	1.000	·	
	A020.17 LIGHTING CONTROL CENTER, TYPE P	 2.000 EACH	·	
0174	A020.30 LIGHTING CONTROL CENTER, TYPE R	 4.000 EACH	·	
	A070.10 1 1/2-INCH CONDUIT IN TRENCH 	 11691.000 LF		-
0176	A070.14 2-INCH CONDUIT IN TRENCH 	 4469.000 LF		

PAGE: 18 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	<u>!</u>	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
	A070.18 3-INCH CONDUIT IN TRENCH 	 23.000 LF	 	 .
	A072.10 1 1/2-INCH CONDUIT UNDER ROADWAY 	 1515.000 LF	 	
	A072.14 2-INCH CONDUIT UNDER ROADWAY 	 562.000 LF		
	A072.18 3-INCH CONDUIT UNDER ROADWAY 	948.000 LF		
	A077.12 2/C #14 AWG TRAFFIC SIGNAL CABLE 	 2096.000 LF		
	A077.22 12/C #14 AWG TRAFFIC SIGNAL CABLE 	 1761.000 LF		
	A079.01 2/C #14 AWG DETECTOR LEAD-IN CABLE 	 11486.000 LF	 	
	A079.07 OPTICAL DETECTOR CABLE 	 1112.000 LF	 .	 .
	A079.50 GROUNDING CONDUCTOR 	 1080.000 LF	 .	
0186	A079.55 SERVICE CABLE 	74.000	 	
	A080.22 STREET LIGHTING CABLE, NO. 6 BARE 	 13485.000 LF	 	 .

PAGE: 19 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	I	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	 DOLLARS CTS	 DOLLARS CTS
	A080.24 STREET LIGHTING CABLE, NO. 6 USE 	 26970.000 LF		
	A081.00 6 PAIR COMMUNICATION CABLE 	3039.000		
	A500.21 INSTALL TRAFFIC SIGNAL CONTROLLER, TYPE TC-2070	 2.000 EACH		
0191	A600.00 REMOVE LIGHTING UNIT 	 18.000 EACH		
	A610.00 REMOVE TRAFFIC SIGNAL AT JUNCTION N-31/N-64	 1.000 EACH		
	A610.01 REMOVE TRAFFIC SIGNAL AT N-31 & DOUGLAS STREET	 1.000 EACH		
	A700.20 RELOCATE STREET LIGHTING UNIT 	 17.000 EACH		
0195	A706.00 RELOCATE PULL BOX 	 1.000 EACH		
0196	A780.05 TEMPORARY LIGHTING SYSTEM AT JUNCTION N-31/N-64	 1.000 EACH		
	A780.06 TEMPORARY LIGHTING SYSTEM AT N-31 & DOUGLAS STREET	1.000 EACH		
0198	A780.07 TEMPORARY LIGHTING SYSTEM AT N-31 & HOPPER STREET	 1.000 EACH	 	

PAGE: 20 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT PRICE	BID AMOUNT
NO		AND UNITS	DOLLARS CTS	DOLLARS CTS
0199	A800.55 OPERATION AND MAINTENANCE OF TEMPORARY LIGHTING SYSTEM AT JUNCTION N-31/N-64	 600.000 DAY		
0200	A800.56 OPERATION AND MAINTENANCE OF TEMPORARY LIGHTING SYSTEM AT N-31 & DOUGLAS STREET	!		
0201	A800.57 OPERATION AND MAINTENANCE OF TEMPORARY LIGHTING SYSTEM AT N-31 & HOPPER STREET	!		
	 SECTION 0005 TOTAL			
SECTIO	ON 0006 GROUP 10 GENERAL	ITEMS		
0202	0001.08 BARRICADE, TYPE II	 36325.000 BDAY	0.50000	 18162.50
0203	0001.10 BARRICADE, TYPE III	 7158.000 BDAY		
0204	0001.75 TEMPORARY SIGN DAY 	 200.000 EACH		
0205	0001.90 SIGN DAY 	25705.000 EACH		 .
0206	0001.99 CONTRACTOR FURNISHED SIGN DAY 	 3122.000 EACH	 	

PAGE: 21 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	<u>!</u>	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	 DOLLARS CTS
	0002.30 PAVEMENT MARKING REMOVAL	 22000.000 LF	 	 .
0208	0002.44 TEMPORARY PAVEMENT MARKING, TYPE PAINT	 35000.000 LF	 	 .
0209	0002.47 TEMPORARY PAVEMENT MARKING SURFACE PREPARATION	 6000.000 LF	 	
0210	0002.97 FLASHING ARROW PANEL 	 1318.000 DAY		
0211	0003.10 FLAGGING	 40.000 DAY		
	0005.10 TRAFFIC CONTROL MANAGEMENT 	 424.000 DAY	 	
0213	0010.04 FIELD OFFICE 	 1.000 EACH		
0214	0030.00 MOBILIZATION 	 LUMP 	 LUMP 	
0215	9110.01 RENTAL OF LOADER, FULLY OPERATED	 60.000 HOUR		
0216	9110.03 RENTAL OF DUMP TRUCK, FULLY OPERATED 	 60.000 HOUR	 	 .
0217	9110.07 RENTAL OF SKID LOADER, FULLY OPERATED 	 60.000 HOUR	 	

PAGE: 22 DATE: 06/09/06

SCHEDULE OF ITEMS

CONTRACT ID: 2786X PROJECT(S): STPD-31-2(108)

LINE	TITEM DESCRIPTION	APPROX.	 UNIT PRICE 	BID AMOUNT	
1.0		AND UNITS	DOLLARS CTS	DOLLARS CTS	
0218	9110.27 RENTAL OF CRAWLER MOUNTED HYDRAULIC EXCAVATOR, FULLY OPERATED	 60.000 HOUR	 	 	
0219	L022.75 TEMPORARY SILT CHECK 	200.000	 	 .	
0220	L022.90 TEMPORARY SILT FENCE 	 300.000 LF	 	 .	
	 SECTION 0006 TOTAL		 	·	
	 TOTAL BID		 	·	