NO. 16

NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

REQUEST FOR PROPOSAL

STATE AID PROJECT NO. SOIA-5-094(112)061 (PCN-20886)

0.000 Miles

TRAFFIC SIGNALS

I-94 SOUTH RAMP AND ND 22 INTERSECTION

STARK COUNTY

BID OPENING: The bidder's proposal will be accepted via the Bid Express on-line bidding exchange at www.bidx.com until **09:30AM Central Time on March 20, 2015.**

Prior to submitting a Proposal, the Bidder shall complete all applicable sections and properly execute the Proposal Form in accordance with the specifications.

Proposal Form of:

_____
(Firm Name)

_____
(Address, City, State, Zipcode)

(For official use only)

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The company, firm, corporation, or individual hereby acknowledges that it has designated a responsible person or persons as having the authority to obligate the company, firm, or individual, through electronic or paper submittal, to the terms and conditions described herein and in the contract documents. The designated responsible person submitting this proposal shall be hereafter known as the bidder. By submitting this proposal, the bidder fully accepts and agrees to all the provisions of the proposal. The bidder also certifies that the information given in this proposal is true and the certifications made in this proposal are correct.

The bidder acknowledges that they have thoroughly examined the plans, proposal form, specifications, supplemental specifications, special provisions and agrees that they constitute essential parts of this proposal.

The bidder acknowledges that all line items which contain a quantity shall have a unit price bid. Any line item which is bid lump sum shall contain a lump sum bid price.

The bidder acknowledges that they understand that the quantities of work required by the plans and specifications are approximate only and are subject to increases and decreases; the bidder understands that all quantities of work actually required must be performed and that payment therefore shall be at the prices stipulated herein; that the bidder proposes to timely furnish the specified materials in the quantities required and to furnish the machinery, equipment, labor and expertise necessary to competently complete the proposed work in the time specified.

NON-COLLUSION AND DEBARMENT CERTIFICATION

The bidder certifies that neither he/she, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid.

By submitting this proposal, the bidder certifies to the best of his/her knowledge and belief that he/she and his/her principles:

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 three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or perform 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

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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 b. of the certification; and
d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or Local) terminated for cause or default

Where the prospective bidder is unable to certify to any of the statements in this certification, the bidder shall submit an explanation in the blanks provided herein. The explanation will not necessarily result in denial of participation in a contract:

Explanation:_____
_____
_____
_____

If the prequalified bidder's status changes, he/she shall immediately submit a new fully executed non-collusion affidavit and debarment certification with an explanation of the change to the Contract Office prior to submitting the bid.

Failure to furnish a certification or an explanation will be grounds for rejection of a bid.

BID LIMITATION (Optional)

The bidder who desires to bid on more than one project on which bids are to be opened on the same date, and who also desires to avoid receiving an award of more projects than the bidder is equipped to handle, may bid on multiple projects and limit the total amount of work awarded to the bidder on selected projects by completing the "Bid Limitation".

The Bid Limitation must be filled in on each proposal form for which the Bidder desires protection. Each such proposal must be covered by a proposal guaranty.

The bid limitation can be made by declaring the total dollar value of work OR total number of projects a bidder is willing to perform.

The Bidder desires to disqualify all of his/her bids on this bid opening that exceed a total dollar value of

$_____

OR

that exceed a total number of _____ projects.

The Bidder hereby authorizes the Department to determine which bids shall be disqualified.

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PERMISSIBLE DISCOUNT (optional)

Only when invited to do so in the Request for Proposal by Special Provision, Bidders are permitted to offer a discount on a specific project (discount project) if they are awarded the contract on one or more additional projects bid at the same bid opening time and date. The bidder must present the proposal so that it can be considered with or without the discount. The bid or discount offered on the "discount project" will not affect the determination of the low bid of any other project.

When discounts are offered, they must be presented as a reduction in the unit price for one or more items of work in the specified proposal (discount project).

Space for Offering Discounts:
_____
_____
_____

Item No:_____

Description:_____

Unit:_____

Proposal Quantity:_____ Unit Price Reduction: $_____ Discount: $_____

Item No:_____

Description:_____

Unit:_____

Proposal Quantity:_____ Unit Price Reduction: $_____ Discount: $_____

Item No:_____

Description:_____

Unit:_____

Proposal Quantity:_____ Unit Price Reduction: $_____ Discount: $_____

TOTAL DISCOUNT_____

It is understood that the discount will only apply if awarded under the conditions as listed above and signed by the bidder.

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RECEIPT OF ADDENDA ACKNOWLEDGEMENT

We hereby acknowledge receipt of the following addenda:

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

PROPOSAL GUARANTY

A proposal guaranty is required. The proposal guaranty must comply with Section 102.09, "Proposal Guarantee" of the Standard Specifications.

TYPE OF PROPOSAL GUARANTY APPLIED TO THIS PROJECT (Check one):

_____ Annual Bid Bond*

_____ Single Project Bid Bond

_____ Certified or Cashier's Check

*Annual Bid Bond is required when submitting proposals electronically

BID ITEMS

Project: SOIA-5-094(112)061 (PCN-20886)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price $$$$$	Unit Price 000	Amount $$$$$	Amount 00
001	103	0100	CONTRACT BOND	L SUM	1.				
002	702	0100	MOBILIZATION	L SUM	1.				
003	704	0100	FLAGGING	MHR	100.				
004	704	1000	TRAFFIC CONTROL SIGNS	UNIT	1,237.				
005	704	1060	DELINEATOR DRUMS	EA	14.				
006	704	1067	TUBULAR MARKERS	EA	20.				
007	704	1087	SEQUENCING ARROW PANEL-TYPE C	EA	1.				
008	762	0117	EPOXY PVMT MK 24IN LINE	LF	102.				
009	762	1500	OBLITERATION OF PVMT MK	SF	30.				
010	772	0001	TRAFFIC SIGNALS SYSTEM	EA	1.				
			TOTAL SUM BID						

Project: SOIA-5-094(112)061 (PCN-20886)

Type of Work: TRAFFIC SIGNALS

County: STARK

Length: 0.0000 Miles

TIME FOR COMPLETION:
The undersigned Bidder agrees, if awarded the contract, to prosecute the work with sufficient forces and equipment to complete the contract work within the allowable time specified as follows:

WORKING DAY CONTRACT: **NA** working days are provided. The Department will begin charging working days beginning **NA** or the date work begins on the project site, whichever is earlier.

CALENDAR DAY CONTRACT: **NA** calendar days are provided. The completion date will be determined by adding **NA** calendar days to **NA** or the date work begins on the project site, whichever is earlier.

COMPLETION DATE CONTRACT The project completion date is **08/29/2015**. The Department provides a minimum of **NA** working days. The Department will begin charging working days beginning **NA** or the date work begins on the project site, whichever is earlier.

Project: SOIA-5-094(112)061 (PCN-20886)

Type of Work: TRAFFIC SIGNALS

County: STARK

Length: 0.0000 Miles

CONTRACT EXECUTION:

The undersigned Bidder agrees, if awarded the contract, to execute the contract form and furnish a contract bond within fifteen calendar days, as determined by NDCC Section 1-02-15, after date of notice of award, in accordance with the provisions of Sections 103.05 and 103.06 of the Standard Specifications.

AFFIDAVIT:

STATE OF _____)
) ss.
COUNTY OF _____)

The undersigned bidder, being duly sworn, does depose and say that they are an authorized representative of _____
CONTRACTOR NAME

of _____ , a
MAILING ADDRESS

☐ Individual ☐ Partnership ☐ Joint Venture ☐ Corporation

and that they have read, understand, acknowledge, and accept the entire proposal form; and that all statements made by said bidder are true and correct.

_____ , TITLE _____
BIDDER MUST SIGN ON THIS LINE

_____
TYPE OR PRINT SIGNATURE ON THIS LINE

Subscribed and sworn to before me this day.

_____
COUNTY

(Seal)

_____ _____
STATE DATE

_____
NOTARY PUBLIC

My commission expires _____

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

Job #16, Project No. SOIA-5-094(112)061

Traffic Signals

INDEX OF PROVISIONS

Road Restriction Permits

Price Schedule for Miscellaneous Items dated October 1, 2014 (PS-1)

Appendix A of the Title IV Assurances dated October 1, 2014

Appendix E of the Title IV Assurances dated October 1, 2014

On-The-Job Training Program dated November 1, 2013

SP 84(14) Interconnect Cable (Hybrid)

SP Fuel Cost Adjustment Clause dated September 8, 2006

NOTICE

TO: All prospective bidders on all North Dakota Department of Transportation Highway Construction Projects.

Contractors moving construction equipment to NDDOT highway construction projects are subject to the Road Restriction Policy with the following modifications:

A. The contractor may purchase up to 10 single trip permits for each NDDOT highway construction project at a cost ranging from $20 to $70 each. These permits must be purchased from the Motor Carrier Division of the Highway Patrol at the central office of the NDDOT in Bismarck, North Dakota.

B. The $1 per mile fee will not be charged for Gross Vehicle Weights (GVW) exceeding 105,500 pounds, 105,500 pounds, and 105,000 pounds for highways Restricted by Legal Weights, 8 Ton, and 7 Ton highways respectively.

C. The $5 per ton per mile fee will be charged only for loads exceeding a GVW of 130,000 pounds, 120,000 pounds, 110,000 pounds and 80,000 pounds for highways Restricted by Legal Weights, 8 Ton, 7 Ton, and 6 Ton highways respectively.

D. The maximum weights per axle for each of the class restrictions still apply. If it is shown that more axles cannot be added, movement may be authorized; however, a $1 per ton per mile fee will be charged for all weight in excess of the restricted axle limits.

E. These construction equipment single trip permits apply to State and US Highways only.

F. The District Engineers and Highway Patrol will select the route of travel.

G. Contractors moving equipment to other than NDDOT highway construction projects are subject to all fees as shown in the Road Restriction Permit Policy.

H. Contractors must call the Highway Patrol prior to movement of all overweight loads on all State and US Highways.

NDDOT ROAD AND VEHICLE RESTRICTIONS Date Revised 05-22-10

ROAD RESTRICTION PERMITS

Permits shall be issued for the movement of non-divisible vehicles and loads on state highways which exceed the weight limits during spring road restrictions. The issuance of permits may be stopped or posted weights changed at any time based on the varying conditions of the roadways. Permits can be obtained from the Highway Patrol.

RESTRUCTION CLASSIFICATIONS WITH ALLOWABLE AXLE WEIGHTS AND GROSS VEHICLE WEIGHTS	PERMIT AND TON/MILE FEES
Highways Restricted by Legal Weight Single Axle -- 20,000 lbs. Tandem Axle -- 34,000 lbs. Triple Axle -- 48,000 lbs. 4 Axles or more -- 15,000 lbs. per axle Gross Vehicle Weight -- 105,500 lbs. Note: The above weights apply to state highways restricted by legal weights, other than interstate highways, in areas where road restrictions are in force. When the gross weight of an axle grouping exceeds 48,000 pounds, the $1 per ton per mile shall apply to all weight in excess of 15,000 pounds per axle.	Permit Fee: $20-$70 per trip Ton Mile Fee: 105,501 lbs. to 130,000 lbs. GVW -- $1 per mile Over 130,000 lbs. GVW – $1 per mile **plus** $5 per ton per mile for that weight exceeding 130,000 lbs. GVW Exceeding axle limits -- $1 per ton per mile
8-Ton: Single Axle -- 16,000 lbs. Tandem Axle -- 32,000 lbs. 3 Axles or more -- 14,000 lbs. per axle Gross Vehicle Weight -- 105,500 lbs.	Permit Fee: $20-$70 per trip Ton Mile Fee: 105,501 lbs. to 120,000 lbs. GVW -- $1 per mile Over 120,000 lbs. GVW – $1 per mile **plus** $5 per ton per mile for that weight exceeding 120,000 lbs. GVW Exceeding restricted axle limits -- $1 per ton per mile
7-Ton: Single Axle -- 14,000 lbs. Tandem Axle -- 28,000 lbs. 3 Axles or more -- 12,000 lbs. per axle Gross Vehicle Weight -- 105,500 lbs.	Permit Fee: $20-$70 per trip Ton Mile Fee: 105,500 lbs. to 110,000 lbs. GVW -- $1 per mile Over 110,000 lbs. GVW – $1 per mile **plus** $5 per ton per mile for that weight exceedi ng 110,000 lbs. GVW Exceeding restricted axle limits -- $1 per ton per mile
6-Ton: Single Axle -- 12,000 lbs. Tandem Axle -- 24,000 lbs. 3 Axles or more -- 10,000 lbs. per axle Gross Vehicle Weight -- 80,000 lbs.	Permit Fee: $20-$70 per trip Ton Mile Fee: $5 per ton per mile for all weight exceeding 80,000 lbs. GVW Exceeding restricted axle limits -- $1 per ton per mile
5-Ton: Single Axle -- 10,000 lbs. Tandem Axle -- 20,000 lbs. 3 Axles or more -- 10,000 lbs. per axle Gross Vehicle Weight -- 80,000 lbs.	No overweight movement allowed

SINGLE UNIT FIXED LOAD VEHICLES SUCH AS TRUCK CRANES AND WORKOVER RIGS

A. Permit Fee and Ton Mile Fee for Self-Propelled Fixed Load Vehicles.

1. Permit Fee: $25 per trip

2. $1 per ton per mile for all weight in excess of restricted axle limits or in excess of legal limits on state highways in areas where road restrictions are in force. When the gross weight of an axle grouping exceeds 48,000 pounds, the $1 per ton per mile shall apply to all weight in excess of 15,000 pounds per axle (see weight classification chart in section C.)

3. $5 **per ton per mile** for all movements exceeding the following gross vehicle weight limits:

   a. 105,500 lbs. GVW on unrestricted state highways, other than interstate highways, in areas where road restrictions are in force.
   b. 105,500 lbs. GVW on 8-ton highways.
   c. 105,500 lbs. GVW on 7-ton highways.
   d. 80,000 lbs. GVW on 6-ton highways.
   e. No overweight movement allowed on 5-ton highways

B. Permit Fees for Work-Over Rigs and Special Mobile Equipment Exceeding 650 but not 670 Pounds Per Inch Width of Tire.

1. Permit Fee:
   a. $50 per trip on work-over rigs up to 650 pounds per inch width.
   b. $75 per trip on work-over rigs that exceed 650 but not 670 pounds per inch width of tire.
2. The work-over rig shall be stripped to the most minimum weights.
3. A minimal number of state highway miles shall be used.
4. District engineer approval shall be obtained prior to movement when vehicle exceeds restricted axle weights by more than 5,000 pounds.
5. A validation number ending in TM must be obtained from the Highway Patrol prior to using a self-issue single trip movement approval form.
6. The ton mile shall be waived.

10/1/2014

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
PRICE SCHEDULE FOR MISCELLANEOUS ITEMS (PS-1)

The Contractor agrees to accept the following unit prices for each listed item of work and or material when no project contract unit price exists for that item. Each price listed will be full compensation for the cost of labor, material and equipment necessary to provide the item of work and/or material, complete in place, including (but not limited to) royalty, disposal of unsuitable material, equipment rental, sales tax, use tax, overhead, profit, and incidentals.

Each listed item is referenced to the Standard Specifications by Section number and Section name.

SECTION NO.	SECTION NAME	ITEM NAME	PRICE PER ITEM
107.08	Haul Roads	Water	$27 per M Gal
107.08	Haul Roads	Bitumen for Mix	Invoice Price [1] + 10%
107.08	Haul Roads	Bituminous Mix	$42 per Ton [2]
107.08	Haul Roads	Aggregate Base	$17 per Ton [2]
203.01 B	Rock Excavation	Rock Excavation	$11 per CY
203.01 C	Shale Excavation	Shale Excavation	Common Excavation Price + $1.00 per CY
203.01 D	Muck Excavation	Muck Excavation	$9 per CY
203.05 H.3	Embankment	Overhaul	$1.40 per CY - Mile
260	Silt Fence	Mucking Silt Fence	$3.90 per LF
260	Silt Fence	Removal of Silt Fence [3]	$4.25 per LF
261	Fiber Rolls	Mucking of Fiber Rolls	$3.90 per LF
261	Fiber Rolls	Removal of Fiber Rolls [3]	$4.25 per LF
420.04 E	Bituminous Seal Coat	Blotter Sand	$27 per Ton [2]
430.04 G	Hot Mix Asphalt (Exc. Material Hauled to Disposal Area)	Bituminous Mixture	Machine Placed: Bid or Invoice Price + $31 per ton Hand Placed: Bid or Invoice Price + $48 per Ton
704	Temporary Traffic Control	Flagging	$32 per MHR

[1] Price paid for bituminous material will be invoice price plus freight costs.

[2] Price Includes haul up to 10 miles. Payment for haul exceeding 10 miles will be according to Section 109.03 E, “Force Account.” The haul distance for aggregate base and bituminous mix will be based on the average haul. The haul distance for blotter sand will be from the point where the haul begins to the point where it enters the project.

[3] This is only for pre-existing items that were not installed under the Contract.

Effective October 1, 2014

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
APPENDIX A OF THE TITLE VI ASSURANCES

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees as follows:

1. Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, the Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the Contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Recipient or the Federal Highway Administration as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

   a. withholding payments to the Contractor under the contract until the Contractor complies; and/or
   b. cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

Effective October 1, 2014

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
APPENDIX E OF THE TITLE VI ASSURANCES

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.,* 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.),* (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.),* as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.),* (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

2014 NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

ON-THE-JOB TRAINING SPECIAL PROVISION

I. PURPOSE

The purpose of the On-the-Job Training (OJT) Program is to provide training **in the highway construction industry** for minority, female, and economically disadvantaged individuals, hereafter known as the targeted group. **Pursuant to 23 Code of Federal Regulations Part 230, Subpart A, Appendix B - Training Special Provisions, this program provides for on-the-job training aimed at developing full** journeyworkers **in the type of trade or job** classification **involved.**

II. INTRODUCTION

A. The OJT Program **was originally** prepared through the cooperative efforts of the Associated General Contractors of North Dakota (AGC); the Federal Highway Administration (FHWA); and the North Dakota Department of Transportation (Department).

B. Successful operation of the OJT Program requires that contractors follow uniform and basic procedures in training, keeping records of trainee progress toward journeyworker status, and reporting each trainee's successful completion or termination from the OJT Program.

C. The bidder's signature on the proposal sheet indicates the bidder agrees to take part in the OJT Program and to **follow** this On-the-Job Training (OJT) Program Special Provision. **Contractors that do not follow this special provision will be subject to sanctions up to and including revocation of bidding privileges.**

D. Projects funded solely with county funds and emergency relief projects that are not included **in the Department's bid openings will not contain this OJT Program Special Provision (i.e., no training program hours will count toward completion of an approved training program or be eligible for reimbursement).**

III. DEFINITIONS

Carryover Position: Unfulfilled trainee position carried forward from a prior program year.

Carryover Trainee: Trainee scheduled to continue required training hours under an approved training program from a prior program year.

Journeyworker: A worker employed in a trade or craft who has attained a level of skill, abilities, and competencies recognized within the industry.

OJT Supportive Services (OJTSS) Consultant: A consultant under contract with the Department to provide in-person oversight, support, and guidance to contractors and trainees in an effort to increase the effectiveness of approved training programs.

Targeted Group: Individuals eligible to receive training under the OJT Program. For trainee

positions assigned by the Department, trainees must be minority, female, or economically disadvantaged as defined by Job Service North Dakota (JSND).

Trainee: A person who receives on-the-job training, whether through an apprenticeship program or other program approved or accepted by FHWA.

Trainer/Supervisor: Prime contractor employee assigned to mentor, train, supervise, and support an assigned OJT Program trainee.

IV. FUNDING

The Department will establish an OJT fund annually from which contractors may bill the Department directly for eligible trainee hours. **The funds for payment of trainee hours on federal-aid projects will be made available based on 23 USC 504(e)** to a maximum of $100,000. The funds for payment of trainee hours on state-aided projects will be allocated to a maximum of $10,000.

V. ASSIGNED TRAINEE POSITIONS

A. Trainee positions will be assigned to contractors and will not be project specific. The number of trainee positions assigned will be determined by applying a formula based on calculations involving specific project specification numbers on applicable projects funded with federal highway dollars awarded by the Department to a contractor from October 1 to September 30.

B. The dollar value of projects subject to Tribal Employment Rights Ordinances (TERO), concrete pavement repair (CPR) projects, electrical projects, rest area projects, signing projects, striping projects, and state-aid highway projects will be excluded when determining the number of trainee positions assigned.

C. In early March, a summary of the trainee positions required and links to the OJT Program package will be sent to prime contractors with assigned positions. The links to the OJT Program package are also provided to prime contractors and subcontractors upon request. In addition, the summary and links are sent to prime contractors as they become eligible for trainee positions throughout the remainder of the year.

The number of trainee positions assigned to each contractor will increase proportionately, as shown in the following table, for any applicable federally funded projects awarded to them. Projects awarded after September 30 will be included in the following year's OJT Program.

D. The number of trainee **positions** will be assigned and will increase as follows:

For all federal highway dollars awarded from October 1 to September 30,

$ 4,500,000	- 8,000,000	=	1 trainee
$ 8,000,001	- 15,000,000	=	2 trainees
$15,000,001	- 23,000,000	=	3 trainees
$23,000,001	- and above	=	4 trainees

A maximum of four (4) trainee positions in a federal fiscal year will be assigned to any prime contractor regardless of dollar amount. Carryover positions from a prior

program year are not included in the four trainee maximum, e.g., a contractor with one carryover and four assigned positions will have a total five trainees.

E. Contractors not qualifying for the OJT Program, or contractors desiring to train more than the allotted number of trainees, may apply to the Department for additional trainee positions. Approval of additional positions will be at the sole discretion of the Department. The Department will take into consideration whether there is enough work for the trainee to successfully complete the curriculum and whether the contractor will be exceeding the allowable ratio of trainees to journeyworkers (generally considered to be one trainee or apprentice to every three to five journeyworkers).

F. The additional positions may be filled by individuals outside of the targeted groups. The contractor may pay the reduced training rates to additional trainees outside of the targeted groups and receive hourly reimbursement for those individuals.

VI. APPROVALS REQUIRED

A. Training Programs: Contractors must have training programs approved by the Civil Rights Division in order to pay the trainees less than the appropriate Davis-Bacon wage established for the job classification concerned and to be eligible for reimbursement under the OJT Program. No training program hours will count toward the fulfillment of an assigned trainee position or be eligible for reimbursement without prior approval. **No retroactive approval will be granted.**

1. The contractor will notify the Civil Rights Division using the *Request for On-the-Job Training Program Approval SFN 9762.* This form is available on the Department's website at:

   http://www.dot.nd.gov/forms/sfn09762.pdf

2. A completed request form and the training curriculum must be submitted for each trainee in the OJT Program. Requests must be submitted by April 1 or within fifteen (15) calendar days of notification of additional trainee assignments.

B. Trainees: Contractors must have trainees approved by the Civil Rights Division in order to pay the trainees less than the appropriate Davis-Bacon wage established for the job classification concerned and to be eligible for reimbursement under the OJT Program. No training program hours will count toward completion of an approved training program or be eligible for reimbursement without prior trainee approval. **No retroactive approval will be granted.**

1. The contractor will notify the Civil Rights Division using the *Request for On-the-Job Trainee Approval SFN 60226*. This form is available on the Department's website at:

   http://www.dot.nd.gov/forms/sfn60226.pdf

2. A completed request form and the trainee's employment application must be submitted for each trainee employed under the OJT Program.

3. Written JSND certification of an individual as economically disadvantaged

must also be provided to the Civil Rights Division as part of the approval process for trainees.

C. The contractor may request to train an individual in a classification not included in this OJT Program package. The request must be submitted, in its entirety, for approval by the Department and FHWA before the trainee begins work under the OJT Program. **No retroactive approval will be granted.**

Training programs for classifications not covered by the Davis-Bacon and Related Acts (DBRA) will be considered on a limited basis. **Customized training curricula will not necessarily be added to the OJT Program; however, previously approved programs are available to contractors upon request; for example, in 2013 the Department approved programs for GPS Survey Technician and Project Management.**

If approved, each new classification must comply with the provisions specified in this OJT Program package. The request must include:

1. A training curriculum, including the classification requested, minimum number of hours required, and type of training the individual will receive to achieve journeyworker status.

2. A minimum wage scale.

D. Union apprenticeship and on-the-job training programs registered with the Bureau of Apprenticeship and Training (BAT), U.S. Department of Labor, are recognized by the Department. These programs may be used for trainee positions assigned under the OJT Program, provided the trainees or apprentices are minority, female, or economically disadvantaged. Nonminority males not certified as economically disadvantaged may be used when the contractor has requested and received approval, from the Department, for additional trainee positions. However, contractors must produce indenture papers to be eligible for reimbursement, to pay the trainees or apprentices less than the appropriate Davis-Bacon wage established for the job classification concerned, and to receive credit for fulfilling assigned trainee positions.

E. The contractor may train an individual on a combination of equipment if each piece of equipment falls within the same groups of power equipment operators identified in the training curricula (groups 1-3 and groups 4-6). These power equipment operator groups are referenced to the federal Davis-Bacon wage rates contained in the contract proposal. As an example, a "utility operator" may receive training on a broom, a front-end loader less than 1½ cubic yards, or other piece of equipment that is used around a paver if each piece falls within either groups 1-3 or groups 4-6. When multiple wage rates apply, the trainee's wage will be based on the equipment being operated at the time or on the highest of the applicable wage rates.

F. Use of the classification "pickup machine operator (asphalt dump-person)" as a group 4 power equipment operator is considered standard industry practice. The classification is defined as: "Operates the controls on the pickup machine that runs in front of the paver, trips the levers on the dump trucks, and balances the loads for the paver. The pickup machine operates on similar principles as a shouldering machine."

VII. DEPARTMENT'S RESPONSIBILITIES

A. Once the trainees have been approved, the Department's OJT supportive services (OJTSS) consultant will monitor the excerpts from the weekly certified payrolls submitted with the monthly vouchers for reimbursement. This includes weekly payrolls from contractors working on state funded only projects. The OJTSS consultant will assure that when the trainees have completed the specified number of hours, their wages are increased accordingly. The OJTSS consultant will also assure that applicable fringe benefits are paid either directly to the trainees or into approved plans, funds, or programs on their behalf.

B. **The OJTSS consultant will also be visiting the** targeted group trainees **and monitoring their progress under the OJT Program. To facilitate the on-site visits, the OJTSS consultant will contact contractors** for the location of the trainees.

VIII. CONTRACTOR'S RESPONSIBILITIES

The contractor:

A. Will appoint an individual within their company who will be available to respond to weekly contacts by the OJTSS consultant in order to monitor the status of assigned trainee positions (e.g., program and trainee approvals, trainees' progress, etc.). Upon assignment of a trainee position, the OJTSS consultant will immediately send a Request for On-the-Job Trainee Approval (SFN 60226) to the contractor to obtain the name, direct phone number, and email address of the individual. The individual must reply to communications from the Department and the OJTSS consultant in a timely manner.

B. **Will ensure trainees are aware they are in a training program and what that means to the contractor and the trainee.**

C. **Will make trainees available to the OJTSS consultant for on-site visits at least twice each construction season.**

D. Will identify all approved trainees on the payrolls, for example: "grp. 4 roller operator trainee." This includes trainees in job classifications not covered by DBRA.

E. Will assign each trainee to a particular person–either a supervisor or an employee proficient in the skill–who shall see that timely, instructional experience is received by the trainee. This person will **be familiar with the OJT Program,** ensure proper records are kept, and **ensure** the required training hours are completed **in** accord**ance with** the training curriculum.

F. **Will make the trainer and project superintendent available to the OJTSS consultant for on-site visits at least twice each construction season.**

G. May terminate the training period of a trainee who has completed 90% or more of their hours and advance the trainee to journeyworker status after providing notice to the Department.

H. Will notify the Department when a trainee completes the OJT Program. The Department will issue a certificate of completion to the trainee.

I. May upgrade trainees from one power equipment operator group or truck driver group to another, with the approval of the Civil Rights Division. Trainees upgraded will not be required to complete the entire number of hours assigned to the new training curriculum. The minimum number of hours required will be:

Power Equipment Operator Groups 4-6 to Groups 1-3 = 400 hrs.
Class C Truck Driver to Class B = 200 hrs.
Class B Truck Driver to Class A = 200 hrs.

Depending on the variety of experience the trainee has gained under the previous curriculum, the difference in the hours may be deducted from the actual operation of the piece of equipment or truck. The contractor will need to review the trainee's past performance in order to make this determination.

J. Commercial driver's license (CDL) holders having over-the-road driving experience, with little or no highway construction experience, may be considered to have completed the Class C truck driver training curriculum and, therefore, are eligible to be upgraded to a Class B truck driver trainee, with the approval the Civil Rights Division.

K. May transfer trainees from one project to another in order to complete the OJT Program. If transfers are made, the Civil Rights Division must be notified and provided with the name of the trainer. The training hours will count toward overall OJT Program completion.

L. May use trainees on municipal, private, or other non-highway work and work performed out of state. The training hours will count toward overall OJT Program completion; however, no program reimbursement will be made for those hours. In addition, the hours will be limited to no more than 25% of the total hours required under the training curriculum.

M. Contractors may delegate or reassign trainee positions to subcontractors, with the acceptance of the subcontractors and the approval of the Civil Rights Division. The prime contractor must verify that the trainee will be able to accumulate enough hours to complete his or her training program. If approved, the subcontractor must obtain training program and trainee approval from the Civil Rights Division before the trainee begins work under the OJT program. Program reimbursement will be made directly to the prime contractor. The trainee position will remain the responsibility of the prime contractor.

N. May use trainees on projects subject to TERO requirements as part of the core crew or as part of the skilled labor supplied by the contractor.

O. Contractors may not use one trainee to fill multiple trainee positions. For instance, a subcontractor may not use the same trainee in the same training program to simultaneously fill two or more trainee positions reassigned to them by prime contractors.

P. May use a trainee on a piece of equipment in groups 1-3 or groups 4-6 for one assigned trainee position, then once that trainee has completed the program, the trainee may be trained on a different piece of equipment in groups 1-3 or groups 4-6 to fulfill a second assigned trainee position. When a trainee is used for a second time within a group, the contractor must pay that trainee at the higher wage rate as described in paragraph B under Wage Rates (page 8).

IX. CLASSROOM TRAINING

A. Classroom training may be used to train employees. The contractor will submit a proposed classroom training curriculum to the Civil Rights Division for approval. The classroom training curriculum must define the type of training the individual will receive and the minimum number of hours required. The Department will determine the number of hours of credit each trainee will receive toward their training. Each classroom training curriculum must be pre-approved by the Civil Rights Division if the contractor wishes to count the classroom hours as training hours. **No retroactive approval will be granted.**

B. Contractors will be reimbursed for classroom training hours after the trainee has completed 80 hours of work on highway construction projects.

C. Reimbursement for classroom training will be limited to 60 hours per trainee per construction season. **Qualified testing technicians and concrete testing technicians/inspectors will not be included in the 60-hour limit.** Reimbursement for classroom training required under the Department's Transportation Technician Qualification Program will be at the Department's discretion.

D. The minimum wage scale to be used for classroom training will be that of the first federal-aid highway construction project on which the trainee will be employed. If the trainee is already employed on a federal-aid highway construction project, the trainee will be paid in accordance with the minimum wage scale applicable to that project. However, if the first project on which the trainee will be employed is a state funded only contract, the minimum wage scale to be used for the classroom training will be that of the appropriate Davis-Bacon wage in effect at the time of award of the state funded contract.

X. WAGE RATES

A. The minimum wage rates shall not be less than 80% of the journeyworker rate for the first two quarters of training, 85% of the journeyworker rate for the third quarter, and 90% of the journeyworker rate for the fourth quarter. In no case shall the minimum wage be less than that of the group 1 laborer classification in the federal Davis-Bacon wage rates contained in the contract proposal. Trainees shall be paid full fringe benefit amounts, where applicable. The contractor has the option of paying the fringe benefits into approved plans, funds, or programs or directly to their employees. A trainee working on a state funded only project, must be paid the Davis-Bacon wage rate in effect at the time of award of the state funded project for the type of work the trainee is performing.

B. Under the power equipment operator training curricula only, once a trainee has completed a training curriculum in either groups 1-3 or groups 4-6, the contractor may enroll the trainee in another training curriculum on a different piece of equipment in either groups 1-3 or groups 4-6. The minimum wage rate under the second program shall not be less than 85% of the journeyworker rate for the first two quarters of training, 90% of the journeyworker rate for the third quarter, and 95% of the journeyworker rate for the fourth quarter.

C. At the completion of the OJT Program, the trainee shall receive the wages of a skilled journeyworker.

D. For the purpose of the OJT Program, a quarter is 25% of the hours worked by each trainee and does not represent three months of the year. The first two quarters of a 550-hour training curriculum would end after 275 hours, the third quarter after 138 hours, and the fourth after 137 hours.

XI. RECRUITMENT AND SELECTION PROCEDURES

A. Prerequisite for Trainees:

To be qualified for enrollment in the OJT Program, trainees must possess basic physical fitness for the work to be performed, dependability, willingness to learn, ability to follow instructions, and an aptitude to maintain a safe work environment.

B. Licenses:

Truck driver trainees must possess appropriate driver permits or licenses for the operation of Class A, B, and C trucks. When an instructional permit is used in lieu of a license, the trainee must be accompanied by an operator who:

1. Holds a license corresponding to the vehicle being operated;

2. Has had at least one year of driving experience; and

3. Is occupying the seat next to the driver.

C. Recruitment:

1. Notices and posters setting forth the contractor's Equal Employment Opportunity Policy and the availability of the OJT Program will be placed in areas readily accessible to employees, applicants for employment, and potential employees.

2. The contractor must employ **members of the targeted group (minority, female, or economically disadvantaged individuals)** for all trainee positions assigned **in** accord**ance with** the OJT Program. Additional positions requested by the contractor may be filled by individuals outside of the targeted groups.

3. The contractor will conduct systematic and direct recruitment through public and private employee referral sources.

4. Present employees will be screened for upgrading. A present employee may qualify as a trainee; however, no work hours will be reimbursed or counted toward program completion prior to training program and trainee approval by the Civil Rights Division.

D. Selection:

1. The selection and employment of a person, meeting the aforementioned criteria, by a participating contractor shall qualify the person for the OJT Program.

2. Employment of trainees will be in accordance with the workforce requirements of the contractor. Each contractor will hire and train the trainees for use in their own organization.

3. A contractor may not employ an individual as a trainee in a job classification in which that individual has successfully completed a training course leading to journeyworker status or in which the individual has been previously employed as a journeyworker.

4. Contractors must submit the *Request for On-the-Job Trainee Approval (SFN 60226)* and the trainee's employment application to the Civil Rights Division for review and approval. Approval must be obtained before the trainee may begin work under the OJT Program. **No retroactive approval will be granted.**

5. The economically disadvantaged certification can only be obtained from **JSND**. Written certification of individuals under this category can be provided to the contractor at the time of the interview if the applicant is referred by **JSND**. Any person wishing to obtain this certification must apply to **JSND** and complete the Application for Eligibility (SFN 7857). This certification must be provided to the Civil Rights Division with the other required information as part of the approval process for trainees. A contractor that has an individual who may qualify must contact the Workforce Investment Act Program Manager at **JSND. JSND** contacts **are also** available on the Department's website at:

   http://www.dot.nd.gov/divisions/civilrights/docs/jobservice-workforce-invest-contacts.pdf

6. Nonminority males used to fill additional trainee positions approved by the Department do not have to be certified as economically disadvantaged.

XII. BASIS OF PAYMENT

A. Contractors will be paid $4.00 for each hour of training provided in accordance with the OJT Program.

B. Program reimbursement will be made directly to the prime contractor. To request reimbursement, prime contractors must complete the *Voucher for On-the-Job Training Program Hourly Reimbursement (SFN 51023)* for each trainee employed under the OJT Program. Attached to each voucher must be excerpts from the weekly certified payrolls showing the trainee's hours, rate of pay, and how applicable fringe benefits are paid. This includes excerpts from weekly payrolls for state funded only projects. Vouchers without excerpts from payrolls will not be paid until the excerpts are provided. If the excerpts from the payrolls are not provided within one week, the voucher will not be approved. The voucher is available on the Department's website at:

   http://www.dot.nd.gov/forms/sfn51023.pdf

C. The completed vouchers must be submitted to the Civil Rights Division for approval and processing by the fifteenth (15th) calendar day of every following month the trainee is employed under the OJT Program.

Regardless, all vouchers for trainee hours worked on state funded only projects from July 1 to June 30 must be received by the Civil Rights Division no later than July 15 in order to be reimbursed. All vouchers for trainee hours worked on federally funded projects from October 1 to September 30 must be received by the Civil Rights Division no later than October 15 in order to be reimbursed. This is due to state and federal end-of-the-year budget fiduciary requirements.

XIII. FAILURE TO PROVIDE THE REQUIRED TRAINING OR HIRE THE TRAINEE AS A JOURNEYWORKER

A. No payment shall be made to a contractor for failure to provide the required training or failure to hire the trainee as a journeyworker when such failure is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this OJT Program Special Provision.

B. If payments have been made, the Department will withhold the amount paid from the contractor's progress payment.

C. It is normally expected that a trainee will begin his or her training as soon as feasible after start of work utilizing the skill involved and remain employed as long as training opportunities exist in his or her work classification or until he or she has completed his or her training program.

D. It is not required that all trainees be employed for the entire length of the construction season. A contractor will have fulfilled its responsibilities under this OJT Program Special Provision if it has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled for a significant period.

XIV. UNFULFILLED TRAINEE POSITIONS

A. For a variety of reasons, a contractor may be unable to fulfill the assigned number of trainee positions during a construction season. Any contractor that has not completed the assigned number of trainee positions must contact the Civil Rights Division by October 1 of the current construction season and provide documentation as to why the assigned trainee positions were not fulfilled. The Civil Rights Division will decide, on a case-by-case basis, whether to carry the trainee positions over to the next construction season.

B. Carryover trainee positions should be among the first positions filled at season startup. Contractors must notify the Department of the trainee's rehiring and submit *Request for On-the-Job Trainee Approval (SFN 60226)*, marking 'Check if Carryover Trainee' in the Approved Training Program section of the form, See Attachment 2.

C. Sanctions, up to and including revocation of bidding privileges, may be imposed by the Department for failure on the part of the contractor to provide sufficient documentation as to why assigned trainee positions were not fulfilled.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

INTERCONNECT CABLE (HYBRID)

5-094(112)061 - PCN 20886

1. DESCRIPTION

This provision sets forth the minimum requirements for a fiber optic interconnection system to establish communication between ITS equipment as specified.

2. GENERAL

The bid shall include all necessary labor, equipment and material to install the composite interconnect cable and connections such that the communication link is complete and fully operational.

The fiber optics cable shall be composite optical cable consisting of single and multimode fiber optics suitable for outside plant operations. The number of each fiber for single and multimode shall be noted on the plans.

The fiber optic cable shall be a single cable consisting of 24 multimode fibers and 24 singlemode fibers.

A. Fiber Optic Cable Specification

1. The purpose of this specification is to describe a fiber optic cable for a duct installation application, for the purpose of communication between various ITS devices.

2. Cable Specification

   The optical cable shall be:

   a. Dielectric
   b. Loose-tube
   c. Dry Block or totally dry cable (no grease or gel)
   d. Single polyethylene jacket (high or medium density)
   e. Reinforced with aramid yarn (Kevlar)
   f. Suitable for duct installation*
      *(If the cable is direct burial, it shall be double jacketed)

3. Optical Specifications shall meet RUS 7 CFR 1755.900 (PE-90) and Telcordia GR-20 standards for composite cable. The cable shall also meet the following criteria:

   Single Mode Fiber
   a. 8.3/125 micrometer, zero water peak.

b. The attenuation shall be less than or equal to 0.4 dB/km at 1310 nm; less than or equal to 0.32 dB/km at 1383 nm and less than or equal to 0.3 dB/km at 1550 nm.

Multimode Fiber

a. 62.5/125 micrometer, zero water peak

b. The attenuation shall be less than or equal to 3 dB/km at 850 nm and less than or equal to 1 dB/km at 1550 nm.

4. Mechanical Specifications

   a. The maximum tensile load rating shall not be greater than 2700 Newtons (600 lbf).
   b. The minimum bend radius shall be 40 times the cable diameter, but not less than 18 inches in diameter, under load and 20 times the cable diameter under no load.
   c. The temperature range shall be -40°C to +70°C.

5. The cable manufacturer shall provide documentation indicating the attenuation and bandwidth for each individual fibers on each reel within five (5) business days after delivery of the cable. The contractor shall test the fibers prior to placement with an Optical Time Domain Reflectometer (OTDR).

B. Splicing requirements

1. The purpose of this specification is to describe splicing requirements for the installed fiber optic cable.

2. All splicing shall occur in a PLP Coyote Pup, Tyco FOSC splice enclosure or an equivalent splice enclosure. Any alternative splice enclosure must be approved by the DOT prior to installation.

3. Each fusion splice shall be 0.10 dB loss and an average splice loss for the entire run of .05dB, with a maximum acceptable splice loss of 0.20 dB.

4. For the fiber optic connectors, a 0.50 dB loss for each connectorized junction is allowable. This includes the connector loss and the fusion splice on the connector.

5. All splice losses are assumed to be a bidirectional average.

6. A CAD schematic drawing shall be supplied to the District Office showing all splice locations and terminations including bundle and individual fiber strand numbers. The CAD schematic drawing shall be in a .dxf, .dwg, or .dgn format.

C. Fiber Optic Connectors

1. The purpose of this specification is to describe fiber optic connectors for mating the ends of the fiber with other fiber optic devices.

2. The fiber optic connectors shall be connectors of “ST” Type.

3. The ITS device locations shall be provided with a wall or rack mounted patch panel frame, as noted on the plans, with capacity to terminate all fibers entering or exiting the location.

   All fibers connected to equipment and the remaining fibers in the bundle shall be terminated at a Fiber Patch Panel which shall have a label for each individual fiber.

D. Breakout Cable

1. The purpose of this specification is to describe a composite fiber optic cable which shall be sufficiently flexible to connect an ITS device location with the backbone cable, while being sufficiently robust to withstand the most common environmental hazards due to personnel handling and other dangers associated with its environs.

2. The composite fiber optic breakout cable shall be a ruggedized cable with six (6) or twelve (12) fibers individually subjacketted for ease in connector installation. The subjackets shall be color coded or numbered for easy identification.

3. SHOP DRAWINGS

Shop drawings shall be submitted in accordance with specification 105.08 “Plans and Work Drawings.” Additionally, the shop drawings shall be complete, indexed, and shall include but not be limited to the following:

A. Complete details of all components and sections showing all materials.

B. A listing of all applicable North Dakota DOT, UL and AASHTO specification.

C. Name of the manufacturer and supplier.

4. TESTING

End-To-End Conformance Testing using an Optical Time Domain Reflectometer (OTDR). The contractor shall test each fiber of each cable run, including the breakout cables, and provide results of the test and the reel packing label test results from the manufacturer to NDDOT. If the individual cable runs do not match the test results of the packing label test results less the connection and splice losses, the cable shall be replaced at the Contractor’s expense.

5. INSTALLATION REQUIREMENTS

A. Interconnect shall be installed per the manufacturers recommendation with warning tape placed 12 inches above the cable.

B. The contractor shall include a single No.14 AWG unspliced, insulated copper conductor running the full length and parallel to any fiber that is not installed in an existing conduit

system with the tracer wire already installed. The purpose of this conductor is for locating the fiber. This is not a separate bid item and the cost shall be included in the price bid for the fiber optic cable.

C. The Contractor shall identify the foot mark of the cable of the incoming and outgoing cable of each hand-hole. The identifying mark shall be recorded and a label shall be placed in the hand-hole. A summary of all identifying marks shall be provided to NDDOT.

D. The Contractor shall leave a minimum of 50 feet of cable slack in each hand-hole. At strategic locations, additional cable length may be needed. At Splice Enclosure locations, a minimum of 50 feet of cable slack shall be left at each cable end. This information will be provided on a case-by-case basis.

6. METHOD OF MEASUREMENT

The Interconnect Cable (Hybrid) shall be included in the item Traffic Signals System and will not be measured for payment. This shall include labor, equipment, and material to install fiber cable. The connectors, drop cable, and tracer wire shall be incidental to the linear feet of fiber cable installed.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION

FUEL COST ADJUSTMENT CLAUSE

Revision Date: 9/8/2006

Introduction

This Special Provision provides for price adjustments to the Contract when significant changes in the cost of motor fuels and burner fuels occur while completing the Contract work. Participation in fuel cost adjustment program is not mandatory. A Contractor is not required to notify the Department at the time of submitting bids whether the Contractor will or will not participate in the fuel cost adjustment provision.

The North Dakota Department of Transportation (NDDOT) will send the low responsible bidder a "Fuel Cost Adjustment Affidavit" (SFN 58393) with the proposed Contract. The Contractor shall return a completed Fuel Adjustment Affidavit with the signed Contract as specified in Standard Specification Section 103.06, Execution and Approval of the Contract. The affidavit shall be returned on all Contracts with this provision even if the Contractor elects not to participate in the provision.

Compensation adjustments for motor fuels and burner fuels consumed in prosecuting the Contract shall be determined by the Engineer in accordance with the provisions set forth herein. Compensation adjustments will be assessed monthly for the cost of the motor fuels and burner fuels whenever the Current Fuel Index (CFI) is outside the given threshold of the Base Fuel Index (BFI) for the Contract.

If the Contractor has a fixed price for fuel for motor or burner fuels to complete the work, no fuel cost adjustments will be made for that fuel type. If there is no fixed fuel price for motor or burner fuels, participation in the Fuel Adjustment provision is the decision of the prime Contractor.

If the prime Contractor decides not to participate, no fuel cost adjustments will be made to the Contract for the Contractor or any subcontractors. If the prime Contractor elects to participate in the fuel cost adjustment provision, the prime Contractor shall include the anticipated fuel cost of subcontractors who wish to participate. If fuel cost adjustments are made to the Contract, the prime Contractor shall ensure that participating subcontractors including second and lower tier, are included in the adjustments in proportion to the percentage of work and anticipated fuel cost by that subcontractor.

Fuel Indexes

Each month, NDDOT will record the average wholesale price for No. 2 diesel fuel and the average wholesale price for unleaded gasoline (87 octane). The monthly average will be the average of the daily rack prices for the month as reported by DTN Energy for Fargo ND.

The burner fuel index will be the No. 2 diesel fuel index regardless of the type of burner fuel actually used.

The Base Fuel Index (BFI) price for motor fuels and burner fuel to be used in the Contract will be the average wholesale price for the month prior to the bid opening.

The Current Fuel Index (CFI) price for motor fuels and burner fuel to be used for each monthly adjustment will be the average wholesale price for the month prior to the adjustment month.

Fuel Ratio

For motor fuels diesel and unleaded gas, the fuel ratio of the Contract will be determined by dividing the Contractor's affidavit costs for each motor fuel by the original Contract amount.

For burner fuels, the fuel ratio of the contract will be determined by dividing the Contractor's affidavit cost for burner fuels by the original Contract amount of plant-mixed hot bituminous pavement paid by the ton. Asphalt cement, binders and other miscellaneous bituminous items shall not be included.

The fuel ratio of the contract for motor and burner fuels will remain the same throughout the length of the contract. The sum of the affidavit fuel costs shall not exceed 15% of the original Contract amount.

The fuel ratio for the three fuel types will be determined by the following equation:

$$\textbf{Fuel Ratio}_{(x, y, z)} = \textbf{Affidavit Cost}_{(x, y, z)} / \textbf{Original Contract Amount}_{(x, y, z)}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
Fuel Ratio$_{(x, y, z)}$	=	Fuel ratio of the contract for each respective fuel type
Affidavit Cost$_{(x, y, z)}$	=	Fuel costs from Fuel Adjustment Affidavit (SFN 58393)
Original Contract Amount$_{(x, y)}$	=	Total of the original contract amount excluding lane rental, and Part B of the bid (when A+B bidding is used), if applicable.
Original Contract Amount$_{(z)}$	=	Total original contract amount for all hot bituminous pavement bid items combined, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation.

Cost Change

The monthly change in fuel costs will be determined by the following equation:

$$\textbf{Cost Change}_{(x, y, z)} = (\textbf{CFI}_{(x, y, z)} - \textbf{BFI}_{(x, y, z)}) / \textbf{BFI}_{(x, y, z)}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel (use diesel prices)
Cost Change$_{(x, y, z)}$	=	The relative change in the current CFI and the BFI for each fuel type
CFI$_{(x, y, z)}$	=	Current Fuel Index for each fuel type
BFI$_{(x, y, z)}$	=	Base Fuel Index for each fuel type

Contract Adjustments

Contract adjustments will be made for the cost of motor and burner fuels whenever the cost change exceeds a ±0.10 threshold. No fuel cost adjustment will be made for work done under liquidated damages. Adjustments will be determined for Motor Fuel (diesel), Motor Fuel (unleaded), and Burner Fuel (burner) separately and shall be computed on a monthly basis.

When the cost change is greater than 0.10, the rebate to the Contractor for each fuel type shall be computed according to the following formulas:

$$\mathbf{FCA_{(x,\,y,\,z)} = Fuel\ Ratio_{(x,\,y,\,z)} \times Estimate_{(x,\,y,\,z)} \times (\ Cost\ Change_{(x,\,y,\,z)} - 0.10\ )}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$FCA_{(x,\,y,\,z)}$	=	Fuel Cost Adjustment for each of the fuel types
$Fuel\ Ratio_{(x,\,y,\,z)}$	=	Fuel Ratio for each of the fuel types
$Estimate_{(x,\,y)}$	=	The monthly total of work done on estimates issued in the current month excluding incentive or disincentive payments, pay factor adjustments and any work completed under liquidated damages.
$Estimate_{(z)}$	=	The monthly total of hot bituminous pavement work done on estimates issued in the current month, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation. Hot bituminous pavement work completed under liquidated damages will not be included.
$Cost\ Change_{(x,\,y,\,z)}$	=	The monthly change in fuel costs for each of the fuel types

When the cost change is less than -0.10, the credit to the Department for each fuel type shall be computed according to the following formulas:

$$\mathbf{FCA_{(x,\,y,\,z)} = Fuel\ Ratio_{(x,\,y,\,z)} \times Estimate_{(x,\,y,\,z)} \times (\ Cost\ Change_{(x,\,y,\,z)} + 0.10\ )}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$FCA_{(x,\,y,\,z)}$	=	Fuel Cost Adjustment for each of the fuel types
$Fuel\ Ratio_{(x,\,y,\,z)}$	=	Fuel Ratio for each of the fuel types
$Estimate_{(x,\,y)}$	=	The monthly total of work done on estimates issued in the current month excluding any incentive or disincentive payments, pay factor adjustments and any work completed under liquidated damages.
$Estimate_{(z)}$	=	The monthly total of hot bituminous pavement work done on estimates issued in the current month, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation. Hot bituminous pavement work completed under liquidated damages will not be included.
$Cost\ Change_{(x,\,y,\,z)}$	=	The monthly change in fuel costs for each of the fuel types

Payments

Adjustments will be determined by the Engineer monthly. Adjustments will be made under the following spec and code for each fuel type:

109 0100	Motor Fuels (Diesel)
109 0200	Motor Fuels (Unleaded)
109 0300	Burner Fuel

When significant payment adjustments are made on final estimates to account for final in-place measured quantities, the Engineer may prorate the adjustments back to the months when the work was done.

Attachments

For informational purposes, a ‘Fuel Cost Adjustment Affidavit’ (SFN 58393) is included as Attachment A.

FUEL COST ADJUSTMENT AFFIDAVIT

North Dakota Department of Transportation, Construction Services
SFN 58393 (08-2006)

Attachment A

Project Number

The Contractor is not required to notify the Department at the time of submitting bids whether he will or will not participate in the fuel cost adjustment program. The Contractor shall return the affidavit on all Contracts with this Provision even if the Contractor elects not to participate.

Check the box for each fuel type that has a fixed price.
No adjustments in fuel price will be made for the boxes that are checked.

☐ Diesel ☐ Unleaded ☐ Burner Fuel

Does your company elect to participate in a fuel adjustment for this contract for the fuels that do not have a fixed price?
No adjustments in fuel prices will be made if **No** is checked.

☐ Yes ☐ No

If yes, provide the total dollars for each of the applicable fuels.

Diesel (x)	$		
Unleaded (y)	$		
Burner Fuel (z)	$		
Sum (x+y+z)	$	% of Original Contract Amount	%*

*The sum of the x, y, and z may not exceed 15% of the original contract amount.

Under the penalty of law for perjury of falsification, the undersigned,

_____, _____
Name Title

of _____, here by certifies that the documentation is submitted in good
Contractor

faith, that the information provided is accurate and complete to the best of their knowledge and belief, and that the monetary amount identified accurately reflects the cost for fuel, and that they are duly authorized to certify the above documentation on behalf of the company.

I hereby agree that the Department or its authorized representative shall have the right to examine and copy all Contractor records, documents, work sheets, bid sheets and other data pertinent to the justification of the fuel costs shown above.

_____ **X** _____
Date Signed

State of _____

County of _____

Subscribed and sworn to before me this _____ day of _____, _____.

(Seal) **X** _____
Signature of Notary Public

My Commission Expires _____