

INFORMATIONAL PROPOSAL

FOR INFORMATION ONLY, NOT TO BE USED FOR BIDDING

NEBRASKA DEPARTMENT OF ROADS
LETTING DATE : March 14, 2002

CALL ORDER: F27 CONTRACT ID: 2926

CONTROL NO./SEQ. NO.: 21926 /000 PROJECT NO.: EACNH-80-9(808)
CONTROL NO./SEQ. NO.: 21931 /000 PROJECT NO.: EACNH-80-9(813)

TENTATIVE START DATE: 04/15/02 CONTRACT TIME: 867 CALENDAR DAYS

LOCATION: I-80, N-370 TO N-50 AND N-370 BRIDGES
IN COUNTY: SARPY

BIDDER

GROUP 1 GRADING
GROUP 1A MSE WALL
GROUP 3 CONCRETE PAVEMENT
GROUP 4 CULVERTS
GROUP 5 SEEDING
GROUP 6 BRIDGE AT STA. 1465+23.95
GROUP 6A BRIDGE AT STA. 368+64.62
GROUP 7 GUARDRAIL
GROUP 7B FENCING
GROUP 8B ELECTRICAL
GROUP 8C SIGNING
GROUP 10 GENERAL ITEMS

THIS PROPOSAL CONTAINS A DBE GOAL OF 10.0 %.

SEE SPECIAL PROVISIONS FOR GROUP TIES

NOTES

³THE TOTAL AMOUNT OF WORK WHICH WILL BE ACCEPTED IN THIS LETTING IS LIMITED TO \$_____.³
³

³THE NUMBER OF _____ CONTRACTS WHICH WILL BE ACCEPTED IN THIS LETTING IS LIMITED TO _____.³
³

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**

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ATTACHMENTS

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

I. GENERAL

1. 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 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.

3. 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.

6. **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.

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.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve

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

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-

Form FHWA-1273 (Rev. 3-94)

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.

a. 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 subcontractor 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:

(1) 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 journeyman-level 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

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 an 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 program.

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 than the applicable wage rate and fringe benefits or cash equivalent for the classification of work 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)

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.

2. 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.

2. 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

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 than \$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.

2. 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:

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:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from 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.

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)

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

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE

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

GOALS AND TIMETABLES FOR FEMALE PARTICIPATION IN EACH TRADE

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

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

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is by county.

November 3, 1980

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

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

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

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

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

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

Supplemental Reporting Requirements

- A. The contractor will keep such records as are necessary to determine compliance with the contractor's equal employment opportunity obligations. The records kept by the contractor will be designed to indicate the number of minority and non-minority group members and women employed in each work classification on the project.
- B. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State Highway agency and the Federal Highway Administration.
- C. The Contractor and each covered subcontractor will submit to the State Highway agency, for the month of July, for the duration of the project, a report (Form PR-1391) "Federal-aid Highway Construction Contractors Annual EEO Report), indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. If on-the-job training is being required by "Standard Federal Equal Employment Opportunity Specifications" the contractor will be required to furnish (Form FHWA 1409) "Federal-aid Highway Construction Contractor's Semi-Annual Training Report".

Equal Employment Opportunity Policy

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

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

GENERAL DECISION **NE010001** 12/14/01 NE1
General Decision Number **NE010001**

Superseded General Decision No. NE000001

State: Nebraska

Construction Type:
HEAVY
HIGHWAY

County(ies):
DOUGLAS SAUNDERS
SARPY WASHINGTON

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	03/02/2001
1	03/09/2001
2	03/30/2001
3	04/06/2001
4	07/20/2001
5	09/14/2001
6	09/28/2001
7	10/12/2001
8	11/02/2001
9	12/14/2001

COUNTY(ies):
DOUGLAS SAUNDERS
SARPY WASHINGTON

* CARP0444B 10/01/2001

	Rates	Fringes
CARPENTER; PILEDRIVER	18.85	6.39

ELEC0022B 06/01/2001

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

ELECTRICIAN	24.25	3.75% + 7.57
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ELEC0265A 06/01/2001

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

ELECTRICIAN:

Zone 1	19.97	4.5% + 5.64
Zone 2	20.27	4.5% + 5.64
Zone 3	20.57	4.5% + 5.64
Zone 4	20.97	4.5% + 5.64

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, 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

ELEC1525A 09/01/2001

	Rates	Fringes
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LINE CONSTRUCTION:

LINE TECHNICIANS:

Line technician	22.87	27.75%+2.20
Cable splicer; Line welder	24.59	27.75%+2.20
Line equipment operator	20.53	27.75%+2.20
Truck driver	16.42	27.75%+2.20
Ground person	14.80	27.75%+2.20

ELEC1525C 09/01/2000

	Rates	Fringes
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TRAFFIC SIGNAL, STREET LIGHT AND
UNDERGROUND WORK:

Line technician	21.99	27.75%+2.00
Cable splicer; Line welder	23.64	27.75%+2.00
Equipment operator	19.74	27.75%+2.00
Truck driver	15.79	27.75%+2.00
Ground person	14.23	27.75%+2.00

ENGI0571C 04/01/2001

	Rates	Fringes
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POWER EQUIPMENT OPERATORS:

Oiler, greaser, air compressor, welding machine, pump, roller, forklift, hydrohammer, pug mill, concrete pump, cure and tyne machine, rubber-tired farm tractor	14.04	3.85
Off-road heavy hauler, Rough Roller dozer, rough blade, Ferguson-type tractors (Workbull with high		

tecco), asphalt roller	17.71	3.85
One and two drum hoists, tugger, trencher, concrete spreader & finishing machine, dozer loader, spread oiler, bantam-type tamper, rubber-tired tractor backhoe, oil distributor-finish roller dozer	19.26	3.85
Trimmer, crane, backhoe, mechanic, slip form paver, asphalt plant- concrete plant, laydown machine, concrete pump truck, finish blade, scraper	19.98	3.85

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:

- Group 1: \$3.00 additional per hour
- Group 2: 2.00 additional per hour
- Group 3: 1.00 additional per hour
- Group 4: no premium pay.

IRON0021C 06/01/2000		
	Rates	Fringes
IRONWORKER	20.01	5.91

LAB01140D 06/01/2001		
	Rates	Fringes
DOUGLAS AND SARPY COUNTIES; SAUNDERS COUNTY (east of Hwy. #109):		

LABORERS:

Sanitary improvement work:

General laborer	15.06	3.90
Mortar mixer, concrete saw operator, pipelayer and chain saw operator	15.35	3.90
Form setter, pre-cast manhole		

setter, inlet builder	15.79	3.90
All other work:		
General laborer	12.05	3.90
Mortar mixer, concrete saw operator, pipelayer and chain saw operator	12.34	3.90
Form setter, pre-cast manhole setter, inlet builder	12.80	3.90

LABO1140G 06/01/2001		
	Rates	Fringes
WASHINGTON COUNTY:		
LABORERS:		
General laborer	11.05	3.90
Mortar mixer, concrete saw operator, pipelayer and chain saw operator	11.34	3.90
Form setter, pre-cast manhole setter, inlet builder	11.80	3.90

PAIN0081J 06/01/2001		
	Rates	Fringes
PAINTER	18.71	3.77
FOOTNOTES:		
Work performed above 75 ft. on suspended staging: \$.50 per hour additional.		
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.		

SUNE2001A 12/20/1988		
	Rates	Fringes
CEMENT MASON	13.62	3.00

SUNE2005A 08/05/1993		
	Rates	Fringes
SPRINKLER INSTALLER (LAWN)	5.15	

TEAM0554A 01/01/2001		
	Rates	Fringes
TRUCK DRIVERS:		
Low boy driver	15.97	4.05
All other work	14.82	4.05

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

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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 (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that 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 be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

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

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

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

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

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

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

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, D. C. 20210

4.) All decisions by the Administrative Review Board are final.
END OF GENERAL DECISION

**SPECIAL PROVISIONS
FOR
FEDERAL AID
PROJECT NOS. EACNH-80-9(808) AND EACNH-80-9(813)**

GENERAL CONDITIONS

Sealed 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 March 14, 2002, until 1:30 P.M.

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.

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. 4-93), 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, 1A, 3, 4, 5, 6, 6A, 7, 7B, 8B, 8C 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
(S1-9-0801)**

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 49 CFR Part 26.

A. Definitions:

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

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

II. DBE CONTRACT GOALS:

- A. DBE goals are set by the NDR 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 Contractors will be posted on the NDR 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 NDR.

- 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 NDR that good faith efforts were made to meet the goals.

- A. REQUIRED DBE PARTICIPATION INFORMATION: All bidders are required to submit to the NDR 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 FIRST WEDNESDAY FOLLOWING THE LETTING. IF THE WEDNESDAY FALLS ON A STATE HOLIDAY, THE TIME WILL BE EXTENDED UNTIL 10:00 A.M. ON THE NEXT OFFICIAL WORKING DAY OF THE NEBRASKA DEPARTMENT OF ROADS.
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 NDR. Errors in addition will be treated in accordance with current NDR 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 NDR to submit good faith information as outlined in Section IV of these specifications.
- G. REQUIRED BIDDERS LIST INFORMATION: All bidders must provide to the NDR the identity of all firms who bid or quote subcontracts on DOT-assisted projects, including both DBEs and non-DBEs. This information must be provided with the bid proposal on a form provided to the contractors by the NDR Contracts Office.

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 NDR to determine that, prior to bidding, the low bidder actually made good faith efforts to meet such goals.

- A. The NDR 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 NDR 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 FIRST WEDNESDAY FOLLOWING THE LETTING. IF THE WEDNESDAY FALLS ON A STATE HOLIDAY, THE TIME WILL BE EXTENDED UNTIL 10:00 A.M. ON THE NEXT OFFICIAL WORKING DAY OF THE NEBRASKA DEPARTMENT OF ROADS.
- 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 NDR to retain documentation of their good faith efforts until an award is made, or all bids are rejected.
- E. The NDR 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 NDR' Highway Civil Rights Coordinator, the Contracts Letting Manager, and the Legal Counsel.

A NDR 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. NDR 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 NDR 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 NDR'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 NDR' 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. COMMERCIALY 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.

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

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

3. In addition, a DBE subcontractor shall be required to designate a project superintendent/foreman who is a regular employee of the subcontractor, and who shall be active in the day-to-day management of the project.
4. 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 NDR does not prohibit the practice of a DBE firm and a prime contractor using two party checks, 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 NDR Disadvantaged Business Enterprise Office and the NDR DBE Office gives its written approval to do so. The NDR will closely monitor the use of two party checks to avoid abuse of this practice.

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 Nebraska Department of Roads 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 NDR 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 NDR that DBE subcontractors be independent companies, and function in the same capacity as majority contractors. It is not the intention of the NDR 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, (either Prime Contractor "A", or some other majority contractor), 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. Many majority contractors lease equipment, and the action is standard industry practice. 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", on a NDR' project. 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". While the NDR cannot tell the DBE subcontractor who to hire, or where to obtain equipment, we find this to be 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.

Note: If a DBE subcontractor is performing work on a project with his own equipment, workforce and supervisory personnel, and an equipment failure or unusual circumstance occurs, and the prime contractor rents or loans equipment and/or employees on a short-

term basis to the DBE, the NDR could find this acceptable as long as this only occurs occasionally and is kept to an absolute minimum.

Situation #4:

A DBE firm is a subcontractor to Prime Contractor "A" on a NDR project. 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. While the NDR cannot tell the DBE subcontractor who to hire, or where to obtain equipment, 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 NDR 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. This situation described may be subject to any of the administrative actions as cited in Section VIII, C. below.

Situation #6:

A DBE firm is a subcontractor to Prime Contractor "A". When it is time for the subcontract work to be performed, the DBE firm brings in its workforce to do the work, and uses equipment already at the site that belongs to Prime Contractor "A". The DBE subcontractor says it is leasing the equipment from Prime Contractor "A". The NDR will closely review this arrangement. This situation resembles a "specific equipment lease" where the equipment is made available on a convenience basis to the DBE firm. The test is whether or not the DBE firm can use the equipment at the DBE's convenience, and not be tied to the availability of the equipment by Prime Contractor "A". If the equipment lease arrangement indicates the DBE firm has total control of the equipment, but in fact Prime Contractor "A" controls the equipment, the NDR would question the relationship to determine whether or not a commercially useful function had been provided. This situation described may be subject to any of the administrative actions cited in Section VIII, C. below.

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 NDR 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 NDR 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 NDR believes a contractor, subcontractor or DBE firm may not be operating in compliance with the terms of these provisions, the NDR will conduct an investigation. If the NDR finds any person or entity not in compliance with these provisions, the NDR 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 NDR, 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 NDR may impose one or more of the penalties hereafter provided for. It is specifically provided by the NDR 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 NDR finds any contractor, subcontractor, or DBE firm, to be out of compliance with these provisions, the NDR 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 NDR' 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 NDR may withhold payment of progress payments.
 - g. If at the completion of the project, the contractor is determined to be out of compliance, the NDR 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 NDR.

DISADVANTAGED BUSINESS ENTERPRISE (DBE) GOAL (S1-9-0801)

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 NDR' Internet web site (<http://www.dor.state.ne.us/>).

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

The standard NDR' 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 NDR 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.

PRIOR TO FINAL PAYMENT THE FOLLOWING FORMS MUST BE COMPLETED AND SUBMITTED TO THE NDR DISADVANTAGED BUSINESS ENTERPRISE OFFICE.

- A. DR Form 441, DBE I. This form shall be filled out by the prime contractor, indicating the DBE firms used, actual work performed, and actual amount of money paid to the DBE Firms.
- B. DR Form 442, DBE II. This form shall be filled out by the DBE subcontractor, indicating the name of the DBE firm, actual work performed, and actual amount of money received from the prime contractor.
- C. The above referenced forms are available from the NDR' Disadvantaged Business Enterprise Office, upon request. The forms are also available electronically from the NDR' Internet web site (<http://www.dor.state.ne.us/>).

The Code of Federal Regulations, Title 49, Part 26 and the Nebraska Department of Roads' Disadvantaged Business Enterprise (DBE) Program, 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.

SUBLETTING OR ASSIGNING OF CONTRACT (S1-9-0801)

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 NDR 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 NDR.

The failure by the prime contractor to carry out the requirements of the "Prompt Payment Clause" and/or timely return of retainage, without just cause, is a material breach of this contract, which may result in the NDR 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 NDR deems appropriate.

NOTE: The prime contractor may withhold payment only for just cause, and must notify the NDR 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 NDR.

**DBE GOAL CREDIT
(S1-9-0801)**

It is the intent of the NDR 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.

1. 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 (S1-9-0801)

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

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

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

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

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

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

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

The DBE firm may also lease trucks from a non-DBE firm, including an owner-operator. The DBE firm that leases the trucks from a non-DBE firm is entitled to credit only for the fee or commission it receives as a result of the lease agreement. The DBE firm does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE firm.

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
(S1-9-0801)**

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

	Type of firm used as source of construction materials:			
	DBE Manufacturer	DBE Supplier (Regular Dealer) NOT BULK PRODUCTS	DBE Supplier (Regular Dealer) BULK PRODUCTS	Non-DBE Manufacturer or Supplier
Delivered by:	Amount of DBE credit allowed, expressed as percentage of cost:			
Non-DBE Delivery Firm (Hauler)	100% of Materials 0% of Hauling	60% of Materials 0% of Hauling	No Credit	No Credit
Another DBE Delivery Firm (Hauler)	100% of Materials 100% of Hauling	60% of Materials 100% of Hauling	60% of Materials 100% of Hauling	100% of Hauling
Manufacturer or Supplier is also certified to haul	100% of All	60% of Materials 100% of Hauling	60% of Materials 100% of Hauling	Not Applicable

TRAINING SPECIAL PROVISIONS

This Training Special Provision supplements subparagraph 7e of the Contract Provision entitled "Standard Federal Equal Opportunity Construction Contract Specification (Executive Order 11246)" and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

The number of trainees to be trained under this contract will be as follows:

<u>No. of Trainees</u>
<u>1</u>

Trainees may be utilized in any group of work included in the contract. Payment will be made under the bid item "Training".

In the event the contractor subcontracts a portion of the contract work, they shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to Department of Roads' Highway Civil Rights Office (EEO Section) for approval, the names of trainees to be trained in each classification and the training program to be used. The contractor also must submit the names and classifications of the trainees to the Project Manager. Furthermore, the contractor shall specify the starting time for each trainee. The contractor will be credited for each approved trainee employed by them on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter. The EEO Section may be contacted at (402) 479-4514 for answers to questions or assistance.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority and women trainees (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that have been taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeymen status or in which they have been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Department of Roads and the Federal Highway Administration. The Department of Roads and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the Department of Roads prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., if the selected training program includes these classifications and the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the F.H.W.A. Division Office. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where they do one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin their training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in this work classification or until they have completed their training program. It is not required that all trainees be on board for the entire length of the contract. Contractors will have fulfilled their responsibilities under this Training Special Provision if they have provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in

connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program they will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The contractor will provide for the maintenance of records and furnish periodic reports documenting their performance under this Training Special Provision.

Payment will not be made to the contractor under the item of "Training" for hours of training which were provided prior to the Engineer's approval of the contractor's selected training program by the Department of Roads.

Payment will be made for the item "Training" in accordance with the foregoing provisions. The number of hours included for payment shall be the actual hours of training which was satisfactorily completed.

Payment will be made on estimates based on a summary of the training provided by the contractor and subcontractors, prepared and submitted by the contractor to the engineer. The summary must list each trainee by name, sex, social security number, race, or national origin, work classification, wage rate paid, hours trained during month covered by summary, and total hours of training under this contract. The payroll records which are submitted to the engineer must contain sufficient information (except trainee's race or national origin) for verification of the information shown on the summary.

The established unit price for the item "Training" shall be full compensation for all costs incurred, which includes but is not limited to providing the necessary supervision, labor, equipment, tools and material. Any additional costs due to payment of wages in excess of the minimum rates specified and for the payment of any fringe benefits shall not be paid for directly but shall be considered subsidiary to the items for which direct payment is made.

AMENDMENT TO CONSTRUCTION TRAINING REPORT REQUIREMENTS

The last sentence under Paragraph C. on Page 5 of the Standard Federal Equal Employment Opportunity Construction Contract Specifications dated November 3, 1980 is void. FHWA Form 1409 "Federal-aid Highway Construction Contractor's Semi-Annual Training Report" is not required.

CERTIFICATION FOR FEDERAL-AID CONTRACTS (S1-11-0801)

The prospective participant certifies, by signing and submitting this bid or proposal, 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 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 subrecipients shall certify and disclose accordingly.

STATUS OF UTILITIES

The following information is current as of February 6, 2002.

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.

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.

People's Natural Gas Company: Gas facilities are in the project area.

Qwest Communications: Existing telephone facilities are in the project area.

Omaha Public Power District: Existing facilities are in the project area.

Metropolitan Utility District: Existing facilities are in the project area.

Sanitary Improvement District No. 32: No conflict.

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

STATUS OF RIGHT-OF-WAY Project No. EACNH-80-9(813)

According to the best information available, all necessary right-of-way has been acquired.

STATUS OF RIGHT OF WAY Project No. EACNH-80-9(808)

The right of way for Project No. EACNH-80-9(808), Control No. 21926 has been acquired and physical possession is held by the State of Nebraska and ready for the contractor's use, except tracts listed below.

Status of unacquired and uncleared right of way tracts is estimated as follows:

TRACT NO.	HEARING DATE	IMPROVEMENTS REMAINING THIS DATE	IMPROVEMENT CLEARANCE
1, 2, 4, 7-negotiating	None	None	None

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 except for the above.

It is anticipated that all right of way will be acquired and physical possession held by the State prior to the tentative starting date shown elsewhere in this proposal.

The contractor will not be allowed to perform work on any tract listed above until legal and physical possession has been acquired by the State. If necessary, the contractor will be granted an extension of time if a delay is caused because of the above tract(s) not being acquired.

SUBCONTRACTOR BIDDERS LIST INFORMATION (S1-43-0801)

All bidders must complete and submit with the bidding proposal, the "Subcontractor Bidders List" form provided by the NDR Contracts office.

Bidders must identify all firms who bid or quote subcontracts on all projects. If no bids or subcontractor quotations are received, the "Subcontractor Bidders List" must be submitted with the bidding documents and the bidder must indicate on the face of the "Subcontractor Bidders List" that no bids or subcontractor quotations were received.

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
(S1-43-1001)**

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 was resulted.)

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 are damage was resulted.)

AWARD AND EXECUTION OF CONTRACT

The first sentence of Subsection 103.03 in the Standard Specifications is void and superseded by the following:

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

The first sentence of Subsection 103.04 is void and superseded by the following:

The contract shall be signed by the successful bidder and returned, together with a satisfactory bond, within 5 days from the date of award.

Paragraph 1.a. of Subsection 103.05 is void and superseded by the following:

- a. Fails to file an acceptable performance bond within 5 days from the date of award.

PLANS AND WORKING DRAWINGS (S1-41-0801)

The last sentence in Paragraph 5. of Subsection 105.02 in the Standard Specifications is void and superseded by the following:

The Contractor shall furnish the Engineer as many copies of working drawings as are required in each Division specifying submission of working drawing, or seven copies (8 copies if the submission is a precast structure or element), if the quantity is not specified.

Paragraph 6.c. of Subsection 105.02 is void and superseded by the following:

- c. (1) The project number, structure number, control number and project location as it appears on the plans, shall be shown on each sheet of all shop drawings.

SPECIAL PROSECUTION AND PROGRESS (Migratory Birds)

Cliff swallows may inhabit the area and may appear in mid-March and inhabit the area through the summer. To avoid the problem of cliff swallows nesting on the structures contained in this project, the Contractor can either net the exposed surfaces or remove early nesting material by high-pressure spraying, twice a week, through the nesting season. Once work is completed on an exposed surface, that area no longer needs to be netted or sprayed. The work of netting or spraying the structures will not be measured for payment, but shall be considered subsidiary to other items of work for which direct payment is made.

SPECIAL PROSECUTION AND PROGRESS AND LIQUIDATED DAMAGES (Phasing)

I. GENERAL

The plans depict traffic phasing sequences, temporary pavement geometrics and pavement marking alignments required for the performance of work included in this proposal. Any modification of these sequences, geometrics or alignments shall require **written approval** of the NDOR Traffic Engineer, the Roadway Design Division and the Project Engineer. Prior to opening a modified phasing sequence to traffic, the NDOR Traffic Engineer and the roadway Design Division shall be notified.

The intersections along N-370 and N-50, which are constructed with HE concrete, shall be constructed such that the intersection work, once started, is completed as soon as possible. State work at the intersections with HE concrete may be completed out of sequence to open the intersection at the earliest opportunity. The N-50 intersections shall be built in halves as shown on the phasing plans. Once the first half of the intersection is completed, traffic shall be shifted to the completed half and work on the second half shall become the priority.

This project is comprised of several construction phases that require certain completion dates. In order to meet these milestone completion dates, the project has been divided into Part A and Part B work.

The Contract Time for the project is 867 Calendar Days. The work associated with Part A has a Contract Time of 594 Calendar Days and a completion date of November 29, 2003. The work associated with Part B has a Contract Time of 273 Calendar Days and a completion date of September 28, 2004. Separate Liquidated Damage amounts will apply to both Part A work and Part B work.

II. CONSTRUCTION SEASON 2002 – PART A

The primary work for the 2002 construction season is on N-370, the bridge in Project IM-80-9(813), and the culverts, grading, widening and setup work required I-80 prior to the traffic shift in the spring of 2003. The Contractor's priority for this construction season shall be:

1. Completing the Phase 1 and Phase 2 work on N-370.
2. Completing the bridge widening work shown in Phase 2 Stage 3 Project IM-80-9(813).
3. Completing culvert extensions for the I-80 grading work. NDOR recommends that as many of the culvert pipe extensions as possible are completed during the summer of 2002. The culverts on the WB (Lt.) side are to be completed prior to the temporary widening required for Phase 3 Stage 1.
4. Phase 3 Stage 1 grading work required for the temporary surfacing work.
5. Phase 3 Stage 1 temporary surfacing, concrete pavement and surfacing work shown on the phasing plans.
6. Pier column protection work in the I-80 median and on the left at the N-50 bridge over I-80.
7. Preparing the Stockpile/Crushing Site by grading off the borrow material.
8. Building fencing throughout the project with the exception of where future work requires delaying the permanent fence.

During this construction season, the Contractor may shift I-80 traffic from Sta. 363+00 to Sta. 374+00, as shown on the Phase 2 Stage 3 phasing plans as soon as the traffic control is set up.

III. CONSTRUCTION SEASON 2003 – Part A

The primary work for this construction season is completing the concrete pavement on I-80 and Ramps 1, 2, 3, 4, 7 and 8; and finishing the pavement approach slabs on Project IM-80-9(813). The Contractor will not be allowed to shift the traffic as depicted in Phase 3 Stage 1 prior to March 31, 2003, or until all of the following conditions are met:

- N-370 construction is completed and open to traffic.
- The center pier and the westbound (Lt.) pier remodeling under the N-50 bridges is completed.
- Median bridge widening with center concrete barrier is completed [Project IM-80-9(813)].
- Doweled concrete pavement from Sta. 363+00 to Sta. 374+00 in the center median, shown on the Phase 2 Stage 3 phasing plans, is completed.

- Phase 3 Stage 1 temporary surfacing, concrete pavement and surfacing work is completed.

The Contractor shall close Ramp 4 during Phase 3 Stage 1 and Stage 2.

The Contractor shall close Ramp 8 during Phase 4 Stage 1 and Stage 2.

The Concrete Protection Barriers shown on the phasing plans in Phase 4 Stage 3 indicate typical situations. The barriers shown in the phasing plans at Sta. 382+75 to Sta. 390+00 indicated the barrier position to protect the work zone during construction of the 42" Doweled Concrete Median Barrier; while those shown at Sta. 454+17.4 to Sta. 459+09.5 depicted the barriers in a typical setup to protect the unfinished ends of the Median Barrier. When the concrete protection barriers are positioned to protect the work zone, impact attenuators shall be used to protect the ends of the barriers.

Impact attenuators shall be used during Phase 4 Stage 1 at approximately Sta. 382+80 and at Sta. 454+00. They shall also be used during Phase 4 Stage 2 at approximately Sta. 386+50 and again at Sta. 454+00.

The Contractor shall complete Phase 4 Stage 3 before November 29, 2003 with traffic as depicted in Phase 4 Stage 3. This shall include all work required to complete Phase 1 through Phase 4 Stage 3. Permanent pavement markings for I-80 and seeding may carry over to 2004.

IV. CONSTRUCTION SEASON 2004 – PART B

The primary work for this construction season is completing the concrete pavement on N-50 and Ramp 6, as shown in Phases 5 and 6. The Contractor shall complete the remainder of the project during this construction season.

The Contractor shall complete the concrete pavement, temporary surfacing, surfacing and set up work shown on the phasing plans and traffic control plans before shifting traffic. The Contractor will not be allowed to shift the traffic as depicted in Phase 5 Stage 1 prior to April 5, 2004. The completion date for the project is August 28, 2004.

V. LIQUIDATED DAMAGES

Paragraph 2, Subsection 108.08 of the Standard Specifications, is amended to include the following:

A. Separate Liquidated Damage assessments will be assigned for the Part A and the Part B work contained in this contract. These liquidated damage assessments are determined based on the percentage of work contained in each construction group required to complete the Part A and Part B work, as previously described in this provision.

B. Liquidated Damage Assessment for Part A Work

The Contractor's failure to complete the Part A work, as described in Sections II and III of this provision, by November 29, 2003, shall result in a liquidated damage assessment based on the percentages and equation described in paragraphs V.D.1. and V.D.2. This assessment shall begin on November 30, 2003, and shall continue per calendar day until, and including, the day the Part A work is completed.

C. Liquidated Damage Assessment for Part B Work

The Contractor's failure to complete the Part B work, as described in Sections II and III of this provision by August 28, 2004, shall result in a liquidated damage assessment based on the percentages and equation described in paragraphs V.D.1. and V.D.3. This assessment shall begin on August 29, 2004, and shall continue per calendar day until, and including, the day the Part B work is completed.

D. Calculations of Liquidated Damage Assessments

1. Percentages By Construction Group

Group No.	% for Group A	% for Group B
1	85.0	15.0
3	80.0	20.0
4	96.0	4.0
5	0.0	100.0
6	0.0	100.0
6A	100.0	0.0
7	100.0	0.0
7B	100.0	0.0
8B	63.0	37.0
8C	100.0	0.0
10	90.0	10.0

2. Part A

$$LD = (R \times C) / T$$

Where: R = 0.12 for a calendar day contract

C = Total of (Original Contract Amount/Group x Group %)

T = 594 Calendar Days

3. Part B

$$LD = (R \times C) / T$$

Where: R = 0.12 for a calendar day contract

C = Total of (Original Contract Amount/Group x Group %)

T = 273 Calendar Days

SPECIAL PROSECUTION AND PROGRESS (Accommodation of Public Vehicular Traffic)

I. GENERAL

During the same non-peak work period, the Contractor shall perform temporary surfacing and pavement widening in a manner as to place surfacing materials to the elevation of the adjacent pavement within all areas that the existing shoulder has been removed. In the event the surfacing is not placed, the drop-off shall be filled with compacted earth materials, to a 3:1 or flatter slope, prior to opening the lane to public vehicular traffic.

When asphaltic concrete is used for temporary surfacing, the following construction methods shall be observed. After any intermediate lift of asphalt has been placed, the drop-off shall be filled with an asphalt wedge, to a 3:1 or flatter slope, prior to opening the lane to public vehicular traffic. If proper density is obtained on this asphalt wedge, it may be left in place as additional intermediate lifts are placed. The top lift of asphalt will be placed at a uniform depth, which may require removal of a portion of the asphalt wedge. See explanation in **Procedure For Closing Local Roadways**.

II. INTERSTATE-80

For I-80, peak hours for this project shall be from 6:00 a.m. to 9:00 a.m. and from 3:30 p.m. to 6:00 p.m. weekdays and from 6:00 p.m. Friday to 10:00 p.m. Saturday. Weekdays between 9:00 a.m. and 3:30 p.m. shall be considered daytime non-peak hours. All other hours, including Saturday 10:00 p.m. to Monday 6:00 a.m. shall be considered nighttime non-peak hours.

The Contractor will be allowed 20 free daytime non-peak hour lane closures during the project. After these 20 closures, all other lane closures during daytime non-peak hours will be charted a **lane rental assessment**. See **Procedure for I-80 Lane Closure**.

The Contractor, during peak hours, shall perform work in a manner as to maintain 2 lanes of traffic in each direction on mainline interstate I-80.

The Contractor shall at all times maintain one lane of traffic on the ramps unless a closure is specifically shown in the plans or described in the Special Provisions.

During daytime and nighttime non-peak hours, the Contractor may be allowed to reduce the number of lanes shown in the plans to one lane in each direction for the following operations (see **Procedure for I-80 Lane Closure** for restrictions to reducing the number of lanes):

- 1, For the setting or removing concrete protection barriers.
2. In order to build the doweled concrete pavement depicted in the phasing plans, Phase 2 Stage 3.
3. In order to perform the widening as depicted in Phase 1 and Phase 2 Stage 1 on either the inside or outside of the westbound lanes. The work of widening the remaining side shall be accomplished by shifting the existing 2 lanes of traffic onto the previously widened pavement and barreling off the area adjacent to the work zone.

4. In order to build the widening at the temporary ramp connections depicted in the phasing plans, Phase 3 and Phase 4.
5. For specific tasks requiring work immediately adjacent to the traveled lanes, which in the opinion of the Engineer would constitute a hazard for the traveling public.
6. For the purpose of installing and removing temporary pavement.
7. For the purpose of removing girders, to set new girders and to pour the new bridge deck.

III. N-50

For N-50, peak hours shall be from 6:00 a.m. to 9:00 a.m. and from 3:30 p.m. to 6:00 p.m. weekdays and from 6:00 p.m. Friday to 10:00 p.m. Saturday. All other hours are non-peak hours.

All the **GENERAL** comments above that discuss pavement drop-off and asphalt concrete placement apply to N-50.

The Contractor shall build the concrete pavement temporary, surfacing and surfacing shown on the phasing plans to set up the Phase 5 Stage 1 traffic shift and the temporary Cornhusker Road intersection at Sta. 1450+00 Lt. & Rt. in a manner as to maintain 2 lanes of traffic in each direction on N-50 during peak hours.

During non-peak hours, the Contractor will be permitted to close one lane of traffic in each direction simultaneously on N-50 to perform this work. The left-turn lanes on N-50 shall be considered one lane of traffic; however, left-turn movements should be maintained during this phase.

Prior to a lane closure and during lane closure periods the Contractor shall organize and manage their work in an expeditious manner to complete the specific tasks (see **Procedure for Closing Local Roadway**).

Once traffic is shifted to a signal lane in each direction, as shown on the phasing plans during Phase 5 and Phase 6, the Contractor shall perform the work in a manner as to maintain the number of traffic lanes shown in the phasing plans. The Contractor should expect that work immediately adjacent to traffic shall be built using forms (hand work) and accessing the work primarily from the closed side of the road.

During Phase 6 Stage 3, the phasing plans depict construction of the median and the center of the intersections. The Contractor shall perform this construction in a manner to maintain the existing traffic movements.

The surfacing depicted in the phasing plans at the ends of the N-50 Bridge, Phase 5 Stage 1, Sta. 1461+00 to Sta. 1464+29.1 Rt. and Phase 6 Stage 1, Sta. 1466+13.7 to Sta. 1470+20.6 Lt. shall be performed without disturbing the existing guardrail adjacent to the surfacing.

IV. N-370

For N-370, peak hours shall be from 6:00 a.m. to 9:00 a.m. and from 3:30 p.m. to 6:00 p.m. Monday thru Friday. All other hours are non-peak hours.

All the **GENERAL** comments above that discuss pavement drop-off and asphalt concrete placement apply to N-370.

The Contractor should expect that work immediately adjacent to traffic shall be built using forms (hand work) and accessing the work primarily from the closed side of the road.

N-370 may be closed at night from 10:00 p.m. to 6:00 a.m. for the following specific purposes: to set new girders and to pour the new bridge deck. N-370 may be reduced to a single lane at night from 10:00 p.m. to 6:00 a.m. to remove the existing bridge deck. When N-370 is reduced to a single lane, a flagger operation shall be incorporated to control traffic (flaggers at night shall be equipped with flashlights with 12" orange cones). Prior to a closure and during the closure periods, the Contractor shall organize and manage their work in an expeditious manner to complete the specific tasks (see **Procedure For Closing Local Roadways**).

Work immediately adjacent to the driving lanes shall be performed during non-peak hour periods.

The Contractor shall build the surfacing, Sta. 1092+57.7 to Sta. 1099+50 Lt. & Rt. and the concrete pavement Sta. 1126+37.7 to Sta. 1130+19.2 Lt. & Rt. show on the phasing plans to set up the Phase 2 Stage 1 traffic shift during non-peak hours.

The Contractor shall be allowed to close a lane in each direction simultaneously to perform work in the median on N-370.

PROCEDURE FOR I-80 LANE CLOSURE

The Contractor will make a written request for each specific lane closure and receive written approval of the Engineer. Each written request shall describe the work requiring the closure and the approximate time required for the closure. Lane closures shall not occur each day as part of normal operations but shall be limited to the specific operations described in **Special Prosecution and Progress (Accommodation of Public Vehicular Traffic)**.

The Contractor will be required to have a work crew on the site at all times during a lane closure.

Lane closures for emergency service situations will not be assessed.

In cases where multiple charges can be assessed for violations in lane closure procedures, the highest single lane closure assessment will be charged for the appropriate period. The lane closure assessment charge will be in addition to other liquidated damages described elsewhere in this proposal.

A lane closure will not be permitted during inclement weather conditions or during periods of time that atmospheric conditions may constitute a hazard to the traveling public, as determined by the Engineer.

Approved Lane Closure, Lane Rental Assessment

The Contractor will be allowed 20 daytime non-peak hour lane closures during the project. These lane closures must be approved as described above and for the operations described in the **Special Prosecution and Progress (Accommodation of Public Vehicular Traffic)**. During the allowed 20 lane closures, one daytime non-peak hour lane closure is charged when a lane closure occurs in either direction or both directions for any length of time during a single weekday daytime non-peak hour period.

After the 20 allowed daytime non-peak hour lane closures, the Contractor will be charged a **lane rental assessment** of \$320 / lane / hour / direction for each additional lane closure during the daytime non-peak hour period. The following formula was used to determine this charge:

$$\begin{aligned}\text{Cost} &= (\text{Vehicle} / \text{Average non-peak hour} / \text{Lane}) \times \text{Delay} \times \text{Cost/Occupant} \\ &= (1190)(1.68)(\$0.16) \\ &= \$320 \quad \text{use} \quad \$320\end{aligned}$$

Any fraction of an hour will be considered as a whole hour when determining this assessment. This assessment is for daytime non-peak hours only and shall not be charged during peak hours or nighttime non-peak hours.

Approved Lane Closure, Lane Closure Assessment

When an approved lane closure is no longer required in accordance with the written request or not necessary in the opinion of the Engineer, the Contractor will have one hour to open the closed lane to traffic. After this one hour period, the Contractor will be charged a **lane closure assessment** of \$320 / lane / hour / direction as calculated above.

Any fraction of an hour will be considered as a whole hour when determining this assessment. This assessment is for daytime and nighttime non-peak hours only and shall not be charged during peak hours.

Peak hour Assessment

The Contractor shall schedule and conduct work operations during periods of time that a lane closure is in effect, in a manner as to complete the work and open the affected traffic lane prior to the above stipulated earliest peak hour traffic movement time. In the event that a closed traffic lane is not opened prior to the stipulated peak hour, the Contractor will be charged a **Peak hour assessment** of \$1,000 / lane / hour / direction. The following formula was used to determine this charge:

$$\begin{aligned}\text{Cost} &= (\text{Vehicle} / \text{Average peak hour} / \text{Lane}) \times \text{Delay} \times \text{Cost/Occupant} \\ &= (1545)(4.08)(\$0.16) \\ &= \$1,009 \quad \text{use} \quad \$1,000\end{aligned}$$

Any fraction of an hour will be considered as a whole hour when determining this assessment. This assessment is for peak hours only and shall not be charged during daytime and nighttime non-peak hours.

PROCEDURE FOR CLOSING LOCAL ROADWAY

Lane and/or street closures are permitted on Cornhusker Road, north of I-80 at N-50 and on Sapp Brothers Frontage Road at N-370. Lane closures are also permitted on N-370 and N-50. See **Special Prosecution and Progress (Accommodation of Public Vehicular Traffic)**. The Contractor shall advise the Engineer and Sarpy County a minimum of 48 hours prior to any closure. If the 48-hour time period falls on a weekend or a holiday, the notification shall be given 72 hours prior to the lane closure.

Sarpy County shall be notified of the lane closure by calling Tom Lynam, Sarpy County Surveyor, at (402) 339-4606.

SPECIAL PROSECUTION AND PROGRESS (Holidays and UNL Football Games Days)

On I-80, the Contractor will be required to schedule his operations in a manner to have two traffic lanes of traffic in each direction open to traffic on the following:

Memorial Day and Labor Day weekends – these weekends shall include Saturday, Sunday and the Monday holiday.

- July 4th
- If July 4th falls on a Monday or Friday, the Saturday and Sunday either preceding or following July 4th shall be included as part of the holiday.
 - If July 4th falls on either Tuesday, Wednesday or Thursday, only that day will be considered as the holiday.
 - If July 4th falls on a Saturday or Sunday, the day preceding and the day following July 4th shall be included as part of the holiday.

The Contractor will also be required to have two lanes of traffic in each direction open to traffic on any day that the University of Nebraska has a home football game.

Failure to have all traffic lanes open, as specified, on these holidays or UNL home football game days will result in a liquidated damage assessment of \$5,000 per occurrence. This assessment will be in addition to other liquidated damages described elsewhere in this proposal.

**SPECIAL PROSECUTION AND PROGRESS
(Paving Delays Due to Settlement)**

As shown below, the Contractor shall delay placing permanent pavement and temporary pavement for the prescribed number of days following the completion of grading:

I-80	Days to Delay Permanent Pavement	Days to Delay Temporary Pavement
347+00 – 353+68 Lt.	180	45
385+00 – 435+00 Lt.	30	
341+00 – 357+00 Rt.	180	45
364+00 – 367+00 Rt.	30	
393+00 – 400+00 Rt.	30	
405+00 – 417+00 Rt.	30	
N-370		
1198+00 – 1105+00 Rt.	30	
1120+00 – 1122+50 Rt.	30	
Ramp 1		
1319+00 – 1321+00 Rt.	30	
1323+00 – 1327+50 Rt.	30	
Ramp 2		
1501+00 – 1509+00 Lt.	60	
Ramp 3		
1622+00 – 1624+50 Rt.	30	
Ramp 4		
1204+00 – 1207+00 Lt.	30	
1211+00 – 1213+20 Rt.	180	45
Ramp 6		
602+50 – 616+00 Rt. & Lt.	60	
Ramp 7		
723+50 - 725+50 Rt.	30	
Ramp 8		
802+50 – 806+50 Rt.	60	

**SPECIAL PROSECUTION AND PROGRESS
(EXISTING GUARDRAIL – DO NOT DISTURB)**

The surfacing depicted in the phasing plans at the ends of the N-50 Bridge, Phase 5 Stage 1, Sta. 1461+00 to Sta. 1464+29.1 Rt. and Phase 6 Stage 1, Sta. 1466+13.7 to Sta. 1470+20.6 Lt. shall be performed without disturbing the existing guardrail adjacent to the surfacing.

The surfacing depicted in the phasing plans at the east end of the N-370 Bridge, Phase 3 Stage 1, Sta. 370+19.4 to Sta. 375+00 Lt. shall be performed without disturbing the existing guardrail adjacent to the surfacing.

SPECIAL PROSECUTION AND PROGRESS (TRANSPORTING EQUIPMENT)

If absolutely necessary as determined and approved by the Engineer, the Contractor will be allowed to transport equipment (such as draglines and cranes) across interstate lanes at grade only between 12:00 midnight and 5:00 a.m. A traffic police officer shall be acquired by the Contractor to monitor the public vehicular traffic movements, and insure safety during the transportation of equipment across the traveled lanes. Flaggers and appropriate signing must be furnished for the crossings. Each crossing will require the expressed approval of the Engineer.

The Contractor is not allowed to build a haul road over the mainline interstate lanes.

SPECIAL PROSECUTION AND PROGRESS (TRANSPORTATION OF EXCAVATION MATERIALS)

The Contractor's excavating and hauling equipment will not be allowed to cross any ramps or segments of streets that are within the interstate right of way during peak hours. During non-peak hours, public vehicular traffic movements within these travel routes will be controlled by flaggers during the transporting of excavation materials across these routes. When embankment material is to be transported across ramps, the crossing for interstate "off" ramps shall be a minimum distance of 400 feet from both the gore point at the interstate and the junction with the intersecting street. For interstate "on" ramps, the crossing shall be a minimum distance of 300 feet from both the gore point at the interstate and the junction with the intersecting street.

The Contractor is not allowed to build a haul road over the mainline interstate lanes.

CRUSHING/STOCKPILE SITE (SE Quadrant of I-80/370 Interchange)

This site may be used for stockpiling asphalt millings, removed concrete and for concrete crushing. The Contractor may also use the site to store equipment.

The Contractor shall determine the actual area that will be used and prepare the site by removing all vegetation and trees. Within this area, the topsoil shall be removed and stockpiled at a location within the Crushing/Stockpile site as designated by the Engineer. The depth of the topsoil to be removed and stockpiled shall not be less than 6" and shall not exceed one foot.

The stockpile site will be graded so that water will drain away from the stockpiled material and the crushing site. Unsurfaced areas upon which material will be stockpiled shall be smoothed and rolled so that the salvaged material may later be removed with a minimum loss.

The Contractor may excavate soil within the site above the elevation of 1180. With the exception of the topsoil, material cut from the site may be used as borrow material on the project. This is approximately a 15-foot cut on the top of the property.

At the completion of this project, the Contractor shall clean up and remove all debris, reinforcing steel and scattered pieces of concrete. It is expected that all crushed concrete material from this project is used on the project and none is left at the end of work. Stockpiled asphalt millings may be left at this site when the work is completed. The work area shall be left in a neat, clean and presentable condition. This site will be designated as the crushing site on future construction projects and will not be restored as part of this contract.

The work of the preparation of the stockpile area will not be paid for directly, but will be considered subsidiary to the item "Crush Concrete Pavement."

WASTE AREA (Along I-80 West of N-370)

A waste area is identified in the plans along I-80, west of N-370. The area is divided into four (4) sites, with approximate waste volumes shown on the plans.

The Contractor shall open only one of the four sites at a time. Each site shall be cleared and grubbed at the appropriate time and prepare it as described in 205 of the Standard Specifications. The Contractor shall open one site at a time; fill the site to the appropriate level then move it to the next one. Material shall be compacted as a Class III embankment.

The waste area cross sections are provided for information only. The embankment shall be placed at least 12 feet away from the nearest I-80 driving lane and shall be built within the existing right of way. Material shall be placed such that it is within the given cross section but such that water and soils always drain away from I-80. The maximum slope left on any fill within 35 feet of the nearest driving lane shall be 4:1. Wasted material shall be built without changing the existing drainage patterns and without affecting the capacity of existing culverts. The final ditch grade shall be shaped to provide positive drainage. The Engineer shall approve the final cross sections.

Silt fence shall be built between the waste material and the existing right of way.

The waste site shall not be *restored* as part of this project.

The Contractor's haul trucks will not be allowed to exit or enter the I-80 mainline traffic at waste area sites. Westbound trucks hauling to the north side waste areas may enter and exit the highway system along the ramps and cross N-370 at the ramp terminal. Trucks hauling to the south side waste areas shall be routed from the stockpile site, shown in the plans, along the state right of way to the waste area.

The Contractor may route empty westbound haul trucks along the right of way to 168th Street on the north side or Schram Road on the south side for a return trip back to N-370. Trucks from Schram Road are expected to enter N-370 at the relocated county road at approximately 150th. Provisions will be added to the future projects, NH-80-9(810), C.N. 21928, 168th Street Bridge and NH-80-9(809), C.N. 21927, Ruff Road to N-370, to notify bidders that these movements are approved by NDOR. The haul route shall be coordinated between the Contractors from the impacted projects.

BORROW AREA
(SE Quadrant of I-80/370 Interchange)

The borrow area may be opened at any time during construction. It is expected that borrow material will not be needed until Phase 3, which is scheduled to start in the spring of 2003.

Paragraph 6.b. of Subsection 205.03 is void and superseded by the following. The borrow area cross sections shown in the plans are for information only. The final grade shall be adjusted based on the amount of borrow required to complete the project. The Engineer shall approve the final cross sections.

Currently there are millings in the borrow area. The Contractor shall excavate around the millings until they are removed.

The borrow area shall be restored as specified in Section 208 of the Standard Specifications. Seeding, Type "A" shall be used in the borrow area.

CONSTRUCTION DETAILS

FUEL COST ADJUSTMENT PAYMENT
(S2-1-0801)

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 10% 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 10% 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 .15. For the item of work "Earthwork Measured in Embankment", "F" shall be equal to .20.

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 .74. For the item of work "Earthwork Measured in Embankment", "F" shall be equal to 1.00.

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).

$$D = P - 1.10P(b), \text{ but not less than zero.}$$

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

$$D = P - .90P(b), \text{ but not greater than zero.}$$

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.

REMOVE LIGHTING CONTROL CENTER

There are two lighting control centers (one at each interchange) that are to be removed as part of this contract. Both control devices are 480/240 volt, pad-mounted units consisting of

main breaker, contractor, three position switch, photo control and distribution panel with circuit breakers. The entire control center (enclosure, controls and concrete pad) will be completely removed from the project and disposed of by the Contractor.

The control center enclosure at the I-80/N-50 interchange houses both the lighting controls and the utilities' (OPPD) 50 KVA transformer. The removal and proper disposal of the transformer will be the utility's responsibility.

The two control centers will remain in operation as long as possible to serve the existing towers. The Contractor will schedule his work in such a manner that will allow as many towers as possible to remain operational. In no case shall there be less than three towers (existing or new) operational in either of the two interchanges at any one time.

Method of Measurement and Basis of Payment

Removal of the lighting control center will be measured for payment as a single unit and paid for at the contract unit price for the item "Remove Lighting Control Center." This price and payment shall be full compensation for the removal of the complete control center including concrete pad; for the proper disposition of all removed materials, for the scheduling of work and materials to keep a minimum of three towers per interchange operational and for all labor, equipment, tools, materials and incidentals necessary to complete the work.

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 N-50 AND SAPP BROS. DRIVE
- 1 EA. REMOVE TRAFFIC SIGNAL AT N-50 AND WB RAMP
- 1 EA. REMOVE TRAFFIC SIGNAL AT N-50 AND EB RAMP
- 1 EA. REMOVE TRAFFIC SIGNAL AT N-50 AND FRONTIER ROAD

Salvage all four controllers for the state, contact Don Wood (402) 595-2534. All other removed material shall become the property of the Contractor and shall be removed from the site.

The price and payment for the item "REMOVE TRAFFIC SIGNAL" shall be full compensation for the complete removal of the traffic signal, salvage and installation of the street name signs, and for all labor, tools, material and incidentals required to complete the work.

REMOVE PULL BOX

It is the intent of this Special Provision to provide for the complete removal of all unused pull boxes from the project site. All pull boxes not removed by general excavation and grading shall be individually removed by the lighting Contractor. The number of units shown to be removed by the lighting Contractor will be approximate. Payment will be made for the actual number of pull boxes removed and approved by the Engineer.

Existing pull boxes are type PB-5 and PB-6. The units will not be salvaged for reuse, but will become the property of the Contractor and must be taken from the project site. All voids

resulting from the pull box removals shall be filled with clean soil and compacted to the density requirements of the project. Abandon existing conduit and cable in place.

Method of Measurement and Basis of Payment

The item "Removal Pull Box" shall be paid for as a complete unit for each pull box being removed. This work shall include, but not be limited to the following: Removal of existing pull box, disposal of the pull box and all surplus material and debris; all necessary excavation backfill and compaction.

REMOVE PAVEMENT

The work noted on the plans as "Remove Pavement" shall be performed and paid for as "Crush Concrete Pavement," except as noted below.

Pavement removed after the crushing operation has ended shall be disposed of as described in Section 203 of the Standard Specifications. Removed pavement disposed as describe in Section 203 shall also be paid as "Crushed Concrete Pavement."

The "Remove Pavement" notes shown on the phasing plans do not necessarily indicate the appropriate phase for the pavement removal. The Contractor shall remove the pavement at the appropriate time based on the traffic movements.

CRUSHED ROCK SURFACE COURSE (Geogrid)

The grid material and the labor associated with its placement shall not be paid for directly, but shall be considered subsidiary to the item "Crushed Rock Surface Course."

CRUSH CONCRETE PAVEMENT

Paragraph 1. of Subsection 312.02 and Paragraph 5. of Subsection 312.03 of the 1997 English Edition of the Standard Specifications are void and superseded by the following:

The Contractor shall crush the concrete to the gradations shown below:

Crush Concrete Foundation Course Gradation Requirements

Sieve Size	Target Value (Percent Passing)	Tolerance
1 ¼ inch	100	0
1 inch	95	±5
¾ inch	75	±12
No. 4	30	±12
No. 10	16	±11
No. 40	9	±5
No. 200	3	±3

A stockpile/crushing site is available and located in the southeast quadrant of the I-80 and N-370 interchange as shown in the plans. The Contractor is allowed to use this location for their crushing and stockpiling operation. This site shall be used to stockpile removed concrete for crushing and milled asphalt. This site shall not be used as a construction waste dumping area. Any remaining crushed concrete pavement not used in the construction of Crushed Concrete Foundation Course shall be stockpiled at this location, as directed by the Engineer.

The Contractor is expected to vacate this site in a timely manner at the completion of the crushing operation. The site is to be left in a clean, neat and orderly manner.

CRUSHED CONCRETE FOUNDATION COURSE 4 INCH & 5 INCH

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, whether obtained from an existing stockpile or from the crush concrete pavement operation on the project, is shown below:

Crushed Concrete Foundation Course Gradation Requirements

Sieve Size	Target Value (Percent Passing)	Tolerance
1 ¼ inch	100	0
1 inch	95	±5
¾ inch	75	±12
No. 4	30	±12
No. 10	16	±11
No. 40	9	±5
No. 200	3	±3

Crushed Concrete Foundation Course shall be measured as prescribe in Paragraph 3. of Subsection 307.04.

CRUSHED ROCK FOUNDATION COURSE

Amend Section 307 of the 1997 English Edition of the Standard Specifications to include Crushed Rock Foundation Course. This specification applies to all depths of Crushed Rock Foundation Course shown on the plans.

1. Material Requirements
 - a. Crushed Rock Foundation Course shall consist of mineral aggregate.
 - b. Aggregates shall conform to the requirements of Subsection 1033.02, Paragraphs 1., 2., and 7.

2. 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 ½ inch.

3. Method of Measurement

Crushed Rock Foundation Course shall be measured as prescribed in Paragraph 3. of Subsection 307.04.

4. Basis of Payment

Crushed Rock Foundation Course shall be paid for at the contract unit price per square yard for the item "Crushed Rock Foundation Course _____."

**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.

HIGH MAST LOWERING SYSTEM

GENERAL:

The lowering system shall be a hoisting device consisting of galvanized or stainless steel head assembly, galvanized or stainless steel luminaire ring, winch drum(s) and winching assembly, Internal Power Unit, luminaire ring hoist cables, winch cable(s) power cable, circuit breakers, lightning rod and arrestors, power connections to the power unit assembly and a luminaire ring guide system to protect the tower and luminaire ring assembly during raising and lowering operations.

Luminaire ring support cables shall be 3/16" galvanized or stainless steel aircraft cable of the non-twisting type with the three cable system having a safety factor of five (5).

The winch cable shall be a ¼" galvanized or stainless steel anti-rotational aircraft cable with a safety factor of three (3).

All electrical components of the lowering assembly are to be U.L. approved.

The lowering assembly shall be a system which has been in use for at least five years and proven itself to be a reliable and functional unit. All changes or design modifications to the system during this five-year period shall be noted by the manufacturer.

Any of the design changes, considered by the light engineer, to be critical to the proper operation of the lowering system and which, in his opinion, have not been in use long enough to establish an acceptable service record, will be sufficient cause for rejection of the entire system.

DESIGN LOADS AND ALLOWABLE STRESSES:

Only a two drum bottom tethered system or a single drum top latching system will be accepted. All towers must be equipped with the same system.

The lowering system shall be designed to withstand 80 mph AASHTO wind loading with a 1.3 gust factor. Each light ring and lowering system shall be capable of supporting twelve fixtures, but shall be designed to hold the number of fixtures shown on the plans for the particular tower in question.

HEAD ASSEMBLY:

The mast head assembly shall contain steel sheaves for the support of the hoisting cables and a roller assembly on which the power cable will ride.

All sheaves shall be precisely sized and formed to fit the cables which they will carry. The cross-section of the groove shall have a radius of 0.005" to 0.009" greater than half the nominal cable diameter and a minimum radius of six inches (6"), as specified by the Wire Rope Technical Board. All sheaves shall have permanently lubricated bearings or oil impregnated bronze bushings mounted on stainless steel shafts. Retainers or keepers shall be provided to prevent the cables from disengaging the sheaves under slack conditions.

The power cable roller assembly shall consist of multiple rollers placed between two vertical side plates. The roller assembly shall be of such design as to support the power cord in a seven-inch (7") minimum bending radius. Keeper bars shall be positioned along the assembly to keep the cord in its track during raising and lowering of the light ring.

The mast head assembly shall include a galvanized steel or aluminum cover that will effectively protect the mechanism from the elements.

LUMINAIRE RING ASSEMBLY:

The luminaire ring assembly shall be fabricated of galvanized or stainless steel and shall contain the required number of 2" diameter luminaire mounting arms. A weather-tight junction box containing a pre-wired 600-volt terminal block shall be mounted to the ring. The junction box shall be provided with a twist lock type receptacle capable of receiving the plug of the pigtail lead when testing the luminaires in the lowered position. Pre-wiring shall consist of Type "ST" distribution cable with the insulation suitable for at least 105°C. and properly sized to power each luminaire. The terminal block shall contain a sufficient number of terminals to allow connecting all luminaires plus an approved lightning arrester. The power cord shall be Type "W" with five #8, 133-strand copper conductors. Strain relief shall be provided at both ends of the power cable by using proper sized cable clamps. The use of Kellem type grips alone will not be allowed. The power cable shall be MSHA approved.

All power cord connections shall be made with weathertight, twist lock type plugs, connector bodies and receptacles. Two 240 volt, 30 amp., double pole circuit breakers shall be furnished in the base of each tower. 240 volt circuits will be run to each tower. Half of the luminaires will be run off of each circuit. Provide alternate feed to the luminaires.

UPPER LATCH BARRELS

The latch barrels shall be cast, high strength, copper-free aluminum. Latching shall be accomplished by the alternate raising and lowering of the luminaire ring assembly using the winch and hoisting assembly. There shall be no moving latch parts or springs attached to the headframe assembly. The latch mechanism shall not be impaired by the formation of ice and shall not require adjustment after the original installation. Indicator flags shall be used to show when the luminaire support ring is in the latched or unlatched position.

WINCHING ASSEMBLY:

The winch assembly shall consist of a worm gear speed reducer with either one or two output shafts with cable drum attached. The winch shall be securely anchored and capable of supporting five (5) times the maximum lifted load. The winch shall include an integral drag brake to prevent unwinding, slipping or free spooling of the winch cable. The drum(s) shall be provided with keepers to ensure that the cable will properly wrap onto the drum. The winch, when powered by the internal power unit, shall raise the luminaire ring at a minimum rate of 12 ft./min.

Single drum units will require the use of a transition device (clevis assembly) to properly attach the winch cable to the hoisting cables. The clevis shall not allow either the winch cable or any of the hoist cables to independently rotate. No bearings of any type will be allowed in the clevis. The clevis shall be beveled or tapered on the bottom of the plate to insure that the transition device will not hang up on the inside of the tower.

FINAL POSITIONING OF LUMINAIRE RING:

Means shall be provided to accurately position, stabilize and hold the luminaire ring in place when in the raised position.

The luminaire ring shall be held in its raised position by either a top latching or bottom tethered system. If a top-latching system is supplied, each latch must be capable of supporting three (3) times the weight of the luminaire ring with its full complement of luminaires attached. Rotation of the luminaire ring to achieve positive latching with this system will not be allowed.

With the bottom tethered system, compression springs shall keep the luminaire ring assembly securely in place against the masthead while the load of the luminaire ring assembly is transferred from the winch system to chain or turnbuckle tension latches at the bottom of the pole.

Latching or unlatching with either system shall impart no more than one "G" acceleration in any direction on the luminaires and lamps.

INTERNAL POWER UNIT:

An internal power unit shall be supplied with each lowering system supplied under this contract. The power unit shall be a heavy duty, reversing gear, single phase motor, rated 1.8 peak HP or greater. The motor shall be operated by a pushbutton or lever control mounted at the end of a 20-ft. (min.) Type "SO" power cord.

The internal power unit will not be paid for separately, but will be considered as part of the complete lowering system.

PIGTAIL LEADS

The pigtail lead used to power the lowered light ring when servicing shall be a minimum of ten feet in length. The actual female end shall be supplied with a weather-tite rubber cap. The cap will protect the pigtail end when not in use and stored in the tower base. The cap shall be loosely attached to the pigtail lead with a cord or other type restraint to prevent its becoming lost.

LUMINAIRE RING GUIDE:

Centering arms must be interconnected or of a design that precludes any possibility of the tower slipping behind the arms and causing a "hang-up".

MISCELLANEOUS:

The manufacturer shall supply all drawings, installation instructions, maintenance manuals and technical information required for the proper installation and maintenance of a complete operating assembly.

The entire assembly shall meet all applicable local, county, state and national codes.

A manufacturer's representative shall be present, on site, to advise the contractor during the installation of at least one complete lowering system. Duties of the manufacturer's representative shall include, but not be limited to, the following:

- (1) Directing all adjustments to the lowering system to insure positive latching and unlatching. (This will consist of a minimum of three complete raising and lowering cycles.)
- (2) Educating the maintaining utility in (a) the methods of proper maintenance to avoid hoist malfunctions, (b) the proper procedures to follow in the event of a hoist malfunction.

WARRANTY:

The manufacturer shall guarantee all equipment from failure due to defects in material or workmanship for two (2) full years from date of shipment and shall warrant to repair or replace any equipment that fails within that time. In addition, the manufacturer shall provide a "Pass-Through Warranty", for use by the Electrical Contractor or Utility assigned by the state as maintaining authority. (The Manufacturer, Manufacturer's Representative and Distributor shall accept defective warranted material directly from the state appointed maintainer, on behalf of the state without state personnel coordinating the return.)

APPROVAL:

The Contractor shall forward to the project engineer, eight (8) complete sets of design drawings and specifications covering the lowering system he proposes to install on the project. These documents will be reviewed, and if found to meet specification requirements, approved and proper distribution made.

DEVIATION FROM SPECIFICATIONS:

No deviations, substitutions, additions or omissions from the above specification will be allowed without the lighting engineer's approval. The lighting engineer's decision in this matter will be final.

PAYMENT:

Subsidiary to "Modify High Mast Tower Type ***."

HIGH MAST TOWER FOUNDATION

Section 407 of the 1997 English Edition of the Standard Specifications is amended to include the following:

The Contractor shall design a concrete foundation showing reinforcement and anchor bolts for each of the high mast lighting units being modified and requiring a new foundation under this project. Foundation design shall be based on test results of soil boring taken from the area of each of the new tower locations. Soil boring, soil analysis and foundation design must be performed by individuals proficient in that line of work.

The Contractor shall submit two complete Geotechnical Engineering Reports showing the soil analysis of the borings taken at each of the tower locations; two complete sets of foundation design drawings together with two complete sets of foundation design computations to the lighting engineer for review.

The foundation design drawings and computations must be signed and stamped by a registered professional engineer, licensed in Nebraska. Acceptance by the state of the foundation design(s) will be based upon this signature and seal. By applying his seal and signature to the design drawings and calculations, the Engineer affirms that the foundations are of proper design and material to meet the structural requirements of the specifications.

Each tower foundation shall be neatly excavated to its design dimensions; only the top two feet may be formed. The excavation shall be dry with all loose dirt removed before concrete can be placed.

Anchor bolts shall be caged and retained in such a manner as to prevent their movement while the foundation is being poured. Welding on the anchor bolts will not be permitted. The anchor bolt cage shall be centered in the concrete foundation. Once the concrete has set, no adjustments or realignments shall be made to the anchor bolts. Field straightening of anchor bolts will not be allowed. The anchor bolts shall be truly vertical with no more than 1/8" deviation in 12" of length permitted. Anchor bolt projection shall allow the

capture of one full hold-down nut plus ½ inch while allowing no more than two anchor bolt diameters between the top of the concrete foundation and the bottom of the tower.

Top of the concrete foundation shall be approximately three inches above final grade.

Concrete for tower foundations shall be Class 47B-3000.

Reinforcing steel for tower foundations shall be deformed grade 60-billet steel conforming to the requirements of ASTM A 615.

Foundation details as shown in the plans shall not be changed unless specifically requested by the Contractor in a letter to the lighting engineer. Any request for a change to the contract plans will be reviewed by the department and a written determination issued addressing the request.

Method of Measurement and Basis of Payment

Reinforced concrete high mast tower foundations, complete, in place and accepted by the Engineer will be paid for by measuring and paying for the following items of work and material:

“High Mast Foundation Design” - measured and paid for by the each.

“Excavation for High Mast Foundation” - subsidiary to “Concrete for High Mast Foundation.”

“Concrete for High Mast Foundation” - measured and paid for by the cubic yard.

“Reinforcing Steel for High Mast Foundation” - measured and paid for by the pound.

“Anchor Bolts for High Mast Foundation” - measured and paid for by the each.

The tower grounding system is subsidiary to the item “Reinforcing Steel.” Soil borings and soil analysis for the tower foundation are subsidiary to the item “High Mast Foundation Design.”

Each High Mast Foundation to be constructed under this contract shall be taken to require 15 cubic yards of excavation, 15 cubic yards of concrete, 1,213 lbs. of reinforced steel and six 2"x84"x6" “L-shaped” anchor bolts. Each contractor will base his/her bid on these quantities. These are estimated quantities. Actual design quantities will vary.

Final payment for concrete, reinforcing steel and anchor bolts will be based on the shop plan quantities. The quantity of concrete for which payment will be made shall be the quantity arrived at using the design dimensions of the tower foundation. No payment will be made for concrete placed outside of these dimensions.

Payment for the above listed items shall be full compensation for the taking and testing of soil samples; for designing and installing the foundation; for all excavation and backfilling; for the furnishing and placing of reinforcing steel, anchor bolts, conduit and concrete; for all

forming, finishing and curing of the concrete and for all labor, equipment, materials, tools and incidentals necessary to complete the work.

RELOCATE EXISTING LIGHTING UNIT

Section 408 of the 1997 Standard Specifications English Edition is amended to include the following:

The Contractor shall relocate the existing lighting unit as indicated in the plans.

The 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 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 concrete pole foundation, including steel and anchor bolts, to a minimum depth of two feet below finished grade, backfill the excavation with clean material and compact the soil to the density of the surrounding undisturbed earth. All debris resulting from the removal operation shall be removed from the project. The Contractor may, at his option, remove the concrete foundation as an entire unit.

A new concrete foundation shall be constructed at the location shown in the plans and in accordance with plan details. The salvaged lighting unit shall be installed on this new foundation and connected to the existing street lighting circuit.

The salvaged luminaire on the relocated lighting unit shall be cleaned and provided with a new lamp.

Method of Measurement and Basis of Payment

Relocated lighting units shall be measured for payment as individual units. Each relocated lighting unit, in place, and accepted by the Engineer, shall be paid for at the contract unit price for the item "Relocate Street Lighting Unit." This price shall be full compensation for the removal, salvage, storage, transportation and preparation of the existing lighting components; for the removal of the old and construction of the new foundations; for the disposal of all surplus material and for all materials, tools, equipment and incidentals necessary to complete the work.

ALTERATION OF PLANS OR CHARACTER OF WORK

The Lighting Designer has attempted to determine the easiest and most economical methods of supplying temporary or permanent power to the modified high mast towers to keep them operational throughout the various phases of project construction. Unforeseen situations in the field, however, may make these methods impractical or unusable. The Contractor may, with the Engineer's approval, modify the electrical circuits to best suit the situation. Except for significant changes in the character of the work, the work will be paid for at the contract unit prices. For significant changes in the character of the work, contract adjustments may be made in accordance with Subsections 104.04 or 109.05 of the Standard Specifications.

ELECTRICAL SERVICES

In most instances, the location at which the Contractor is to obtain electric power for a lighting system will be prearranged with the local utility and this location will be shown on the plans. These locations, however, are approximate and subject to change.

The Contractor will be required to contact the utility prior to installing the conduit, cable and electric controls to determine if the location for electrical service remains as shown on the plans. If this location for the service has changed, the Contractor shall advise the project manager of this change and shall refrain from installing the electrical service until he receives the project manager's approval.

The Contractor shall be fully responsible for installing the electrical service at its correct location. If installed at an incorrect location, the Contractor will be required to move the service to its correct location. The move will be made at no cost to the state.

The contact person for this project is Mr. Robert Adams, Utility Coordinator, Omaha Public Power District (402) 636-3333.

TERMINATING CONDUCTORS

The stub of existing or new conductors shall be properly terminated by one of the two following methods:

1. Seal the stub end with rubber splicing compound, electrical tape and sealant.

OR

2. Seal the stub end with an approved, commercially available EPDM rubber, cable-sealing cap of the correct size for the conductor being terminated.

Separate payment will not be made for conductor terminations. This work will be considered subsidiary to other group 8B items for which payment is being made.

FIELD WELDING AND CUTTING

Field welding and/or cutting may be required to attach the new masthead to the top of the existing tower; to remove a winch assembly mounting plate in the tower's base or to enlarge the hole in the tower's base plate.

Subsection 708.01, Paragraph 6.a. of the 1997 English Edition of the Standard Specifications is amended to include the following:

All welders must be qualified in welding and cutting ASTM-588, Grade B weathering steel. Qualification testing is required and all applicable parts of Section 708 will apply. Welders not capable of producing first-class work will not be permitted to make field welds or cuts. All welding shall be in accordance with welding procedures which have been subjected to review and have received the approval of the Nebraska Department of Roads' Materials and Research Division.

The type of electrodes and fluxes used will depend on the welding process and shall be as set forth in Section 1047.

HIGH MAST LUMINAIRES

High Mast Luminaires shall have a die cast aluminum housing of either the open ventilated or closed filtered design, with its lamp operating in the vertical, base up position. The reflector shall be designed to direct light rays away from the arc tube. Ballast shall have its power factor over 90% and shall be capable of operating at a temperature of -20 degree F. Ballast shall operate at 240 VAC and be fused. Luminaires shall be equipped with a protected starter and shall be furnished with a 1,000 watt HPS lamp. All fixtures shall be specifically designed for high mast tower application.

High Mast Luminaires designated HML-A-1KW are 1,000 watt HPS units with an asymmetric distribution pattern and cutoff control characteristics. These units shall be installed with the major axis of the distribution pattern in line with the arrows shown on the plans. The asymmetrical reflectors shall be clearly marked for easy orientation.

High Mast Luminaires designated HML-V-1KW are 1,000 watt HPS units with a symmetrical distribution pattern and cutoff control characteristics.

High Mast Luminaires will be paid for as "Luminaire, Type HML-* - ***."

OPERATION AND MAINTENANCE OF LIGHTING UNITS

The Contractor will be responsible for the proper operation and maintenance of all working lighting units (existing and new) (tower, conventional ground-mounted, conventional median mounted and sign) within the limits of the project from the time the project is started until construction is complete and has been accepted. Any existing sign or tower lights not working at the time construction is started will not be the Contractor's responsibility. The Contractor's responsibility for non-working tower lights will begin at the time the tower is modified and the lights energized and working.

Replacement parts for modified towers or new conventional units being installed under this contract shall be furnished by the Contractor.

New HPS lamps for all working units on the project, if needed, will be supplied by the Contractor.

If the Contractor fails to correct a reported failure of the system as stipulated above, the Department of Roads will hire a local Contractor to perform the work and the cost will be assessed to the project Contractor.

All costs resulting from the repair or replacement of lighting units damaged as the result of negligence or carelessness on the part of the Contractor will be deducted from monies owed him.

The Contractor will not be responsible for the cost of the electrical energy required for the operation of the lights on the project.

The maintenance of all lighting units on the project shall be measured for payment per day for the number of days the lights are in operation under the contract.

Basis of Payment

Payment will be made at the contract unit price per day for the item "Maintenance of Lighting Units." This price and payment shall be full compensation for all repairs, replacements, installations, rentals, fees, transportation, labor, equipment, tools and incidentals necessary to maintain all lights on the project in working order as set forth in the plans, specifications and these Special Provisions.

WINCH HOUSING

A Winch Housing, as detailed in the plans and these Special Provisions, shall be furnished for the tower being modified under this project. The Winch Housing shall be fabricated from A-588 weathering steel or equivalent and shall be designed to fit the (new) (existing) foundation, and the base plate of the existing tower.

The Winch Housing shall have a single-hand hole with a door to provide access to the winch, cable drum(s), and electrical components. The hand hole shall be sized and so arranged to permit removal of the lowering mechanism without excessive dismantling of the equipment.

The hand hole shall have rounded corners and shall be reinforced to maintain the original strength of the tower shaft. The hand hole cover (door) shall be provided with a stainless steel loose joint butt hinge or other hinge arrangement acceptable to the engineer. The hinge shall be heavy duty and suitable for the weight of the hand hole door. The door shall be gasketed in a manner which will prevent the entry of water into the tower. The door shall be held closed with stainless steel cover hold downs, deep slot stainless steel screws or hex head stainless steel bolts. The door shall be provided with a padlock hasp for securing the equipment within the tower from vandals.

The Winch Housing, when attached to the tower and in place on its foundation, shall be capable of being supported solely by nuts. The space between the Winch Housing base plate and concrete foundation will be left ungrouted. The space will be covered with expanded metal is shown in the winch housing detail in the plans. In no case shall the diameter (or distance across flats) of the winch housing be less than that of existing tower measured at a point directly adjacent to the tower base plate.

The contractor shall verify the anchor bolt sizes, anchor bolt patterns and diameter of the existing towers by visiting the project and making field observations and taking field measurements.

The modified tower, installed on its (new) (existing) foundation, with new Winch Housing and lowering system with luminaires in place, shall be capable of withstanding an 80 mph AASHTO wind loading with a 1.3 gust factor.

The Contractor shall submit 8 copies of design drawings and computations representing the Winch Housing he/she proposes to furnish. The drawings and computations must be signed and stamped by a registered professional engineer licensed in Nebraska. By applying his/her seal and signature to the design drawings and calculations, the Engineer affirms that the Winch

Housing is of proper design and material to meet the structural requirements of the specifications. Acceptance, by the state, of the Winch Housing design will be based upon this signature and seal.

The winch housing is subsidiary to the item "Modify High Mast Tower, Type ***".

ROADWAY LIGHTING

Paragraph 2. of Subsection 415.02 in the Standard Specifications is void and superseded by the following:

2. Lamps provided shall be as shown in the plans.

Paragraph 7 of Subsection 1073.02 in the Standard Specifications and Supplemental Specifications is amended to include the following:

1. Conventional Roadway Luminaires

A. Housing

Luminaire housing shall be "cobra-head" style, of pressure die-cast aluminum, Large Housing Series. The casting shall be sound, complete, with smooth edges and free of flash. The lower portion of the housing shall be hinged for easy access.

The optical compartment shall be effectively sealed and filtered using a dacron polyester filter. The seal/filter combination shall be provided between the reflector and lens and between the socket assembly and reflector. The seal/filter combination shall be under compression when the assembly is in operating position. Seal/filter combination shall be of heat resisting material selected to last the functional life of the unit, but shall be easily replaceable should they become damaged. The optical compartment door shall be secured in position with a positive latch mechanism. The hinge arrangement shall be designed to prevent accidental disengagement when it is in the open position.

Finish shall be a gray Polyester Powder Coat or an electrodeposited epoxidized acrylic paint coat capable of successfully withstanding 1,000 hours of salt spray test per ASTM B 117.

Attachment hardware used to secure components to the aluminum housing shall be organically coated. Stainless steel or galvanized hardware is not allowed.

Housing must be legibly and durably marked with the lamp size, using ANSI NEMA lamp identification label.

B. Slipfitter

The slipfitter shall accept 1 1/4 inch to 2 inch (32 mm to 50 mm) pipe.

C. Reflector

The reflector shall be hydroformed aluminum with an approved aluminum oxide or silica coating bonded to the inside and outside surfaces.

D. Socket

The socket shall be a mogul base porcelain.

E. Lens

The lens shall be made of clear tempered flat glass, heat resistant and free from imperfections.

F. Terminal Block

A terminal block will be required.

G. Ballast

The ballast shall be of the magnetic regulator type the high pressure sodium lamp size as indicated in the plans.

Ballast shall be dual volt 120/240 or multi tap, ballast to be factory wired to 240 volt.

The ballast and starting aid shall not incur significant life reduction should the lamp continue in open or shorted circuit condition for a six-month period.

Regulation and Operation:

At nominal line voltage and nominal lamp voltage, the ballast design center will not vary more than 5% from rated lamp wattage. Lamp wattage variation shall not exceed 10% for a $\pm 10\%$ line voltage variation.

The ballast/lamp combination must provide reliable starting to -40 degrees F (-40 degrees C).

Ballast starting current must not exceed normal operating current.

Power factor must be rated above 90% through all operational modes.

H. Photometric and Performance Requirement

The luminaire shall have "cutoff" control characteristics as follows: Candela per 1000 lumens shall not exceed 100 (10%) at a vertical angle of 80 degrees above nadir, and 25 (2.5%) at an angle of 90 degrees above nadir horizontal.

The luminaires as required by manufacturer to meet specifications shall be installed according to the following parameters: Lamp size and lumens as specified in the plans shall provide a minimum average maintained horizontal illumination level of 0.80 FC with an average to minimum uniformity ratio not exceeding 3.5:1. The maximum to minimum ratio shall not exceed 7.0:1. Lateral distribution shall be factory-preset to IES distribution to meet specifications.

Parameters used; roadway width 48', pole spacing 180', mounting height 45', pole setback 14', mastarm length 6', maintenance factor .81, pole layout median mounted.

I. Substitutions and Variations

No substitutions or variations of the above will be allowed.

J. Approval Requirements

In addition to the requirements for approval of the roadway lighting luminaires outlined in Subsection 1073.02, the contractor may be asked to supply IES formatted photometrics on a 1.44 MB computer disk for each type of luminaire he/she proposes to furnish for the project. The disk must be IBM compatible.

The contractor shall be prepared, upon request, to furnish a working sample of any luminaire proposed for this project (sample will be returned to the contractor or counted as part of the contract quantity).

The right is reserved to reject any and all proposals. The State of Nebraska will decide all questions which may arise as to the quality or acceptability of the luminaire submitted for approval under this specification.

Manufacturers allowed to submit luminaires for approval are as follows:

Crouse Hinds
General Electric
Hubbell
American Electric

**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
(S4-9-1201)**

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.

DURABLE LIQUID PAVEMENT MARKINGS WITH REFLECTIVE ELEMENTS

I. DESCRIPTION

- A. This work shall consist of furnishing and installing retroreflective liquid pavement markings in accordance with this provision and in reasonably close conformance to the dimensions and lines shown on the plans or established by the Engineer.
- B. The liquid marking material shall be applied by spray method onto asphaltic cement concrete and Portland cement concrete surfaces. Following an application of composite reflective elements and glass beads, and upon curing, the resulting marking shall be an adherent reflectorized stripe of the specified thickness and width that is capable of resisting deformation by traffic.
- C. The Contractor shall field verify the pavement marking quantities required for the project prior to purchasing materials. The Department will not be held responsible for the Contractor's shortage or surplus of material. The Contractor's verification of quantities and purchasing material shall not delay the project or the installation of pavement marking when required.

II. MATERIALS

A. Polyurea

1. Composition Requirements:

- a. The polyurea coating shall be formed by the reaction of two components. At least one component shall be composed of secondary amines, pigments and fillers as needed to meet performance requirements of this specification. Composition shall be specifically formulated for use as a durable pavement marking material and for application at elevated temperatures not exceeding 150°F. The liquid markings shall consist of a two-component (Part A and Part B), 100% solids polyurea film formulated and designed to provide a simple volumetric mixing ratio (e.g. three volumes of Part A to one volume of Part B). The markings shall consist of white or yellow films with clear and/or yellow-tinted microcrystalline ceramic elements and glass beads incorporated to provide immediate and continuing retroreflection. These films shall be manufactured without the use of lead chromate pigments or other similar, lead-containing chemicals. The white polyurea shall contain not less than 13% by weight rutile titanium dioxide pigment to ensure adequate opacity, hiding power and reflective properties.

B. Reflective Media

The reflective media shall be made up of reflective elements and glass beads for drop-on application and shall conform to the following requirements:

- 1. The composite reflective elements shall be composed of a titania opacified ceramic core having clear and/or yellow tinted microcrystalline ceramic beads embedded to the outer surface. These elements and

glass beads, when properly applied at the specified coating weight will provide immediate and continuing retroreflection.

2. Index of Refraction - All microcrystalline ceramic beads bonded to reflective elements shall have a minimum index of refraction of 1.88 ($\pm .04$) when tested using the liquid oil immersion method.

- a. Testing Procedure For Refractive Index Of Beads By Liquid Immersion

Equipment Required:

Microscope (minimum 100X magnification).

Light Source - preferably sodium light or other monochromatic source, but not absolutely essential.

Refractive Index Liquids.*

Microscope Slide and Slide Cover.

Mortar and Pestle.

- b. Procedure:

Using the mortar and pestle, crush a few representative beads and place a few of these crushed particles on a microscope slide.

Place a drop of a refractive index liquid, with an index as close to that of the crushed particles as can be estimated, on the particles.

Cover the slide with a microscope slide cover and view the crushed particles by transmitted light normal to the slide surface (illuminated from the bottom).

Adjust the microscope mirror to allow a minimum light intensity for viewing. This is particularly important if sodium light is not used.

Bring a relatively flat and transparent particle into focus.

By slightly raising and lowering the objective (microscope tube), look for one or both of the following:

Becke Line - This light line will appear to move either into the particle or away from it. In general, if the objective is raised, the line will move toward the material of higher refractive index; if the objective is lowered, the line will move toward the material of lower index.

Variation in Particle Brightness - When raising the objective from a sharp focus, the particle will appear to get brighter or darker than the surrounding field. If it becomes

brighter, the particles have a higher refractive index than the liquid. If it becomes darker, the glass has a lower refractive index than the liquid. In both cases, the opposite will be true if the objective is lowered.

This test can be used to confirm that the beads are above or below a specified index. It can also be used to give an accurate determination of the index (± 0.001). This is done by using several refractive index liquids until a match or near match of indices occurs. The index of the glass will equal that of the liquid when no Becke line and no variation in bead brightness observed.

The size and quality of the beads shall be such that the performance requirements for the retroreflective material shall be met.

Acid Resistance: A sample of microcrystalline ceramic and glass beads supplied by the manufacturer, shall show resistance to corrosion of their surface after exposure to a 1% solution (by weight) of sulfuric acid. The 1% acid solution shall be made by adding 5.7cc of concentrated acid into 1000cc of distilled water. CAUTION: Always add the concentrated acid into the water, not the reverse.

C. End Product Requirements

1. Composition: The retroreflective pavement markings shall consist of a mixture of high-quality resins, curing agent and pigments, with a reflective layer of glass beads and reflective elements with microcrystalline ceramic beads bonded to the top surface.

2. Reflectance:

Because of normal variances in materials, pavement surfaces, application equipment, and measurement instruments, the initial retroreflectance of the marking will vary from one installation to the next. When the marking is applied according to the manufacturer's recommendations, the initial retroreflection averaged over many installations shall be at least $900 \text{ mcd} \cdot \text{ft}^{-2} \cdot \text{fc}^{-1}$ for white and $700 \text{ mcd} \cdot \text{ft}^{-2} \cdot \text{fc}^{-1}$ for yellow. The standard deviation of initial retroreflectance for many installations shall be no more than $130 \text{ mcd} \cdot \text{ft}^{-2} \cdot \text{fc}^{-1}$ for both white and yellow. The manufacturer shall provide sufficient evidence that these values can be met. The striper shall bear responsibility for meeting these requirements.

The initial retroreflectance of a single installation shall be the average value determined according to the measurement and sampling procedures outlined in ASTM D 6359, using a 30 meter retroreflectometer. The 30 meter retroreflectometer shall measure the coefficient of retroreflected luminance, R_L , at an observation angle of 1.05 degrees and an entrance angle of 88.76 degrees. R_L shall be expressed in units of millicandelas per square foot per foot-candle, $\text{mcd} \cdot \text{ft}^{-2} \cdot \text{fc}^{-1}$. The metric equivalent shall be expressed in units of millicandelas per square meter per lux, $\text{mcd} \cdot \text{m}^{-2} \cdot \text{lux}^{-1}$.

INITIAL REFLECTANCE

Initial Reflectance is described by the following distribution:

White - Average 900 MCD, Standard Deviation of 130 MCD
Yellow - Average of 700 MCD, Standard Deviation of 130 MCD

3. Color: The preformed markings shall consist of white and yellow films with pigments selected and blended to conform to standard highway colors.
4. Skid Resistance: The surface of the retroreflective marking shall provide an initial average skid resistance value of 45 BPN when tested according to ASTM E303.
5. Color and Weathering Resistance: The mixed polyurea compound, both white and yellow, when applied to a 3"x 6" aluminum panels at 15±1 mil in thickness with no glass beads and exposed in a Q.U.V. Environmental Testing Chamber, as described in ASTM G- 53-77, shall conform to the following minimum requirements. The color of the white polyurea system shall not be darker than Federal Standard No. 595A-13538. The color of the yellow polyurea system shall be reasonably close to Federal Standard No. 595A-13538.
6. Drying Time (Laboratory): When tested in accordance with ASTM D-711 the polyurea marking material shall reach a no-pick-up condition in 5 minutes or less. This test shall be performed with AASHTO Type 1 beads coated at a coverage of 0.099 pounds per square foot.
7. Dry Time Field: When installed at 77° F, at a wet film thickness of 15±1 mils and reflectorized with glass beads, the polyurea markings shall reach a no-track condition in less than 3 minutes. Dry to "no-tracking" shall be considered as the condition where no visual deposition of the polyurea marking to the pavement surface is observed when viewed from a distance of 50 feet, after a traveling vehicle's tires have passed over the line.
8. Adhesion to Concrete: The polyurea pavement marking materials, when tested according to ACI Method 503, shall have such a high degree of adhesion to the specified concrete surface that there shall be a 100% concrete failure in the performance of this test. The prepared specimens shall be conditioned at room temperature (75°, ± 2° F) for a minimum of 24 hours and maximum of 72 hours prior to the performance of the tests indicated.
9. Adhesion to Asphalt: The polyurea pavement marking materials, when tested according to ACI Method 503, shall have such a high degree of adhesion to the specified asphalt surface that there shall be a 100% asphalt failure in the performance of this test. The prepared specimens shall be conditioned at room temperature (75°, ± 2° F) for a minimum of 24 hours and maximum of 72 hours prior to the performance of the tests indicated.

III. APPLICATION EQUIPMENT

- A. The equipment shall be certified by the manufacturer as suitable for the application of the polyurea and reflective media. The striping equipment shall bear a decal identifying it as manufacturer certified.
- B. At any time throughout the duration of the project, the Contractor shall provide free access to his application equipment for inspection by the Engineer, his authorized representative, or the materials representative.

IV. APPLICATION

A. Atmospheric Conditions

- 1. The pavement markings shall only be applied during conditions of dry weather and subsequently dry pavement surfaces. At the time of installation the pavement surface temperature and the ambient temperature shall be above 40° F. The material manufacture shall determine the atmospheric conditions and pavement surface conditions that produce satisfactory results.

B. Surface Preparation

- 1. At the time of application all pavement surfaces shall be free of moisture, oil, dirt, dust, grease and similar foreign materials. In addition, concrete curing compounds on new Portland cement concrete surfaces and existing pavement markings on both concrete and asphalt surfaces shall be removed. The Contractor shall clean the pavement surface to the satisfaction of the Engineer and the Material Manufacturer. Material may be applied on new pavement surfaces, over temporary paint or where 80% or more of existing markings have been removed.

C. Application

- 1. The markings shall be applied by a manufacturer certified contractor in accordance with the manufacturer's installation instructions. Marking configurations shall be in accordance with the "Manual on Uniform Traffic Control Devices."
- 2. The reflectorized pavement markings shall be placed only on properly prepared surfaces and at the widths and patterns designed required for the project. Marking operations shall not begin until applicable surface preparation work is completed and approved by the Engineer.
- 3. The pavement markings shall be applied at a minimum uniform wet thickness of 15 mils. 20 mils for open course asphalt mixes. Reflective elements and glass beads shall be applied at a rate specified by the manufacturer.
- 4. Using the application equipment the pavement markings shall be applied in the following manner, as a simultaneous operation.

- 4.1 The surface is air-blasted to remove any dirt and residues if present.
 - 4.2 The resin, mixed and heated in accordance with the manufacturer's recommendations, is sprayed onto the pavement surface.
 - 4.3 The specified reflective media is dropped onto the liquid marking at the following rate: Reflective elements shall be applied at a rate of 0.011 pounds per lineal foot of 4 inch wide line (0.033) pounds per square foot.
5. Glass beads as specified by the manufacturer shall be applied at a rate of 0.0264 pounds per lineal 4 inch wide line (0.08 pounds per square foot).

V. OBSERVATION PERIOD

Following initial completion of all pavement marking, there will be a 180 day observation period before final acceptance. During the observation period, the Contractor, at no expense to the Department of Roads, shall replace any marking that the Engineer determines are not performing satisfactorily due to defective materials and/or workmanship in manufacture and/or application. At the end of the observation period the minimum required retention percentage for marking installed shall be 90%.

Determination of Percentage Retained - The percentage retained shall be calculated as the nominal area of the strip less the area of loss divided by the nominal area and expressed as a percentage of the nominal area. A claim, made by the State against the Contractor, shall be submitted to the Contractor in writing within 30 days after the 180 day observation period. When such a claim is made prior to August 1, the replacement material shall be installed during that same construction season. Replacement material for any claim after August 1, shall be installed prior to June 1, of the following year. Marking replacement shall be performed in accordance with requirement specified herein for the initial application, including but not limited to surface cleaning, sealer application, etc.

Final acceptance of all marking will include an inspection of the appearance of the markings during daylight and darkness. Any markings that fail to have a satisfactory appearance during either period, as determined by the Engineer, shall be reapplied at no expense to the Department of Roads.

Final acceptance of the pavement marking will be: (1) 180 days after the initial completion of all work, or (2) upon completion of all corrective work, whichever occurs last.

VI. CERTIFICATION OF COMPLIANCE

The Contractor shall furnish a manufacturer's certification that the material complies with the provisions of this specification.

Measurement and Payment

The pavement marking shall be measured and paid for by the linear foot of actual material, of each width, installed and per each for arrows and legends. The price shall be full compensation

for furnishing and installing lines, pavement surface preparation, arrows and legend, and for all equipment, tools, labor, materials and incidentals necessary to complete the work.

VII. CONTRACT UNITS AND BASIS FOR PAYMENT

- A. Linear pavement markings will be measured in linear feet complete-in- place for the width specified.
- B. Arrows and legends are measured by the each.
- C. Retroreflective markings will be paid for at the contract unit price, which shall be full compensation for cleaning and preparing the pavement surface, for furnishing and placing all materials, and for all materials, labor, tools, equipment and incidentals necessary to complete the work.

Payment will be made under:

Pay Item	Pay Unit
_____ inch _____ Durable Liquid Pavement Marking	Lin Feet

HIGHWAY SIGNS

GENERAL

Description

This work shall consist of furnishing all materials, equipment, tools, and labor for fabrication and installation of all items necessary to provide new signing as required on the plans. All work shall be done in accordance with the latest edition and revisions of the Manual on Uniform Traffic Control Devices for Streets and Highways, the 1997 English Units Edition of the Nebraska Department of Roads Standard Specifications, the Standard Plans, Contract Plans, and these Special Provisions.

SCOPE OF WORK

Signs

All signs on this project shall be Type "B" as indicated on the plans. The signs, hardware for mounting the signs, and supports shall be furnished by the Contractor.

The Contractor shall be fully responsible for all signs and mountings while work is being done on or near the signs. The Contractor shall replace or repair any sign damaged during the course of the work and the signs shall be level after the work is completed.

SIGN INSTALLATION

Ground Mounted Sign Supports

All signs to be mounted on the roadside will be supported by structural steel beam break-away posts, as shown on the plans. All post lengths shown on the plans are estimated, and shall be **field checked** before ordering materials.

Signs placed in gore areas shall be installed at a minimum of 4 feet from either edge of the driving lane. The bottom of the signs shall be 7 feet above the ground. All other signs installed along the interstate shall be installed a minimum of 35 feet from the edge of the driving lane to the edge of the sign. Signs mounted along the interstate off ramps shall be a minimum of 15 feet from the edge of the driving lane.

Sign Fasteners

In fastening the extru-sheet sign panels to the supports, the Contractor shall furnish new bolts and nuts. The bolts shall be square head aluminum post clip bolts specially manufactured for use with extru-sheet panels. The bolts shall be fabricated in accordance with the plans and Section 1070 of the 1997 English Standard Specifications. The hardware for mounting the signs shall be considered subsidiary to the item "TYPE B SIGNS", for which direct payment is made.

Footings

The footings shall be round, and reinforced where required. Footing holes shall be carefully dug or drilled to the required size and depth at the proper location. All excavated material shall be disposed of within the right-of-way in such a manner as to blend uniformly with the existing surface, and as approved by the Engineer. Immediately before placing any concrete, the Contractor shall remove all loose and uncompacted material from the bottom of the hole. The stub steel post shall protrude no more than 4 inches above the ground. The rest of the footing shall be constructed no more than 1 inch above the ground.

Excavation and backfilling, furnishing and placing concrete and reinforcing steel, furnishing and installing 3 foot long stub posts for break-away structural steel sign supports, finishing and all other equipment, tools, labor, materials and incidentals required to complete the work shall be considered subsidiary to the item, "****SIGN SUPPORT FOOTINGS", for which direct payment is made.

SIGN SUPPORT – BREAK-AWAY STRUCTURAL STEEL

Break-away steel supports for Type "B" signs shall be measured by the pounds of unplated, unwelded, and undrilled steel, and payment shall be made at the contract unit price for the item "Structural Steel for Sign Supports." The kilograms of steel shall be the weight per foot multiplied by the length of sign support above the post stub required at each location as determined by the Engineer. The price shall be full compensation for the steel material, including the connection, galvanizing, welding and for all other equipment, tools, labor, materials, and incidentals necessary to fabricate and erect the supports on stubs, excluding the concrete footing and the stub post.

Removing Signs, Structure and Foundations

This work shall involve the removal of the existing signs, luminaires, structure, and foundations, all in accordance with the applicable sections of the Standard Specifications and these provisions.

The signs and luminaries shall be removed from the structure and delivered to the state yard designated by the Engineer. All overhead structures scheduled for removal shall become the property of the Contractor who shall be responsible for their disposal. The exposed portion of the foundations shall be removed to a minimum depth of 3 feet below ground. All debris from the foundation removal shall be disposed of as directed by the Engineer. After the removal has been completed, the excavation shall be filled and the entire area shall be restored to the condition of the surrounding area, unless otherwise directed by the Engineer.

This work shall be measured and paid for at the contract unit price per each for the item "REMOVE SIGN, STRUCTURE AND FOUNDATION." This price shall include all labor, tools, equipment and incidentals necessary to complete the work.

Luminaire, Type HPS-150

The Contractor shall furnish and install one 150W high pressure sodium luminaire per sign, unless otherwise indicated on the plans. Use Holophane Panel-vue wide-angle sign light Catalogue No. PANL-15AHP-MTLDG-PS, General Electric Versaflood II Signliter V2FS 15SO M1SS N4 GR, Metrolux PA-17-W-150-HPS-MOG, or approved equal.

The Contractor shall furnish and install additional conduit, wire and other electrical items as needed to connect the luminaries to a junction box in the bridge curb, or panel box near the base of the structure. Electrical service locations are shown on the roadway lighting plans. One photo-electric control is required on each overhead structure unless the sign lights are connected into roadway lighting circuits. Photo-electric controls when required shall be mounted near the hand hole or as directed by the Engineer.

The disconnect switch, photo-electric control (if applicable), conduit, wire mounting hardware, labor, equipment, and all incidentals necessary to put the luminaire in working condition shall be considered subsidiary to the item, "LUMINAIRE, TYPE HPS-150" for which direct 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:

TEMPORARY TRAFFIC SIGNAL AT N-50 AND SAPP BROS. DRIVE
TEMPORARY TRAFFIC SIGNAL AT N-50 AND I-80 WB RAMP
TEMPORARY TRAFFIC SIGNAL AT N-50 AND I-80 EB RAMP
TEMPORARY TRAFFIC SIGNAL AT N-50 AND FRONTIER ROAD

The Contractor shall furnish, construct, maintain and remove the temporary traffic signal as directed by the project manager. All equipment and material shall be furnished by the Contractor and will remain the Contractor's property.

The Contractor shall contact Mr. Robert Adams, OPPD, (402) 636-3333, to request electric power service for the temporary signal. This should be done as soon as the contract is awarded. State of Nebraska will pay for power.

The Contractor shall supply a solid state 170 style traffic signal controller capable of 8 phase operation. The Contractor shall program and maintain the controller. Contact Bob Simard, Department of Roads' Traffic Engineering Division, (402) 479-4594, for the phasing and timing data to program into the controller.

Wire the signal heads so that the heads for each approach are separated. A minimum of two signal heads is required for each approach. Center the signal heads over the approach lanes. The signal heads for each approach shall have a minimum horizontal separation of ten feet as viewed by the drivers. The Contractor shall realign the signal heads over the lanes as required for each phase of the project.

The Contractor shall maintain the entire temporary signal for the duration of its use at no additional cost to the State.

Payment for the temporary traffic signal shall be full compensation for furnishing, installing, operating, maintaining and removing the temporary traffic signal and for all labor, equipment, tools, materials and incidentals required to complete the work.

TEMPORARY LIGHTING SYSTEM

The Contractor shall install a temporary lighting system of the type specified for each crossover as indicated in the plans. The temporary lighting system shall be installed using direct buried cable and shall be tested and in proper operating condition before traffic is routed over the crossover.

The State will furnish the following items for the five temporary lighting systems on this project: For item quantities, see lighting details for each temporary lighting system.

- 400 or 1000 Watt Offset Luminaire with Photo Control
- 45' Tenon Top Pole
- 7' Power Installed Foundation (Slotted)
- TBI-17 Transformer Base
- Transformer Base Bolts (4/pk) (connecting-top)
- Transformer Base Bolts (4/pk) (carriage-bottom)

The Contractor shall provide all other materials required by the plans for a complete and working system and shall install all materials in accordance with the plans and specifications.

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 Mr. John Nelson at (402) 479-4335 two days prior to pick up. 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 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 temporary lighting system. The temporary lighting system at Station 1096+50 will remain in service for approximately 3 years after project completion and must be served by a permanent power source.

At the completion of construction, when traffic has been redirected back onto the normal driving lanes and the temporary lighting system is no longer required, the lighting system shall be removed by the Contractor. (The lighting system at Station 1096+50 will remain in place after completion of the project). All poles, luminaries, breakaway devices and power installed foundations comprising the temporary lighting systems shall be removed, separated as individual components, cleaned, properly prepared and delivered to the Department of Roads' Supply Yard at 5001 South 14th Street, Lincoln, Nebraska.

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. Items to be returned must be prepared as follows:

- (a) Poles shall be free of internal wiring and have their handhole cover in place.
- (b) Luminaries must have their photo-control in place and the mounting access hole covered with duct tape.
- (c) Breakaway transformer bases shall have all bolts, nuts and washers attached.
- (d) Power foundations shall be thoroughly cleaned and have all bolts, nuts and washers attached.

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.

Any void resulting from power foundation removal shall be backfilled with clean soil and compacted to a density equal to that of the surrounding earth.

Abandon existing direct buried cable in place.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

A temporary 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 at STA. ***." This price and payment shall be full compensation for installing and removing the lighting system including poles, luminaries, lamps, foundations, breakaway bases, all necessary pole wiring, all direct buried feeder cable, all materials, labor, equipment, tools; for providing electrical power to 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 the five temporary lighting systems on the project shall be measured for payment by the number of calendar days each of 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 at STA. ***." This price and payment shall be full compensation for all electrical energy used by the system, for all repairs, replacements, rentals, fees, fuel, labor, equipment, tools, transportation and incidentals related to the proper operation and maintenance of the lighting system.

SERVICE BOX

Paragraph 1. of Subsection of 406.05 in the 1997 English Edition of the Standard Specifications is amended to include the following:

Pay Item	Pay Unit
Service Box _____	Each (ea)

HIGH MAST TOWER MODIFICATION

There are fourteen (14) high mast tower foundations to be modified under this contract. Towers ET-1 through ET-5 will be modified according to Type "A" modification. Towers ET-6, ET-7 and ET-12 will be modified according to Type "B" modification. Towers ET-8, ET-9 and ET-10 will be modified according to Type "C" modification. Tower ET-11 will be modified according to Type "D" modification. Towers ET-13 and ET-14 will be modified according to Type "E" modification.

Type "A" Modification Will Consist of the Following:

Lowering the 140' tower from its foundation.
Moving the tower to its new location.
Preparing the tower.
Furnishing and installing a new lowering system and winch housing.
Setting the tower on a new foundation at the location shown on the plans.
Testing and adjusting the new lowering system.
Breaking back the existing foundation.
Dispose of removed lowering system components and foundation debris.

Type "B" Modification Will Consist of the Following:

Lowering the 120' tower from its foundation.
Moving the tower to its new location.
Preparing the tower.
Furnishing and installing a new lowering system and winch housing.
Setting the tower on a new foundation at the location shown on the plans.
Testing and adjusting the new lowering system.
Breaking back the existing foundation.
Dispose of removed lowering system components and foundation debris.

Type "C" Modification Will Consist of the Following:

Lowering the 120' tower from its foundation.
Preparing the tower.
Furnishing and installing a new lowering system and winch housing.
Resetting the tower on its original foundation.
Testing and adjusting the new lowering system.
Dispose of removed lowering system components.

Type "D" Modification Will Consist of the Following:

Lowering the 120' tower at the I-80/N-50 interchange.
Transporting the tower to the I-80/N-370 interchange.
Preparing the tower.
Furnishing and installing a new lowering system and winch housing.
Setting the tower on a new foundation at the location shown on the plans.
Testing and adjusting the new lowering system.
Break back the existing foundation.
Dispose of removed lowering system components and foundation debris.

Type "E" Modification Will Consist of the Following:

Obtaining the 140' tower from the I-680/Maple Street interchange (SE Quadrant) and transporting the tower to the I-80/N-370 interchange.
Preparing the tower (towers under this modification are void of luminaries, mast head assembly and all lowering system components). Furnishing and installing a new lowering system and winch housing.
Setting the tower on a new foundation at the location shown on the plans.
Testing and adjusting the new lowering system.

Transport Highway Mast Tower

Two of the towers being modified under this project are stored with other towers at the I-680/Maple Street interchange in Omaha. Both towers are 140' in length and are located in the southeast quadrant of the interchange. The Contractor will be required to transport both towers to the I-80/N-370 interchange.

The project manager or his representative will determine which of the High Mast Towers will be transported. Contractor will contact the State Motor Carrier Permit Office at (402) 479-4536 and the City of Omaha Permit Office (402) 444-5109 to determine what rules and regulations must be followed and what permits, if any, will be required.

Towers to be transported are three section units of ASTM A-588 weathering steel with lowering system removed. Carefully remove the tower from its cribbing and place on the transport vehicle. Towers shall be transported in essentially straight alignment with no part of the tower coming in contact with the ground.

Upon arrival at the new project site, the tower shall be unloaded and secured on cribbing with its shaft in straight alignment and no part of the tower in contact with the ground. Tower shall be stored on the project in an area designated by the project engineer.

It will be the Contractor's responsibility to protect all material from damage during loading, transport, unloading and storage.

I. Lowering the Tower

Disconnect electrical and grounding conductors. Remove tower from its foundation and secure on timber cribbing with shaft essentially straight alignment and no part of unit in contact with the ground. Store tower on cribbing at location approved by project engineer.

II. Preparing the Tower

Remove luminaries and mast head assembly, hoisting cables, power cable and winch assembly from the tower. Modify top of tower, if necessary, to accept new mast head assembly. Enlarge hole in base plate, if necessary, to approximately 20" diameter to allow free working of lowering device.

III. Install New Lowering System

Furnish and install new mast head assembly, winch housing, winch and winch cable, hoist cables, power cable, electrical components and luminaries on prepared tower in strict accordance with manufacturer's instructions and recommendations.

The winch housing shall be of the approximate design shown on the plans. Mounting holes in both top and bottom plates must be of the correct size and alignment to properly attach to the tower and to the foundation. Contractor to verify essential data before ordering.

IV. Resetting the Tower

A new foundation, for each of the towers requiring one, will be constructed at the location shown in the plans. The new foundation will be designed, constructed and paid for in accordance with the special provision titled "High Mast Tower Foundation" which is also a part of this contract.

Reset the prepared tower on its new foundation supported solely by the leveling nuts. Tighten the anchor bolt hold-down nuts in accordance with the applicable parts of Subsection 708.03, Paragraph 10 of the 1997 Standard Specifications, English Units Edition.

Install an expanded metal enclosure around the tower base plate as detailed in the plans.

Make up all electrical connections. Connect a 1/0 copper bonding jumper from each of the two grounding lugs in the tower base to its corresponding grounding lug in the winch housing and then to a ground rod in a manner as shown in the "Concrete Foundation with Winch Housing" detail.

V. Testing and Adjusting the New Lowering System

Test the luminaries. Test the operation of the lowering system. Make any adjustments necessary for satisfactory operation. Operate lowering system for three (3) complete consecutive cycles to assure proper functioning.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

The work of modifying high mast towers in a manner as described in the plans and these Special Provisions, complete, in place and accepted by the engineer shall be measured as a single unit and paid for at the contract unit price per each for the item "Modify High Mast Tower, Type ***". This price and payment shall be full compensation for removing the high mast tower from its foundation; placing the tower on cribbing; preparing the tower for a new lowering system; furnishing and installing the new lowering system including winch housing; moving the towers to their new locations (if required); transporting the tower (if required); resetting the tower on its foundation (new or existing); making up all necessary electrical connections; testing and adjusting the lowering system; disposing of the removed lowering system (if required); disposing of the foundation debris (if required) and for all labor, equipment, tools, materials, transportation and incidentals necessary to complete the work.

Payment is full compensation for all work prescribed in this provision.

REMOVE AND TRANSFER TEMPORARY LIGHTING SYSTEM

There are two instances on this project where the Contractor will be required to remove and transfer a temporary lighting system from one crossover to another. The temporary lighting system in both cases will be made up of four offset lighting units consisting of 45' tenon top pole, 1000 watt HPS luminaire, breakaway transformer base and 7' screw-in foundation.

The Contractor will carefully remove all items and store the items on the project site in a proper manner until transferred to the second crossover site. The temporary lighting system at

crossover Sta. 1125+80 will be removed and transferred to Sta. 337+00 and the temporary lighting system at crossover Sta. 424+00 will be removed and transferred to Sta. 415+00. The direct buried cable used to power the temporary lighting system will be abandoned in place.

Payment for the two temporary lighting system removal and transfers will be made at the contract unit price per each for the item "Remove and Transfer Temporary Lighting System".

INSTALL IMPACT ATTENUATOR

Paragraph 18. "Install Impact Attenuator" of Subsection 422.03 of the Standard Specifications is void and superceded by the following:

The Contractor shall furnish, install and maintain an impact attenuator system at the locations shown on the traffic control plans or as designated by the Engineer. The system shall be designed for attachment to both the temporary concrete protection barrier (24" wide) and the permanent 42" concrete median barrier (31" wide) and be wide enough to protect either of these obstacles. The system shall be designed for 65 mph.

The Department recommends the Contractor choose from the following systems or an approved equal: QuadGuard, Type CZ or React 350 manufactured by Energy Absorption Systems and supplied by the John Thomas Company; contact David Krahulac at 1-(888) 447-7263 or the TRACC manufactured by Trinity Industries: contact Robert Takach at 1-(800) 644-7976.

If the selected system requires a replacement cartridge set or a replacement kit to restore it after an impact, the Contractor shall have available one replacement cartridge set or kit either on the project or within a reasonable distance in the event the installed system becomes damaged.

The system shall be installed and maintained as specified by the manufacturer. The Contractor shall immediately repair or replace any damaged system.

Upon completion of the work requiring the impact attenuator, the Contractor shall remove the system; clean the site of any debris and fill any holes drilled to attach the system to the obstacle or the pavement with epoxy mortar described in Section 1018 of the Standard Specifications.

The item "Install Impact Attenuator" shall be measured by the each (EA) and shall include all the parts, attachments, pavement epoxy and replacement modules required to build, maintain and remove the required system.

The item "Relocate Impact Attenuator" shall be a pay item for removing the impact attenuator to a new location after the initial installation and operation. This item shall be measured by the each (EA) and shall include all the parts, kits, attachments, pavement epoxy and the labor and materials required to relocate the system for subsequent phases as shown on the plans or designated by the Engineer.

TEMPORARY PAVEMENT MARKING

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 pavement markings shall comply with requirements of Section 1069 as amended herein.

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" wide, 10' long with a 30-foot gap or a minimum 4" wide solid line as shown on the plans.

Raised pavement markers and plowable pavement markers shall be used to supplement the temporary paint markings on projects requiring lane shifts. They shall consist of single markers spaced 80 feet apart and the spacing shall be reduced to 40 feet through transition curves and on solid white lane lines. Yellow edge lines shall be supplemented at a spacing no greater than 20 feet. They shall not be used to supplement right edge lines. Raised pavement markers shall not be placed on top of any dashed painted temporary pavement marking and they shall be placed adjacent to any solid painted temporary pavement marking. Raised pavement markers may be used on new or existing concrete pavement and temporary asphaltic concrete pavement. Plowable pavement markers shall be used in lieu of raised pavement markers only on those projects where lane shifts are required to carry over through the winter months and into the following construction season. Plowable pavement markers are to be used only on existing concrete pavement that is to be removed or temporary asphaltic concrete pavement.

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

TEMPORARY PAVEMENT MARKING

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

1. Prior to the initial placement of the markings, temporary paint, Type II tape or raised pavement markers, the pavement upon which the markings are to be placed shall be dry, cleaned and properly prepared by 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 markings 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 six pounds of glass beads per gallon. The beads shall have a minimum index of refraction of 1.50. The temporary paint shall be applied with a minimum width of four inches and a wet thickness approximately 15 mils (approximately 16.5 gallons of paint per mile 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 30 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 15 day or 30 day warranty periods.

After the minimum 15 day or 30 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 15 day or 30 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 and 50°F, 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 will be paid for by the state, even if the application falls within either the 15 day or 30 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 wide and the reflectorizing glass beads shall have an index of refraction of not less than 1.90. A nonmetallic medium 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, either manually or with a recommended roll up device. Removal shall be accomplished without the use of heat, solvents, grinding, or sandblasting.

4. Raised pavement markers shall consist of a plastic shell with one or more

prismatic reflective faces with a minimum of 2.45 square centimeters of reflective surface for each direction required to reflect incident light. The marker shall be fastened to the surface with an approved adhesive system. Raised pavement markers which have not been previously approved by the Department of Roads will not be permitted on the project until approved by the engineer.

5. The use of paint, as provided above, shall be paid at the contract unit price per linear foot for the item "Temporary Pavement Marking, Type Paint".

6. Temporary pavement marking tape Type II shall be paid at the contract unit price per linear foot for the item "Temporary Pavement Marking, Type II".

7. Raised pavement markers shall be paid at the contract unit price per each for the item "Temporary Raised Pavement Markers".

8. Plowable pavement markers shall conform to Section 907 of the Supplemental Standard Specifications.

9. The removal of temporary paint pavement marking, as directed by the engineer, shall be paid at the contract unit price per linear foot for the item "Pavement Marking Removal".

10. Initial surface preparation requiring shot blasting shall be paid at the contract unit price per linear foot 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 CONTROL DEVICES

Paragraphs 2.k.(2) through 2.k.(5) of Subsection 422.01 of the Standard Specifications is void and superseded by the following:

- (2) Upon notification by the engineer, the Contractor shall respond to the site within ninety (90) minutes and take immediate steps to correct the deficiency.
- (3) For each occurrence failure to respond to the notification within the ninety minute time period will result in the assessment of a lump sum \$1,000.00 liquidated damages. If necessary, the engineer may correct the adverse conditions in an appropriate manner. The Contractor will also be assessed the costs incurred when the corrective action is performed by others.

INSTALL CONCRETE PROTECTION BARRIER

Paragraph 5.a.(1) of Subsection 422.03 of the Standard Specifications is void and superseded by the following:

- (1) Concrete protection barriers shall be furnished by the Department and installed and maintained by the Contractor at the locations shown in the plans or designated by the Engineer for the pay item "Install Concrete Protection Barrier".

Paragraph 5.b. of Subsection 422.03 is amended to provide that Concrete Protection Barriers for use on this project are located on I-80, currently in use on the project located to the

east of N-50. The Contractor will be required to deliver the barriers to the Maintenance Yard in Papillion when no longer required on this project.

Paragraph 5. of Subsection 422.03 of the Standard Specifications is amended to include the following:

f.(1) Concrete protection barriers that become dislodged or moved out of alignment shall be placed back into alignment as soon as practical. If the dislodged barriers are considered to be a hazard to the traveling public by the Engineer or the barriers encroach into the traveled lane, the barriers shall be realigned within four (4) hours of the time the Contractor is notified. For each occurrence, failure to realign the barriers within the four (4) hour time period will result in the assessment of a lump sum \$1,000.00 liquidated damages and the Engineer may proceed to correct the adverse conditions in a manner that is deemed appropriate. The Contractor will also be assessed the cost occurred when the action is performed by others.

(2) The work of realigning and returning the existing concrete protection barriers, along with any grading required, shall be considered subsidiary to installing concrete protection barriers.

(3) If the Contractor desires additional barriers to protect equipment or material, barriers may be obtained at the Department of Roads' Maintenance Yard at Papillion. Direct payment will not be made for this work.

(4) The concrete protection barriers shown on the Phase 4 Stage 1 Traffic Control plans from Sta. 327+75 to Sta. 335+00 Lt. are to remain in place at the completion of the project.

INERTIAL BARRIER SYSTEM

Section 422 in the Standard Specifications and Supplemental Specifications is amended to provide that the Inertial Barrier System in Group 7 shall be left in place upon the completion of the project.

The work of furnishing and installing the sand filled type inertial barrier system, as shown on the plans in Group 7 or as required by the Engineer and leaving the system in place, in the proper alignment and in good working condition after the construction is complete shall be paid as the item "Inertial Barrier System".

The Inertial Barrier System in Group 7 shall be measured by the each and shall include all the modules required to build and maintain the required array, sand filler material and salt and the required object markers. Payment shall also include the earthwork required for placing the system on flat ground and the maintenance of the system until the project is accepted.

RELOCATE CONCRETE PROTECTION BARRIER

Paragraph 5.a.(3) of Subsection 422.03 of the Supplemental Specifications is void and superseded by the following:

When concrete protection barriers are lifted onto a truck and hauled to a new location than lifted off the truck and reset, as directed by the Engineer or as shown in the plans, after the initial installation the pay item "Relocate Concrete Protection Barrier" shall be used.

Concrete protection barrier moves that do not require a truck haul shall not be considered a relocate. These moves are subsidiary to the item "Install Concrete Protection Barrier".

The work of realigning barriers after a hit or when they become dislodged is considered maintenance of the barrier and is subsidiary to the item "Install Concrete Protection Barrier". See provision titled **Install Concrete Protection Barrier**.

RELOCATE INERTIAL BARRIER SYSTEM

Paragraph 19.b. of Subsection 422.04 in the Supplemental Specifications is void and superseded by the following:

b. "Relocate Inertial Barrier System" is the pay item for moving the inertial barrier system to a new location after initial installation and operation.

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

1.	Pay Item	Pay Unit
	Relocate Inertial Barrier System	Each (ea)

LOCAL MATERIAL SOURCES (S5-1-0801)

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

SURFACING UNDER GUARDRAIL (S5-4-0801)

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

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

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

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

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

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

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

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

ASPHALTIC CONCRETE (S5-5-0801)

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

COLD MILLING CLASS 4

All the asphalt removal shown in the plans shall be considered Cold Milling Class 4.

Salvaged material produced on this project is the property of the State, but shall be furnished for use on this project at no cost to the Contractor.

Salvaged material shall be stockpiled at a site provided by the State. The State provided stockpile site is located at the Southeast quadrant of the I-80 and N-370 Interchange.

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.

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 "47B-3500" Concrete, Class "AX-3500" Concrete, Class "PR-3500" Concrete or Asphaltic Concrete Type SP5. 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 tested as shown in the Supplemental Specifications. The incentive, disincentive pay tables do not apply, however, any asphaltic concrete not meeting the specifications will be subject to removal.

Subsection 302.04 is amended to provide that 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 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 _____".

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 3500 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 cold mill the temporary surfacing. Uncontaminated millings shall be stockpiled at the I-80 and N-370 Interchange, as directed by the Engineer. Any foundation course used under the temporary surfacing 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.

SURFACING

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

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

Prepare the underlying subgrade, prior to placing the 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 "47B-3500" Concrete, Class "AX-3500" Concrete, Class "PR-3500" Concrete or Asphaltic Concrete Type SP5. Whatever option is chosen, shall be used throughout the project unless approved in writing by the Engineer.

Asphaltic Concrete used for surfacing shall meet all specifications and sampled and tested as shown in the Supplemental Specifications. The incentive, disincentive pay tables do not apply, 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 "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 "Surfacing _____".

Subsection 503.05 is amended to provide that Asphaltic Concrete and P.G. Binder used in the asphaltic concrete will not be measured for payment, but shall be considered subsidiary to the item "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 "Surfacing _____".

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

Paragraph 10 of Subsection 603.03 is amended to provide that concrete used in the surfacing, reach a minimum strength of 3500 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 "Surfacing _____".

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

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

BITUMINOUS SURFACE COURSE 14 INCH

The salvaged bituminous material for use in the bituminous surface course shall be obtained from an existing stockpile site located at the project borrow area, as directed by the Engineer.

When the need for the Bituminous Surface Course is no longer required, the Contractor shall remove the Bituminous Surface Course. Uncontaminated millings may be stockpiled at the project borrow area, as directed by the Engineer. Any contaminated millings 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 "Bituminous Surface Course 14".

The 14" bituminous surface course at Sta. 1100+00 Lt. along N-370 is to provide temporary access to the gas station during construction of the intersection at Sta. 1100+99.

The Contractor shall install temporary drainpipe under the bituminous surface course. The drainpipe shall be a 12" to 18" culvert pipe provided by the State. The pipe shall be removed at the same time as the surface course and stored on the project as direct by the Engineer.

The work of installing and removing the temporary drainpipe shall not be paid for directly but shall be considered subsidiary to the item "Bituminous Surface Course 14".

TINING (S6-19-1001)

Paragraph (5) d. of Subsection 603.03 of the Standard Specifications is void and superseded by the following:

Description

When required by the plans or Special Provisions, the Contractor shall tine texture the concrete pavement surface using the following methods:

Construction Methods

1. The surface of the concrete pavement shall be dragged with wet burlap, carpet, or canvas belt before tining.
2. Mainline Tining-Longitudinal
 - a. Mainline paving shall be tined with a metal device 23 feet (7 meters) in length with a single row of tines.
 - b. The tines shall be of such dimensions as to produce grooves parallel to the centerline of the road approximately 1/8 inch (3 mm) wide and 1/8 inch (3 mm) deep spaced at 3/4 inch (19 mm) on center. A 2 inch (50 mm) to 3 inch (75 mm)

wide strip of pavement surface shall be protected from surface grooving for the length of and centered along the longitudinal joint.

- c. The tining device shall be mechanically operated and shall cover the full pavement width in a single pass at a uniform speed and depth centered on the longitudinal joint. Longitudinal tining shall be accomplished by equipment with horizontal and vertical string line controls to ensure straight grooves.
3. Non Mainline Tining-Transverse
- a. Either mechanical or hand transverse tining shall be used on other pavement requiring tining on the project. This shall consist of creating uniform grooves approximately 1/8 inch (3 mm) wide by 1/8 inch (3 mm) deep spaced 3/4 inch (19 mm) on center placed transversely to the centerline of the road.
 - b. Hand tining will be allowed on irregular areas or areas inaccessible to the tining machine as shown in the 6 inch (155 mm) to 16 inch (405 mm) Concrete Pavement Special Plan. A tine rake shall be used for hand tining. The use of a corrugated bull float or other device that creates a smooth finish between the grooves will not be permitted.
4. When authorized, pavement texture damaged by rain and pavements not textured to the specified requirements shall be textured only after the concrete has attained its designed strength. The texturing shall be done with diamond grinding equipment specifically designed to grind and texture concrete pavements. The cutting head shall be at least 36 inches (915 mm) wide and capable of producing the depth and spacing indicated in 2.b. or 3.a.

DOWELED CONCRETE PAVEMENT (S6-20-0901)

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.

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.

CONCRETE PAVEMENT CORES (S6-21-0302)

Section 603 in the Standard Specifications, and Supplemental Specifications is amended to include the following:

Coring

All coring applicable to this specification shall be the responsibility of the Contractor.

All record core locations shall be determined by Materials and Research Division. The locations will be requested by the Contractor and furnished to the Contractor through the Project Manager.

All cores, including designated, additional, exploratory, and special cores, shall be drilled at such locations as the Engineer may direct. The coring shall be done in the presence of the Engineer.

All cores shall be obtained in accordance with AASHTO T-24 and with concrete coring equipment approved by the Engineer. Equipment that must be anchored or secured to the pavement will not be permitted.

Because cores will be used to verify concrete strength requirements, no cores shall be drilled until the concrete is sufficiently cured to permit the cores to be transported without damage and without special handling or wrapping to protect against moisture loss.

All cores shall have a four-inch (100 mm) nominal diameter unless otherwise indicated in the plans or Special Provisions.

Measurement

The Engineer shall measure the thickness of each core by the caliper method indicated in the specifications. If the caliper measurement shows the core to have a length equal to or greater than plan thickness, no further measurement will be made. If the caliper method shows less than plan thickness, another measurement will be made in accordance with NDR Standard Test Method T-148.

A copy of the measurements shall be furnished to the Contractor.

Payment

Coring shall be paid for at the contract unit price per each for the item "Concrete Pavement Thickness Cores". Payment will be made for the minimum number of cores required for the project as determined by the Engineer. Additional cores required to determine the limits of deficiencies will be obtained at the Contractor's expense.

Special cores requested by the Engineer will be paid for at the contract unit price unless a deficiency is found. In the case of a deficiency, the special cores will be obtained at the Contractor's expense.

CONCRETE MEDIAN SURFACING

Subsection 607.05 is amended to include the pay items "6" Concrete Median Surfacing."

Where shown in the plans on the median surfacing details, the Contractor shall build No. 4 transverse bars at 5-foot centers. The work of furnishing and installing the transverse re-bars shall **not** be paid for directly but shall be considered subsidiary to the items "6" Concrete Median Surfacing" and "Concrete Median Surfacing".

4" CONCRETE LIP CURB, TYPE II

Subsection 606.05 is amended to include the pay item "Concrete Class 47B-3500 Lip Curb, Type II".

The Contractor shall build the No. 4 longitudinal bar and the No. 5 x 6" dowel bars shown in the plans on the curb detail. The work of furnishing, installing, drilling and grouting, shall **not** be paid for directly but shall be considered subsidiary to the item "Concrete Class 47B-3500 Lip Curb, Type II".

MECHANICALLY STABILIZED EARTH WALL

Paragraph 3 of Subsection 714.04 is void and superceded by the following:

3. As shown on the *typical section of backfill* on the special plan for "Mechanically Stabilized Earth Wall", the Contractor shall use select granular backfill between the sloped earth embankment and the back face of the MSE wall. No adjustment in the pay quantity will be made for the additional quantity of granular material required outside the neat dimensions used to compute the volume to base the plan quantity.

The pay quantity of "Select Granular Backfill for MSE Walls" is measured by the cubic yard and computed using the plan dimensions. The pay quantity shown in the plans is based on a volume equal to the height of the wall times a width equal to 70 percent of the height. If the wall design requires soil reinforcement or straps to extend further into the soil than $0.70 \times \text{Height}$ than the pay quantity shall be adjusted accordingly. At a minimum, the depth of select granular material shall extend 1 foot beyond the soil reinforcement or straps.

DRAINAGE

I. GENERAL

The plans and cross-sections were prepared with consideration given to drainage during the intermediate phases. Any changes to the project plans or cross- sections shall require the Contractor to consider the ramifications these changes will have on the project drainage.

On the culvert cross-section sheets, recommendations are made for which phase and stage, or part thereof, the drainage work should occur. The Contractor shall consider these notes for information purposes throughout the course of construction.

The work of maintaining drainage during the construction shall not be paid for directly, but shall be considered subsidiary to items for which payment is made.

II. STA. 1118+50, N-370

The storm sewer pipe at Sta. 1118+50 (No. 103) shall be constructed during Phase 1 Stage 1. In order to maintain traffic, construction of the median inlet structure (No. 106) at the same station needs to be delayed until Phase 2 Stage 2. The Contractor shall supply and install a temporary drainpipe between pipe No. 103 and the N-370 median to the east. The pipe shall be sized large enough to provide adequate drainage during the interim phases until the median inlet structure can be built. The work of supplying, install and maintaining the temporary drainage pipe described above shall not be paid for directly, but shall be considered subsidiary to items for which direct payment is made.

III. RAMP 3, Phase 3 Stage 1

The area between the existing ramp 3 and the new ramp 3 needs to be temporarily drained. It is recommended a drainpipe be tapped into the culvert pipe built at Sta. 1630+29. The drainpipe shall be removed when the existing ramp 3 is removed during Phase 3 Stage 2. The tapped culvert pipe at Sta. 1630+29 shall be repaired as necessary and approved by the Engineer.

The work of supplying, building and maintaining the drainage Pipe described above and the work of repairing the culvert pipe shall not be paid for directly, but shall be considered subsidiary to items for which direct payment is made.

IV. RAMP 4, Phase 1 Stage 1

The area between the existing ramp 4 and the new ramp 4 needs to be temporarily drained. It is recommended a drainpipe be built under the temporary surfacing (Phase 1 Stage 2) along Ramp 4 at approximately Sta. 1202+20. The drainpipe shall not be left under the new ramp 4 pavement at the conclusion of the project.

The work of supplying, building and maintaining the drainage pipe described above shall not be paid for directly, but shall be considered subsidiary to items for which direct payment is made.

V. 10" CONCRETE PAVEMENT, STA. 1126+37.7 to STA. 1130+19.2 LT. / RT.

The Contractor shall supply and install a temporary culvert pipe under the 10" Concrete Pavement from Sta. 1126+37.7 to Sta. 1130+19.2. The pipe shall be installed to carry water under the crossover to the existing inlet at 1126+50. The pipe shall be a minimum 12" in diameter and not larger than 18" in diameter. The length of the pipe required is estimated to be 250 Lin. Ft. from Sta. 1127+00 to Sta. 1129+50

The work of supplying, installing and maintaining the culvert pipe described above shall be paid for as Culvert Pipe, Type 2,3,4,5,6,7 or 8. Excavation to install the pipe shall not be paid for directly, but shall be considered subsidiary to items for which direct payment is made.

VI. TEMPORARY PIPE

Temporary culvert pipes, described in the plans as "T1" (Sta. 1449+67 to 1450+29 Lt.), "T2" (Sta. 1449+71 to 1450+29 Rt.), "T3" (Sta. 607+00), "T4" (Sta. 1202+50) and the 12" culvert pipe under the N-370 crossover (Sta. 1127+00 to Sta. 1129+50), shall be removed and salvaged. The Contractor is required to clean and deliver the pipe to the Department of Roads Maintenance Yard at Papillion upon completion of the project or at such time as the pipe is no longer needed.

The work of removing, salvaging, cleaning and delivering the temporary pipe to the Maintenance Yard, shall not be paid for directly, but shall be considered subsidiary to the items of work for which direct payment is provided.

VII. MEDIAN INLETS

For the median inlet No. 36 at Sta. 383+75, 2.73' Lt., the following note is on the culvert cross-sections, "Phase 3 Stage 1 - Build inlet and outlet pipe and temporarily connect, then build pavement over the inlet location". Phase 4 Stage 2 Cut pavement over the median inlet location and construct the inlet."

For the median inlet No. 39 at Sta. 387+75, 2.73' Lt., the following note is on the culvert cross-sections, "Phase 3 Stage 1 - Build inlet pipes and outlet pipe and temporarily connect, then build pavement over the inlet location". "Phase 4 Stage 3 - Cut pavement over the median inlet location and construct the inlet."

For the median inlet No. 68 at Sta. 415+00, 2.73' Lt., the following note is on the culvert cross-sections, "Phase 3 Stage 1 - Build outlet pipe and temporarily bulkhead, then build pavement over the inlet location". "Phase 3 Stage 3 - Cut pavement over the median inlet location and construct the inlet."

The extra work, materials, tools and incidentals required to construct median inlets No. 36, 39 and 68 as described in the plans shall not be paid for directly, but shall be consider subsidiary to items for which direct payment is made.

For the existing median inlet at Sta. 454+50, 2.73' Lt., the Contractor shall temporarily close the median inlet to accommodate the traffic crossover shown in the plans. The Contractor shall remove the frame and store at a safe location, then lay filter fabric into the structure and fill it with crushed rock. The inlet opening shall then be paved over with a minimum 14 inches of pavement. The inlet opening shall be formed with a material to allow the concrete to be removed without damaging the inlet frame. The pavement and the rock shall be removed as part of Phase 3 Stage 3 and the median inlet cleaned out and the grate replaced.

The extra work, materials, tools and incidentals required to temporarily close the existing median inlet at Sta. 454+50 as described above shall not be paid for directly, but shall be consider subsidiary to items for which direct payment is made.

TEMPORARY BULKHEAD FOR STORM SEWER

This work shall consist of furnishing and installing temporary bulkhead for storm sewers as needed for phasing.

Temporary bulkheads shall be constructed of 3/4-inch exterior grade plywood. The outside diameter of the bulkhead shall be the outside diameter of the sewer pipe plus 12 inches.

Work for furnishing and installing the temporary bulkheads shall be considered incidental to the work related to furnishing and installing of storm sewer, and shall not be paid for directly.

PREPARATION OF BRIDGE AT STA. 368+64.62

The preparation of the existing bridge shall be in accordance with Sections 203 and 704 of the Standard Specifications for Highway Construction and include the following:

Extreme caution shall be exercised in removing the exterior portion of the existing bridge deck so that the existing reinforcing and electrical conduit is not damaged and so that no material or debris will be permitted to fall upon the roadway below. At the slab break line, the contractor shall sawcut the existing slab one inch deep before breaking off and removing the exterior portion of the slab. The purpose of the sawcut is to provide a good clean joint with the new concrete.

PROTECTIVE SYSTEM FOR BRIDGES WITH WEATHERING STEEL GIRDERS

Before steel girders are set, the exposed face of the abutments and the top ten feet of the piers shall be wrapped with 6 mil polyethylene to protect against staining. The polyethylene wrap shall remain in place until after the bridge deck is poured. When the wrap is removed, concrete surfaces of abutments and piers shall be cleaned of any stains from the weathering steel.

The polyethylene wrap will not be paid for directly, but shall be subsidiary to the item "CLASS 47B-3000 CONCRETE FOR BRIDGES". As an alternate, a stain resisting coating may be used in place of the polyethylene wrap. The stain resisting coating shall be applied to the exposed face of the abutments and the top ten feet of the piers. The stain resisting coating shall be applied to the concrete surfaces prior to erecting the steel superstructure.

Stain resisting coating shall be one of the products listed below or an approved equal:

Product	Manufacturer
Carbocrete Sealer WB	Carboline Company, Burlington, IA
Waterproofing Sealer	I.C.I. Paints, Omaha, NE
Polyshield Graffiti	American Building Restoration,
Preventer	Franklin, WI

Preparation of the concrete surface and mixing and applying the coating shall be in accordance with the manufacturer's instructions.

After the bridge deck is poured, concrete surfaces of abutments and piers shall be cleaned of any stains from the weathering steel.

Stain resisting coating will not be paid for directly, but shall be subsidiary to the item "CLASS 47B-3000 CONCRETE FOR BRIDGES".

1 1/2" CONDUIT IN BRIDGE

Description

This work consists of furnishing and installing an electrical conduit system as shown in the plans. It shall include all labor and materials, including the 1 1/2" and 3/4" conduit and fittings, junction boxes, expansion fittings, drains, excavation, backfill and all equipment, tools and incidentals necessary to complete the work.

Material Requirements

Junction boxes shall be 10"x 6"x 6" in dimension and of NEMA type 4 watertight and dust-tight construction. Boxes shall be of machineable quality gray iron castings, outside flanged with recessed cover and designed especially for flush mounting in masonry. Cover and box shall have a hot-dip galvanized finish. Cover shall be gasketed and secured to the box with hex head stainless steel screws. Conduit entrance into the box shall be through slip holes. Conduit shall be fastened to box using sealing type locknuts. Box shall be O-Z Gedney YR 100606, Spring City ER 100606, Crouse Hinds WGB 100606, or approved equal.

All electrical conduit and fittings to be cast in concrete shall be PVC and bear the UL Label. All other conduit shall be as designated on the plans.

Construction Methods

The conduit system shall be installed under the direct supervision of a journeyman electrician or lineman and shall conform to the requirements of the National Electric Code and the NDR Standard Specifications.

Method of Measurement

The electrical conduit system shall be measured for payment by the number of linear feet shown in the plans within the limits defined for this item.

Basis of Payment

The electrical conduit system, in place and accepted by the Engineer, will be paid for at the contract unit price per linear foot for the item "1 1/2" CONDUIT IN BRIDGE". This price and payment shall be full compensation for furnishing and installing the complete electrical conduit system as shown in the plans. The 3/4" conduit shall be subsidiary to the 1 1/2" conduit.

EPOXY COATED REINFORCING STEEL

Paragraph 1. of Subsection 707.05 in the 1997 English Edition of the Standard Specifications is amended to include the following:

Pay Item	Pay Unit
Epoxy Coated Reinforcing Steel for _____	Pound (lb)

SEEDING

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

Type "A"	Minimum Purity (%)	Broadcast or Hydraulic Seeder Application Rate in lb. of Pure Live Seed/Acre	Approved Mech. Drill Application Rate in lb. of Pure Live Seed/Acre
Intermediate Wheatgrass – Slate	85		4
Western Wheatgrass – Flintlock	85		5
Indiangrass – NE-54, Oto	75		3
Switchgrass – Pathfinder	90		1.5
Little Bluestem – Blaze	55		5
Sideoats Grama – Butte	75		4
Partridge Pea – Platte	90		1
Purple Prairie Clover – Inoculated	90		2
Blue Flax	90		4
Blackeyed Susan	90		1.5
Pitcher Sage – NeKan	90		1
Type "B"			
Perennial Ryegrass – Linn	85		10
K-31 Fescue	85		15
Western Wheatgrass – Flintlock	85		10
Buffalograss – Sharps 2, Cody	80		5
Blue Grama – NE, KS, CO	35		3
Birdsfoot Trefoil – Empire – 5X Inoculation	90		4
Crimson Clover – 2X Inoculation	90		4
Oats	90		15

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 (N ₂) -----	48 or 54 lb.
Available Phosphoric Acid (P ₂ O ₅) -----	138 or 144 lb.

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

Nitrogen (total available) -----	60 lb.
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The contractor may, at his option, apply granular urea formaldehyde in lieu of the sulphur coated urea fertilizer at the following rate:

Nitrogen (total available) -----	60 lb.
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EROSION CONTROL

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

For All Erosion Control except Type J, and for All Erosion Checks	Minimum Purity (%)	Application rate in lb. of Pure Live Seed/1000 yd. ²
Canada Wildrye – NE, IA	85	0.4
Eastern Gamagrass – Pete	90	0.5
Intermediate Wheatgrass – Flintlock	85	1
Switchgrass – Pathfinder	90	0.4
Indiangrass – NE-54, Oto	75	1
Ill. Bundle Flower – Inoculated	90	0.1
Grayhead, Prairie Coneflower	90	0.2
Rudbeckia Laciniata – Golden Glow	90	0.2
Pitcher Sage – NeKan	90	0.25
Oats	90	6

Erosion Control Type J – for material, use any erosion control material as shown on the approved product list for erosion control. For seed, use a low growing grass/wildflower mixture seeded at a rate of 6.5 lbs/1000 sq.yds. The mixture must be approved by the engineer prior to use.

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 inorganic fertilizer shall be:

	Rate of Application Per 1000 yd. ² (Min.)
Available Nitrogen (N ₂) -----	8 or 9 lb.
Available Phosphoric Acid (P ₂ O ₅) -----	23 or 24 lb.

Rate of application of granular sulphur coated urea fertilizer or urea-formaldehyde fertilizer shall be:

	Rate of Application Per 1000 yd. ² (Min.)
Nitrogen (Total Available) -----	18 lb.

EROSION CONTROL (S8-14-0202)

Subsection 807.02 in the Supplemental Specifications is void.

Paragraph 6.b. of Subsection 807.03 in the Standard Specifications is amended to include the following:

The soil retention blanket for Erosion Control Type B, Type B-1, and Type B-2 shall be placed longitudinally next to the shoulder of the roadway. The soil retention blanket shall be placed after the area is seeded and before the area is mulched. One-third more staples are required than shown in the plans.

EROSION CONTROL, TYPE A & AA (S8-15-0801)

This work shall consist of placing a soil retention blanket, filter fabric, 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 soil retention blanket for Erosion Control "A & AA" shall be as shown on the approved products list for Erosion Control A & AA.

The filter fabric shall be from the approved products list for Erosion Control Type A, Type AA, or Erosion check or approved equal. Place the erosion control material with the filter fabric attached over the prepared area. Pin the area. Seed and fertilize and then soil fill. The soil fill shall be fine enough to fill the voids and cover all of the seed. If the filter fabric is not attached to the erosion control material, the installation is as follows: prepare the area, lay out the filter fabric, pin the filter fabric, lay out the erosion control material and pin, seed and fertilize and soil fill.

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

The pins for the filter fabric shall be made of No. 11 gauge (3 mm diameter) steel wire. The pins shall be "U" pins with a one-inch (25 mm) throat and at least six inches (150 mm) long.

The pins for the "A & AA" mat shall be a minimum of 8 or 9 gauge (4 mm diameter) wire, u-shaped pins with 8"-10" (200 mm to 250 mm) legs and a 1" or 2" (25 mm or 50 mm) throat. The 11 gauge (3 mm diameter) 6 inch (150 mm) "U" pins may be used in lieu of the 8 or 9 gauge (4 mm diameter) pins if the 11 gauge (3 mm diameter) pins are machine placed and one-third more pins are used.

EROSION CONTROL, TYPE "AAA" (S8-16-0801)

This work shall consist of placing a soil retention blanket, filter fabric, 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 soil retention blanket for Erosion Control "AAA" shall be as shown on the approved products list for Erosion Control AAA.

The filter fabric shall be from the approved products list for Erosion Control Type A, Type AA, or Erosion check or approved equal. After the area around the culvert is shaped and graded, the filter fabric shall be placed and pinned. The filter fabric shall be placed under the pipe and the full length of the installation as shown in the plans. Place the Erosion Control "AAA" mat over the pipe to allow for a three foot (1 meter) \pm piece of material on top of the pipe. Cut out the hole for the pipe, leaving an area uncut that will be tucked under the culvert and in front of the culvert. Pin the mat as shown and trench in and compact the downstream end. Seed and fertilize the area and soil fill, raking the soil in well. Reseed and rake the area.

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

The pins for the filter fabric shall be made of No. 11 gauge (3 mm diameter) steel wire. The pins shall be "U" pins with a one-inch (25 mm) throat and at least six inches (150 mm) long.

The pins for the "AAA" mat shall be a minimum of 8 or 9 gauge (4 mm diameter) wire, u shaped pins with 8"-10" (200 mm to 250 mm) legs and a 1" or 2" (25 mm or 50 mm) throat.

**FABRIC SILT FENCE
(HIGH POROSITY AND LOW POROSITY)**

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

At the completion of the project, the silt fence shall be left in good working condition.

COVER CROP SEEDING

Section 812 – Cover Crop Seeding in the Standard Specifications is amended to include fertilizer.

The Cover Crop Seeding for this project will be fertilized. Rates of application of commercial inorganic fertilizer shall be:

Rate of application per ha – per acre		
Available Nitrogen (N2)	73 kg	66 lbs

**GUARDRAIL END TREATMENT, TYPE I
(S9-2-0202)**

Section 902 in the Standard Specifications is amended to include “Guardrail End Treatment, Type I”.

This work consists of furnishing and installing a guardrail end treatment system according to the details and at the locations shown in the plans.

The Contractor has the option of installing one of the following systems:

- 1.) ET-2000; Manufactured by Trinity Industries, Inc.
2525 N. Stemmons Freeway
Dallas, TX 75207
(800) 644-7976
- 2.) BEST; Manufactured by Road Systems, Inc.
3616 Old Howard County Airport
Big Springs, TX 79720
(915) 263-2435
- 3.) SKT-350; Manufactured by Road Systems, Inc.
3616 Old Howard County Airport
Big Springs, TX 79720
(915) 263-2435

The Contractor will be required to furnish two sets of shop plans to the Department of the system to be installed. The guardrail end treatment shall be installed in accordance with the recommendations of the manufacturer.

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

VEHICLE GATE

Paragraph 1. of Subsection 911.05 in the Standard Specifications is amended to include the following:

1.	Pay Item	Pay Unit
	____ Vehicle Gate	Each (ea)

PLUG AND ABANDON INLET, STATION 1326+04

The inlet at Sta. 1326+04, 33' Rt. shall be plugged and abandon. Section 918, of the Standard Specifications is amended to include the following:

1. MATERIAL REQUIREMENTS

Concrete for the plug shall be Class 47B-3000 or AX-3000.

Steel for concrete reinforcement shall conform to Section 1020 of the Standard Specifications.

2. CONSTRUCTION METHODS

The plug shall be cast in place over the top of the existing concrete grate and structure. The plug shall be 4'4" x 4'4" and 6-inches thick. It shall be reinforced with size 4 reinforcing steel at 6" centers both longitudinally and transversely to match the dimensions required. Dowel bars (No. 4) shall be used at each corner to prevent the lid from slipping.

3. METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Payment for the work to Plug and Abandon Inlet, Sta. 1326+04 shall be full compensation for all the work described. The price bid shall be full compensation for excavation, forming the plug, constructing the plug and all miscellaneous materials and labor required to complete the work.

RECONSTRUCT MANHOLE, STA. 422+60,120' Lt.

The manhole is approximately 54 inches in diameter and is made from precast reinforced concrete culvert pipe. The manhole acts as an inlet with a re-steel style grate poured into the top concrete ring.

This reconstruction involves lowering the manhole top elevation approximately 1.5 foot below the existing grate. Lowering the existing structure, building a new concrete lid and

concrete risers to the new top elevation, and installing a new grate and frame inlet at the top as per plan 435-R1. The new round grate and frame inlet shall be "heavy duty" cast iron with a minimum 200 sq.in. opening with minimum 1 ½ inch slots on the top. The existing structure dimensions should be field verified before ordering materials for the reconstruction.

Paragraph 3. of Subsection 917.04 of the Standard Specifications is void and superseded by the following: Cast iron for grate and frame shall be subsidiary to the item Reconstruct Manhole".

BUILD MANHOLE, STA. 813+00

This is a new manhole to be built as per plan 435-R1 with a grate and frame inlet on the top.

The new grate and frame inlet shall be "heavy duty" cast iron with a minimum 200 sq.in. opening with minimum 1 1/2 inch slots on the top.

Paragraph 5. of Subsection 916.04 of the Standard Specifications is void and superseded by the following: Cast iron for grate and frame shall be subsidiary to the item Build Manhole, Sta. 813+00.

RECONSTRUCT MANHOLE, STA. 410.06,129.5' Lt.

The manhole is approximately 26 inches in diameter and is made from precast reinforced concrete culvert pipe. The manhole acts as an inlet with a re-steel style grate poured into the top concrete ring.

This reconstruction involves lowering the manhole top elevation approximately 4 inches and installing a new grate and frame inlet at the top. The new round grate and frame inlet shall be "heavy duty" Cast Iron with a minimum 200 sq.in. opening with minimum 1 1/2-inch slots on the top. The existing structure dimensions should be field verified before ordering materials for the reconstruction.

Paragraph 3. of Subsection 917.04 of the Standard Specifications is void and superseded by the following: Cast iron for grate and frame shall be subsidiary to the item "Reconstruct Manhole".

PIPE UNDERDRAINS

Subsection 914.03 of the Supplemental Specifications is amended to include the following: Each headwall shall be marked in the field with a delineator as shown on the 2-N sheets. Delineator posts and reflectors shall be supplied and installed by the Contractor at the appropriate time during construction.

Subsection 914.04 of the Supplemental Specifications is amended to include the following: The delineator shown in the plans to mark pipe underdrain headwalls, shall be subsidiary to the item "Underdrain Headwalls".

REMOVE AND RESET CABLE GUARDRAIL
Sta. 1097+11 to Sta. 1100+31 Lt.

The slope directly behind the existing cable guardrail may measure steeper than 2:1. Where the existing foreslope is steeper than 2:1, the Contractor shall be required to use the long posts (7') shown on the special plan.

IMPACT ATTENUATOR

This work shall consist of furnishing and installing impact attenuators in accordance with the details and at the location shown in the plans and as directed by the Engineer.

The Contractor shall install the following system:

1. Quadguard manufactured by Energy Absorption Systems, Inc.
One East Wacker Drive
Chicago, IL 60601-2076
312-467-6750

Installation of the attenuator shall be accomplished by experienced workman in accordance with the recommendations of the manufacturer. The Contractor shall furnish two sets of shop plans of the system to be installed to the NDOR.

The impact attenuators shall be measured as single units of the size and type shown in the plans and these special provisions, and shall be paid for at the contract unit price per each for the item "Impact Attenuator". This price shall be considered full compensation for all work required to install the complete Impact Attenuator System.

TEMPORARY FENCE

If the existing right of way fence is removed before the new one is built, the Contractor shall install and maintain a temporary right-of-way fence.

In areas where the new right of way fence can be constructed without conflicts, the new fence shall be completed before the existing fence is removed.

Right of way fence construction shall be accomplished and completed in one quadrant at a time, for removal, temporary fence and new right-of-way fence.

The temporary fence can be let down to allow access during a day's construction but shall be replaced if work crews are not in the area. The temporary fence must be in place at the end of each day's operation.

The Contractor shall furnish the temporary fence and fence materials. The fence material shall be a lightweight orange colored plastic and be at least 4 feet high. The Contractor will also furnish metal "T" posts and ties. The post shall be set at approximately 10 feet intervals and the fabric tied with 3 ties per post.

After the new right of way fence is in place, the temporary fence may be removed.

The work of installing, maintaining and removing the temporary fence will not be paid for directly, but will be subsidiary to the item "5-foot Chain Link Fence".

FENCE AT STA. 1094+30 to STA. 1094+59.4 Rt.

This fence is designed to match the existing fence that outlines the Chalco Hill Recreational Area. The plan was developed from sketches provided by the Corps of Engineers and the Papio-Missouri River Natural Resource District (P-MRNRD).

Existing fence posts, considered in good condition by the Contractor and the Engineer may be reused in the new fence. The existing wire fabric shall be disposed and new wire fabric built at the new fence location.

If the new fence is not built before the existing fence is removed, temporary right-of-way fence shall be installed and maintained as described elsewhere in this proposal. See provision titled ***Temporary Fence***.

47B CONCRETE PAVEMENTS AND 47BD CONCRETE FOR BRIDGES (S10-4A-0302)

General

Section 1002 in the 1997 Standard Specifications and Supplemental Specifications is amended to include the following:

For the purpose of this Special Provision, Type IPN shall mean Type IP cement made with 15 to 25 percent natural pozzolan and Type IPF shall mean Type IP cement made with 15 to 25 percent Class F fly ash. All cements must conform to the requirements of Section 1004 in the 1997 Standard Specifications and Supplemental Specifications.

47BD Concrete for Bridges and Barriers

The 47BD concrete used in bridge decks, approach slabs, bridge rails, and barriers shall be proportioned using one of the alternates shown in Table I.

TABLE I (ENGLISH)
CLASS 47BD CONCRETE PROPORTIONS

Alt.	Cement Type	Pounds of Cement per Cu.Yd.	Pounds of Class F Fly Ash	Air Content Percent		Pounds of Total Agg. per Cu.Yd.		Ratio of Total Agg. Percent	Type of Coarse Agg.
				Min.	Max.	Min.	Max.		
1	I or II	590	130 Min.	5.0	7.5	2530	2950	30±3	Limestone
2	IPN	658	0*	5.0	7.5	2530	2950	30±3	Limestone
3	IPF	658	0**	5.0	7.5	2530	2950	30±3	Limestone

TABLE I (METRIC)
CLASS 47BD CONCRETE PROPORTIONS

Alt.	Cement Type	Kg of Cement per Cu. Meter	Kg of Class F Fly Ash	Air Content Percent		Kg of Total Agg. per Cu.Meter		Ratio of Total Agg. Percent	Type of Coarse Agg.
				Min.	Max.	Min.	Max.		
1	I or II	350	77 Min.	5.0	7.5	1500	1750	30±3	Limestone
2	IPN	390	0*	5.0	7.5	1500	1750	30±3	Limestone
3	IPF	390	0**	5.0	7.5	1500	1750	30±3	Limestone

* Class C or F fly ash may be substituted in the mix design provided the total pozzolan content does not exceed 25 percent. The mix may be modified by substituting an amount of fly ash equal to the weight of cement removed.

** No additional fly ash substitution is allowed.

Water reducing and set retarding admixtures shall be used in accordance with the manufacturer's recommendations of dosage rates.

47B Concrete Pavements

The 47B concrete used in concrete pavements shall be proportioned using one of the alternates shown in Table II.

TABLE II (ENGLISH)
CLASS 47B CONCRETE PAVEMENT PROPORTIONS

Alt.	Cement Type	Pounds of Cement per Cu.Yd.	Pounds of Class F Fly Ash	Air Content Percent		Pounds of Total Agg. per Cu.Yd.		Ratio of Total Agg. Percent	Type of Coarse Agg.
				Min.	Max.	Min.	Max.		
1	I or II	510	110 Min.	5.0	7.5	2876	3130	30±3	Limestone
2	IPN	564*	0*	5.0	7.5	2876	3130	30±3	Limestone
3	IPF	564**	0**	5.0	7.5	2876	3130	30±3	Limestone

TABLE II (METRIC)
CLASS 47B CONCRETE PAVEMENT PROPORTIONS

Alt.	Cement Type	Kg of Cement per Cu. Meter	Kg of Class F Fly Ash	Air Content Percent		Kg of Total Agg. per Cu.Meter		Ratio of Total Agg. Percent	Type of Coarse Agg.
				Min.	Max.	Min.	Max.		
1	I or II	303	65 Min.	5.0	7.5	1706	1857	30±3	Limestone
2	IPN	335*	0*	5.0	7.5	1706	1857	30±3	Limestone
3	IPF	335**	0**	5.0	7.5	1706	1857	30±3	Limestone

* Class C or F fly ash may be substituted in the mix design provided the total pozzolan content does not exceed 25 percent. The mix may be modified by substituting an amount of fly ash equal to the weight of cement removed.

** No additional fly ash substitution is allowed.

Water reducing admixtures shall be used in accordance with the manufacturer's recommendations of dosage rates.

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 1/4		

**REPAIR OF DAMAGED METALLIC COATINGS
(S10-5-0801)**

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.

**DOWEL BARS
(S10-5-0801)**

Subsection 1022.02 in the Standard Specifications is amended to include the following:

In addition to these certificates, two 1.8 meter samples of the coated bar (for tension testing and bend testing) of each size bar and each heat number shall be sent to the NDR Materials and Research Laboratory, Lincoln, Nebraska. These bars will be properly identified with tags showing the size and heat number.

**CORRUGATED METAL PIPE
(S10-5-0801)**

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
(S10-5-0801)**

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. (mm²/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:

4. 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 (S10-5-1001)

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 (S10-5-0202)

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

2. 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 (S10-5-1201)

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*.

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 samples 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.

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 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, with assistance from or under supervision of NDR personnel. 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 MP1 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 Table 1. Overall project average testing requirements and price adjustments will also apply, as stated in Table 2.
6. Material Requirements:
 - a. Performance graded binder, as specified in the contract items shall be in accordance with AASHTO Designation MP1 and meet all minimum and maximum requirements.
 - 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.

- 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 MP-1 specifications when tested as $\pm 3^\circ$ of the specified PG binder. The sample of the blended material will 1) be considered as a lot sample, 2) will be taken during initial production following the blending of the binders, and 3) deductions when not meeting MP-1, 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 MP-1 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.

TABLE 1

SINGLE SAMPLE TOLERANCE AND PRICE REDUCTION TABLE		
	Price Reduction¹ Pay Factor of 0.75	Determined by Engineer² Pay Factor of 0.50 or Removal
<u>Tests on Original Binder</u> Dynamic Shear, G*/Sin δ , kPa	0.86-0.92	< 0.86
<u>Tests on Rolling Thin Film</u> <u>Oven Residue</u> Dynamic Shear, G*/Sin δ , kPa	1.76-1.97	< 1.76
<u>Tests Pressure Aging Vessel</u> <u>Residue</u> Dynamic Shear, G*/Sin δ , kPa	5601-6200	> 6200
<u>Creep Stiffness</u> 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.

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

²The Engineer will determine if the non-compliant material will be removed. If the non-compliant material is accepted, a price reduction of 50% will be applied. The price reduction shall be based on the contract unit price of 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 MP-1 Testing

Out of specification material will be determined by the specifications outlined in AASHTO MP-1, excluding Direct Tension.

The Nebraska Department of Roads, Materials and Research, Bituminous Laboratory will do complete testing, per MP-1 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 MP-1 testing out of every five samples received. When any test result shows sample not meeting MP-1 specifications, the previous and following sample received will be tested for complete MP-1 compliance. Testing will continue in this manner until tested samples meet all of MP-1 specifications.

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 MP-1 specification, it will then be tested for complete MP-1 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 MP-1 compliance is in addition to the minimum number of samples that will be tested for complete MP-1 compliance.

At the completion of testing, all complete MP-1 test results will be averaged. For averages that do not meet MP-1 specifications, the largest reduction shown in Table 2 will be applied to all the Performance Graded Binder used on the project.

Table 2

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

Single Sample Reduction and Overall Project Average Reduction

A sample representing a lot, not meeting MP-1 Specification, will have a reduction for the material that the sample represents. Only the largest reduction from Table 1, will apply when more than one result of a single sample does not meet MP-1 specifications. Only the largest overall project average reduction from Table 2, will apply when more than one test average falls out of MP-1 specifications. Pay Factors based on both Table 1 and Table 2 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).
2. 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 great 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

Asphaltic Concrete Type SP5 shall use the 0.5 gradation band.

Paragraph 4.f.(1)(i) of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

Bulk Specific Gravity (Gmb) shall be determined for each specimen in accordance with AASHTO T 166.

Paragraph 4.f.(5) of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

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.
5. (ii) The gradations shall be determined for each QC test using AASHTO T 30.

Paragraph 4.g.(1) of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

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.

Paragraph 5.b. of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

Two consecutive test results (single test) outside the Specification limits or a (50% or reject) shall be cause to cease operations.

Paragraph 5.e. of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

Failure to cease operations after two consecutive test results fall outside the Specification limits shall subject all subsequent material to be rejected.

The "Note" in paragraph 9.b. of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

Note: The individual QC test value of the Maximum Mix Specific Gravity (Rice) will be used to calculate the density of each corresponding core.

MECHANICALLY STABILIZED EARTH (MSE) WALLS WITH CONCRETE FACING PANELS

Table 714.04 in the 1997 English Edition of the Standard Specifications is void and superseded by the following:

Table 714.04		
Property	Requirement	Test Method
Resistivity	Minimum 3000 ohm-cm, at 100% saturation	AASHTO T 288
ph	Acceptable Range 5-10	AASHTO T 289
Chlorides	Maximum 100 ppm	AASHTO T 291
Sulfates	Maximum 200 ppm	AASHTO T 290

Paragraph 5.d. of Subsection 714.02 in the 1997 English Edition of the Standard Specifications is void and superseded by the following:

A copy of all test results performed by the Contractor, which includes: AASHTO T 27, AASHTO T 90, AASHTO T 99, AASHTO T 104, AASHTO T 236, AASHTO T 288, AASHTO T 289, AASHTO T 290, and AASHTO T 291, shall also be furnished to the Engineer.

PROPOSAL GUARANTY (S1-38-0801)

As an evidence of good faith in submitting a proposal for this work or for any portion thereof as provided in the proposal form, the bidder must file with his proposal a bid bond, which must be executed on the Department of Roads' Bid Bond form, in the amount of 5 percent of the amount bid for any group of items or collection of groups for which the bid is submitted. Any alterations, conditions or limitations added to the Department of Roads' Bid Bond form will be unacceptable and cause the bid not to be opened and read.

* * * * *

F27INFMAR02

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