## If you plan to submit a bid directly to the Department of Transportation

## PREQUALIFICATION

Any contractor who desires to become pre-qualified to bid on work advertised by IDOT must submit the properly completed pre-qualification forms to the Bureau of Construction no later that 4:30 p.m. prevailing time twenty-one days prior to the letting of interest. This pre-qualification requirement applies to first time contractors, contractors renewing expired ratings, contractors maintaining continuous pre-qualification or contractors requesting revised ratings. To be eligible to bid, existing pre-qualification ratings must be effective through the date of letting.

### **REQUESTS FOR AUTHORIZATION TO BID**

Contractors downloading and/or ordering CD-ROM's and are wanting to bid on items included in a particular letting must submit the properly completed "Request for Authorization to Bid/or Not For Bid Status" (BDE 124INT) and the ORIGINAL, signed and notarized, "Affidavit of Availability" (BC 57) to the proper office no later than 4:30 p.m. prevailing time, three (3) days prior to the letting date.

#### WHO CAN BID ?

Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID? When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status" (BDE 124INT) he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued a **Proposal Denial and/or Authorization Form**, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Proposal Denial and/or Authorization Form** will indicate the reason for denial.

**ABOUT AUTHORIZATION TO BID:** Firms that have not received an authorization form within a reasonable time of complete and correct original document submittal should contact the department as to status. This is critical in the week before the letting. These documents must be received three days before the letting date. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions.

**ADDENDA AND REVISIONS:** It is the contractor's responsibility to determine which, if any, addenda or revisions pertain to any project they may be bidding. Failure to incorporate all relevant addenda or revisions may cause the bid to be declared unacceptable.

Each addendum will be placed with the contract number. Addenda and revisions will also be placed on the Addendum/Revision Checklist and each subscription service subscriber will be notified by e-mail of each addendum and revision issued.

The Internet is the Department's primary way of doing business. The subscription server e-mails are an added courtesy the Department provides. It is suggested that bidder check IDOT's website <a href="http://www.dot.il.gov/desenv/delett.html">http://www.dot.il.gov/desenv/delett.html</a> before submitting final bid information.

## IDOT is not responsible for any e-mail related failures.

Addenda Questions may be directed to the Contracts Office at (217)782-7806 or D&Econtracts@dot.il.gov

Technical Questions about downloading these files may be directed to Tim Garman (217)524-1642 or garmantr@dot.il.gov.

**WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?**: Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

- 1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
- 2. Other special documentation and/or information that may be required
  - by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

**ABOUT SUBMITTING BIDS**: It is recommended that bidders deliver bids in person to insure they arrive at the proper location prior to the time specified for the receipt of bids. Any bid received at the place of letting after the time specified will not be accepted.

## WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding	Call
Prequalification and/or Authorization to Bid	(217)782-3413
Preparation and submittal of bids	(217)782-7806
Mailing of plans and proposals	(217)782-7806
Electronic plans and proposals	(217)524-1642

## ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

Planholders should verify that they have received and incorporated the addendum and/or revision prior to submitting their bid. Failure by the bidder to include an addendum could result in a bid being rejected as irregular.

Proposal Submitted By



Name

Address

City

# Letting June 17, 2005

# NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction. (SEE INSTRUCTIONS ON THE INSIDE OF COVER)

# Notice To Bidders, Specifications, Proposal, Contract and Contract Bond



Springfield, Illinois 62764

Contract No. 68412 PEORIA-TAZEWELL Counties Section D4 I-74 ITS SYSTEM-4 Route FAI 74 Project HD-74(2) District 4 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:

A Bid Bond is included.

A Cashier's Check or a Certified Check is included

Plans Included Herein

Prepared by

Checked by (Printed by authority of the State of Illinois)

F

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAI (See instructions inside front cover)

## INSTRUCTIONS

**ABOUT IDOT PROPOSALS**: All proposals issued by IDOT are potential bidding proposals. Each proposal contains all Certifications and Affidavits, a Proposal Signature Sheet and a Proposal Bid Bond required for Prime Contractors to submit a bid after written **Authorization to Bid** has been issued by IDOT's Central Bureau of Construction.

WHO CAN BID?: Bids will be accepted from only those companies that request and receive written Authorization to Bid from IDOT's Central Bureau of Construction. To request authorization, a potential bidder <u>must complete and submit</u> Part B of the Request for Authorization to Bid/or Not For Bid Status form (BDE 124 INT) and submit an original Affidavit of Availability (BC 57).

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Request for Proposal Forms and Plans" he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued a **Proposal Denial and/or Authorization Form**, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Proposal Denial and/or Authorization Form**, they should contact the Central Bureau of Construction in advance of the letting date.

**WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED**?: Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

- 1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
- 2. Other special documentation and/or information that may be required by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

**ABOUT SUBMITTING BIDS**: It is recommended that bidders deliver bids in person to insure they arrive at the proper location prior to the time specified for the receipt of bids. Any bid received at the place of letting after the time specified will not be accepted.

## WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding	Call
Prequalification and/or Authorization to Bid	217/782-3413
Preparation and submittal of bids	217/782-7806
Mailing of CD-ROMS	217/782-7806



# PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of \_\_\_\_\_\_

for the improvement identified and advertised for bids in the Invitation for Bids as:

Contract No. 68412 PEORIA-TAZEWELL Counties Section D4 I-74 ITS SYSTEM-4 Project HD-74(2) Route FAI 74 District 4 Construction Funds

This project includes installation of fiber optic cable in new and existing conduit and handholes along Illinois Route 8, Illinois Route 40, Illinois Route 116, and other various roadways.

2. The undersigned bidder will furnish all labor, material and equipment to complete the above described project in a good and workmanlike manner as provided in the contract documents provided by the Department of Transportation. This proposal will become part of the contract and the terms and conditions contained in the contract documents shall govern performance and payments.

BD 353A (Rev. 11/2001)

- 3. ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER. The undersigned further declares that he/she has carefully examined the proposal, plans, specifications, form of contract and contract bond, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this proposal he/she waives all right to plead any misunderstanding regarding the same.
- 4. EXECUTION OF CONTRACT AND CONTRACT BOND. The undersigned further agrees to execute a contract for this work and present the same to the department within fifteen (15) days after the contract has been mailed to him/her. The undersigned further agrees that he/she and his/her surety will execute and present within fifteen (15) days after the contract has been mailed to him/her contract bond satisfactory to and in the form prescribed by the Department of Transportation, in the penal sum of the full amount of the contract, guaranteeing the faithful performance of the work in accordance with the terms of the contract.
- 5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

			Proposal				Proposal
4	Amount o	of Bid	<u>Guaranty</u>	<u>An</u>	nount c	of Bid	<u>Guaranty</u>
Up to		\$5,000	\$150	\$2,000,000	to	\$3,000,000	\$100,000
\$5,000	to	\$10,000	\$300	\$3,000,000	to	\$5,000,000	\$150,000
\$10,000	to	\$50,000	\$1,000	\$5,000,000	to	\$7,500,000	\$250,000
\$50,000	to	\$100,000	\$3,000	\$7,500,000	to	\$10,000,000	\$400,000
\$100,000	to	\$150,000	\$5,000	\$10,000,000	to	\$15,000,000	\$500,000
\$150,000	to	\$250,000	\$7,500	\$15,000,000	to	\$20,000,000	\$600,000
\$250,000	to	\$500,000	\$12,500	\$20,000,000	to	\$25,000,000	\$700,000
\$500,000	to	\$1,000,000	\$25,000	\$25,000,000	to	\$30,000,000	\$800,000
\$1,000,000	to	\$1,500,000	\$50,000	\$30,000,000	to	\$35,000,000	\$900,000
\$1,500,000	to	\$2,000,000	\$75,000	over		\$35,000,000	\$1,000,000

Bank cashier's checks or properly certified checks accompanying proposals shall be made payable to the Treasurer, State of Illinois, when the state is awarding authority; the county treasurer, when a county is the awarding authority; or the city, village, or town treasurer, when a city, village, or town is the awarding authority.

If a combination bid is submitted, the proposal guaranties which accompany the individual proposals making up the combination will be considered as also covering the combination bid.

The amount of the proposal guaranty check is \_\_\_\_\_\_\$( ). If this proposal is accepted and the undersigned shall fail to execute a contract bond as required herein, it is hereby agreed that the amount of the proposal guaranty shall become the property of the State of Illinois, and shall be considered as payment of damages due to delay and other causes suffered by the State because of the failure to execute said contract and contract bond; otherwise, the bid bond shall become void or the proposal guaranty check shall be returned to the undersigned.

#### Attach Cashier's Check or Certified Check Here

In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual proposal. If the guaranty check is placed in another proposal, state below where it may be found.

Mark the proposal cover sheet as to the type of proposal guaranty submitted.

BD 354 (Rev. 11/2001)

6. COMBINATION BIDS. The undersigned further agrees that if awarded the contract for the sections contained in the following combination, he/she will perform the work in accordance with the requirements of each individual proposal comprising the combination bid specified in the schedule below, and that the combination bid shall be prorated against each section in proportion to the bid submitted for the same. If an error is found to exist in the gross sum bid for one or more of the individual sections included in a combination, the combination bid shall be corrected as provided in the specifications.

When a combination bid is submitted, the schedule below must be completed in each proposal comprising the combination.

If alternate bids are submitted for one or more of the sections comprising the combination, a combination bid must be submitted for each alternate.

#### **Schedule of Combination Bids**

Combination		Combination	n Bid
No.	Sections Included in Combination	Dollars	Cents

- 7. SCHEDULE OF PRICES. The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
- 8. **CERTIFICATE OF AUTHORITY.** The undersigned bidder, if a business organized under the laws of another State, assures the Department that it will furnish a copy of its certificate of authority to do business in the State of Illinois with the return of the executed contract and bond. Failure to furnish the certificate within the time provided for execution of an awarded contract may be cause for cancellation of the award and forfeiture of the proposal guaranty to the State.

#### **ILLINOIS DEPARTMENT OF TRANSPORTATION** SCHEDULE OF PRICES CONTRACT 68412 NUMBER -

C-94-090-04 State Job # -PPS NBR -4-00053-0100 County Name -PEORIA- TAZEWELL-Code -143 - 179 -District -4 - 4 -

Project Number HD-0074/002/000 Route

VARIOUS

Section Number -D4 I-74 ITS SYSTEM-4

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
XX003940	20 AMP 1P CIR BREAKER	EACH	2.000				
X0323898	CCTV DOME CAMERA	EACH	2.000				
X0323904	IDOT COMM CENTER NODE	L SUM	1.000				
X0323912	E PEO PUB SF BLD NODE	L SUM	1.000				
X0323913	FIBER OPTIC LINK CCTV	EACH	2.000				
X0323921	POLE MT EQUIP CAB TC	EACH	1.000				
X0324972	REPL EX COM VAULT LID	EACH	1.000				
X0324973	REM & REPL BIT SURF S	SQ FT	16.000				
X0324974		L SUM	1.000				
X8130350		EACH	1.000				
X8710020		FOOT	3,669.000				
X8710028		FOOT	550.000				
		FOOT					
X8710030			20,430.000				
X8710070		EACH	3.000				
X8710071	FIB OPT FUSION SPLICE	EACH	12.000		<u> </u>	<u> </u>	I

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#### ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT 68412 NUMBER -

C-94-090-04 State Job # -PPS NBR -4-00053-0100 County Name -PEORIA- TAZEWELL-Code -143 - 179 -District -4 - 4 -

Project Number HD-0074/002/000 Route

VARIOUS

Section Number -D4 I-74 ITS SYSTEM-4

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
44000100	PAVEMENT REM	SQ YD	3.000				
44004610	SIDEWLK REM & REPL SP	SQ FT	27.000				
44200274	PAVT PATCH T1	SQ YD	3.000				
67100100	MOBILIZATION	L SUM	1.000				
70102635	TR CONT & PROT 701701	L SUM	1.000				
81012600	CON T 2 PVC	FOOT	1,197.000				
81021330	CON P 2 PVC	FOOT	226.000				
81100600	CON AT ST 2 GALVS	FOOT	91.000				
81102600	CON AT ST 2 PVC	FOOT	1,023.000				
81300948	JUN BX SS AS 24X24X10	EACH	5.000				
81400400	CONC HANDHOLE	EACH	2.000				
	TR & BKFIL F ELECT WK	FOOT	1,187.000				
	EC C XLP USE 1C 10	FOOT	1,000.000				**************************************
86300405		EACH	1.000				**************************************
	CONC FDN TY D	FOOT	3.500				

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## ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER -

C-94-090-04 State Job # -PPS NBR -4-00053-0100 Project Number Route VARIOUS County Name -PEORIA- TAZEWELL-HD-0074/002/000 Code -143 - 179 -District -4 - 4 -Section Number -D4 I-74 ITS SYSTEM-4

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
87900200	DRILL EX HANDHOLE	EACH	4.000				

Page 3 6/2/2005 CONTRACT NUMBER

68412

THIS IS THE TOTAL BID \$

NOTES:

- 1. Each PAY ITEM should have a UNIT PRICE and a TOTAL PRICE.
- 2. The UNIT PRICE shall govern if no TOTAL PRICE is shown or if there is a discrepancy between the product of the UNIT PRICE multiplied by the QUANTITY.
- 3. If a UNIT PRICE is omitted, the TOTAL PRICE will be divided by the QUANTITY in order to establish a UNIT PRICE.
- 4. A bid may be declared UNACCEPTABLE if neither a unit price nor a total price is shown.

#### STATE REQUIRED ETHICAL STANDARDS GOVERNING CONTRACT PROCUREMENT: ASSURANCES, CERTIFICATIONS AND DISCLOSURES

#### I. GENERAL

**A.** Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

**B.** In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. By execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances has been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.

**C.** In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for termination of the contract and the suspension or debarment of the bidder.

#### II. ASSURANCES

**A.** The assurances hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous assurance, and the surety providing the performance bond shall be responsible for the completion of the contract.

#### B. Felons

1. The Illinois Procurement Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any state agency from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-10.

#### C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

#### Section 50-13. Conflicts of Interest.

(a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois Toll Highway authority.

(b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.

(e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 days after the officer, member, or employee takes office or is employed.

The current salary of the Governor is \$150,700.00. Sixty percent of the salary is \$90,420.00.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-13, or that an effective exemption has been issued by the Board of Ethics to any individual subject to the Section 50-13 prohibitions pursuant to the provisions of Section 50-20 of the Code and Executive Order Number 3 (1998). Information concerning the exemption process is available from the Department upon request.

#### D. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

(a) It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

#### E. Inducements

1. The Illinois Procurement Code provides:

Section 50-25. Inducement. Any person who offers or pays any money or other valuable thing to any person to induce him or her not to bid for a State contract or as recompense for not having bid on a State contract is guilty of a Class 4 felony. Any person who accepts any money or other valuable thing for not bidding for a State contract or who withholds a bid in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-25, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

#### F. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

Section 50-30. Revolving door prohibition. Chief procurement officers, associate procurement officers, State purchasing officers, their designees whose principal duties are directly related to State procurement, and executive officers confirmed by the Senate are expressly prohibited for a period of 2 years after terminating an affected position from engaging in any procurement activity relating to the State agency most recently employing them in an affected position for a period of at least 6 months. The prohibition includes, but is not limited to: lobbying the procurement process; specifying; bidding; proposing bid, proposal, or contract documents; on their own behalf or on behalf of any firm, partnership, association, or corporation. This Section applies only to persons who terminate an affected position on or after January 15, 1999.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-30, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

#### G. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, chief procurement officer, State purchasing officer, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offerors, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the chief procurement officer.

2. The bidder assures the Department that it has not failed to report any relevant facts concerning the practices addressed in Section 50-40 which may involve the contract for which the bid is submitted.

#### H. Confidentiality

1. The Illinois Procurement Code provides:

Section 50-45. Confidentiality. Any chief procurement officer, State purchasing officer, designee, or executive officer who willfully uses or allows the use of specifications, competitive bid documents, proprietary competitive information, proposals, contracts, or selection information to compromise the fairness or integrity of the procurement, bidding, or contract process shall be subject to immediate dismissal, regardless of the Personnel code, any contract, or any collective bargaining agreement, and may in addition be subject to criminal prosecution.

2. The bidder assures the Department that it has no knowledge of any fact relevant to the practices addressed in Section 50-45 which may involve the contract for which the bid is submitted.

#### I. Insider Information

1. The Illinois Procurement Act provides:

Section 50-50. Insider information. It is unlawful for any current or former elected or appointed State official or State employee to knowingly use confidential information available only by virtue of that office or employment for actual or anticipated gain for themselves or another person.

2. The bidder assures the Department that it has no knowledge of any facts relevant to the practices addressed in Section 50-50 which may involve the contract for which the bid is submitted.

#### **III. CERTIFICATIONS**

**A.** The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous certification, and the surety providing the performance bond shall be responsible for completion of the contract.

#### B. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State shall contain a certification by the contractor that the contractor is not barred from being awarded a contract or subcontract under this Section. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

2. The bidder certifies that it is not barred from being awarded a contract under Section 50.5.

#### C. Educational Loan

1. Section 3 of the Educational Loan Default Act provides:

§ 3. No State agency shall contract with an individual for goods or services if that individual is in default, as defined in Section 2 of this Act, on an educational loan. Any contract used by any State agency shall include a statement certifying that the individual is not in default on an educational loan as provided in this Section.

2. The bidder, if an individual as opposed to a corporation, partnership or other form of business organization, certifies that the bidder is not in default on an educational loan as provided in Section 3 of the Act.

#### D. Bid-Rigging/Bid Rotating

1. Section 33E-11 of the Criminal Code of 1961 provides:

§ 33E-11. (a) Every bid submitted to and public contract executed pursuant to such bid by the State or a unit of local government shall contain a certification by the prime contractor that the prime contractor is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of this Article. The State and units of local government shall provide the appropriate forms for such certification.

(b) A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

2. The bidder certifies that it is not barred from contracting with the Department by reason of a violation of either Section 33E-3 or Section 33E-4.

#### E. International Anti-Boycott

1. Section 5 of the International Anti-Boycott Certification Act provides:

§ 5. State contracts. Every contract entered into by the State of Illinois for the manufacture, furnishing, or purchasing of supplies, material, or equipment or for the furnishing of work, labor, or services, in an amount exceeding the threshold for small purchases according to the purchasing laws of this State or \$10,000.00, whichever is less, shall contain certification, as a material condition of the contract, by which the contractor agrees that neither the contractor nor any substantially-owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act.

2. The bidder makes the certification set forth in Section 5 of the Act.

#### F. Drug Free Workplace

1. The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.

2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.

(b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.

(c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.

(d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.

(e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.

(f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.

(g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

#### G. Debt Delinquency

1. The Illinois Procurement Code provides:

Section 50-11 and 50-12. Debt Delinquency.

The contractor or bidder certifies that it, or any affiliate, is not barred from being awarded a contract under 30 ILCS 500. Section 50-11 prohibits a person from entering into a contract with a State agency if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The contractor further acknowledges that the contracting State agency may declare the contract void if this certification is false or if the contractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

#### H. Sarbanes-Oxley Act of 2002

1. The Illinois Procurement Code provides:

Section 50-60(c).

The contractor certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 for a period of five years prior to the date of the bid or contract. The contractor acknowledges that the contracting agency shall declare the contract void if this certification is false.

#### I. ADDENDA

The contractor or bidder certifies that all relevant addenda have been incorporated in to this contract. Failure to do so may cause the bid to be declared unacceptable.

#### J. Section 42 of the Environmental Protection Act

The contractor certifies in accordance with 30 ILCS 500/50-12 that the bidder or contractor is not barred from being awarded a contract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The contractor acknowledges that the contracting agency may declare the contract void if this certification is false.

#### K. Apprenticeship and Training Certification (Does not apply to federal aid projects)

In accordance with the provisions of Section 30-22 (6) of the Illinois Procurement Code, the bidder certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the bidder will perform with its own forces. The bidder further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Department, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The bidder shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project as reported on the Construction Employee Workforce Projection (Form BC-1256) and returned with the bid is accounted for and listed.

#### **NA - FEDERAL**

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract.

## TO BE RETURNED WITH BID

#### **IV. DISCLOSURES**

**A.** The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous disclosure, and the surety providing the performance bond shall be responsible for completion of the contract.

#### B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$10,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

In addition, all disclosures shall indicate any other current or pending contracts, proposals, leases, or other ongoing procurement relationships the bidding entity has with any other unit of state government and shall clearly identify the unit and the contract, proposal, lease, or other relationship.

2. <u>Disclosure Forms</u>. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies. The forms must be included with each bid or incorporated by reference.

#### C. Disclosure Form Instructions

#### Form A: For bidders that have previously submitted the information requested in Form A

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may sign the following certification statement indicating that the information previously submitted by the bidder is, as of the date of signature, current and accurate. The Certification must be signed and dated by a person who is authorized to execute contracts for the bidding company. Before signing this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder signs the Certification, the Bidder should proceed to Form B instructions.

## **CERTIFICATION STATEMENT**

I have determined that the Form A disclosure information previously submitted is current and accurate, and all forms are hereby incorporated by reference in this bid. Any necessary additional forms or amendments to previously submitted forms are attached to this bid.

(Bidding Company)

Name of Authorized Representative (type or print)

Title of Authorized Representative (type or print)

Signature of Authorized Representative

Date

#### Form A: For bidders who have NOT previously submitted the information requested in Form A

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the <u>NOT APPLICABLE STATEMENT</u> on the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

- 1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES \_\_\_\_ NO
- Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$90,420.00? YES \_\_\_\_ NO\_\_\_\_
- Does anyone in your organization receive more than \$90,420.00 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES \_\_\_\_ NO \_\_\_
- 4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than \$90,420.00? YES \_\_\_\_ NO \_\_\_

(Note: Only one set of forms needs to be completed per person per bid even if a specific individual would require a yes answer to more than one question.)

A "YES" answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the bidding entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is authorized to execute contracts for your organization. **Photocopied or stamped signatures are not acceptable**. The person signing can be, but does not have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.

If the answer to each of the above questions is "NO", then the <u>NOT APPLICABLE STATEMENT</u> on page 2 of Form A must be signed and dated by a person that is authorized to execute contracts for your company.

Form B: Identifying Other Contracts & Procurement Related Information Disclosure Form B must be completed for each bid submitted by the bidding entity. It must be signed by an individual who is authorized to execute contracts for the bidding entity. Note: Signing the <u>NOT</u> <u>APPLICABLE STATEMENT</u> on Form A <u>does not</u> allow the bidder to ignore Form B. Form B must be completed, signed and dated or the bidder may be considered nonresponsive and the bid will not be accepted.

The Bidder shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the signature box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:

Option I: If the bidder did not submit an Affidavit of Availability to obtain authorization to bid, the bidder must list all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an attached sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts and are not to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development Board must be included. Bidders who submit Affidavits of Availability are suggested to use Option II.

Option II: If the bidder is required and has submitted an Affidavit of Availability in order to obtain authorization to bid, the bidder may write or type "See Affidavit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois agency pending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the Affidavit of Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.

#### D. Bidders Submitting More Than One Bid

Bidders submitting multiple bids may submit one set of forms consisting of all required Form A disclosures and one Form B for use with all bids. Please indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms by reference.

• The bid submitted for letting item \_\_\_\_\_ contains the Form A disclosures or Certification Statement and the Form B disclosures. The following letting items incorporate the said forms by reference:

## **RETURN WITH BID/OFFER**

# ILLINOIS DEPARTMENT OF TRANSPORTATION

## Form A Financial Information & Potential Conflicts of Interest Disclosure

Yes <u>No</u>

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Code (30 ILCS 500). Vendors desiring to enter into a contract with the State of Illinois must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for bids in excess of \$10,000, and for all open-ended contracts. A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.

## DISCLOSURE OF FINANCIAL INFORMATION

**1. Disclosure of Financial Information.** The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than \$90,420.00 (60% of the Governor's salary as of 7/1/01). (Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)

	. (type or print information)		
NAME:			
ADDRESS			
Type of own	ership/distributable income share	e:	
stock	sole proprietorship	Partnership	other: (explain on separate sheet):
% or \$ value	of ownership/distributable income sl	hare:	
·	·		

**2. Disclosure of Potential Conflicts of Interest.** Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services.

If your answer is yes, please answer each of the following questions.

- 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois Toll Highway Authority? Yes \_\_\_\_No \_\_\_
- 2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) provide the name the State agency for which you are employed and your annual salary.

## **RETURN WITH BID/OFFER**

- If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes \_\_\_\_ No \_\_\_
- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes \_\_\_\_ No \_\_\_
- (b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

Yes <u>No</u>

If your answer is yes, please answer each of the following questions.

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois Toll Highway Authority? Yes \_\_\_\_No \_\_\_
- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary.
- 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the salary of the Governor as of 7/1/01) are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes No
- 4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor?

Yes \_\_\_ No \_\_\_

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years.

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes \_\_\_\_No \_\_\_

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statues of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes No \_\_\_

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes <u>No</u>

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes \_\_\_No \_\_\_

## **RETURN WITH BID/OFFER**

- (h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes \_\_\_\_No \_\_\_
- (i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes No \_\_\_
- (j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.

Yes No \_\_\_\_

	APPLICABLE STATEMENT	
This Disclosure Fo	orm A is submitted on behalf of the INDIVIDUAL named on previo	ous page.
Completed by:		
. ,	Name of Authorized Representative (type or print)	_
Completed by:		
	Title of Authorized Representative (type or print)	—
Completed by:		
	Signature of Individual or Authorized Representative	Date
	NOT APPLICABLE STATEMENT	
require the comple	that no individuals associated with this organization meet the cr etion of this Form A.	
This Disclosure Fo	orm A is submitted on behalf of the CONTRACTOR listed on the p	previous page.
	Name of Authorized Representative (type or print)	—
	Title of Authorized Representative (type or print)	
	Signature of Authorized Representative	
		Date

## ILLINOIS DEPARTMENT OF TRANSPORTATION

## Form B Other Contracts & Procurement Related Information Disclosure

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
Disclosure of the information contained in this		

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for bids in excess of \$10,000, and for all open-ended contracts.

## DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The BIDDER shall identify whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes No If "No" is checked, the bidder only needs to complete the signature box on the bottom of this page.

**2.** If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

## THE FOLLOWING STATEMENT MUST BE SIGNED

Name of Authorized Representative (type or print)	
 Title of Authorized Representative (type or print)	
 Signature of Authorized Representative	Da

## SPECIAL NOTICE TO CONTRACTORS

The following requirements of the Illinois Department of Human Rights' Rules and Regulations are applicable to bidders on all construction contracts advertised by the Illinois Department of Transportation:

## **CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION**

- (a) All bidders on construction contracts shall complete and submit, along with and as part of their bids, a Bidder's Employee Utilization Form (Form BC-1256) setting forth a projection and breakdown of the total workforce intended to be hired and/or allocated to such contract work by the bidder including a projection of minority and female employee utilization in all job classifications on the contract project.
- (b) The Department of Transportation shall review the Employee Utilization Form, and workforce projections contained therein, of the contract awardee to determine if such projections reflect an underutilization of minority persons and/or women in any job classification in accordance with the Equal Employment Opportunity Clause and Section 7.2 of the Illinois Department of Human Rights' Rules and Regulations for Public Contracts adopted as amended on September 17, 1980. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.
- (c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.



Contract No. 68412 PEORIA-TAZEWELL Counties Section D4 I-74 ITS SYSTEM-4 Project HD-74(2) Route FAI 74 District 4 Construction Funds

## PART I. IDENTIFICATION

Dept. Human Rights # \_\_\_\_\_

Duration of Project:

Name of Bidder:

#### PART II. WORKFORCE PROJECTION

A. The undersigned bidder has analyzed minority group and female populations, unemployment rates and availability of workers for the location in which this contract work is to be performed, and for the locations from which the bidder recruits employees, and hereby submits the following workforce projection including a projection for minority and female employee utilization in all job categories in the workforce to be allocated to this contract:

				IA	BLE A										TABLE	: В		
		TOT	AL Wo	rkforce	Projec	tion for	Contr	act					1	(	CURRENT	- EN	<b>IPLOYEE</b>	S
			MINORITY EMPLOYEES				TRAINEES				TO BE ASSIGNED TO CONTRACT							
JOB CATEGORIES		TAL OYEES	BL/	ACK	HISP	ANIC	-	THER NOR.	APPF TIC		-	N THE JOB			OTAL OYEES	S MINORITY		
	М	F	М	F	М	F	Μ	F	Μ	F	М	F		М	F		М	F
OFFICIALS (MANAGERS)																		
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		

TABLE C								
T	OTAL Tra	aining Pro	ojection	n for C	ontract			
EMPLOYEES IN	TOTAL EMPLOYEES		BLACK HISPANIC			*OTHER MINOR.		
TRAINING	М	F	М	F	М	F	М	F
APPRENTICES								
ON THE JOB TRAINEES								

\*Other minorities are defined as Asians (A) or Native Americans (N).

Please specify race of each employee shown in Other Minorities column.

Note: See instructions on the next page

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BC 1256 - Pg 1 (Rev. 3/98) IL 494-0454

## Contract No. 68412 PEORIA-TAZEWELL Counties Section D4 I-74 ITS SYSTEM-4 Project HD-74(2) Route FAI 74 District 4 Construction Funds

## PART II. WORKFORCE PROJECTION - continued

B. Included in "Total Employees" under Table A is the total number of **new hires** that would be employed in the event the undersigned bidder is awarded this contract.

The undersigned bidder projects that: (number) \_\_\_\_\_\_ new hires would be recruited from the area in which the contract project is located; and/or (number) \_\_\_\_\_\_ new hires would be recruited from the area in which the bidder's principal office or base of operation is located.

C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors.

The undersigned bidder estimates that (number) \_\_\_\_\_\_ persons will be directly employed by the prime contractor and that (number) \_\_\_\_\_\_ persons will be employed by subcontractors.

## PART III. AFFIRMATIVE ACTION PLAN

- A. The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under **PART II** is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the **Department of Human Rights**.
- B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications.

Company \_\_\_\_\_

Telephone Number \_\_\_\_\_

Address \_\_\_\_\_

## NOTICE REGARDING SIGNATURE

The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required.

Signature:

Title: \_\_\_\_\_

Date:

Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel.

- Table A Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.
- Table B Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.
- Table C Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

BC-1256-Pg. 2 (Rev. 3/98)

## ADDITIONAL FEDERAL REQUIREMENTS

In addition to the Required Contract Provisions for Federal-Aid Construction Contracts (FHWA 1273), all bidders make the following certifications.

- A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.
- B. <u>CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY</u>:
  - 1. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES \_\_\_\_\_ NO \_\_\_\_\_
  - If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES \_\_\_\_\_ NO \_\_\_\_\_

## Contract No. 68412 PEORIA-TAZEWELL Counties Section D4 I-74 ITS SYSTEM-4 Project HD-74(2) Route FAI 74 District 4 Construction Funds

#### PROPOSAL SIGNATURE SHEET

The undersigned bidder hereby makes and submits this bid on the subject Proposal, thereby assuring the Department that all requirements of the Invitation for Bids and rules of the Department have been met, that there is no misunderstanding of the requirements of paragraph 3 of this Proposal, and that the contract will be executed in accordance with the rules of the Department if an award is made on this bid.

	Firm Name	
(IF AN INDIVIDUAL)		
	Firm Name	
	Ву	
(IF A CO-PARTNERSHIP)	Business Address	
		Name and Address of All Members of the Firm:
	Corporate Name	
	Ву	
(IF A CORPORATION)		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	Signature
(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE	Business Address	
SECOND PARTY SHOULD SIGN BELOW)		
	Corporate Name	
(IF A JOINT VENTURE)	Ву	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	
		Signature
	Business Address	
If more than two parties are in the joint venture,	places attach as addit	ional cignatura chaot
in more than two parties are in the joint venture,	please allach an addit	เบทสา รายาสเนาย รายยา.



**Division of Highways Proposal Bid Bond** (Effective November 1, 1992)

Item No. Letting Date

KNOW ALL MEN BY THESE PRESENTS, That We

as PRINCIPAL, and

as SURETY, are

held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in Article 102.09 of the "Standard Specifications for Road and Bridge Construction" in effect on the date of invitation for bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH, That Whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF ILLINOIS, acting through the Department of Transportation, for the improvement designated by the Transportation Bulletin Item Number and Letting Date indicated above.

NOW, THEREFORE, if the Department shall accept the bid proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in the bidding and contract documents, submit a DBE Utilization Plan that is accepted and approved by the Department; and if, after award by the Department, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to make the required DBE submission or to enter into such contract and to give the specified bond, the PRINCIPAL pays to the Department the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the Department may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the Department determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then Surety shall pay the penal sum to the Department within fifteen (15) days of written demand therefor. If Surety does not make full payment within such period of time, the Department may bring an action to collect the amount owed. Surety is liable to the Department for all its expenses, including attorney's fees, incurred in any litigation in which it prevails either in whole or in part.

In TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this \_\_\_\_\_\_ day of \_\_\_\_\_\_ day of \_\_\_\_\_\_ A.D., \_\_\_\_\_.

(Company Name)
By:
By: (Signature of Attorney-in-Fact)
, a Notary Public in and for said County, do hereby certify that
ning on behalf of PRINCIPAL & SURETY)
nes are subscribed to the foregoing instrument on behalf of PRINCIPAL and bectively, that they signed and delivered said instrument as their free and voluntary
, A.D
Notary Public

In lieu of completing the above section of the Proposal Bid Form, the Principal may file an Electronic Bid Bond. By signing below the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.

Electronic Bid Bond ID#

Company/Bidder Name

Signature and Title

# PROPOSAL ENVELOPE



# PROPOSALS

for construction work advertised for bids by the Illinois Department of Transportation

Item No.	Item No.	Item No.

Submitted By:

lame:	
ddress:	
hone No.	

Bidders should use an IDOT proposal envelope or affix this form to the front of a 10" x 13" envelope for the submittal of bids. If proposals are mailed, they should be enclosed in a second or outer envelope addressed to:

Engineer of Design and Environment - Room 326 Illinois Department of Transportation 2300 South Dirksen Parkway Springfield, Illinois 62764

## NOTICE

Individual bids, including Bid Bond and/or supplemental information if required, should be securely stapled.

# **CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS**

# NOTICE

None of the following material needs to be returned with the bid package unless the special provisions require documentation and/or other information to be submitted.

Contract No. 68412 PEORIA-TAZEWELL Counties Section D4 I-74 ITS SYSTEM-4 Project HD-74(2) Route FAI 74 District 4 Construction Funds





## **NOTICE TO BIDDERS**

- 1. TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., June 17, 2005. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.
- 2. DESCRIPTION OF WORK. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 68412 PEORIA-TAZEWELL Counties Section D4 I-74 ITS SYSTEM-4 Project HD-74(2) Route FAI 74 District 4 Construction Funds

This project includes installation of fiber optic cable in new and existing conduit and handholes along Illinois Route 8, Illinois Route 40, Illinois Route 116, and other various roadways.

- 3. INSTRUCTIONS TO BIDDERS. (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.
  - (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS. This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the Illinois Department of Transportation

Timothy W. Martin, Secretary

BD 351 (Rev. 01/2003)

## 68412

## FAI Route 74(I-74) Section D4 I-74 ITS System-4 Peoria and Tazewell Counties INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

## Adopted March 1, 2005

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-02) (Revised 3-1-05)

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## **RECURRING SPECIAL PROVISIONS**

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

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12	Use of Geotextile Fabric for Railroad Crossing (Eff. 1-1-95) (Rev. 1-1-97)	
13	Asphaltic Emulsion Slurry Seal and Fibrated Asphaltic Emulsion Slurry Seal (Eff. 8-1-89) (Rev. 2-1-97)	
14	Bituminous Surface Treatments Half-Smart (Eff. 7-1-93) (Rev. 1-1-97)	
15	Quality Control/Quality Assurance of Bituminous Concrete Mixtures (Eff. 1-1-00) (Rev. 3-1-05)	
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22	Protective Shield System (Eff. 4-1-95) (Rev. 1-1-03)	
22	Polymer Concrete (Eff. 8-1-95) (Rev. 3-1-05)	
23 24	Controlled Low-Strength Material (CLSM) (Eff. 1-1-90) (Rev. 3-1-05)	
	Pipe Underdrains (Eff. 9-9-87) (Rev. 1-1-98)	
25 26	Guardrail and Barrier Wall Delineation (Eff. 12-15-93) (Rev. 1-1-97)	
-	Bicycle Racks (Eff. 4-1-94) (Rev. 1-1-97)	
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28	Reserved	
29	Reserved	
30	Reserved	
31	Night Time Inspection of Roadway Lighting (Eff. 5-1-96)	
32	Reserved English Substitution of Metric Bolts (Eff. 7-1-96)	
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34	English Substitution of Metric Reinforcement Bars (Eff. 4-1-96) (Rev. 1-1-03)	
35	Polymer Modified Emulsified Asphalt (Eff. 5-15-89) (Rev. 1-1-04)	185
36	Corrosion Inhibitor (Eff. 3-1-80) (Rev. 7-1-99)	
37	Quality Control of Concrete Mixtures at the Plant-Single A (Eff. 8-1-00) (Rev. 1-1-04)	
38	Quality Control of Concrete Mixtures at the Plant-Double A (Eff. 8-1-00) (Rev. 1-1-04)	
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## FAI Route 74(I-74) Section D4 I-74 ITS System-4 Peoria and Tazewell Counties

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## STATE OF ILLINOIS

## SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2002, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of FAI Route 74 (I-74), Project HD-0074(002), Section D4 I-74 System-4 in Peoria and Tazewell Counties and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

## LOCATION OF PROJECT

This improvement is located in Peoria and Tazewell Counties in Illinois. The roadway improvement in Peoria County commences from the City of Peoria's E911 Center located along Walnut Street, extends to Water Street, and ends along Illinois Route 40 across the Bob Michel Bridge. The roadway improvement in Tazewell County commences from Illinois Route 40 from the Bob Michel Bridge and extends along Camp Street to Riverfront Drive, Ramp I-3. The roadway improvement also extends from West Washington Street to Illinois Route 116 (Main Street) and along Illinois Route 8 (East Washington Street) to the East Peoria Public Works Building.

## **DESCRIPTION OF PROJECT**

This project consists of installing fiber optic cable in existing conduit and handholes from the City of Peoria's E-911 Center, located along Walnut Street to the intersection of Camp Street and Riverfront Drive in East Peoria; installing conduit attached to the structure on the Bob Michel Bridge, installing conduit trenched and pushed from the foot of the Bob Michel Bridge in Tazewell County to the existing traffic signal conduit system located along Camp Street in East Peoria, installing fiber optic cable in existing conduit and handholes from the City of East Peoria's Public Safety Building located along West Washington Street to the City of East Peoria's Public Works Building located along East Washington Street, installing CCTV cameras with PTZ control on existing steel combination mast arm assemblies at the intersections of Illinois Route 116 (Main Street) and Illinois Route 8 (Camp Street) and Illinois Route 8 (Washington Street) and Carver/Jay Lane, installing fiber optic interconnect cable from the intersection of Illinois Route 8 (Camp Street) and Washington Street to Rosedale/Putnam; installing conduit and ITS equipment at the City of East Peoria's Public Works Building; installing ITS equipment at the City of East Peoria's Public Safety Building and IDOT District Four Communications Center; and all other collateral work required to complete the improvements.

## TRAFFIC CONTROL PLAN

Effective March 31, 2005

Traffic control shall be in accordance with the applicable sections of the "Standard Specifications for Road and Bridge Construction," the applicable guidelines contained in the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways," these Special Provisions, and any special details and Highway Standards contained herein and in the plans.

Special attention is called to <u>Section 701</u> and Articles 107.09 and 107.14 of the "Standard Specifications for Road and Bridge Construction" and the following Highway Standards relating to traffic control:

701001	701006	701101	701011
701301	701701	702001	

Traffic shall be maintained on the associated roadways at all times during the construction of the Intelligent Transportation System (ITS) elements and associated communications infrastructure. For the installation and maintenance of ITS elements and associated communications infrastructure near or along arterial roadway sections, IDOT Standards 701301, and 701701 shall be applied. All lane closures shall be made during off-peak traffic hours, defined as time periods from 8:30 a.m. to 3:30 p.m. and 5:30p.m. to 7:00 a.m. The Contractor shall notify the Engineer 48 hours before the time of a planned closure. The exact time and duration of all lane closures, however, shall be as determined by the Engineer.

All traffic control devices shall be furnished, erected, maintained, and removed by the Contractor in accordance with the Standard Specifications. Where possible, all post mounted signs shall be placed a minimum of 2 ft (0.6 m) beyond the curb or edge of shoulder. Proposed sign spacing may be modified as approved by the Engineer in order to meet existing field conditions or to prevent obstruction of the motorist's view of permanent signing.

# LOCATION OF UNDERGROUND STATE MAINTAINED FACILITIES

The Contractor shall be responsible for locating existing IDOT electrical facilities prior to performing any work at his/her own expense if required. The Contractor shall also be liable for any damage to IDOT facilities resulting from inaccurate locating.

The Contractor may obtain, on request, plans for the existing electrical facilities from the Department.

The Contractor shall also be responsible for locating and providing protection for IDOT facilities during all phases of construction. If at any time, the facilities are damaged, the Contractor shall immediately notify the Department and make all necessary arrangements for repair to the satisfaction of the Engineer. This work shall be included in the contract bid price.

# CONTRACT GUARANTEE

The Contractor shall provide a written guarantee for all electrical equipment, apparatus, materials, and workmanship provided under the contract for a period of six months after the date of final acceptance according to Article 801.13.

All instruction sheets and other documentation required to be furnished by the manufacturer for materials and supplies and for operations shall be delivered to the Engineer prior to the acceptance of the project, with the following warranties and guarantees:

- 1. The manufacturer's standard written warranty for each piece of electrical equipment or apparatus furnished under the contract.
- 2. The Contractor's written guarantee that, for a period of six months after the date of final inspection of the project, all necessary repairs to or replacement of said warranted equipment, or apparatus shall be made by the Contractor at no cost to the Department.

3. The Contractor's written guarantee for satisfactory operation of all electrical systems furnished and constructed under the contract for a period of six months after final inspection of the project.

The Contractor shall furnish a warranty certificate for each component that includes the equipment description and details, serial numbers, effective dates, and the details of the warranty regarding materials and labor. The warranty period shall begin on the date of installation and the warranty certificate shall reflect this date.

The Contractor will not be responsible for existing components that are not provided under this contract.

# SYSTEM IMPLEMENTATION, EQUIPMENT INTEGRATION AND SUPPORT

Effective June 2, 2005

**Description.** The Contractor shall ensure that all components meet the minimum specifications, are compatible with one another, and are integrated to enable the system to perform all functions to the satisfaction of the Engineer.

All furnished components shall be subject to a 90 day burn-in period. The system along with all of its components shall be fully and functionally operational before any acceptance testing will be initiated. The Contractor shall notify the Department a minimum of three days in advance to schedule the acceptance testing. During the acceptance tests, the Contractor shall demonstrate the system to the Engineer to show that it meets all of the required design and installation parameters. After, the system has been accepted by the Engineer, the system shall begin a ninety-day "burn-in" period immediately after the successful completion of the acceptance test. During the "burn-in" period, all components shall perform continuously, without any interruption of operation, for a period of ninety days. In the event that there are operational problems during the burn-in period, the burn-in period shall reset back to day one.

After the successful completion of the burn-in period, the system will have completed final acceptance.

This work will not be paid for separately, but shall be included in the contract bid price.

#### SEEDING, MINOR AREAS

Effective July 1, 1990 Revised July 1, 1994

Seeding and fertilizing shall be done in accordance with <u>Article 250</u> of the Standard Specifications except for the following revisions:

All areas disturbed by the work performed shall be seeded and fertilized. The materials may be purchased locally and placed as directed by the Engineer.

The estimated area is approximately 0.02 acres. The seed mixture shall be applied at 110 kg/ha (100 pounds/acre). The mixture shall be one that contains a high percentage of Kentucky Blue Grass. All seeds shall meet the purity and noxious weed requirements of <u>Article 1081.04</u> of the Standard Specifications, and be approved by the Engineer.

The fertilizer nutrients shall be applied at a rate of <u>300 kg (270 lbs.)</u> of actual nutrients per <u>hectare (acre)</u>. The fertilizer furnished shall be ready mixed material having a ratio of (1-1-1).

The Contractor shall provide the Engineer with the test results from the seed container and the chemical analysis of the fertilizer nutrients.

The seed and fertilizer will not be measured for payment but will be considered included in the cost of TRENCH AND BACKFILL FOR ELECTRICAL WORK; CONCRETE HANDHOLE; and CONCRETE FOUNDATION, TYPE D.

# CONDUIT, PUSHED OR TRENCHED

Effective October 1, 1991 Revised January 1, 1998

This work shall consist of furnishing and installing conduit under an existing roadway, driveway, or sidewalk, or trenched into the ground. The Contractor may substitute coilable polyethylene conduit of equal size.

In urban areas where the existing pavement is to be overlaid, if utility conflicts or other circumstances make a push impossible, then the Engineer may direct the Contractor to saw cut the pavement to install the conduit. This work shall consist of using a wheel saw to cut a 100 mm (4") wide cut through the pavement and installing the conduit just below the pavement structure. The Contractor shall then backfill the cut with an approved bituminous concrete mixture. This work shall be performed before any rotomilling or overlaying of the pavement. The work of saw cutting the pavement and backfilling the cut will be paid for according to Article 109.04 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price per foot for CONDUIT of the size and type specified, which price shall be payment in full for furnishing and installing the conduit and fittings complete.

# COMPLIANCE WITH LOCAL LAWS, ORDINANCES AND REGULATIONS (CITY OF PEORIA)

Effective June 2, 2005

This project is located within the City of Peoria. The Contractor is advised to coordinate with the City of Peoria to determine the requirements for the construction of parking lots, placement of trailers, material storage, staging areas, work areas outside the right-of-way.

The Contractor may contact the City of Peoria Planning and Growth Management Department, which is located in Room 402 of the Twin Towers Mall at (309) 494-8600, to discuss proposed improvements located outside the right-of-way. The City of Peoria holds One Stop meetings on Mondays at 1:30 p.m. in City Hall Room 400 or 404 where Contractors can present their proposed improvements which are located outside the right-of-way to the appropriate departments. Contractors should contact the Planning and Growth Department to be placed on the One Stop meeting agenda.

The storage or staging of any materials or equipment on the public right of way outside of the state right-of-way must be coordinated with the City of Peoria. The Contractor shall contact the Engineering Department at (309) 494-8826 or (309) 494-8833 prior to the start of any work involving staging/storage of equipment and/or materials in these areas.

# COMPLIANCE WITH LOCAL LAWS, ORDINANCES AND REGULATIONS (CITY OF EAST PEORIA)

Effective June 2, 2005

This project is located within the City of East Peoria. The Contractor is advised to coordinate with the City of East Peoria to determine the requirements for the placement of trailers, material storage, staging areas, work areas outside the right-of-way.

The Contractor may contact the City of East Peoria Public Works Department, which is located at 2232 East Washington Street, East Peoria, Illinois to discuss the use of the areas located outside the right-of-way.

The storage or staging of any materials or equipment on the public right of way outside of the project access control limits must be coordinated with the City of East Peoria. The Contractor shall contact Mr. Rick Jeremiah, Director of Public Works at (309) 698-4716, prior to the start of any work involving staging/storage of equipment and/or materials in these areas.

# CONCRETE HANDHOLE

This work shall consist of furnishing the materials and constructing a handhole in accordance with the applicable Articles of Section 814 and 1088 of the Standard Specifications with the following modifications:

The lift ring for the cover shall consist of a solid closed ring of stainless steel at least 3/8 inch in diameter. The lift ring shall be attached to the cover by a loop of stainless steel at least 3/8 inch in diameter. The lift ring and loop shall be recessed in the cover.

The lid shall be marked with the legend "TRAFFIC SIGNALS".

Pre-cast handholes are not allowed.

All surplus materials shall be disposed of by the Contractor outside the job limits.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price each for CONCRETE HANDHOLE, which price shall be payment in full for all labor, materials, and equipment required to provide the handhole described above as well as any necessary excavating, backfilling, disposal of unsuitable materials, and furnishing all materials within the limits of the handhole.

# SIDEWALK REMOVAL AND REPLACEMENT, SPECIAL

Effective June 2, 2005

**Description.** Portland cement concrete sidewalk shall be removed and replaced at locations as indicated on the Plans. In general, this work will take place where underground electric cable in existing conduit in-place under existing concrete sidewalk needs to be accessed. This work shall include removal of the existing sidewalk in accordance with Section 440 of the Standard Specifications, and installing new concrete sidewalk to replace the removed sidewalk in accordance with Section 424 of the Standard Specifications.

<u>Materials</u>. The newly constructed Portland cement concrete sidewalk shall meet the requirements of Section 424.02 of Standard Specifications. The thickness of the newly constructed concrete sidewalk shall match the thickness of the existing sidewalk.

**<u>Construction Requirements</u>**. The existing concrete sidewalk to be removed shall be as shown on the plans or as directed by the Engineer. The removal and disposal of the existing sidewalk shall be performed in accordance with Section 440 of the Standard Specifications.

The new Portland cement concrete sidewalk shall be constructed where the existing sidewalk has been removed, or as directed by the Engineer. Construction work shall be in accordance with Section 424 of the Standard Specifications.

<u>Method of Measurement</u>. Sidewalk Removal and Replacement shall be measured for payment in place, and the area computed in square feet of the newly installed concrete sidewalk minus the embedded junction box. The amount of sidewalk removal shall be included in the cost of this pay item.

**<u>Basis of Payment</u>**. Payment will be paid for at the contract unit price per square feet of SIDEWALK REMOVAL AND REPLACMENT, SPECIAL. The price shall include payment in full for all required expansion joints, special texturing, variable height edge treatment at sidewalk ramps, and for removing and disposing of the entire quantity of sidewalk as required.

# EAST PEORIA PUBLIC WORKS BUILDING NODE

Effective June 2, 2005

**Description.** Under this item, the Contractor shall be responsible for furnishing, installing, and integrating hardware, software, and equipment to complete the communications at the City of East Peoria Public Works Building. The Contractor shall provide a fiber optic splice tray and termination panel, an RJ-45 24 port patch panel, a fiber optic to Ethernet gigabit switch, video decoder, video control joystick, video monitor, building work as shown on the plan sheets (including flexible conduit, wall penetrations, etc.), and all other miscellaneous work required to complete the improvements.

# <u>Materials</u>.

<u>General</u>

Environmental Requirements:

All subsystem components shall operate as specified under the following ambient conditions:

٠	Temperature:	32°F to +122°F (0°C to 50°C)
٠	Relative Humidity:	25% to 90%

Labeling Requirements:

The Contractor shall label all cables and ports using permanent cable tags. These labels shall identify the function of the cables and the ports the cables are connected to.

The Contractor shall label all cable terminations, jacks, and connectors with function and system identification.

Cable:

- Network
   The Contractor shall furnish twisted-pair cables, UTP Category 5e, in accordance with the Plans. Cable terminations for network cables shall be Category 5e or greater.
- RF and Video
   The Contractor shall furnish and install coaxial cables as indicated on the Plans. For applications requiring low-loss RF cables, the Contractor shall install RG-214/U or equivalent, "riser" rated cable. For local video connections, the Contractor shall furnish and install RG-6/U or equivalent cables.

For video connections and distribution, the Contractor shall furnish and install RG-6 cable for point-to-point wiring and RG-59/U cable to connect to the monitors and switching equipment. All cables shall be "riser" rated.

 Fiber Optic
 The Contractor shall furnish and install fiber optic patch cords to cross connect fibers in different cable sheaths, as shown on the Plans. These cables shall be color-coded, with yellow being used for single mode and orange being used for multi-mode cables.

#### Video Decoder:

The video decoder shall be a Coretec Model VCX2400-D (or approved equal) for integration with the existing ITS system.

The video decoder shall decode digitized and compressed video from the IDOT District Four Communication Center Node located in the Becker Building.

In addition, the codec shall decode camera pan, tilt, zoom, focus and iris commands from the DS-1 service and shall return camera and controller status to the DS-1 service.

The video decoder shall comply with the following data formatting, decompressing, and electrical requirements:

Input Power:

110 VAC, 60 Hz

Compression:

MPEG II, variable frame rate and resolution, D1 720hx480v NTSC Frame Rate: 30 fps

Inputs:

Video: NTSC Composite Data/Status: RS-232/422/485 Data Rate: to 38.4 kbps

Outputs:	
	Video and Status: EIA-530 at DS-1 rate
Connectors:	
	Video: BNC
	Status/Control: DB-25, RJ-45
Network Para	meters:
	Data Rate: 1.0 to 8.0 Mbps
	Ethernet: RJ-45
	Interface: 10/100 Base T
	Protocols: UDP, IP, IGMP, Multicast
<b>Environmenta</b>	<u>l:</u>
	Temperature: -20°C to +70°C
	Humidity: 0-95% non-condensing

# Fiber Optic Termination Panel

The Contractor shall furnish a Fiber Termination Panel with 24 terminations. The Contractor shall install these panels as shown on the Plans. The 24-fiber termination panel will be used to terminate the single mode cables.

The termination panels shall be constructed of heavy gauge aluminum and shall comply with the following requirements:

- The Termination Panels shall be mounted in EIA-Standard 19-in equipment racks.
- The 24-fiber panel shall not exceed two SRUs.
- The Termination Panels shall use FC connectors. These connectors shall be accessible to a technician standing in front of the cabinet. Each FC connector on the panel shall not cause in excess of 0.3dB optical signal loss when tested at 1310nm.
- The panel shall route fiber optic patch cables between any two connectors without reaching the patch cables' minimum bending radius.
- Single mode fiber used in the pigtails shall meet the optical characteristics of the drop cable used, including mode field diameter.

# RJ-45 Patch Panel

The Contractor shall furnish a 24 port 19-in RJ-45 patch panel. The panel shall be constructed using normal-thru connections.

٠	Insertion loss	≤0.5 dB at 1.576 MHz
٠	Crosstalk	≤ -60 dB
٠	Return loss	≤ -26 dB at 772 kHz
٠	Contact resistance	≤ 0.01 ohms
٠	Characteristic impedance	100 ohms (nominal)
٠	Humidity	0 to 95%
٠	Life	Minimum 20,000 insertions/withdrawal cycles
•	Thermal limits	-40°F to 149°F (-40°C to 65ºC) (operating) -76°F to 185°F (-60°C to 85ºC) (storage)

# Video Control Joystick

The contractor shall furnish a joystick module that controls the video selection and controls the camera orientation (PTZ) from remote locations.

The joystick controller shall be a Vicon V1411X-DVC for integration with the existing ITS system components.

The interface between the joystick controller and the camera controller shall be EIA/TIA RS-422.

# Video Monitor

The Contractor shall furnish a video monitor that conforms to the following minimum specifications:

- Power
- Horizontal lines of resolution
- Input connector Viewing area

90-126 VAC Not less than 450

BNC Not less than 20 in, measured diagonally

Format

NTSC, composite 1 V peak-to-peak (nominal)

The video monitor shall be a Sony Model PVM-20N5u (or approved equal) for integration into the existing ITS system.

# DS1 Fiber Optic Gigabit Switch (Transmitter/Receiver)

A DS1 fiber optic switch shall be provided. The DS1 Fiber Optic Transmitter converts DS1 signals from a DS1 circuit to an optical signal to be transmitted on a single-mode (1300 nm nominal) optical fiber. The DS1 Fiber Optic Receiver shall receive optically modulated DS1 data from the DS1 Fiber Optic Transmitter and convert it to DS1 signals. The DS1 Fiber Optic Modem shall support standard DS1 line speeds (1.554 Mbps).

The DS1 Fiber Optic Modem shall be mountable in a 19" rack with all required cable management pre-installed.

If required power is not 120 VAC @ 60 Hz, the Contractor shall provide a plug-in power supply.

The Contractor shall furnish and install optical, data, and coaxial cables to interconnect the equipment as needed.

The Fiber Optic modem shall be a TC Communications Model TC3820 (or approved equivalent) series switch for integration with the existing ITS system components.

The fiber optic modem shall be a managed switch that meets or exceeds the following minimum specifications:

Data Rates	10/100Mbps (electrical) 1000 Mbps (optical)	
Optical		
Interface	2 Ethernet 1000Base-SX,-LX	
Transmitter	ELED, LASER	
Receiver	PIN Diode	
Wavelength	1300nm Multimode	
	1300nm, 1550nm Single Mode	
Fiber Optic Connectors	ST	
Loss Budget*	Multimode (62.5/125µm): 15dB	
(1300nm, 1550nm)	Single Mode (9/125µm): 20dB	
	Laser Single Mode: 25dB	
Electrical		
Ethernet Ports	6 RJ-45 Female	
Interface	Ethernet 10/100Base-T (auto-sensing)	
Standard	IEEE 802.3/3u/3x	
Bit Error Rate	1 in 10^9 or better	
Fault Recovery	< 250 msec.	
Visual Indicators		
System Status	Power, Status (8)	
Port Status (Each Port)	10/100, Act, Link, Tx, Rx, Speed	
Alarm		
Dry Contact	Normal OPEN	
Power		
Standard	12VDC @ 500mA 120 VAC (with external	
Ontingal		
Optional	24VDC, -48VDC, 125VDC or 115/230VAC	
Temperature	40% to 50%	
Operating	-10° to 50°C	
High Temp	-20° to 70°C	
Hardened	-40° to 80°C	
Storage	-40° to 90°C	
Humidity Physical (Packmount Unit)	95% non-condensing	
Physical (Rackmount Unit)	(2.52 cm) 1.75" Nominal	
Height Width	(3.53 cm) 1.75" Nominal (48.26 cm) 19.0" Nominal	
	(16.57 cm) 6.5" Nominal	
Depth Woight	(544 gm) 1.2 lbs Nominal	
Weight	(344 gill) 1.2 INS NUTITIA	

Required Features:

• Redundant ring technology. If a fiber cable or device failure occurs, the data path automatically switches over within 250 msec. to the secondary path to maintain Ring network integrity.

- SNMP Management, Six 10/100M copper ports and two Gigabit fiber ports. Unit can be daisy-chained and supports distances between switches up to 100 km.
- The Ring can be single mode or multimode fiber (1300/1550nm) or CAT5 UTP cables; IEEE 802.3, 802.3u, 802.3x and 802.z compliant.
- Web-based configuration user interface is provided to view and change network settings such as IP Address, Subnet, Gateway, Speed, Half/Full Duplex, Name, Password and other parameters. It also monitors the fiber ring status, alarm conditions, fault locations for local and remote units. The unit can also be configured through a serial console (Out-of-Band).
- Store-forward switching technology eliminates the congestion problem inherent to the contention-oriented Ethernet CSMA/CD protocol.

# **Construction Requirements.**

# <u>General</u>

The Contractor shall install ITS equipment as indicated on the plan sheets.

The Contractor shall prepare a shop drawing, which details all of the equipment to be supplied under this bid item. The submittal shall consist of the standard catalogue descriptions and user or installation manuals for each component. The information submitted must be sufficient to verify that the equipment is compliant with all of requirements included in the material specifications. In addition, schematics shall be included which detail the interconnection of all of the components to other system components.

The Contractor shall develop and submit for the Engineer's approval, a detailed test plan that verifies that each component is compliant with the specification and that all of the interconnection cables are operational and properly configured. This test shall use standard manufacturer operating and diagnostic software. At the test, each component will be inspected to verify that it has been delivered according to the approved shop drawings.

Five (5) copies of all operations and maintenance manuals for each central component shall be delivered for each assembly installed.

# <u>Warranty</u>

The Contractor shall warranty all materials and workmanship including labor for a period of two years after the completion and acceptance of the installation, unless other warranty requirements prevail. The warranty period shall begin when the Contractor completes all construction obligations related to this item and when the components for this item have been accepted, which shall be documented as the final completion date in the construction status report. This warranty shall include repair and/or replacement of all failed components via a factory authorized depot repair service. All items sent to the depot for repair shall be returned within two weeks of the date of receipt at the facility. The depot location shall be in the United States. Repairs shall not require more then two weeks from date of receipt and the provider of the warranty shall be responsible for all return shipping costs. The depot maintainer designated for each component shall be authorized by the original manufacturer to supply this service. A warranty certificate shall be supplied for each component from the designated depot repair site indicating the start and end dates of the warranty. The certificate shall be supplied at the conclusion of the system acceptance test and shall be for a minimum of two years after that The certificate shall name the Department as the recipient of the service. point. The Department shall have the right to transfer this service to other private parties who may be contracted to perform overall maintenance of the facility.

<u>Method of Measurement</u>. The East Peoria Public Works Building node installation will be measured on a lump-sum basis for all center elements and equipment, subsystems and components specified herein.

**Basis of Payment.** This item shall be paid at the contract lump-sum price for EAST PEORIA PUBLIC WORKS BUILDING NODE which price shall include all equipment, material, testing, documentation and labor detailed in the contract documents.

# EAST PEORIA PUBLIC SAFETY BUILDING NODE

# Effective June 2, 2005

**Description.** Under this item, the Contractor shall be responsible for furnishing, installing, and integrating hardware, software, and equipment to complete the communications systems at the City of East Peoria Public Safety Building. The Contractor shall provide a fiber optic splice tray an environmentally hardened fiber optic to Ethernet gigabit switch, CAT 5E cables from the existing outdoor communication cabinet to the ITS equipment closet, and all other miscellaneous work required to complete the improvements.

# <u>Materials</u>.

#### <u>General</u>

# Environmental Requirements:

All subsystem components shall operate as specified under the following ambient conditions:

٠	Temperature:	32°F to +122°F (0°C to 50°C)
٠	Relative Humidity:	25% to 90%

# Labeling Requirements:

The Contractor shall label all cables and ports using permanent cable tags. These labels shall identify the function of the cables and the ports the cables are connected to.

The Contractor shall label all cable terminations, jacks, and connectors with function and system identification.

# Cable:

- Network
   The Contractor shall furnish twisted-pair cables, UTP Category 5e, in accordance with the Plans. Cable terminations for network cables shall be Category 5e or greater.
- RF and Video
   The Contractor shall furnish and install coaxial cables as indicated on the Plans. For applications requiring low-loss RF cables, the Contractor shall install RG-214/U or equivalent, "riser" rated cable. For local video connections, the Contractor shall furnish and install RG-6/U or equivalent cables.

For video connections and distribution, the Contractor shall furnish and install RG-6 cable for point-to-point wiring and RG-59/U cable to connect to the monitors and switching equipment. All cables shall be "riser" rated.

 Fiber Optic
 The Contractor shall furnish and install fiber optic patch cords to cross connect fibers in different cable sheaths, as shown on the Plans. These cables shall be color-coded, with yellow being used for single mode and orange being used for multi-mode cables.

# Fiber Optic Splice Tray:

The Contractor shall furnish a Fiber Optic Splice Tray and install it in the existing outdoor communication's cabinet.

#### DS1 Fiber Optic Gigabit Switch (Transmitter/Receiver)

A DS1 fiber optic switch shall be provided. The DS1 Fiber Optic Transmitter converts DS1 signals from a DS1 circuit to an optical signal to be transmitted on a single-mode (1300 nm nominal) optical fiber. The DS1 Fiber Optic Receiver shall receive optically modulated DS1 data from the DS1 Fiber Optic Transmitter and convert it to DS1 signals. The DS1 Fiber Optic Modem shall support standard DS1 line speeds (1.554 Mbps).

The DS1 Fiber Optic Modem shall be mountable in a 19" rack with all required cable management pre-installed.

If required power is not 120 VAC @ 60 Hz, the Contractor shall provide a plug-in power supply for the DS1 Fiber Optic Modem.

The Contractor shall furnish and install optical, data, and coaxial cables to interconnect the equipment as needed.

The Fiber Optic modem shall be a TC Communications Model TC3820 (or approved equivalent) series switch for integration with the existing ITS system components.

The fiber optic modem shall be a managed switch that meets or exceeds the following minimum specifications:

Data Rates	10/100Mbps (electrical) 1000 Mbps (optical)	
Optical		
Interface Transmitter Receiver	2 Ethernet 1000Base-SX,-LX ELED, LASER PIN Diode 1200nm Multimode	
Wavelength Fiber Optic Connectors Loss Budget* (1300nm, 1550nm)	1300nm Multimode 1300nm, 1550nm Single Mode ST Multimode (62.5/125µm): 15dB Single Mode (9/125µm): 20dB Laser Single Mode: 25dB	
Electrical		
Ethernet Ports Interface Standard Bit Error Rate	6 RJ-45 Female Ethernet 10/100Base-T (auto-sensing) IEEE 802.3/3u/3x 1 in 10^9 or better	
Fault Recovery	< 250 msec.	
Visual Indicators		
System Status Port Status (Each Port)	Power, Status (8) 10/100, Act, Link, Tx, Rx, Speed	
Alarm		
Dry Contact Power	Normal OPEN	
Standard	12VDC @ 500mA120 VAC (with external power supply)	
Optional	24VDC, -48VDC, 125VDC or 115/230VAC	
Temperature		
Hardened Storage Humidity	-40°C to 80°C -40°C to 90°C 95% non-condensing	
Physical (Rackmount Unit)		
Height Width Depth Weight	(3.53 cm) 1.75" Nominal (48.26 cm) 19.0" Nominal (16.57 cm) 6.5" Nominal (544 gm) 1.2 lbs Nominal	

Required Features:

- Redundant ring technology. If a fiber cable or device failure occurs, the data path automatically switches over within 250 msec. to the secondary path to maintain Ring network integrity.
- SNMP Management, Six 10/100M copper ports and two Gigabit fiber ports. Unit can be daisy-chained and supports distances between switches up to 100 km.
- The Ring can be single mode or multimode fiber (1300/1550nm) or CAT5 UTP cables; IEEE 802.3, 802.3u, 802.3x and 802.z compliant.
- Web-based configuration user interface is provided to view and change network settings such as IP Address, Subnet, Gateway, Speed, Half/Full Duplex, Name, Password and other parameters. It also monitors the fiber ring status, alarm conditions, fault locations for local and remote units. The unit can also be configured through a serial console (Out-of-Band).
- Store-forward switching technology eliminates the congestion problem inherent to the contention-oriented Ethernet CSMA/CD protocol.

# **Construction Requirements.**

# <u>General</u>

The Contractor shall install ITS equipment as indicated on the plan sheets, including a total of two CAT 5E cables (approximately 250 ft. per each cable each) from the existing outdoor communications cabinet to the ITS equipment closet located inside of the EPPS Building using existing conduit.

The Contractor shall prepare a shop drawing, which details all of the equipment to be supplied under this bid item. The submittal shall consist of the standard catalogue descriptions and user or installation manuals for each component. The information submitted must be sufficient to verify that the equipment is compliant with all of requirements included in the material specifications. In addition, schematics shall be included which detail the interconnection of all of the components to other system components.

Five (5) copies of all operations and maintenance manuals for each central component shall be delivered for each assembly installed.

Warranty. The Contractor shall warranty all materials and workmanship including labor for a period of two years after the completion and acceptance of the installation, unless other warranty requirements prevail. The warranty period shall begin when the Contractor completes all construction obligations related to this item and when the components for this item have been accepted, which shall be documented as the final completion date in the construction status report. This warranty shall include repair and/or replacement of all failed components via a factory authorized depot repair service. All items sent to the depot for repair shall be returned within two weeks of the date of receipt at the facility. The depot location shall be in the United States. Repairs shall not require more then two weeks from date of receipt and the provider of the warranty shall be responsible for all return shipping costs. The depot maintainer designated for each component shall be authorized by the original manufacturer to supply this service. A warranty certificate shall be supplied for each component from the designated depot repair site indicating the start and end dates of the warranty. The certificate shall be supplied at the conclusion of the system acceptance test and shall be for a minimum of two years after that The certificate shall name the Department as the recipient of the service. The point. Department shall have the right to transfer this service to other private parties who may be contracted to perform overall maintenance of the facility.

<u>Method of Measurement</u>. The East Peoria Public Safety Building node installation will be measured on a lump-sum basis for all center elements and equipment, subsystems and components specified herein.

<u>Basis of Payment</u>. This item shall be paid at the contract lump-sum price for EAST PEORIA PUBLIC SAFETY BUILDING NODE which price shall include all equipment, material, testing, documentation and labor detailed in the contract documents.

# FIBER OPTIC CABLE IN CONDUIT NO. , 24F (12 62.5/125 UM MULTI-MODE AND 12 SINGLE MODE FIBERS)

This work shall be in accordance with Section 871 and 1076 of the Standard Specifications except as modified herein.

The fiber optic cable shall be a 24-fiber cable that includes 12 multi-mode fibers and 12 single mode fibers.

Revise Section 871.00 of the Standard Specifications to read:

This work shall consist of furnishing and installing Fiber Optic cable in conduit with all accessories and connectors according to Section 871 of the Standard Specifications. The cable shall be of the type, size, and the number of fiber specified.

The fiber optic cable shall provide the amount of fibers called for in the Fiber Optic Cable pay item in the Contract. Fibers from each cable shall be terminated with approved mechanical connectors at the termination points shown on the Plans. Fibers not being used shall be labeled "spare", and fibers not attached to a distribution enclosure shall be capped and sealed. A minimum of 13 ft. (4.0 m) of slack cable shall be provided for the cabinet locations, and the cabinet slack cable shall be stored as directed by the Engineer.

The fiber optic cable shall be pulled into each existing traffic signal cabinet and terminated in the proposed fiber optic enclosures. A total of 6 multi mode fibers shall be terminated at each cabinet. Single mode fibers shall not be terminated.

Article 815.03(d) calls for cable marking tape to be installed as part of "trench and backfill for electrical work". This requirement is waived and the following section shall apply:

<u>12 Ga., stranded THHN, insulated orange tracer cable is to be pulled into all conduits</u> <u>that contain fiber optic cable</u>. <u>This work shall be done at the same time the fiber optic</u> cable is pulled. There will be no additional compensation for this work.

THE CONTRACTOR SHALL NOTIFY ERIC HOWALD, I.D.O.T. TRAFFIC SIGNAL SYSTEMS ENGINEER, AT (309) 671-4481 BEFORE PROCEEDING WITH THE FIBER OPTIC INSTALLATION.

The amount of slack cable (only for traffic signal interconnect cable) listed in Article 873.03 shall be revised as follows:

Location	Length of S	<u>Slack Cable</u>
	Meters	Feet
Gulfbox	1.0	3.0
Junction Box	1.0	3.0
Handhole	2.0	6.5
Double Handhole	9.0	30.0
Controller Cabinet	3.0	10.0

The fiber optic cable shall be clearly marked in each handhole and cabinet with a brightly colored (orange or yellow) weather resistant marker securely attached to the cable.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per foot for FIBER OPTIC CABLE IN CONDUIT NO. 24F (12 62.5/125 um MM and 12 SM FIBERS) and shall be payment in full for all labor, equipment, and materials required to provide, test, and install the fiber optic cable described above, complete.

# FIBER OPTIC CABLE, SINGLE MODE

Effective June 21, 2002

**Description.** Under these items, the Contractor shall furnish and install loose-tube, singlemode, fiber optic cable of the number of fibers specified as shown in the plans and as directed by the Engineer.

Other ancillary components, required to complete the fiber optic cable plant, including but not limited to, moisture and water sealants, cable caps, fan-out kits, etc., shall be supplied under these items for fiber optic cable and will not be paid for separately.

<u>Materials</u>. The single-mode, fiber optic cable shall incorporate a loose, buffer-tube design. The cable shall conform to the requirements of RUS 7 CFR1755.900 (PE-90) for a single sheathed, non-armored cable, and shall be new, unused and of current design and manufacture. The number of fibers in each cable shall be as specified on the plans.

# Minimum Bending Radius.

The cable shall be capable of withstanding a minimum-bending radius of 20 times its outer diameter during installation and 10 times its outer diameter during operation without changing the characteristics of the optical fibers.

#### Environmental Requirements:

The cable shall meet all of specified requirements under the following conditions: Shipping/storage temperature: -58°F to +158°F (-50°C to +70°C) Installation temperature: -22°F to +158°F (-30°C to +70°C) Operating temperature: -40°F to +158°F (-40°C to +70°C) Relative humidity from 0% to 95%, non-condensing

# **Construction Requirements:**

# Experience Requirements.

Personnel involved in the installation, splicing and testing of the fiber optic cables shall meet the following requirements:

- A minimum of three (3) years experience in the installation of fiber optic cables, including fusion splicing, terminating and testing single mode fibers.
- Install two systems where fiber optic cables are outdoors in conduit and where the systems have been in continuous satisfactory operation for at least two years. The Contractor shall submit as proof, photographs or other supporting documents, and the names, addresses and telephone numbers of the operating personnel who can be contacted regarding the installed fiber optic systems.
- One fiber optic cable system (which may be one of the two in the preceding paragraph), which the Contractor can arrange for demonstration to the Department representatives and the Engineer.

Installers shall be familiar with the cable manufacturer's recommended procedures for installing the cable. This shall include knowledge of splicing procedures for the fusion splicer being used on this project and knowledge of all hardware such as breakout (furcation) kits and splice closures. The Contractor shall submit documented procedures to the Engineer for approval and to be used by Construction inspectors.

Personnel involved in testing shall have been trained by the manufacturer of the fiber optic cable test equipment to be used, in fiber optic cable testing procedures. Proof of this training shall be submitted to the Engineer for approval. In addition, the Contractor shall submit documentation of the testing procedures for approval by the Engineer.

# Installation in Conduit.

The Contractor shall provide a cable-pulling plan, identifying where the cable will enter the underground system and the direction of pull. This plan will address locations where the cable is pulled out of a handhole, coiled in a figure eight, and pulled back into the hand hole. The plan shall address the physical protection of the cable during installation and during periods of downtime. The cable-pulling plan shall be provided to the Engineer for approval a minimum of 10 working days prior to the start of installation. The Engineer's approval shall be for the operation on the freeway and does not include an endorsement of the proposed procedures. The Contractor is responsible for the technical adequacy of the proposed procedures.

During cable pulling operations, the Contractor shall ensure that the minimum bending of the cable is maintained during the unreeling and pulling operations. Entry guide chutes shall be used to guide the cable into the handhole conduit ports. Lubricating compound shall be used to minimize friction. Corner rollers (wheels), if used, shall not have radii less than the minimum installation-bending radius of the cable. A series array of smaller wheels can be used for accomplishing the bend if the cable manufacturers specifically approve the array.

The pulling tension shall be continuously measured and shall not be allowed to exceed the maximum tension specified by the manufacturer of the cable. Fuse links and breaks can be used to ensure that the cable tensile strength is not exceeded. The pulling system shall have an audible alarm that sounds whenever a pre-selected tension level is reached. Tension levels shall be recorded continuously and shall be given to the Engineer upon request.

The number of handholes and their locations shall be as shown on the Plans.

The cable shall be pulled into the conduit as a single component, absorbing the pulling force in all tension elements. The central strength member and Aramid yarn shall be attached directly to the pulling eye during cable pulling. "Basket grip" or "Chinese-finger type" attachments, which only attach to the cable's outer jacket, shall not be permitted. A breakaway swivel, rated at 95% of the cable manufacturer's approved maximum tensile loading, shall be used on all pulls. When simultaneously pulling fiber optic cable with other cables, separate grooved rollers shall be used for each cable.

#### Construction Documentation Requirements:

Installation Practices for Outdoor Fiber Optic Cable Systems

The Contractor shall examine the proposed cable plant design. At least one month prior to starting installation of the fiber optic cable plant, the Contractor shall prepare and submit to the Engineer for review and approval, ten (10) copies of the Contractor's "Installation Practices for Outdoor Fiber Optic Cable Systems" manual. This manual shall address the Contractor's proposed practices covering all aspects of the fiber optic cable plant. This submittal shall include all proposed procedures, list of installation equipment, and splicing and test equipment. Test and quality control procedures shall be detailed as well as procedures for corrective action.

# Operation and Maintenance Documentation

After the fiber optic cable plant has been installed, ten (10) complete sets of Operation and Maintenance Documentation shall be provided. The documentation shall, as a minimum, include the following:

• Complete and accurate as-built diagrams showing the entire fiber optic cable plant including locations of all splices.

- Final copies of all approved test procedures.
- Complete performance data of the cable plant showing the losses at each splice location and each terminal connector.
- Complete parts list including names of vendors.

# Testing Requirements

The Contractor shall submit detailed test procedures for approval by the Engineer. All fibers shall be tested bi-directionally at both 1310 nm and 1550 nm with both an Optical Time Domain Reflectometer (OTDR) and a power meter and optical source. For testing, intermediate breakout fibers may be concatenated and tested end-to-end. Any discrepancies between the measured results and these specifications will be resolved to the satisfaction of the Engineer.

The Contractor shall provide the date, time and location of any tests required by this specification to the Engineer at least 5 days before performing the test. Upon completion of the cable installation, splicing, and termination, the Contractor shall test all fibers for continuity, events above 0.1 dB, and total attenuation of the cable. The test procedure shall be as follows:

A Certified Technician utilizing an Optical Time Domain Reflectometer (OTDR) and Optical Source/Power Meter shall conduct the installation test. The Technician is directed to conduct the test using the standard operating procedures defined by the manufacturer of the test equipment. All fibers installed shall be tested in both directions.

The method of connectivity between the OTDR and the cable shall be a factory patch cord of a length equal to the "dead zone" of the OTDR. Optionally, the Technician can use a factory "fiber box" of 328 ft (100 m) minimum with no splices within the box. The tests shall be conducted at 1310 and 1550 nm for all fibers.

At the completion of the test, the Contractor shall provide two copies of documentation of the test results to the Project Engineer. The test documentation shall be bound and shall include the following:

Cable & Fiber Identification:

Cable ID Cable Location - beginning and end point Fiber ID, including tube and fiber color Operator Name Date & Time Setup Parameters Wavelength Pulse width (OTDR) Refractory index (OTDR) Range (OTDR) Scale (OTDR) Setup Option chosen to pass OTDR "dead zone"

Test Results:

A. OTDR Test Total Fiber Trace Splice Loss/Gain Events > 0.10 dB Measured Length (Cable Marking) Total Length (OTDR)

Test results and traces shall also be provided on a diskette.

B. Optical Source/Power Meter

Total Attenuation Attenuation (dB/km)

These results shall be provided in tabular form. The following shall be the criteria for the acceptance of the cable:

The test results shall show that the dB/km loss does not exceed +3% of the factory test or 1% of the cable's published production loss. However, no event shall exceed 0.10 dB. If any event is detected above 0.10 dB, the Contractor shall replace or repair the fiber including that event point.

The total dB loss of the cable, less events, shall not exceed the manufacturer's production specifications as follows: 0.5 dB/km at both 1310 and 1550 nm.

If the total loss exceeds these specifications, the Contractor shall replace or repair that cable run at the Contractor's expense, both labor and materials. Elevated attenuation due to exceeding the pulling tension during installation shall require the replacement of the cable run at the Contractor's expense, including labor and materials.

Label the destination of each trunk cable onto the cable in each handhole, vault or cable termination panel.

#### Splicing Requirements

Splices shall be made at locations shown on the Plans. Any other splices shall be permitted only with the approval of the Engineer.

All optical fibers shall be spliced as indicated on the Plans. If no information is provided, mainline splices will concatenate the fibers from the two cable segments, that is, the colors of the buffer tubes and fibers shall be the same across the splice. For splices that breakout the individual fibers, the fibers shall be spliced in accordance with the Plans.

# Slack Storage of Fiber Optic Cables.

A part of these items, slack fiber shall be supplied as necessary to allow splicing the fiber optic cables in a controlled environment, such as a splicing van or tent. After splicing has been completed, the slack fiber shall be stored underground in handholes or in the raised base adapters of ground mounted traffic controller cabinets.

Where identified on the plans, or as directed by the Engineer, additional lengths of fiber shall be stored, as maintenance coils. The aggregate lengths of the maintenance coils and the slack fiber will be used to repair and maintain the fiber optic cable.

Fiber optic cable shall be tagged inside handholes with yellow tape containing the text: "CAUTION - FIBER OPTIC CABLE."

<u>Method of Measurement</u>. The fiber optic cable of the number of fibers specified will be measured for payment as the number of linear feet (meters) of cable, including lengths stored as splicing slack and maintenance coils, actually furnished installed and tested.

**Basis of Payment.** FIBER OPTIC CABLE of the number of fibers specified shall be paid for at the contract unit price per foot , which cost shall include the cost of furnishing all labor, material, documentation, tools and equipment to install and test the fiber optic cable.

Fiber optic patch panels, splice closures, connectors, splice vaults and handholes will be supplied and paid for under other contract items.

# FIBER OPTIC FUSION SPLICE

Effective October 14, 2002

**Description.** The Contractor will splice optical fibers from different cable sheaths and protect them with a splice closure at the locations shown on the Plans. Fiber splicing consists of in-line fusion splices for all fibers described in the cable plan at the particular location.

Two splices are identified. A mainline splice includes all fibers in the cable sheath. In a lateral splice, the buffer tubes in the mainline cable are dressed out and those fibers identified on the plans are accessed in and spliced to lateral cables.

#### Materials.

#### Splice Closures

Splice Closures shall be designed for use under the most severe conditions such as moisture, vibration, impact, cable stress and flex temperature extremes as demonstrated by successfully passing the factory test procedures and minimum specifications listed below:

Physical Requirements:

The closures shall provide ingress for up to four cables in a butt configuration.

The closure shall prevent the intrusion of water without the use of encapsulates.

The closure shall be capable of accommodating splice organizer trays that accept mechanical, or fusion splices. The splice closure shall have provisions for storing fiber splices in an orderly manner, mountings for splice organizer assemblies, and space for excess or un-spliced fiber. Splice organizers shall be re-enterable. The splice case shall be UL rated.

Closure re-entry and subsequent reassembly shall not require specialized tools or equipment. Further, these operations shall not require the use of additional parts.

The splice closure shall have provisions for controlling the bend radius of individual fibers to a minimum of 1.5 in (38 mm).

# Factory Testing:

Compression Test: The closure shall not deform more than 10% in its largest cross-sectional dimension when subjected to a uniformly distributed load of 1335 N at a temperature of 0°F and 100°F (-18°C and 38°C). The test shall be performed after stabilizing at the required temperature for a minimum of two hours. It shall consist of placing an assembled closure between two flat parallel surfaces, with the longest closure dimension parallel to the surfaces. The weight shall be placed on the upper surface for a minimum of 15 minutes. The measurement shall then be taken with weight in place.

Impact Test: The assembled closure shall be capable of withstanding an impact of 28 N-M at temperatures of 0°F and 100°F (-18°C and 38°C). The test shall be performed after stabilizing the closure at the required temperature for a minimum of 2 hours. The test fixture shall consist of 20 lb (9 kg) cylindrical steel impacting head with a 2 in (5 cm) spherical radius at the point where it contacts the closure. It shall be dropped from a height of 12 in (30 cm). The closure shall not exhibit any cracks or fractures to the housing that would preclude it from passing the water immersion test. There shall be no permanent deformation to the original diameter or characteristic vertical dimension by more than 5%.

Cable Gripping and Sealing Testing: The cable gripping and sealing hardware shall not cause an increase in fiber attenuation in excess of 0.05 dB/fiber @ 1550 nm when attached to the cables and the closure assembly. The test shall consist of measurements from six fibers, one from each buffer tube or channel, or randomly selected in the case of a single fiber bundle. The measurements shall be taken from the test fibers before and after assembly to determine the effects of the cable gripping and sealing hardware on the optical transmission of the fibers.

Vibration Test: The splice organizers shall securely hold the fiber splices and store the excess fiber. The fiber splice organizers and splice retaining hardware shall be tested per EIA Standard FOTP-II, Test Condition I. The individual fibers shall not show an increase in attenuation in excess of 0.1 dB/fiber.

Water Immersion Test: The closure shall be capable of preventing a 10 ft (3 m) water head from intruding into the splice compartment for a period of 7 days. Testing of the splice closure is to be accomplished by the placing of the closure into a pressure vessel and filling the vessel with tap water to cover the closure. Apply continuous pressure to the vessel to maintain a hydrostatic head equivalent to 10 ft (3 m) on the closure and cable. This process shall be continued for 30 days. Remove the closure and open to check for the presence of water. Any intrusion of water in the compartment containing the splices constitutes a failure.

Certification: It is the responsibility of the Contractor to insure that either the manufacturer, or an independent testing laboratory has performed all of the above tests, and the appropriate documentation has been submitted to the Department. Manufacturer certification is required for the model(s) of closure supplied. It is not necessary to subject each supplied closure to the actual tests described herein.

# Construction Requirements.

The closure shall be installed according to the manufacturer's recommended guidelines. For mainline splices, the cables shall be fusion spliced. 45 days prior to start of the fiber optic cabling installation, the Contractor shall submit the proposed locations of the mainline splice points for review by the Department.

The Contractor shall prepare the cables and fibers in accordance with the closure and cable manufacturers' installation practices. A copy of these practices shall be provided to the Engineer 21 days prior to splicing operations.

Using a fusion splicer, the Contractor shall optimize the alignment of the fibers and fuse them together. The Contractor shall recoat the fused fibers and install mechanical protection over them.

Upon completing all splicing operations for a cable span, the Contractor shall measure the mean bi-directional loss at each splice using an Optical Time Domain Reflectometer. This loss shall not exceed 0.1 dB.

The Contractor shall measure the end-to-end attenuation of each fiber, from connector to connector, using an optical power meter and source. This loss shall be measured at from both directions and shall not exceed 0.5 dB per installed kilometer of single mode cable. Measurements shall be made at both 1300 and 1550 nm for single mode cable. For multimode cable, power meter measurements shall be made at 850 and 1300 nm. The end-to-end attenuation shall not exceed 3.8 dB/installed kilometers at 850nm or 1.8 dB per installed kilometer at 1300nm for multimode fibers.

As directed by the Engineer, the Contractor at no additional cost to the Department shall replace any cable splice not satisfying the required objectives.

The Contractor shall secure the Splice Closure to the side of the splice facility using cable support brackets. All cables shall be properly dressed and secured to rails or racks within the manhole. No cables or enclosures will be permitted to lie on the floor of the splice facility. Cables that are spliced inside a building will be secured to the equipment racks or walls as appropriate and indicated on the Plans.

<u>Method of Measurement</u>. Fiber optic splice of the type specified will be measured as a unit, completely installed and tested with all necessary splices completed within the closure, and the closure secured to the wall of the splice facility.

**Basis of Payment.** FIBER OPTIC FUSION SPLICE of the type specified, measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing and installing the splices and enclosures, including all labor, tools, equipment, and incidentals necessary to complete the work.

# CLOSED-CIRCUIT TELEVISION DOME CAMERA

Effective August 23, 2002

**Description.** This work shall consist of furnishing and installing an integrated Closed-Circuit Television (CCTV) Dome Camera Assembly, camera brackets, and all other items required for operation. This assembly shall contain all components identified in the Materials Section and shall be configured as indicated on the plan sheets.

# Materials.

The CCTV camera shall be a Vicon Model S2000-RW23-PR Dome Camera Assembly (or approved equal) for integration into the existing ITS system components.

#### <u>General</u>

The camera assembly shall be of the dome type and shall consist of the camera, lens, and pan/tilt motor, internal to the dome, along with the camera controller with a maximum weight of 15 lbs. External interfaces to the dome shall include a standard NTSC video BNC connector, RS-232 data connector for control, and 24 VAC power if required by the CCTV Dome Camera.

The camera assembly shall have a variable-speed manual pan and tilt, and shall include a "preset" timed rotation capability to allow the camera to be automatically oriented to predefined positions via the central software.

The Contractor shall provide a totally operational assembly with all cabling and terminations matched to support the selected components.

#### CCTV Camera and Lens

The CCTV camera and lens shall comply with the following specifications:

Image Sensor:	1/4 inch (6.35 mm) Color Interline Transfer CCD
Signal format:	Compatible with all applicable National Television Standards Committee
-	(NTSC) specifications, have 470 horizontal lines and 350 vertical lines at
	60 Hz and 30 full frames per second.
Color balance:	Through-the-lens type, with less than 10 IRE units unbalance from 285°
	to 580° K.
Video Signal:	NTSC and PAL Standard
Iris:	Automatic with Manual Override
Focus:	Remotely Controlled and Automatic or Manual
Pixels:	768(H) X 494(V)
Day/Night Switchover	Day (color) / Night (mono) automatic with manual override
Sensitivity:	
Color:	
Full Video:	6.5 Lux at F1.4 (AGC OFF) for 1.0 volt peak-to-peak ±3.0 dB (75-ohm, unbalanced)
80% Video:	Maximum of 0.55 Lux for 80 percent video measured at the faceplate.
	(AGC ON)
B & W:	0.015 Lux at F1.4 (AGC OFF) for 1.0 volt peak-to-peak ±6.0 dB (75-ohm,
	unbalanced)
Signal/noise Ratio:	Greater than 45 dB with AGC off, CCIR weighting

1 to 10X analog (Minimum) 1 to 8X digital (Minimum) -22°F to 158°F (-30°C to 70°C) 0 to 90 % Direct Gearing (No Drive Belts) 360 Degrees Continuous
Manual: Variable speed, < 1 degree/sec to >50 Degrees/sec (minimum for large movements)
120 Degrees/sec (minimum) at 0.5 degree accuracy or 220 degrees/sec (minimum) at 0.1 degree accuracy
0-180 Degrees
Manual: Variable speed, < 1 degree/sec to > 40 Degrees/sec
Preset: 120 Degrees/sec (minimum)
60 minimum with automatic rotation of preselected presets
<ul> <li>5 (minimum) programmable zones that can be set for video blanking</li> <li>15 (minimum) independent sectors in the horizontal plane</li> <li>2 (minimum) on-board alarm inputs</li> </ul>

External synchronization: Color lock and burst phase adjustment shall be available along with horizontal phase adjustment.

The camera shall have a built-in programmable character generator capable of superimposing camera identification on the video display. The identification shall be programmable for up to two lines of 24 characters per line. Text characters shall be white with a black border 28 horizontal TV lines in height. The camera identification shall be programmable from a laptop computer, using the RS-232 connector in the control cabinet.

The control/receiver driver shall accept control commands through a standard RS-232 interface. This port shall operate at user adjustable speeds between 2400 and 9600 bps. The receiver/driver shall be assigned a user selectable address and be capable of responding to a minimum of 64 unique addresses via software or dip switch.

Each unit shall only respond to commands directed to its unique address. The receiver/driver shall provide confirmation via the full duplex RS-232 communications port in response to all commands. In addition, the unit shall have at least two dry-contact alarm inputs and two auxiliary dry-contact outputs.

The Contractor shall fully document and provide to the Department the communication protocol implemented on the receiver/driver. This protocol shall be open and allow third-party development of control software. If the current protocol is not NTCIP compliant, the Contractor shall supply upgrades to make the software compliant in the future at no cost to the Department.

The video shall be synchronized to the 60 Hz power source. A phase adjustment shall be provided for roll-free vertical interval switching at the video switch. In addition, a video isolation amplifier shall be provided to address potential interference.

A variable speed electronic shutter shall be provided which shall be adjustable from 1/100 to 1/10,000 of a second, in a minimum of seven steps. An Automatic White Balance Control shall be provided to adjust the white balance dynamically in response to the varying light conditions encountered in outside environments.

# Environmental Enclosure/Housing

The environmental enclosure shall be designed to physically protect the integrated camera from the outdoor environment and moisture via a sealed and pressurized enclosure. If the option exists in the standard product line of the manufacturer, the assembly shall be supplied with an integral sun shield. The enclosure shall be fully water and weather resistant with a NEMA 4 rating or better.

The camera dome shall be constructed of distortion free acrylic or equivalent material that must not degrade from environmental conditions. The environmental housing shall include a camera-mounting bracket. In addition, the environmental housing shall include a heater, blower, and power surge protector. An integral fitting compatible with a standard 1-1/2 in (38.1 mm) NPT pipe, suitable for outdoor pendant mounting shall also be provided.

The enclosure shall be equipped with a heater controlled by a thermostat. The heater shall turn on when the temperature within the enclosure falls below  $40^{\circ}$  F ( $4.4^{\circ}$ C). The heater shall turn off when the temperature exceeds  $60^{\circ}$ F ( $15.6^{\circ}$ C). The heater will minimize internal fogging of the dome faceplate when the assembly is operated in cold weather.

In addition, a fan shall be provided as part of the enclosure. The fan will provide airflow to ensure effective heating and to minimize condensation.

The enclosure shall be equipped with a hermetically sealed, weatherproof connector, located near the top for external interface with power, video, and control feeds.

The complete camera assembly shall meet or exceed the following environmental specifications:

a) Temperature:	-40°F to +122°F (-40°C to +50°C)
b) Humidity:	100% MIL-E-5400T, para 3.2.24.4
c) Altitude:	0 to 1.9 mile (0 to 3.05 km), MIL-E-5400T, para 3.2.24.2
d) Vibration:	Swept 5-60 Hz, 2.1 mm amplitude: (15 Gs at 60 Hz),
	Random 60-1000 Hz .5 Gs RMS
e) Shock:	15 Gs, 3 axis. MIL-E-5400T, para 3.2.24.6
f) Sand & Dust:	MIL-E-5400T, para 3.2.24.7
g) Fungus and Salt:	MIL-E-5400T, para 3.2.24.8
h) Atmosphere:	MIL-E-5400T, para 3.2.24.9
i) Explosion:	MIL-E-5400T, para 3.2.24.10
j) EMI:	FCC Rules, part 15, subpart J, for Class A devices
<ul><li>k) Acoustic Noise:</li></ul>	+150 dB

#### CCTV Dome Camera Mounting Supports

Mounting supports shall be configured as shown on the camera support detail plans and as approved by the Engineer. Mount shall be of aluminum construction with enamel or polyester powder coat finish. Braces, supports, and hardware shall be stainless steel. Wind load rating shall be designed for sustained gusts up to 90 mph (145 km/hr), with a 30% gust factor. Load rating shall be designed to support up to 75 lb (334 N). For roof or structural post/light pole mounting, mount shall have the ability to swivel inward for servicing. The mounting flange shall use standard 1-1/2 inch (38.1 mm) NPT pipe thread.

# 120 VAC and 24 VAC Power Supply

If required by the CCTV Dome Camera, a 24 VAC output/120 VAC input NEMA rated power supply shall be provided in the equipment cabinet. Transformer rating shall not be less than 100 VA. The 24 VAC output is to be fused and is to be capable of handling up to 4 amps of total load. Input connectors shall be of the compression type and be designed to terminate #12-16 AWG conductors. Output connectors shall be screw-type barrier strips and be designed to terminate #16-20 AWG conductors. The power supply shall be mounted and wired into the equipment cabinet as described in these Special Provisions and as shown on the Plans.

# Connecting Cables

The Contractor shall provide composite cabling that includes power conductors, coaxial video feed, and RS-232 control wires to connect the integrated CCTV dome camera assembly to the equipment cabinet designated on the Plans from which the camera shall be powered. Compatible connectors shall be supplied to mate with the integrated CCTV dome camera assembly. In addition, the other end of the cable, to be terminated in the equipment cabinet, shall be terminated with an RS-232 connector compatible with the communications equipment supplied under other bid items, a BNC connector to terminate the NTSC video feed, and lugs to terminate the AC power feed.

All conductors connecting the CCTV Dome Camera to the pole mounted or ground mounted cabinets shall be provided with solid-state surge protection where they enter the equipment cabinet. Cabling and surge protection shall be included with the CCTV Dome Camera Assembly.

Surge protection of the video coaxial cable shall meet or exceed the following specifications:

Clamp voltage:	6 Volts
Peak surge current:	500 Amps for 10 x 700 us
Protection type:	Line to ground
Attenuation:	0.1 dB @ 10 MHz.
Response time:	< 1 nanosecond
Impedance:	75 ohms
Connector type:	BNC
Technology:	Hybrid; both avalanche semiconductors and gas tube

Specifications for surge protection of remaining camera cable conductors shall be as follows:

Clamp voltage:	15 Volts
Peak surge current:	500 Amps per line for 10 x 700 us
Protection type:	Line to ground
Response time:	< 1 nanosecond
Connector type:	terminal strip
Technology:	Hybrid; both avalanche semiconductors and gas tube

# Diagnostic Software

PC based diagnostic software shall be supplied which shall allow all camera functions accessible via the control/receiver driver to be viewed or exercised. A cable shall be provided with a standard 9-PIN PC RS232 port, to connect the receiver driver to the command port of the integrated CCTV dome camera assembly. A copy of this PC diagnostic shall be supplied with every assembly. The program shall operate under Windows NT, 2000, and Windows 95/98 and be capable of configuring and controlling a CCTV dome camera assembly and its functions (position, zoom, focus, iris, power, color balance, etc.) from within it. This includes storing and recalling preset positions for fast system configuration.

# Camera Control

The camera and assembly shall accept and respond correctly to commands issued by the software program and provide all responses anticipated by the software.

# Construction Requirements.

# <u>General</u>

The Contractor shall prepare a shop drawing detailing the complete CCTV Dome Camera Assembly and installation of all components to be supplied for approval of the Engineer. Particular emphasis shall be given to the cabling and the interconnection of all of the components.

The Contractor shall demonstrate a prototype assembly using the proposed components. This demonstration shall take place at a Contractor selected site or at the factory. These conformance tests shall be completed prior to the delivery of any completed assemblies to the project site. Any deviations from these specifications that are identified during this testing shall be corrected prior to shipment of the assembly to the project site.

The Contractor shall install the CCTV dome camera assembly at the locations indicated in the Plans. The CCTV Dome Camera Assembly shall be mounted on a pole, wall, or other structure.

Camera assembly cables shall be terminated in the Equipment Cabinet, as indicated in the plans. This cabinet includes communication and power interfaces. Power supplied to the CCTV dome camera shall be 24, 89, or 120 VAC and is subject to manufacturers supplied equipment and shall be approved by the Engineer.

The Contractor shall install the composite cable with sufficient length to terminate all required camera functions in the equipment cabinet and at the dome. The Contractor shall terminate the cable at both ends.

Appropriate connectors shall be furnished and installed to interface the in-cabinet components to the integrated dome camera assembly. The Contractor shall mount the in-cabinet components in the equipment cabinet and connect them to AC power, communications, and video feeds.

# <u>Testing</u>

The Contractor shall test each installed CCTV Dome Camera Assembly. The test shall be conducted from the field cabinet using the standard communication protocol and a laptop computer. The Contractor shall verify that the camera can be fully exercised and moved through the entire limits of Pan, Tilt, Zoom, Focus and Iris adjustments, using both the manual control and presets. In addition, a video monitor and an oscilloscope shall verify that the video signal meets or exceeds the specified requirements. The Contractor shall maintain a log of all testing and the results. A representative of the Contractor and a representative of the Engineer shall sign the log as witnessing the results. Records of all tests shall be submitted to the Engineer prior to accepting the installation.

# **Documentation**

One copy of all operations and maintenance manuals for each CCTV component shall be delivered for each assembly installed. In addition, full documentation for all software and associated protocols shall be supplied to the Department on a 3.5-inch floppy disk(s) and a CD-ROM. The Department reserves the right to provide this documentation to other parties who may be contracted with in order to provide overall integration or maintenance of this item.

# <u>Warranty</u>

The Contractor shall warranty all materials and workmanship including labor for a period of two vears after the completion and acceptance of the installation, unless other warranty requirements prevail. The warranty period shall begin when the Contractor completes all construction obligations related to this item and when the components for this item have been accepted, which shall be documented as the final completion date in the construction status report. This warranty shall include repair and/or replacement of all failed components via a factory authorized depot repair service. All items sent to the depot for repair shall be returned within two weeks of the date of receipt at the facility. The depot location shall be in the United States. Repairs shall not require more then two weeks from date of receipt and the provider of the warranty shall be responsible for all return shipping costs. The depot maintainer designated for each component shall be authorized by the original manufacturer to supply this service. A warranty certificate shall be supplied for each component from the designated depot repair site indicating the start and end dates of the warranty. The certificate shall be supplied at the conclusion of the system acceptance test and shall be for a minimum of two years after that The certificate shall name the Department as the recipient of the service. point. The Department shall have the right to transfer this service to other private parties who may be contracted to perform overall maintenance of the facility.

<u>Method of Measurement</u>. The closed circuit television dome camera bid item will be measured for payment by the actual number of CCTV dome camera assemblies furnished, installed, tested, and accepted.

**<u>Basis of Payment</u>**. Payment will be made at the contract unit price for each CLOSED CIRCUIT TELEVISION DOME CAMERA including all equipment, material, testing, documentation, and labor detailed in the contract documents for this bid item.

# POLE MOUNTED EQUIPMENT CABINET TYPE C

Effective June 2, 2005

**Description.** This work consists of furnishing and installing a pole mounted equipment cabinet and peripheral equipment at locations indicated in the Plans. These cabinets will be utilized to house critical electrical, optical, and communications equipment as defined in other contract pay items.

# Materials.

Materials shall be in accordance to the following specifications.

#### General.

Equipment cabinets shall be mounted and anchored on the poles and structures at locations indicated in the Plans. These cabinets will have a housing that shall include, but not be limited to, miscellaneous items such as video transmitters, receiver/drivers, modems, etc. as defined by other pay items. In addition, all mounting hardware and brackets required to install the equipment cabinet on the pole shall be stainless steel and provided. The mounting heights and pole diameters shall be as specified in the Plans.

The Type C cabinet shall be a stainless steel NEMA 4X Single Door Enclosure, with nominal outside dimensions of approximately 16 in high X 12 in wide X 6 in deep. It shall also be furnished with two adjustable height shelves. The cabinet shall also have a Corbin #2 dead bolt lock or equal. The key shall be removable in the lock position only. Four keys shall be supplied for each lock, and all equipment cabinet locks shall be keyed the same.

All cables shall be labeled utilizing marking tags.

#### Surge Protector

The Contractor shall install surge protection on all external cables. This will include primary power as well as signal and control cables.

The surge protector shall be an ECO SHA-1210IRS or approved equal.

A surge protector shall protect each leg of the primary power feed. This surge protector shall be installed as a precautionary measure against possible damage resulting from voltage surges on all incoming power lines. The 120V AC single-phase surge protector shall incorporate a series choke and shall have a maximum clamp voltage of 340 V at 20 kA with a 5 ns response.

In addition, the surge protector shall have the capability of removing high-energy surges and shall block high-speed transients. The surge protector shall comply with the following specifications:

Peak Current: 20,000 amps (8 X 20 us wave shape) Occurrences: 20 times at peak current Minimum Series Inductance: 200 microHenrys Continuous Series Current: 50A Temperature Range: -40°F to 185°F (-40°C to +85°C)

# Radio interference filter

A radio interference suppressor shall be installed in series with the line between the surge protector and the circuit breakers. The suppressor shall provide a minimum attenuation of 50 dB over a frequency range of 200 KHz to 75 MHZ. The suppressor shall be hermetically sealed in a substantial metal case filled with a suitable insulation compound and shall be capable of passing 50 Amperes of continuous current.

# Fluorescent light

The cabinet shall be equipped with a fluorescent lamp assembly. The fixture shall be equipped with cold-weather ballast.

# CCTV Local Control Panel

The cabinet shall be equipped with a CCTV local control panel that will enable the CCTV camera to be tested at the cabinet. The local control panel shall include user-selectable RS-422 or RS-232 camera control and a video output.

# Construction Requirements.

The Contractor shall prepare and submit shop drawings that detail all of the components to be supplied, along with associated mounting hardware for the pole mounted equipment cabinet type C. The shop drawings must be approved by the Engineer prior to any testing or installation of the completed cabinet in the field.

The Engineer reserves the right to inspect and/or factory test any completed cabinet assemblies prior to shipment of the material to the project site. Any deviances from these specifications that are identified during such testing shall be corrected prior to delivery of the assembly to the project site.

The AC power service to be run to the equipment cabinet shall be terminated. The cost of providing the AC power service connection is included in other bid items as designated in the Plans. In addition, the cabinet shall be connected to an adequate ground following the Standard Specifications. Power service shall be activated and the Contractor shall perform tests to verify that proper line service is being obtained.

The Contractor shall terminate any inbound and outbound fiber optic, telephone, or wireless antenna leads in the equipment cabinet as shown in the Plans. The Contractor shall terminate any twisted pair communication cable on the termination panel in the equipment cabinet as shown in the Plans. Lugs shall be installed at the end of each conductor suitable for connection to the barrier terminal blocks.

<u>Method of Measurement</u>. This item shall be measured for payment by each pole mounted equipment cabinet type C in-place.

**<u>Basis of Payment</u>**. This work shall be paid for at the contract unit price each for POLE MOUNTED EQUIPMENT CABINET TYPE C, and shall include all equipment, material and labor detailed in the specifications and as shown on the Plans.

# FIBER OPTIC LINK (CLOSED CIRCUIT TELEVISION)

Effective October 14, 2002

**Description.** A fiber optic link (CCTV) shall consist of a Fiber Optic Video Transmitter (FOVT) and a Fiber Optic Video Receiver (FOVR), video encoder, and all other components required for a fully functional video/data link installed at locations as shown on the Plans. These devices, when connected with optical fibers, constitute a fiber optic link (CCTV).

Video decoders will be paid for separately as ITS equipment installed in each node.

Work under this item consists of furnishing, installing, and testing a Fiber Optic Video Transmitter (FOVT) and a matching Fiber Optic Video Receiver (FOVR) as shown on the Plans, and a video encoder.

<u>Materials</u>. The Fiber Optic Video Transmitter (FOVT) shall be an IFS Model VDT14130WDM (or approved equivalent) for integration with the existing ITS system equipment. The Fiber Optic Video Receiver (FOVR) shall be an IFS Model VDT14130WDM (or approved equivalent) for integration with the existing ITS system equipment.

The Fiber Optic Video Transmitter converts analog NTSC video from a CCTV camera to an optical signal to be transmitted on a single-mode optical fiber. It also transmits and receives RS-232 data on the same fiber, converting between the optical and electrical signals.

A Fiber Optic Video Receiver shall receive optically modulated video and data from the Fiber Optic Video Transmitter and converts it to NTSC and RS-232 electrical signals for video monitoring and control. It shall also convert RS-232 data from electrical to optical signals and transmit them to the Video Fiber Optic Transmitter.

A single fiber will be used for both video and data transmission.

Environmental:

Fiber Optic Link (CCTV) shall comply with the following environmental specifications:

Temperature:	32°F to 104°F (0°C to 40°C)
Humidity:	0 to 95 %, non-condensing

The Contractor shall supply Fiber Optic Video Transmitters and Fiber Optic Video Receivers, that when configured as a Fiber Optic Link (CCTV), shall meet or exceed the following minimum specifications:

Video Bandwidth:	8 MHz
Video Impedance	75 ohms
Video I/O voltage	1 v p-p (nominal)
Video S/N ratio:	>50 dB typical
Optical Wavelength	1300 nm (nominal)

The link shall maintain the specified video parameters with an optical link loss of 0-10 dB

Interface Connectors: Optical: Video: Data:	ST BNC 9 pin EIA RS-232, 25-pin EIA RS-232 connector, or terminal block
Data Rates: Power:	1200-9600 bps, asynchronous 120 VAC ±10% <15 Watts

The Contractor shall furnish and install optical, data, and coaxial cables to interconnect the equipment as needed.

The Contractor shall supply over-voltage protection on all coaxial and control cables exiting the cabinet and connected to the fiber optic modem.

#### Video Encoder:

The video encoder shall be a Coretec Model VCX2400-D (or approved equal) for integration with the existing ITS system.

The video encoder shall decode digitized and compressed video from the IDOT District Four Communication Center Node located in the Becker Building.

In addition, the codec shall decode camera pan, tilt, zoom, focus and iris commands from the DS-1 service and shall return camera and controller status to the DS-1 service.

The video encoder shall comply with the following data formatting, decompressing, and electrical requirements:

Input Power:

110	VAC,	60	Hz
110	v/(O,	00	112

Compression:

Inpute	MPEG II, variable frame rate and resolution, D1 720hx480v NTSC Frame Rate: 30 fps	
Inputs:	Video: NTSC Composite	
	Data/Status: RS-232/422/485 Data Rate: to 38.4 kbps	
<u>Outputs</u> :	Video and Otativas EIA 520 at DO 4 rate	
Connectors:	Video and Status: EIA-530 at DS-1 rate	
	Video: BNC	
	Status/Control: DB-25, RJ-45	
Network Parameters:		
	Data Rate: 1.0 to 8.0 Mbps	
	Ethernet: RJ-45	
	Interface: 10/100 Base T	
	Protocols: UDP, IP, IGMP, Multicast	

Environmental:

Temperature: -20°C to +70°C Humidity: 0-95% non-condensing

# **Construction Requirements:**

The Contractor shall install the Fiber Optic Link (CCTV) as shown on the Plans.

The Contractor shall install over-voltage protection where the coaxial cable from the camera enters the equipment cabinet and prior to connecting to the Fiber Optic Video Transmitter. The Transmitter and protector module shall be grounded to the cabinet in accordance with the National Electrical Code.

The Contractor shall connect the Fiber Optic Video Transmitter and Fiber Optic Video Receiver to the assigned fiber in the fiber optic backbone cable. Power shall be applied to both units. An end-to-end test shall demonstrate the correct operation of the Fiber Optic Link (CCTV). This test can use test equipment to simulate the video and RS-232 signals, or it can use the actual CCTV dome camera.

<u>Method of Measurement</u>. Fiber optic link (CCTV) will be measured per unit, completely installed and operational.

**Basis of Payment.** FIBER OPTIC LINK (CLOSED CIRCUIT TELEVISION), measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing, installing, and testing the units; and for all labor, tools, equipment, and incidentals necessary to complete the work.

# 20 AMP, 1 POLE CIRCUIT BREAKER

**Description.** This work shall consist of furnishing a single pole, rated 20 A circuit breaker that is mounted on an aluminum plate and is installed in a small panelboard in an existing cabinet at the location shown on the Plans or as designated by the Engineer. This work shall be in accordance with the requirements set forth under Section 805 and 1086 and Article 1068.01(e)(3) in particular of the Standard Specifications.

**Basis of Payment**. This work will be paid for at the contract unit price of each for 20 AMP, 1 POLE CIRCUIT BREAKER, which shall be payment in full for all labor, equipment, and materials required to provide the circuit breaker installation described above, complete. Any charges by Central Illinois Light Company to provide electrical service to the service installation will be paid for separately according to Article 109.05.

# CONTROLLER CABINET, TYPE IV, SPECIAL

This work shall be in accordance with Sections 857 and 1085 of the Standard Specifications except as modified herein.

The cabinet shall be a Type IV cabinet with nominal dimensions of 44" L x 26" W x 55" H. The cabinet shall be of aluminum construction with a natural finish.

The cabinet shall be equipped with the following items:

- Fiber optic splice tray and patch panel
- Standard traffic signal control cabinet power panel assembly equipped with EDCO SHA-1250 and Transtector Model ACP100BWN3 surge arrestors, RFI line filter, one 20A circuit breaker, and one 15A circuit breaker, etc.
- Equipment receptacle (4 Plugs)
- 15A GFI service receptacle
- Door-switchable florescent light assembly with cold-weather ballast

The cabinet shall also be equipped with all other items required to splice the fiber optic cables.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price each for CONTROLLER CABINET, TYPE IV, SPECIAL and shall be payment in full for all labor, materials, and equipment required to transport, and install the equipment described above, complete.

# FIBER OPTIC INTERCONNECT CENTER, 24 FIBER

**Description.** This work shall consist of furnishing and installing a 24 fiber wall mountable interconnect center. The interconnect center shall be installed in the existing traffic signal cabinets. The Contractor shall be responsible for rearranging any existing components to facilitate installation.

The wall mountable interconnect center shall be equipped with two six-fiber bulkheads, complete with all required fiber termination accessories.

**<u>Basis of Payment</u>**. This work will be paid for at the contract unit price of each for FIBER OPTIC INTERCONNECT CENTER, 24 FIBER, which shall be payment in full for all labor, equipment, and materials required to provide the equipment described above, complete.

# REPLACE EXISTING COMMUNICATIONS VAULT LID

**Description.** This work shall consist of furnishing and installing a reoplacement lid for an existing communications vault as shown on the plans.

The existing communications vault is constructed on polymer concrete and has dimensions of nominal 30" x 45". The Contractor shall verify the exact size needed prior to installation.

**Basis of Payment.** This work will be paid for at the contract unit price of each for REPLACE EXISTING COMMUNICATIONS VAULT LID, which shall be payment in full for all labor, equipment, and materials required to provide and install the equipment described above, complete.

# ILLINOIS DEPARTMENT OF TRANSPORTATION COMMUNICATIONS NODE

**Description.** Under this item, the Contractor shall be responsible for furnishing, installing, and integrating hardware, software, and equipment to complete the communications at the Illinois Department of Transportation Communications Center Node located at 401 Main Street, Peoria, Illinois on the seventh floor of the Becker Building.

The Contractor shall provide one video encoder (to encode video and provide camera communications for the East Peoria Public Works Building), one video decoder to decode video and camera control from the CCTV camera at Illinois Route 116 (Main Street) and Illinois Route 8 (Camp Street) in East Peoria, one video decoder to decode video and camera control from the CCTV camera at Illinois Route 8 (Washington Street) and Firehouse #3 in East Peoria and all other miscellaneous work required to complete the improvements.

# <u>Materials</u>

# <u>General</u>

Environmental Requirements:

All subsystem components shall operate as specified under the following ambient conditions:

• Temperature:

Relative Humidity:

32°F to +122°F (0°C to 50°C) 25% to 90%

Labeling Requirements:

The Contractor shall label all cables and ports using permanent cable tags. These labels shall identify the function of the cables and the ports the cables are connected to.

The Contractor shall label all cable terminations, jacks, and connectors with function and system identification.

#### Cable:

- Network
   The Contractor shall furnish twisted-pair cables, UTP Category 5e, in accordance with the Plans. Cable terminations for network cables shall be Category 5e or greater.
- RF and Video
   The Contractor shall furnish and install coaxial cables as indicated on the Plans. For applications requiring low-loss RF cables, the Contractor shall install RG-214/U or equivalent, "riser" rated cable. For local video connections, the Contractor shall furnish and install RG-6/U or equivalent cables.

For video connections and distribution, the Contractor shall furnish and install RG-6 cable for point-to-point wiring and RG-59/U cable to connect to the monitors and switching equipment. All cables shall be "riser" rated. • Fiber Optic The Contractor shall furnish and install fiber optic patch cords to cross connect fibers in different cable sheaths, as shown on the Plans. These cables shall be color-coded, with yellow being used for single mode and orange being used for multi-mode cables.

#### Video Encoder/Decoder

The video encoder/decoder shall be a Coretec Model VCX2400-R (rack mounted chassis card) for integration with the existing rack-mounted components and ITS system.

The video encoder shall encode digitized and compressed video from the IDOT ITS Equipment Room located in the Becker Building and send it over the network to the East Peoria Public Works Building.

The two video decoders shall decode digitized and compressed video from the proposed CCTV cameras located at the intersections of Illinois Route 116 (Main Street) and Illinois Route 8 (Camp Street) and Illinois Route 8 (Washington Street) and Firehouse #3 in East Peoria.

In addition, the unit(s) shall decode camera pan, tilt, zoom, focus and iris commands from the DS-1 service and shall return camera and controller status to the DS-1 service.

The video encoder/decoder shall comply with the following data formatting, decompressing, and electrical requirements:

Input Power:

110 VAC, 60 Hz

#### Compression:

MPEG II, variable frame rate and resolution, D1 720hx480v NTSC Frame Rate: 30 fps Inputs: Video: NTSC Composite Data/Status: RS-232/422/485 Data Rate: to 38.4 kbps Outputs: Video and Status: EIA-530 at DS-1 rate Connectors: Video: BNC Status/Control: DB-25, RJ-45 Network Parameters: Data Rate: 1.0 to 8.0 Mbps Ethernet: RJ-45 Interface: 10/100 Base T Protocols: UDP, IP, IGMP, Multicast Environmental: Temperature: -20°C to +70°C Humidity: 0-95% non-condensing

# **Construction Requirements**

# <u>General</u>

The Contractor shall install proposed equipment in the ITS Equipment Room located at the IDOT District Four Headquarters. The proposed equipment shall be rack mounted and installed in the existing 19" rack units.

The Contractor shall prepare a shop drawing, which details all of the equipment to be supplied under this bid item. The submittal shall consist of the standard catalogue descriptions and user or installation manuals for each component. The information submitted must be sufficient to verify that the equipment is compliant with all of requirements included in the material specifications. In addition, schematics shall be included which detail the interconnection of all of the components to other system components.

The Contractor shall develop and submit for the Engineer's approval, a detailed test plan that verifies that each component is compliant with the specification and that all of the interconnection cables are operational and properly configured. At the test, each component will be inspected to verify that it has been delivered according to the approved shop drawings.

Five (5) copies of all operations and maintenance manuals for each central component shall be delivered for each assembly installed.

## <u>Warranty</u>

The Contractor shall warranty all materials and workmanship including labor for a period of two years after the completion and acceptance of the installation, unless other warranty requirements prevail. The warranty period shall begin when the Contractor completes all construction obligations related to this item and when the components for this item have been accepted, which shall be documented as the final completion date in the construction status report. This warranty shall include repair and/or replacement of all failed components via a factory authorized depot repair service. All items sent to the depot for repair shall be returned within two weeks of the date of receipt at the facility. The depot location shall be in the United States. Repairs shall not require more then two weeks from date of receipt and the provider of the warranty shall be responsible for all return shipping costs. The depot maintainer designated for each component shall be authorized by the original manufacturer to supply this service. A warranty certificate shall be supplied for each component from the designated depot repair site indicating the start and end dates of the warranty. The certificate shall be supplied at the conclusion of the system acceptance test and shall be for a minimum of two years after that The certificate shall name the Department as the recipient of the service. point. The Department shall have the right to transfer this service to other private parties who may be contracted to perform overall maintenance of the facility.

## Method of Measurement

The Illinois Department of Transportation Communications Node installation will be measured on a lump-sum basis for all center elements and equipment, subsystems and components specified herein.

**Basis of Payment:** This item shall be paid at the contract lump-sum price for ILLINOIS DEPARTMENT OF TRANSPORTATION COMMUNICATIONS NODE which price shall include all equipment, material, testing, documentation and labor detailed in the contract documents.

# REMOVE AND REPLACE BITUMINOUS SURFACE SPECIAL

This work shall consist of removing and replacing the existing bituminous material located between the sidewalk and the East Peoria Public Works Building. This work shall be in accordance with the applicable Articles of Section 440 and 442 of the Standard Specifications.

Bituminous surface removal and disposal shall be included in the bid price for this item and will not be paid for separately.

The Contractor shall restore the disturbed area by replacing the bituminous surface. The bituminous replacement shall match the existing type and thickness.

The Contractor, at his expense, shall repair or replace any sections that are damaged by removal and/or conduit installation.

The Contractor shall backfill the area to be patched to the satisfaction of the Engineer. This cost of backfilling shall be included in the bid price for this item and will not be paid for separately.

**Basis of Payment:** This work will be paid for at the contract unit price per square foot for REMOVE AND REPLACE BITUMINOUS SURFACE, SPECIAL which shall be payment in full for all labor, equipment, and materials required to remove the existing bituminous surface, backfill the disturbed area, and replace the bituminous surface described above, complete.

#### PAVEMENT PATCHING, TYPE 1

This work shall consist of furnishing the materials and constructing a pavement patch in accordance with the applicable Articles of Section 442 of the Standard Specifications with the following modifications:

Pavement removal will be paid for separately as PAVEMENT REMOVAL.

The Contractor, at his option, may construct a Class C (Cement Concrete) or Class D (Bituminous Concrete) patch.

The minimum thickness of the patch shall be 6".

The Contractor shall backfill the area to be patched with fine aggregate with density to the satisfaction of the Engineer. This cost of backfilling shall be included in the price for PAVEMENT PATCHING, TYPE 1 and will not be paid for separately.

**Basis of Payment:** This work will be paid for at the contract unit price per square yard for PAVEMENT PATCHING, TYPE 1, which shall be payment in full for all labor, equipment, and materials required to backfill the area to be patched and install the pavement described above, complete.

# CONCRETE ADMIXTURES (BDE)

Effective: January 1, 2003 Revised: July 1, 2004

Revise Article 1020.05(b) of the Standard Specifications to read:

"(b) Admixtures. Except as specified, the use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted only when approved in writing by the Engineer. The Department will maintain an Approved List of Concrete Admixtures. When the Department permits the use of a calcium chloride accelerator, it shall be according to Article 442.02, Note 5.

When the atmosphere or concrete temperature is 18 °C (65 °F) or higher, a retarding admixture meeting the requirements of Article 1021.03 shall be used in the Class BD Concrete and portland cement concrete bridge deck overlays. The amount of retarding admixture to be used will be determined by the Engineer. The proportions of the ingredients of the concrete shall be the same as without the retarding admixture except that the amount of mixing water shall be reduced, as may be necessary, in order to maintain the consistency of the concrete as required. In addition, a high range water-reducing admixture shall be used in Class BD Concrete. The amount of high range water-reducing admixture will be determined by the Engineer. At the option of the Contractor, a water-reducing admixture may be used. Type I cement shall be used.

For Class PC and PS Concrete, a retarding admixture may be added to the concrete mixture when the concrete temperature is 18 °C (65 °F) or higher. Other admixtures may be used when approved by the Engineer, or if specified by the contract. If an accelerating admixture is permitted by the Engineer, it shall be the non-chloride type.

At the Contractor's option, admixtures in addition to an air-entraining admixture may be used for Class PP-1 concrete. The accelerator shall be the non-chloride type. If a water-reducing or retarding admixture is used, the cement factor may be reduced a maximum 18 kg/cu m (0.30 hundredweight/cu yd). If a high range water-reducing admixture is used, the cement factor may be reduced a maximum 36 kg/cu m (0.60 hundredweight/cu yd). Cement factor reductions shall not be cumulative when using multiple admixtures. An accelerator shall always be added prior to a high range water-reducing admixture, if both are used.

If Class C fly ash or ground granulated blast-furnace slag is used in Class PP-1 concrete, a water-reducing or high range water-reducing admixture shall be used. However, the cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used. In addition, an accelerator shall not be used.

For Class PP-2 or PP-3 concrete, a non-chloride accelerator followed by a high range water-reducing admixture shall be used, in addition to the air-entraining admixture. For Class PP-3 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-2 or PP-3 concrete, the Contractor has the option to use a water-reducing admixture. A retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

When the air temperature is less than 13 °C (55 °F) for Class PP-1 or PP-2 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-4 concrete, a high range water-reducing admixture shall be used in addition to the air-entraining admixture. The Contractor has the option to use a water-reducing admixture. An accelerator shall not be used. For stationary or truck mixed concrete, a retarding admixture shall be used to allow for haul time. The Contractor has the option to use a mobile portland cement concrete plant according to Article 1103.04, but a retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

If the Department specifies a calcium chloride accelerator for Class PP-1 concrete, the maximum chloride dosage shall be 1.0 L (1.0 quart) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.0 L (2.0 quarts) per 45 kg (100 lb) of cement if approved by the Engineer. If the Department specifies a calcium chloride accelerator for Class PP-2 concrete, the maximum chloride dosage shall be 1.3 L (1.3 quarts) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.6 L (2.6 quarts) per 45 kg (100 lb) of cement if approved by the Engineer.

For Class PV, MS, SI, RR, SC and SH concrete, at the option of the Contractor, or when specified by the Engineer, a water-reducing admixture or a retarding admixture may be used. The amount of water-reducing admixture or retarding admixture permitted will be determined by the Engineer. The air-entraining admixture and other admixtures shall be added to the concrete separately, and shall be permitted to intermingle only after they have separately entered the concrete batch. The sequence, method and equipment for adding the admixtures shall be approved by the Engineer. The water-reducing admixture shall not delay the initial set of the concrete by more than one hour. Type I cement shall be used.

When a water-reducing admixture is added, a cement factor reduction of up to 18 kg/cu m (0.30 hundredweight/cu yd), from the concrete designed for a specific slump without the admixture, will be permitted for Class PV, MS, SI, RR, SC and SH concrete. When an approved high range water-reducing admixture is used, a cement factor reduction of up to 36 kg/cu m (0.60 hundredweight/cu yd), from a specific water cement/ratio without the admixture, will be permitted based on a 14 percent minimum water reduction. This is applicable to Class PV, MS, SI, RR, SC and SH concrete. A cement factor below 320 kg/cu m (5.35 hundredweight/cu yd) will not be permitted for Class PV, MS, SI, RR, SC and SH concrete. A cement factor reduction will not be allowed for concrete placed underwater. Cement factor reductions shall not be cumulative when using multiple admixtures.

For use of admixtures to control concrete temperature, refer to Articles 1020.14(a) and 1020.14(b).

The maximum slumps given in Table 1 may be increased to 175 mm (7 in.) when a high range water-reducing admixture is used for all classes of concrete except Class PV and PP."

Revise Section 1021 of the Standard Specifications to read:

#### "SECTION 1021. CONCRETE ADMIXTURES"

**1021.01 General.** Admixtures shall be furnished in liquid form ready for use. The admixtures may be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer and trade name of the material. Containers shall be readily identifiable to the satisfaction of the Engineer as to manufacturer and trade name of the material they contain.

Prior to inclusion of a product on the Department's Approved List of Concrete Admixtures, the manufacturer shall submit a report prepared by an independent laboratory accredited by the AASHTO Accreditation Program. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications.

Tests shall be conducted using materials and methods specified on a "test" concrete and a "reference" concrete, together with a certification that no changes have been made in the formulation of the material since the performance of the tests. Per the manufacturer's option, the cement content for all required tests shall either be according to applicable specifications or 335 kg/cu m (5.65 cwt/cu yd). Compressive strength test results for six months and one year will not be required.

In addition to the report, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The test and reference concrete mixture shall contain a cement content of 335 kg/cu m (5.65 cwt/cu yd). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by the AASHTO Accreditation Program.

Prior to the approval of an admixture, the Engineer may conduct all or part of the applicable tests on a sample that is representative of the material to be furnished. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 335 kg/cu m (5.65 cwt/cu yd). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161, Procedure B.

The manufacturer shall include in the submittal the following information according to ASTM C 494; the average and manufacturing range of specific gravity, the average and manufacturing range of solids in the solution, and the average and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

When test results are more than seven years old, the manufacturer shall re-submit the infrared spectrophotometer trace and the report prepared by an independent laboratory accredited by the AASHTO Accreditation Program.

All admixtures, except chloride-based accelerators, shall contain no more than 0.3 percent chloride by mass (weight).

**1021.02 Air-Entraining Admixtures.** Air-entraining admixtures shall conform to the requirements of AASHTO M 154.

If the manufacturer certifies that the air-entraining admixture is an aqueous solution of Vinsol resin that has been neutralized with sodium hydroxide (caustic soda), testing for compliance with the requirements may be waived by the Engineer. In the certification, the manufacturer shall show complete information with respect to the formulation of the solution, including the number of parts of Vinsol resin to each part of sodium hydroxide. Before the approval of its use is granted, the Engineer will test the solution for its air-entraining quality in comparison with a solution prepared and kept for that purpose.

**1021.03 Retarding and Water-Reducing Admixtures.** The admixture shall comply with the following requirements:

- (a) The retarding admixture shall comply with the requirements of AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) The water-reducing admixture shall comply with the requirements of AASHTO M 194, Type A.
- (c) The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).

When a Type F or Type G high range water-reducing admixture is used, water-cement ratios shall be a minimum of 0.32.

Type F or Type G admixtures may be used, subject to the following restrictions:

For Class MS, SI, RR, SC and SH concrete, the water-cement ratio shall be a maximum of 0.44.

The Type F or Type G admixture shall be added at the jobsite unless otherwise directed by the Engineer. The initial slump shall be a minimum of 40 mm (1 1/2 in.) prior to addition of the Type F or Type G admixture, except as approved by the Engineer.

When a Type F or Type G admixture is used, retempering with water or with a Type G admixture will not be allowed. An additional dosage of a Type F admixture, not to exceed 40 percent of the original dosage, may be used to retemper concrete once, provided set time is not unduly affected. A second retempering with a Type F admixture may be used for all classes of concrete except Class PP and SC, provided that the dosage does not exceed the dosage used for the first retempering, and provided that the set time is not unduly affected. No further retempering will be allowed.

Air tests shall be performed after the addition of the Type F or Type G admixture.

**1021.04 Set Accelerating Admixtures.** The admixture shall comply with the requirements of AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating)"

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# CURING AND PROTECTION OF CONCRETE CONSTRUCTION (BDE)

Effective: January 1, 2004

Revise the second and third sentences of the eleventh paragraph of Article 503.06 of the Standard Specifications to read:

"Forms on substructure units shall remain in place at least 24 hours. The method of form removal shall not result in damage to the concrete."

Delete the twentieth paragraph of Article 503.22 of the Standard Specifications.

Revise the "Unit Price Adjustments" table of Article 503.22 of the Standard Specifications to read:

"UNIT PRICE ADJUSTMENTS	
	Percent
Type of Construction	Adjustment
	in Unit Price
For concrete in substructures, culverts (having a waterway	
opening of more than 1 sq m (10 sq ft)), pump houses, and	
retaining walls (except concrete pilings, footings and	
foundation seals):	
When protected by:	
Protection Method II	115%
Protection Method I	110%
For concrete in superstructures:	
When protected by:	
Protection Method II	123%
Protection Method I	115%
For concrete in footings:	
When protected by:	
Protection Method I, II or III	107%
For concrete in slope walls:	
When protected by:	
Protection Method I	107%"

Delete the fourth paragraph of Article 504.05(a) of the Standard Specifications.

Revise the second and third sentences of the fifth paragraph of Article 504.05(a) of the Standard Specifications to read:

"All test specimens shall be cured with the units according to Article 1020.13."

Revise the first paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"Curing and Low Air Temperature Protection. The curing and protection for precast, prestressed concrete members shall be according to Article 1020.13 and this Article."

Revise the first sentence of the second paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"For curing, air vents shall be in place, and shall be so arranged that no water can enter the void tubes during the curing of the members."

Revise the first sentence of the third paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"As soon as each member is finished, the concrete shall be covered with curing material according to Article 1020.13."

Revise the eighth paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"The prestressing force shall not be transferred to any member before the concrete has attained the compressive strength of 28,000 kPa (4000 psi) or other higher compressive release strength specified on the plans, as determined from tests of 150 mm (6 in.) by 300 mm (12 in.) cylinders cured with the member according to Article 1020.13. Members shall not be shipped until 28-day strengths have been attained and members have a yard age of at least 4 days."

Delete the third paragraph of Article 512.03(a) of the Standard Specifications.

Delete the last sentence of the second paragraph of Article 512.04(d) of the Standard Specifications.

Revise the "Index Table of Curing and Protection of Concrete Construction" table of Article 1020.13 of the Standard Specifications to read:

"INDEX TABLE OF (	CURING AND PROTECTION OF	CONCRETE C	ONSTRUCTION
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS
Cast-in-Place Concrete: 11/			
Pavement Shoulder	1020.13(a)(1)(2)(3)(4)(5) <sup>3/5/</sup>	3	1020.13(c)
Base Course Base Course Widening	1020.13(a)(1)(2)(3)(4)(5) <sup>1/2/</sup>	3	1020.13(c)
Driveway Median Curb Gutter Curb and Gutter Sidewalk Slope Wall	1020.13(a)(1)(2)(3)(4)(5) <sup>4/5/</sup>	3	1020.13(c) <sup>16/</sup>
Paved Ditch Catch Basin Manhole Inlet Valve Vault	1020.13(a)(1)(2)(3)(4)(5) <sup>4/</sup>	3	1020.13(c)
Pavement Patching	1020.13(a)(1)(2)(3)(4)(5) <sup>2/</sup>	3 <sup>12/</sup>	1020.13(c)
Pavement Replacement	1020.13(a)(1)(2)(3)(4)(5) <sup>1/2/</sup>	3	442.06(h) and 1020.13(c)
Railroad Crossing	1020.13(a)(3)(5)	1	1020.13(c)
Piles	1020.13(a)(3)(5)	7	1020.13(e)(1)(2)(3)
Footings Foundation Seals	1020.13(a)(1)(2)(3)(4)(5) <sup>4/6/</sup>	7	1020.13(e)(1)(2)(3)
Substructure	1020.13(a)(1)(2)(3)(4)(5) <sup>1/7/</sup>	7	1020.13(e)(1)(2)(3)
Superstructure (except deck)	1020.13(a)(1)(2)(3)(5) <sup>8/</sup>	7	1020.13(e)(1)(2)
Deck	1020.13(a)(5)	7	1020.13(e)(1)(2) <sup>17/</sup>
Retaining Walls	1020.13(a)(1)(2)(3)(4)(5) <sup>1/7/</sup>	7	1020.13(e)(1)(2)
Pump Houses	1020.13(a)(1)(2)(3)(4)(5) <sup>1/</sup>	7	1020.13(e)(1)(2)
Culverts	1020.13(a)(1)(2)(3)(4)(5) <sup>4/6/</sup>	7	1020.13(e)(1)(2) <sup>18/</sup>
Other Incidental Concrete	1020.13(a)(1)(2)(3)(5)	3	1020.13(c)
Precast Concrete: 11/			
Bridge Beams Piles Bridge Slabs Nelson Type Structural Member	1020.13(a)(3)(5) <sup>9/10/</sup>	As required. <sup>13/</sup>	504.06(c)(6), 1020.13(e)(2) <sup>19/</sup>
All Other Precast Items	1020.13(a)(3)(4)(5) <sup>2/9/10/</sup>	As required 14/	504.06(c)(6), 1020.13(e)(2) <sup>19/</sup>
Precast, Prestressed Concrete: <sup>11/</sup>			
All Items	1020.13(a)(3)(5) <sup>9/10/</sup>	Until strand tensioning is released. <sup>15/</sup>	d504.06(c)(6), 1020.13(e)(2) <sup>19/</sup> s

Notes-General:

- 1/ Type I, membrane curing only
- 2/ Type II, membrane curing only
- 3/ Type III, membrane curing only
- 4/ Type I, II and III membrane curing
- 5/ Membrane curing will not be permitted between November 1 and April 15.
- 6/ The use of water to inundate footings, foundation seals or the bottom slab of culverts is permissible when approved by the Engineer, provided the water temperature can be maintained at 7 °C (45 °F) or higher.
- 7/ Asphalt Emulsion for Waterproofing may be used in lieu of other curing methods when specified and permitted according to Article 503.18.
- 8/ On non-traffic surfaces which receive protective coat according to Article 503.19, a linseed oil emulsion curing compound may be used as a substitute for protective coat and other curing methods. The linseed emulsion curing compound will be permitted between April 16 and October 31 of the same year, provided it is applied with a mechanical sprayer according to Article 1101.09 (b), and meets the material requirements of Article 1022.07.
- 9/ Steam curing (heat and moisture) is acceptable and shall be accomplished by the method specified in Article 504.06(c)(6).
- 10/ A moist room according to AASHTO M 201 is acceptable for curing.
- 11/ If curing is required and interrupted because of form removal for cast-in-place concrete items, precast concrete products, or precast prestressed concrete products, the curing shall be resumed within two hours from the start of the form removal.
- 12/ Curing maintained only until opening strength is attained, with a maximum curing period of three days.
- 13/ The curing period shall end when the concrete has attained the mix design strength. The producer has the option to discontinue curing when the concrete has attained 80 percent of the mix design strength or after seven days. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 14/ The producer shall determine the curing period or may elect to not cure the product. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 15/ The producer has the option to continue curing after strand release.
- 16/ When structural steel or structural concrete is in place above slope wall, Article 1020.13(c) shall not apply. The protection method shall be according to Article 1020.13(e)(1).
- 17/ When Article 1020.13(e)(2) is used to protect the deck, the housing may enclose only the bottom and sides. The top surface shall be protected according to Article 1020.13(e)(1).
- 18/ For culverts having a waterway opening of 1 sq m (10 sq ft) or less, the culverts may be protected according to Article 1020.13(e)(3).
- 19/ The seven day protection period in the first paragraph of Article 1020.13(e)(2) shall not apply. The protection period shall end when curing is finished. For the third paragraph of Article 1020.13(e)(2), the decrease in temperature shall be according to Article 504.06(c)(6)."

Add the following to Article 1020.13(a) of the Standard Specifications:

"(5) Wetted Cotton Mat Method. After the surface of concrete has been textured or finished, it shall be covered immediately with dry cotton mats. The cotton mats shall be placed in a manner which will not mar the concrete surface. A texture resulting from the cotton mat material is acceptable. The cotton mats shall then be wetted immediately and thoroughly soaked with a gentle spray of water. For bridge decks, a foot bridge shall be used to place and wet the cotton mats.

The cotton mats shall be maintained in a wetted condition until the concrete has hardened sufficiently to place soaker hoses without marring the concrete surface. The soaker hoses shall be placed on top of the cotton mats at a maximum 1.2 m (4 ft) spacing. The cotton mats shall be kept wet with a continuous supply of water for the remainder of the curing period. Other continuous wetting systems may be used if approved by the Engineer.

After placement of the soaker hoses, the cotton mats shall be covered with white polyethylene sheeting or burlap-polyethylene blankets.

For construction items other than bridge decks, soaker hoses or a continuous wetting system will not be required if the alternative method keeps the cotton mats wet. Periodic wetting of the cotton mats is acceptable.

For areas inaccessible to the cotton mats on bridge decks, curing shall be according to Article 1020.13(a)(3)."

Revise the first paragraph of Article 1020.13(c) of the Standard Specifications to read:

"Protection of Portland Cement Concrete, Other Than Structures, From Low Air Temperatures. When the official National Weather Service forecast for the construction area predicts a low of 0 °C (32 °F), or lower, or if the actual temperature drops to 0 °C (32 °F), or lower, concrete less than 72 hours old shall be provided at least the following protection:"

Delete Article 1020.13(d) and Articles 1020.13(d)(1),(2),(3),(4) of the Standard Specifications.

Revise the first five paragraphs of Article 1020.13(e) of the Standard Specifications to read:

"Protection of Portland Cement Concrete Structures From Low Air Temperatures. When the official National Weather Service Forecast for the construction area predicts a low below 7 °C (45 °F), or if the actual temperature drops below 7 °C (45 °F), concrete less than 72 hours old shall be provided protection. Concrete shall also be provided protection when placed during the winter period of December 1 through March 15. Concrete shall not be placed until the materials, facilities and equipment for protection are approved by the Engineer. When directed by the Engineer, the Contractor may be required to place concrete during the winter period. If winter construction is specified, the Contractor shall proceed with the construction, including concrete, excavation, pile driving, steel erection and all appurtenant work required for the complete construction of the item, except at times when weather conditions make such operations impracticable.

Regardless of the precautions taken, the Contractor shall be responsible for protection of the concrete placed and any concrete damaged by cold temperatures shall be removed and replaced by the Contractor at his/her own expense."

Add the following at the end of the third paragraph of Article 1020.13(e)(1) of the Standard Specifications:

"The Contractor shall provide means for checking the temperature of the surface of the concrete during the protection period."

Revise the second sentence of the first paragraph of Article 1020.13(e)(2) of the Standard Specifications to read:

"The Contractor shall provide means for checking the temperature of the surface of the concrete or air temperature within the housing during the protection period."

Delete the last sentence of the first paragraph of Article 1020.13(e)(3) of the Standard Specifications.

Add the following Article to Section 1022 of the Standard Specifications:

"**1022.06 Cotton Mats.** Cotton mats shall consist of a cotton fill material, minimum 400 g/sq m (11.8 oz/sq yd), covered with unsized cloth or burlap, minimum 200 g/sq m (5.9 oz/sq yd), and be tufted or stitched to maintain stability.

Cotton mats shall be in a condition satisfactory to the Engineer. Any tears or holes in the mats shall be repaired.

Add the following Article to Section 1022 of the Standard Specifications:

"1022.07 Linseed Oil Emulsion Curing Compound. Linseed oil emulsion curing compound shall be composed of a blend of boiled linseed oil and high viscosity, heavy bodied linseed oil emulsified in a water solution. The curing compound shall meet the requirements of a Type I, II, or III according to Article 1022.01, except the drying time requirement will be waived. The oil phase shall be  $50 \pm 4$  percent by volume. The oil phase shall consist of 80 percent by mass (weight) boiled linseed oil and 20 percent by mass (weight) Z-8 viscosity linseed oil. The water phase shall be  $50 \pm 4$  percent by volume."

Revise Article 1020.14 of the Standard Specifications to read:

**"1020.14 Temperature Control for Placement.** Temperature control for concrete placement shall conform to the following requirements:

(a) Temperature Control other than Structures. The temperature of concrete immediately before placing, shall be not less than 10 °C (50 °F) nor more than 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced. The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

Plastic concrete temperatures up to 35 °C (96 °F), as placed, may be permitted provided job site conditions permit placement and finishing without excessive use of water on and/or overworking of the surface. The occurrence within 24 hours of unusual surface distress shall be cause to revert to a maximum 32 °C (90 °F) plastic concrete temperature.

Concrete shall not be placed when the air temperature is below 5 °C (40 °F) and falling or below 2 °C (35 °F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the aggregates to be heated to not less than 20 °C (70 °F) nor more than 65 °C (150 °F). The aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

For pavement patching, refer to Article 442.06(e) for additional information on temperature control for placement.

(b) Temperature Control for Structures. The temperature of concrete as placed in the forms shall be not less than 10 °C (50 °F) nor more than 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits. When insulated forms are used, the temperature of the concrete mixture shall not exceed 25 °C (80 °F). If the Engineer determines that heat of hydration might cause excessive temperatures in the concrete, the concrete shall be placed at a temperature between 10 °C (50 °F) and 15 °C (60 °F), per the Engineer's instructions. When concrete is placed in contact with previously placed concrete, the temperature of the concrete may be increased as required to offset anticipated heat loss.

Concrete shall not be placed when the air temperature is below 7 °C (45 °F) and falling or below 4 °C (40 °F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the aggregates to be heated to not less than 20 °C (70 °F) nor more than 65 °C (150 °F). The aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced. The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

(c) Temperature. The concrete temperature shall be determined according to ASTM C 1064."

80114

## FLAGGER VESTS (BDE)

Effective: April 1, 2003

Revised: April 1, 2005

Revise the first sentence of Article 701.04(c)(1) of the Standard Specifications to read:

"The flagger shall be stationed to the satisfaction of the Engineer and be equipped with a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 2 garments and approved flagger traffic control signs conforming to Standard 702001 and Article 702.05(e)."

Revise Article 701.04(c)(6) of the Standard Specifications to read:

"(6) Nighttime Flagging. The flagger station shall be lit by additional overhead lighting other than streetlights. The flagger shall be equipped with a fluorescent orange, fluorescent yellow/green, or a combination of fluorescent orange and fluorescent yellow/green garment meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 3 garments."

80101

# FREEZE-THAW RATING (BDE)

Effective: November 1, 2002

Revise the first sentence of Article 1004.02(f) of the Standard Specifications to read:

"When coarse aggregate is used to produce portland cement concrete for base course, base course widening, pavement, driveway pavement, sidewalk, shoulders, curb, gutter, combination curb and gutter, median, paved ditch or their repair using concrete, the gradation permitted will be determined from the results of the Department's Freeze-Thaw Test."

80079

# PARTIAL PAYMENTS (BDE)

Effective: September 1, 2003

Revise Article 109.07 of the Standard Specifications to read:

"109.07 Partial Payments. Partial payments will be made as follows:

(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the amount of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved. Furthermore, progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c).

(b) Material Allowances. At the discretion of the Department, payment may be made for materials, prior to their use in the work, when satisfactory evidence is presented by the Contractor. Satisfactory evidence includes justification for the allowance (to expedite the work, meet project schedules, regional or national material shortages, etc.), documentation of material and transportation costs, and evidence that such material is properly stored on the project or at a secure location acceptable and accessible to the Department.

Material allowances will be considered only for nonperishable materials when the cost, including transportation, exceeds \$10,000 and such materials are not expected to be utilized within 60 days of the request for the allowance. For contracts valued under \$500,000, the minimum \$10,000 requirement may be met by combining the principal (material) product of no more than two contract items. An exception to this two item limitation may be considered for any contract regardless of value for items in which material (products) are similar except for type and/or size.

Material allowances shall not exceed the value of the contract items in which used and shall not include the cost of installation or related markups. Amounts paid by the Department for material allowances will be deducted from estimates due the Contractor as the material is used. Two-sided copies of the Contractor's cancelled checks for materials and transportation must be furnished to the Department within 60 days of payment of the allowances or the amounts will be reclaimed by the Department."

80116

# PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000 Revised: September 1, 2003

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts no later than 30 days from the receipt of each payment made to the Contractor.

State law addresses the timing of payments to be made to subcontractors. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, generally requires that when a Contractor receives any payment from the Department, the Contractor is required to make corresponding, proportional payments to each subcontractor performing work within 15 calendar days after receipt of the state payment. Section 7 of the State Prompt Payment Act further provides that interest in the amount of 2% per month, in addition to the payment due, shall be paid to any subcontractor by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

As progress payments are made to the Contractor in accordance with Article 109.07 of the Standard Specifications for Road and Bridge Construction, the Contractor shall make a corresponding partial payment within 15 calendar days to each subcontractor in proportion to the work satisfactorily completed by each subcontractor. The proportionate amount of partial payment due to each subcontractor shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors shall be paid in full within 15 calendar days after the subcontractor's work has been satisfactorily completed. The Contractor shall hold no retainage from the subcontractors.

This Special Provision does not create any rights in favor of any subcontractor against the State of Illinois or authorize any cause of action against the State of Illinois on account of any payment, nonpayment, delayed payment or interest claimed by application of the State Prompt Payment Act. The Department will neither determine the reasonableness of any cause for delay of payment nor enforce any claim to payment, including interest. Moreover, the Department will not approve any delay or postponement of the 15 day requirement. State law creates remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond in accordance with the Public Construction Bond Act, 30 ILCS 550.

80022

# PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: July 1, 2004

All personnel, excluding flaggers, working outside of a vehicle (car or truck) within 7.6 m (25 ft) of pavement open to traffic shall wear a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/.green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 2 garments. Other types of garments may be substituted for the vest as long as the garments have manufacturers tags identifying them as meeting the ANSI Class 2 requirement.

80130

## PORTLAND CEMENT (BDE)

Effective: January 1, 2005

Replace the first sentence of the second paragraph of Article 1001.01 of the Standard Specifications with the following:

"For portland cement according to ASTM C 150, the addition of up to 5.0 percent limestone by mass (weight) to the cement will not be permitted. Also, the total of all organic processing additions shall not exceed 1.0 percent by mass (weight) of the cement and the total of all inorganic processing additions shall not exceed 4.0 percent by mass (weight) of the cement." 80139

## PORTLAND CEMENT CONCRETE (BDE)

Effective: November 1, 2002

Add the following paragraph after the fourth paragraph of Article 1103.01(b) of the Standard Specifications:

"The truck mixer shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"." Add the following paragraph after the first paragraph of Article 1103.01(c) of the Standard Specifications:

"The truck agitator shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

Add the following paragraph after the first paragraph of Article 1103.01(d) of the Standard Specifications:

"The nonagitator truck shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

Revise the first sentence of the first paragraph of Article 1103.02 of the Standard Specifications to read:

"The plant shall be approved before production begins according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

80083

## PORTLAND CEMENT CONCRETE PATCHING (BDE)

Effective: January 1, 2001 Revised: January 1, 2004

Revise Note 1 of Article 442.02 of the Standard Specifications, to read:

"Note 1. When patching ramp pavements and two lane pavements with two way traffic, Class PP-2, PP-3, or PP-4 concrete shall be used for Class A, Class B and Class C patching. For all other pavements, Class PP-1, PP-2, PP-3, or PP-4 concrete shall be used, at the Contractor's option, for Class A, Class B and Class C patching."

Delete Note 2 of Article 442.02 of the Standard Specifications.

Add the following to Article 442.02 of the Standard Specifications:

Note 5. The calcium chloride accelerator, when permitted by the Department, shall be Type L (Liquid) with a minimum of 32.0 percent by mass (weight) of calcium chloride."

Revise the first paragraph of Article 442.06(e) of the Standard Specifications to read:

"(e) Concrete Placement. For Class A, Class B and Class C Patches, concrete shall be placed according to Article 420.07 and governed by the limitations set forth in Article 1020.14, except that the maximum temperature of the mixed concrete immediately before placing shall be 35 °C (96 °F), the required use of an approved retarding admixture when the plastic concrete reaches 30 °C (85 °F) shall not apply."

Revise the first paragraph of Article 442.06(h) of the Standard Specifications to read:

"(h) Curing and Protection. In addition to Article 1020.13, when the air temperature is less than 13 °C (55 °F), the Contractor shall cover the patch with minimum R12 insulation until opening strength is reached. Insulation is optional when the air temperature is 13 °C - 35 °C (55 °F - 96 °F). Insulation shall not be placed when the air temperature is greater than 35 °C (96 °F)."

Revise the second paragraph of Article 701.05(e)(1)d.1. of the Standard Specifications to read:

"No open holes, broken pavement, or partially filled holes shall remain overnight for bituminous patching or when the Department specifies only Class PP-2, PP-3, or PP-4 concrete be used. The only exception is conditions beyond the control of the Contractor."

Revise Article 701.05(e)(2)b. of the Standard Specifications to read:

"b. Strength Tests. For patches constructed with Class PP-1, PP-2, PP-3, or PP-4 concrete, the pavement may be opened to traffic when test specimens cured with the patches have obtained a minimum flexural strength of 4150 kPa (600 psi) or a minimum compressive strength of 22,100 kPa (3200 psi) according to Article 1020.09.

For patches constructed with Class PP-2, PP-3, or PP-4 concrete which can obtain a minimum flexural strength of 4150 kPa (600 psi) or a minimum of compressive strength of 22,100 kPa (3200 psi) in 16 hours, the pavement may be opened to traffic at a lower opening strength. The specimens cured with the patches shall have obtained a minimum flexural strength of 2050 kPa (300 psi) or a minimum compressive strength of 11,000 kPa (1600 psi) according to Article 1020.09, to permit opening pavement to traffic.

With the approval of the Engineer, concrete strength may be determined according to AASHTO T 276. The strength-maturity relationship shall be developed from concrete which has an air content near the upper specification limit. The strength-maturity relationship shall be re-established if the mix design or materials are changed."

Revise Article 701.05(e)(2)c. of the Standard Specifications to read:

"c. Construction Operations. For Class PP-2, PP-3, or PP-4 concrete used on ramp pavements and two lane pavements with two way traffic, or when the Department specifies only Class PP-2, PP-3, or PP-4 concrete be used for other pavements, Contractor construction operations shall be performed in a manner which allows the patches to be opened the same day and before nightfall. If patches are not opened before nightfall, the additional traffic control shall be at the Contractor's expense. Any time patches cannot be opened before nightfall, the Contractor shall change subsequent construction operations or the mix design. The changes shall be at no additional cost to the Department."

Revise Table 1 of Article 1020.04 of the Standard Specifications by replacing Class PP concrete with the following:

"TABLE 1. CLASSES OF PORTLAND CEMENT CONCRETE AND MIX DESIGN CRITERIA												
Class of Concrete	Use	Specification Section Reference	Cement Factor kg/cu m (cwt/cu yd)	Max. Water/Cement Ratio kg/kg (lb/lb)								
PP-1	PCC Pavement Patching Bridge Deck Patching	442	Type I Cement 385 to 445 (6.50 to 7.50) Type III Cement 365 to 425 (6.20 to 7.20)	0.44								

PP-2	PCC Pavement Patching Bridge Deck Patching	442	Type I Cement 435 (7.35)	0.38
PP-3	PCC Pavement Patching Bridge Deck Patching	442	Type III Cement 435 (7.35)	0.35
PP-4	PCC Pavement Patching Bridge Deck Patching	442	Rapid Hardening Cement 355 to 370 (6.00 to 6.25)	0.50

For PP-1, the Contractor has the option to replace the Type I Cement with Class C fly ash or ground granulated blast-furnace slag. The amount of cement replaced shall not exceed 15 percent by mass (weight), at a minimum replacement ratio of 1.5:1.

For PP-2, the Contractor has the option to replace the Type I cement with ground granulated blast-furnace slag. The amount of cement replaced shall not exceed 30 percent by mass (weight), at a minimum replacement ratio of 1:1.

For PP-3, in addition to the cement, 60 kg/cu m (100 lb/cu yd) of ground granulated blast-furnace slag and 30 kg/cu m (50 lb/cu yd) of microsilica are required. For an air temperature greater than 30 °C (85 °F), the Contractor has the option to replace the Type III cement with Type I cement.

TABLE 1.	TABLE 1. (CONT'D) CLASSES OF PORTLAND CEMENT CONCRETE AND MIX DESIGN CRITERIA											
Class of Concrete	Slump, mm (in.)	Mix Design Compressive Strength, kPa (psi) Hours 48	Mix Design Flexural Strength, kPa (psi) Hours 48	Air Content, %	Coarse Aggregate Gradations Permitted							
PP – 1	100 (4) Max	22,100 (3200)	4150 (600)	4.0 - 7.0	CA-7, CA-11, CA-13, CA14, or CA-16							
PP – 2	150 (6) Max	22,100 (3200)	4150 (600)	4.0 - 6.0	CA-7, CA-11, CA-13, CA14, or CA-16							
PP – 3	100 (4) Max	22,100 (3200)	4150 (600)	4.0 - 6.0	CA-7, CA-11, CA-13, CA14, or CA-16							
PP – 4	150 (6) Max	22,100 (3200)	4150 (600)	4.0 - 6.0	CA-7, CA-11, CA-13, CA14, or CA-16							

For PP-4, the cement shall be from the Department's "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs".

For PP-1, PP-2, PP-3 or PP-4; only CA-13, CA-14, or CA-16 may be used for bridge deck patching. In addition, the mix design strength at 48 hours shall be increased to 27,500 kPa (4,000 psi) compressive or 4,650 kPa (675 psi) flexural for bridge deck patching.

For PP-1, the slump may be increased to 150 mm (6 in.) Max if a high range water-reducing admixture is used."

Delete Article 1020.05(g) of the Standard Specifications.

80036

## TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 1992

Revised: January 1, 2005

To ensure a prompt response to incidents involving the integrity of work zone traffic control, the Contractor shall provide a telephone number where a responsible individual can be contacted 24 hours-a-day.

When the Engineer is notified, or determines a traffic control deficiency exists, he/she will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 12 hours based upon the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge. A deficiency may be any lack of repair, maintenance, or non-compliance with the traffic control plan. A deficiency may also be applied to situations where corrective action is not an option such as the use of non-certified flaggers for short term operations; working with lane closures beyond the time allowed in the contract; or failure to perform required contract obligations such as traffic control surveillance.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The daily monetary deduction will be either \$1,000 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option this monetary deduction will be immediate.

In addition, if the Contractor fails to respond, the Engineer may correct the deficiency and the cost thereof will be deducted from monies due or which may become due the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

5729I

# WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: January 1, 2003

Revised: November 1, 2004

Add the following to Article 702.01 of the Standard Specifications:

"All devices and combinations of devices shall meet the requirements of the National Cooperative Highway Research Program (NCHRP) Report 350 for their respective categories. The categories are as follows:

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, flexible delineators and plastic drums with no attachments. Category 1 devices shall be crash tested and accepted or may be self-certified by the manufacturer.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include drums and vertical panels with lights, barricades and portable sign supports. Category 2 devices shall be crash tested and accepted for Test Level 3.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions, truck mounted attenuators and other devices not meeting the definitions of Category 1 or 2. Category 3 devices shall be crash tested and accepted for either Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as arrow boards, changeable message signs, temporary traffic signals and area lighting supports. Currently, there is no implementation date set for this category and it is exempt from the NCHRP 350 compliance requirement.

The Contractor shall provide a manufacturer's self-certification letter for each Category 1 device and an FHWA acceptance letter for each Category 2 and Category 3 device used on the contract. The letters shall state the device meets the NCHRP 350 requirements for its respective category and test level, and shall include a detail drawing of the device."

Delete the third, fourth and fifth paragraphs of Article 702.03(b) of the Standard Specifications.

Delete the third sentence of the first paragraph of Article 702.03(c) of the Standard Specifications.

Revise the first sentence of the first paragraph of Article 702.03(e) of the Standard Specifications to read:

"Drums shall be nonmetallic and have alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes."

Add the following to Article 702.03 of the Standard Specifications:

"(h) Vertical Barricades. Vertical barricades may be used in lieu of cones, drums or Type II barricades to channelize traffic."

Delete the fourth paragraph of Article 702.05(a) of the Standard Specifications.

Revise the sixth paragraph of Article 702.05(a) of the Standard Specifications to read:

"When the work operations exceed four days, all signs shall be post mounted unless the signs are located on the pavement or define a moving or intermittent operation. When approved by the Engineer, a temporary sign stand may be used to support a sign at 1.2 m (5 ft) minimum where posts are impractical. Longitudinal dimensions shown on the plans for the placement of signs may be increased up to 30 m (100 ft) to avoid obstacles, hazards or to improve sight distance, when approved by the Engineer. "ROAD CONSTRUCTION AHEAD" signs will also be required on side roads located within the limits of the mainline "ROAD CONSTRUCTION AHEAD" signs."

Delete all references to "Type 1A barricades" and "wing barricades" throughout Section 702 of the Standard Specifications.

80097

# WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 35 working days.

80071

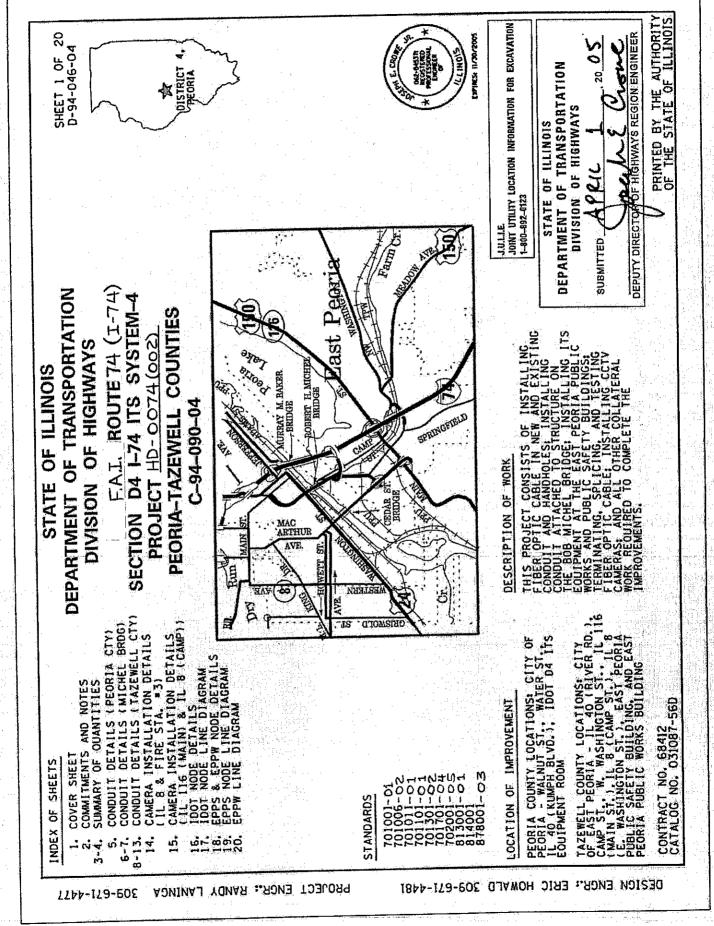
## SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department. 80143



COMMITMENTS AND NOTES o Z SHEET TOTAL 30 PROP. CONDUIT (PUSHED/TRENCHED) PROP. TY IV CABINET (SPECIAL) ALL TELEPHONE NUMBERS FOR THE ENGINEER'S FIELD OFFICE SHALL BE UNPUBLISHED. EX. CONT. CABINET (SIGNAL) EX. COMMUNICATIONS VAULT NO COMMITMENTS WERE MADE IN CONJUNCTION WITH THIS PROJECT. EX. STEEL COMB. MAST ARM TAZEWELL TRAFFIC SIGNAL LEGEND PROP. CONCRETE HANDHOLE EX. TRAFFIC SIGNAL HEAD COUNTY PROP. JUNCTION BOX EX. DBL HANDHOLE EX. JUNCTION BOX EX. HANDHOLE EX. LUMINAIRE D4 I-74 ITS EX. CONDULT SYSTEM-4 SECTION COMMITMENTS NOTE M Ø 4 81 Π  $\square$ 6 DESIG. VAR. ROUTE NSTALLATION. THIS WORK SHALL BE DONE AT THE SAME TIME THE FIBER OPTIC FRENCHED ON THE PLANS. THIS WORK WILL BE MEASURED FOR PAYMENT AND ALL COSTS FOR LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO INTEGRATE MKD. VAR. SERVAL NUMBERS, EFFECTIVE DATES, AND THE WARRANTY DETAILS FOR EACH INSULATED ORANGE TRACER WIRE PULLED DURING THE FIBER OPTIC CABLE. NSTALLATION OF THE PROPOSED ITS COMPONENTS AND FIBER OPTIC CABLE. WORK IN ACCORDANCE WITH ART. 109.04 OF THE STANDARD SPECIFICATIONS. THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING AND IS FLUSH WITH THE SURFACE OF THE MEDIAN, SIDEWALK, OR GROUND LINE. THE HANDHOLE SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME THE CONTRACTOR MAY ELECT TO PUSH A CONDUIT THAT IS SHOWN TO BE ANY MAINTENANCE OF EXISTING EQUIPMENT SHALL BE CONSIDERED EXTRA FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY PROPOSED HANDHOLES SHALL BE CAST IN PLACE CONCRETE HANDHOLES. EACH HANDHOLE SHALL HAVE 6.5 FT OF SLACK CABLE AND EACH DOUBLE. PROPOSED STATE OWNED ITS, TRAFFIC SIGNAL, AND LIGHTING FACILITIES. THE PROPOSED ITS EQUIPMENT INTO THE EXISTING ITS SYSTEM SHALL BE COILABLE POLYETHYLENE DUCT MAY BE SUBSTITUTED FOR PVC CONDUIT PAID FOR AS CONDUIT IN TRENCH OF THE TYPE AND SIZE SPECIFIED AND ALL CONDUITS CONTAINING FIBER SHALL HAVE A 12 GA. STRANDED THHN, ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL FIBER OPTIC CABLES SHALL BE FULLY TERMINATED AND TESTED IN INSTALLED EQUIPMENT THAT INCLUDES THE EQUIPMENT DESCRIPTION . THE CONTRACTOR SHALL FURNISH A WARRANTY CERTIFICATE FOR ALL CABLE IS PULLED. THIS WORK SHALL BE INCLUDED IN THE PRICE FOR NCLUDED IN THE BID PRICE FOR THE CONTRACT. THERE WILL BE NO HE EXISTING ITS SYSTEM SHALL REMAIN IN OPERATION DURING THE HANDHOLE SHALL HAVE 13.0 FT OF SLACK CABLE (ITS FIBER ONLY). THE LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS. ACCORDANCE WITH THE PROJECT SPECIAL PROVISIONS. ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS. CONSTRUCTION NOTES TRENCH AND BACKFILL FOR ELECTRICAL WORK. ADDITIONAL COMPENSATION FOR THIS WORK. FIBER OPTIC CABLE IN CONDUIT. PUSHED OR TRENCHED. **WARRANTY ITEM** COMPONENTS.

ROUTE SECTION COUNTY SHEET MKD. DESIG. D4 I-74 ITS PEORIA TOTAL NO. VAR. VAR. SYSTEM-4 TAZEWELL 20 3

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81400400	CONCRETE HANDHOLE	EACH	2		2	· · · ·
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1/181/1	190	997	
81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	1,000		1,000	-1
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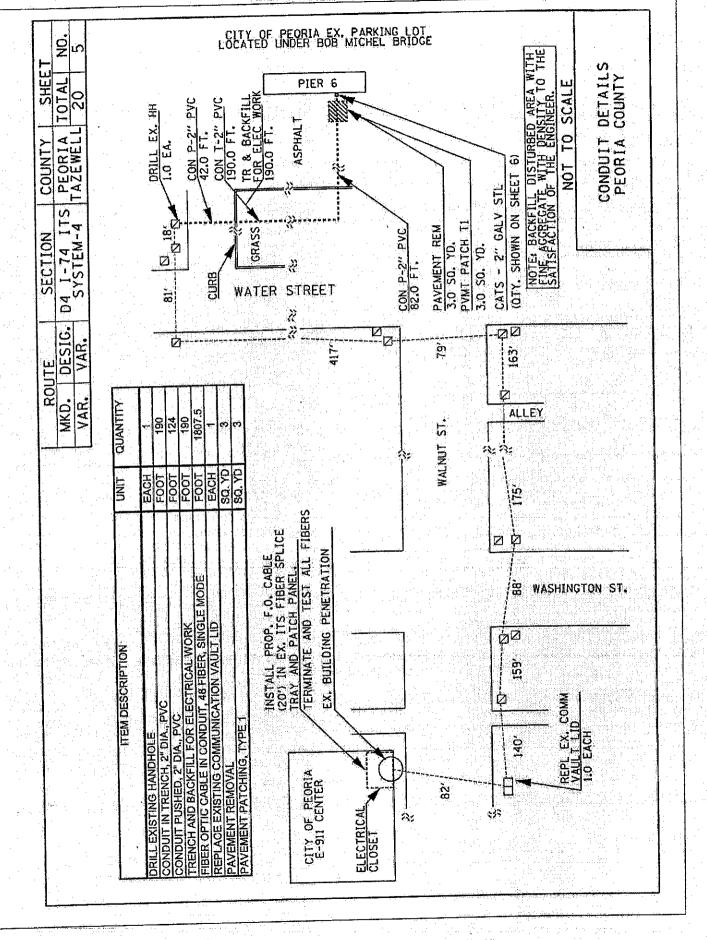
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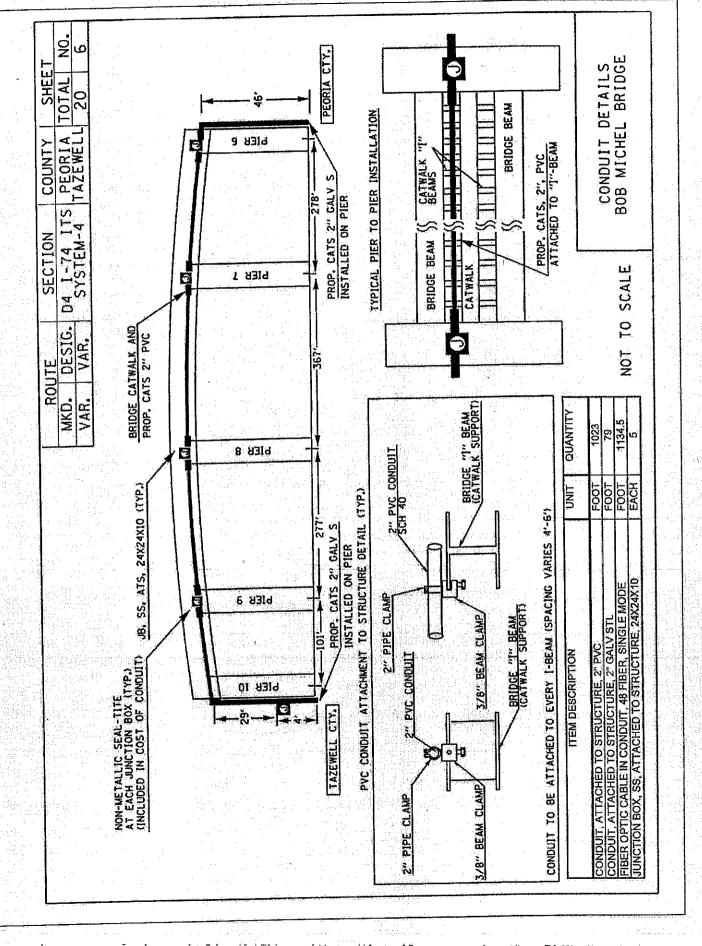
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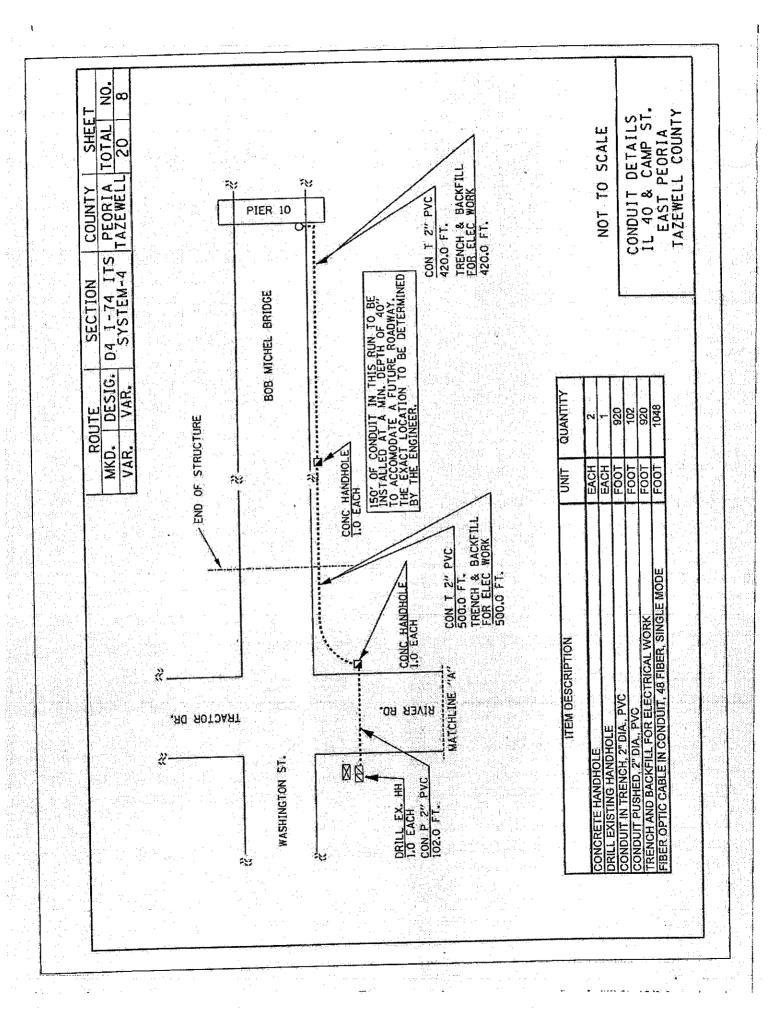
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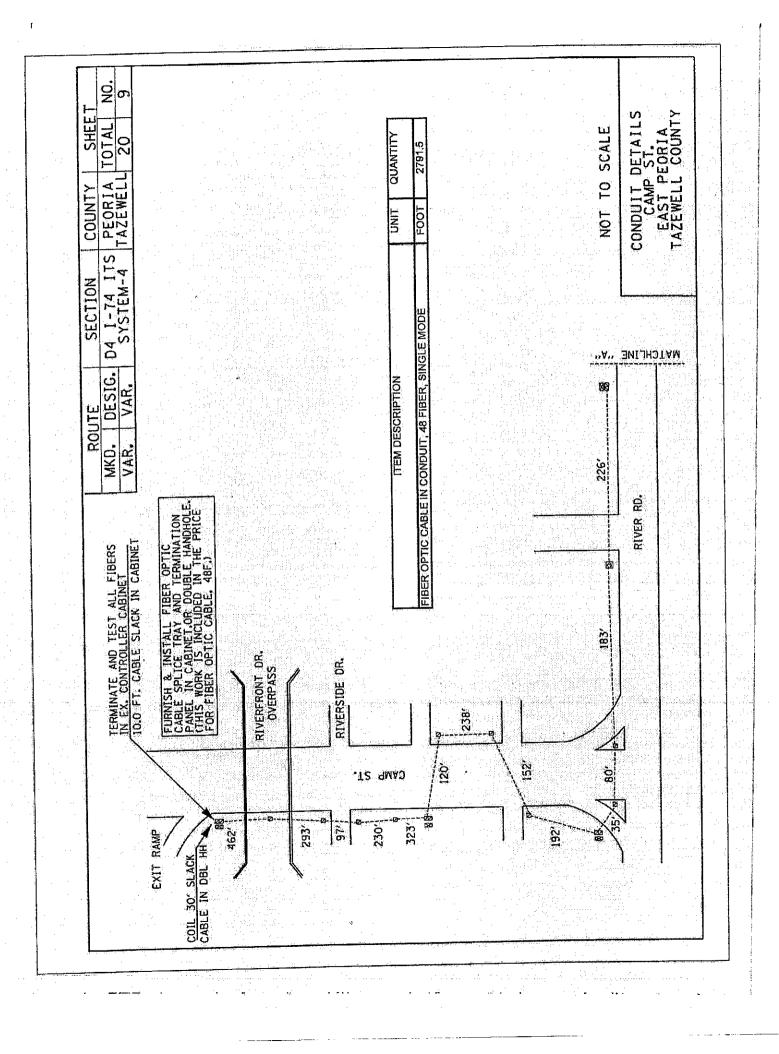


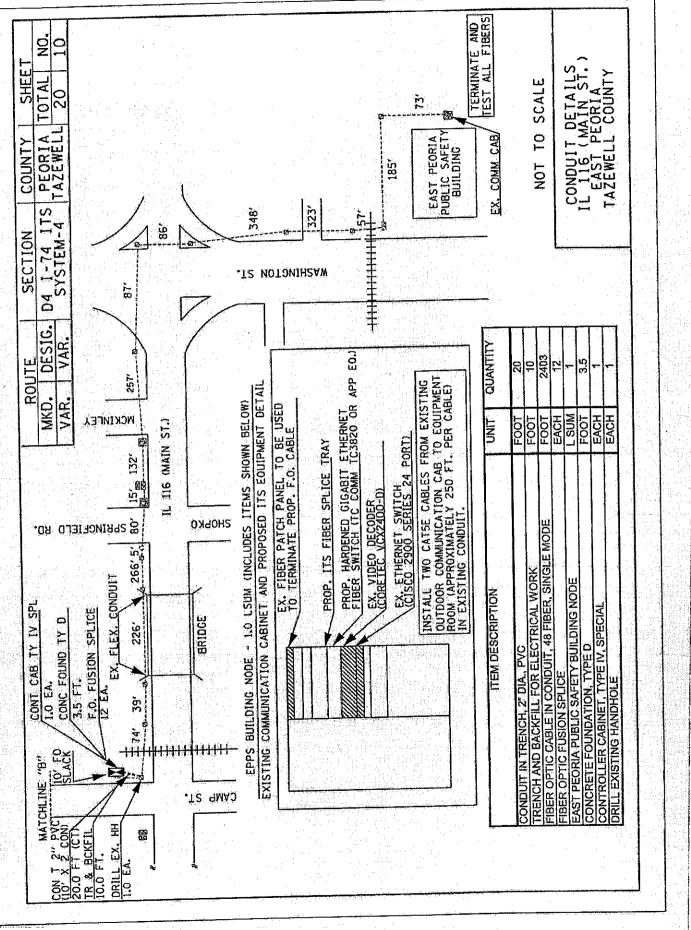
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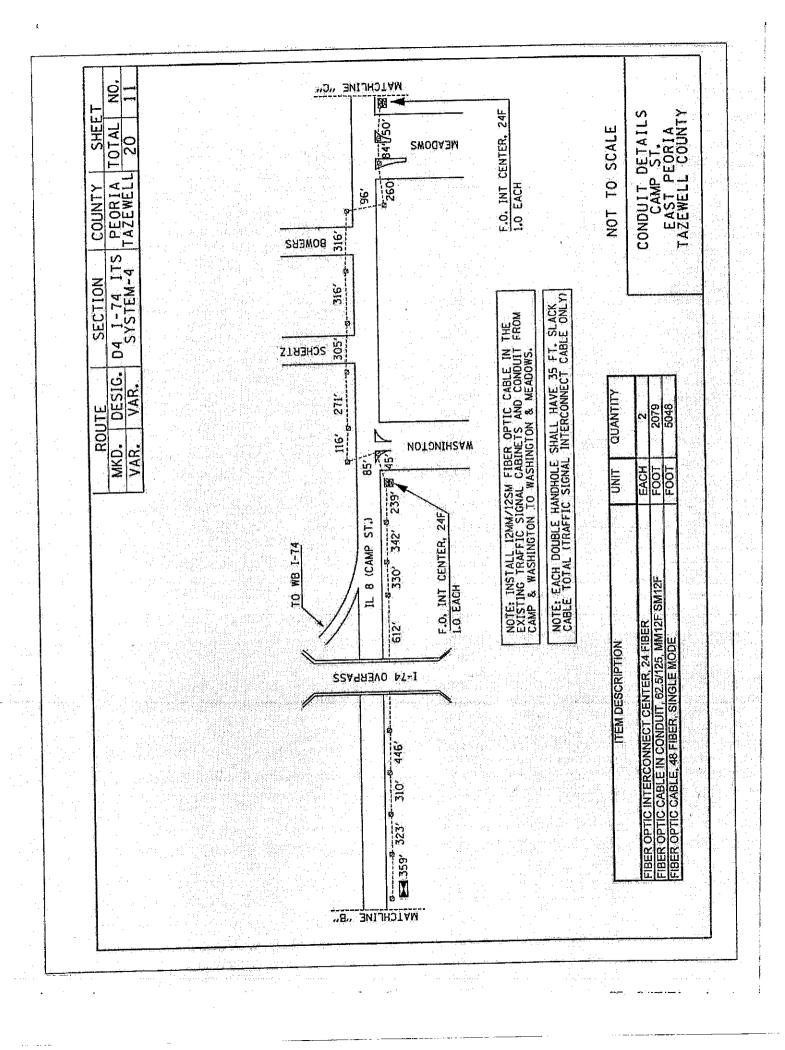
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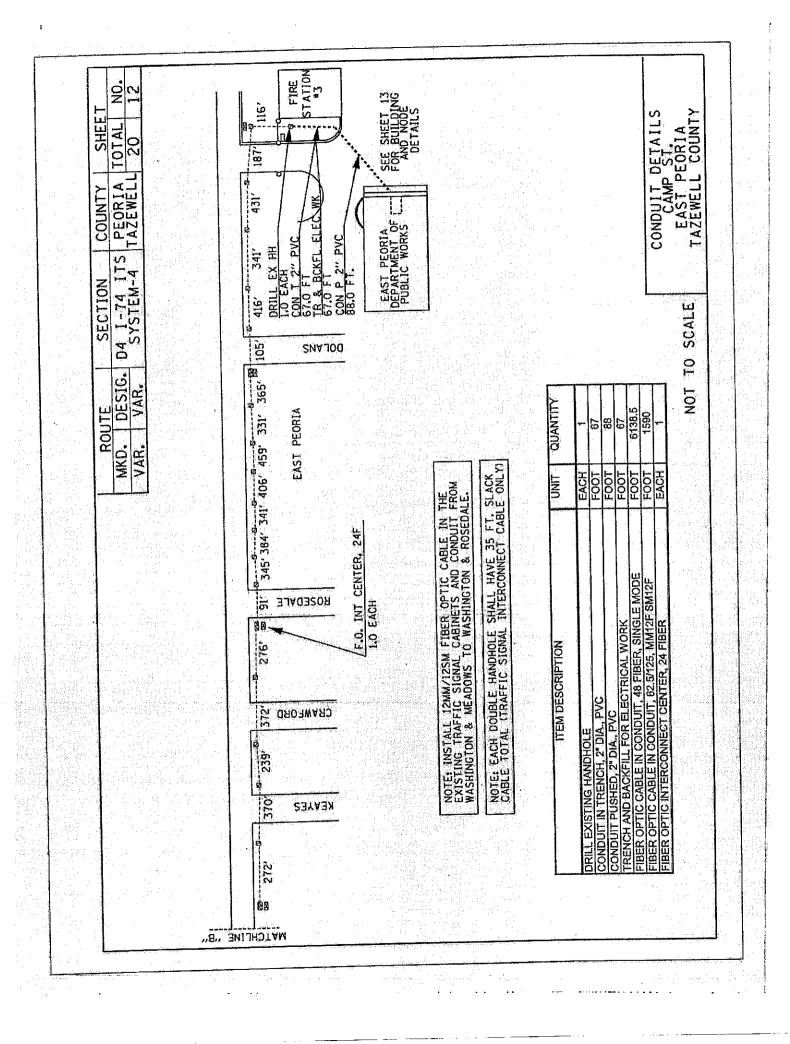
N0. CONDUIT DETAILS BOB MICHEL BRIDGE SHEET APPROXIMATELY 4 TO 6 FT. APART. THE CONTRACTOR BRIDGE STRUCTURE. METHOD OF ATTACHMENT TO BE OF THE FLEXIBLE CONDUIT SHALL BE INCLUDED IN THE JUNCTION BOX TO ALLOW FOR EXPANSION. THE COST VO CLAMPS OR ATTACHMENTS OF ANY KIND SHALL BE JUNCTION BOXES SHALL BE SECURELY ATTACHED TO CONDULT CLAMPS USED FOR ATTACHING GALVANIZED CONDUIT EXPANSION JOINTS AT PIERS 6 AND 9 SHALL STEEL CONDUIT TO BRIDGE PIERS SHALL BE SPACED WATCH THE MODULAR EXPANSION JOINTS AT THOSE CONNECT THE GALVANIZED STEEL CONDUIT TO THE TOTAL QUANTITY OF CLAMPS REQUIRED TO ATTACH THE 2" SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT 20 "-BEAMS FOR CATWALK SUPPORT ARE LOCATED FLEXIBLE CONDUIT SHALL BE INSTALLED AT EACH BRIDGE CONDUIT INSTALLATION NOTES A SUITABLE COUPLING SHALL BE PROVIDED TO **NSTALLED IN THE PATCHED AREA ON PIER 6.** PEORIA TAZEWELL COUNTY BID PRICE FOR THE PVC CONDUIT. PVC CONDUIT TO EACH "I"-BEAM. Š APPROVED BY THE ENGINEER. SYSTEM-4 SECTION NO MORE THAT 8 FT, APART. D4 I-74 NOT TO SCALE PVC CONDUIT. DESIG. VAR. PIERS (13"). ROUTE MKD. VAR. AVOID INSTALLING CONDUIT IN PATCHED AREA OF PIER CONDUIT ATTACHED TO STRUCTURE AT BRIDGE PIER (TYP.) PROP. 2" CATS (GALV STL) PROP. 2" CATS (GALV STL) PROP. JB, SS, ATS PROP. 2" CATS CALV STID CONDUIT ATTACHMENT DETAIL - PIER 10 - PIER BACKSTRAP PROP. 2" CATS (GAL V STL) CONDUIT ATTACHMENT DETAIL Ì 29, PIER 6 PIER 10 EX. UTILITY CONDU

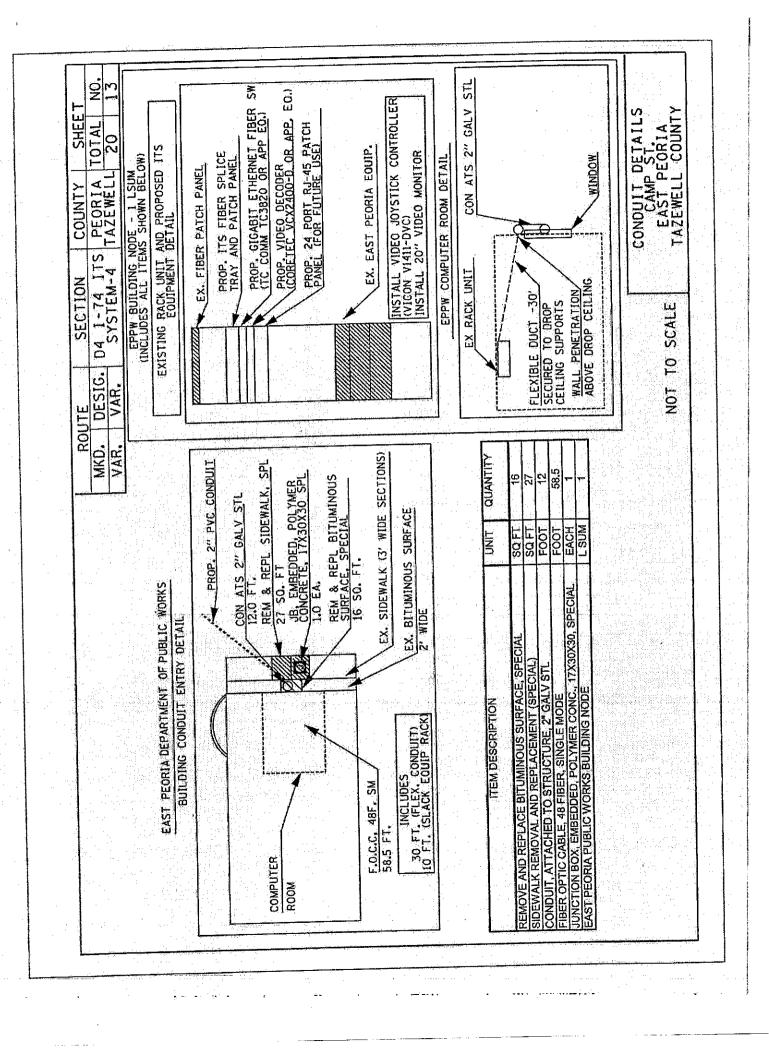


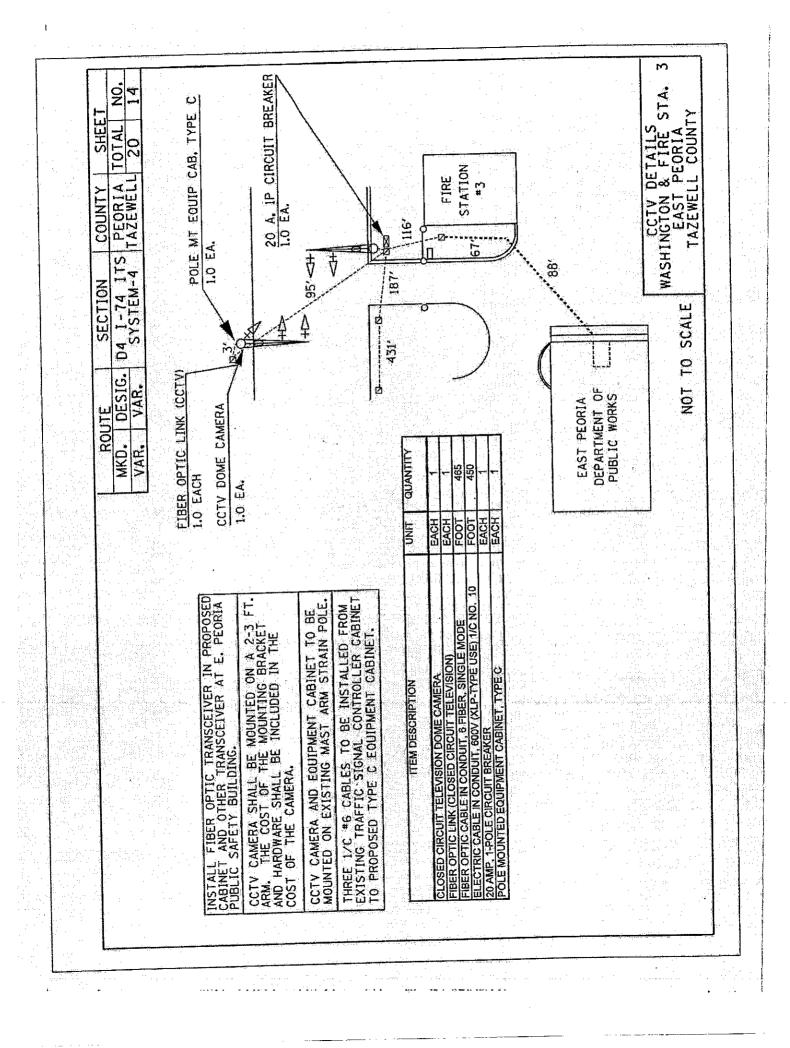


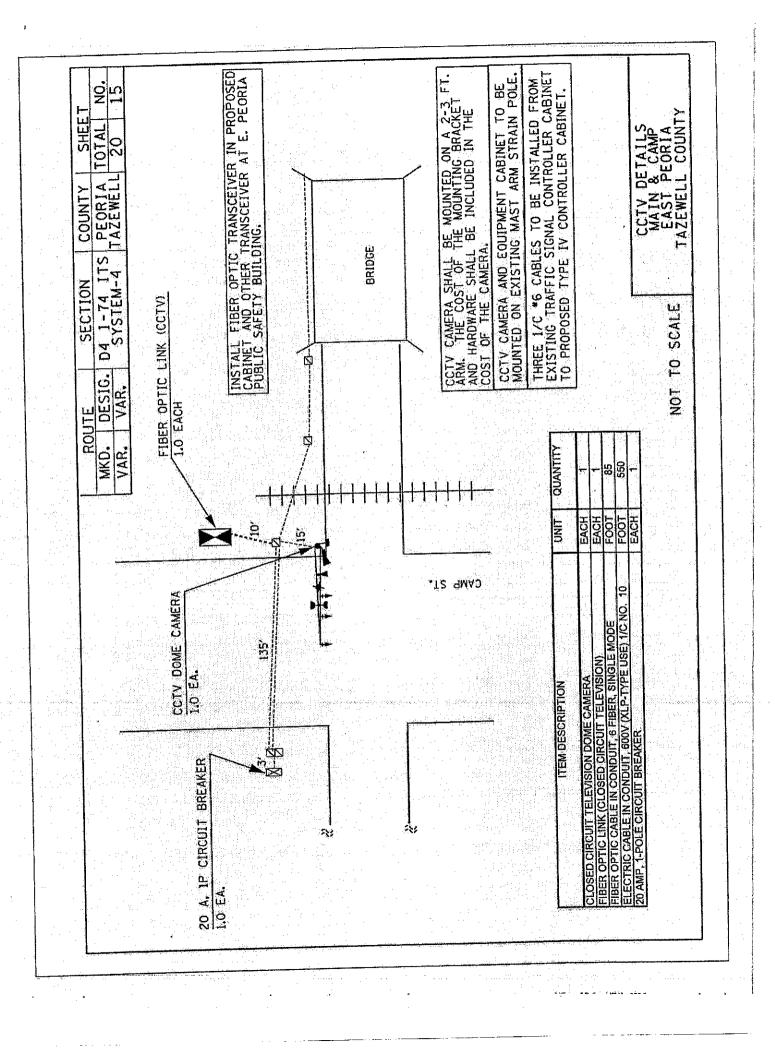




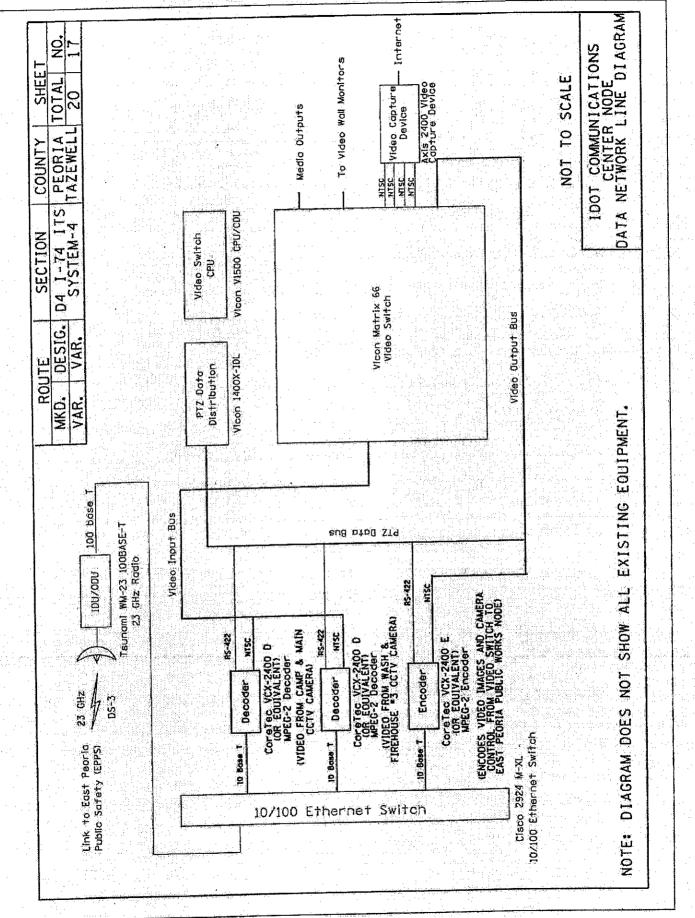




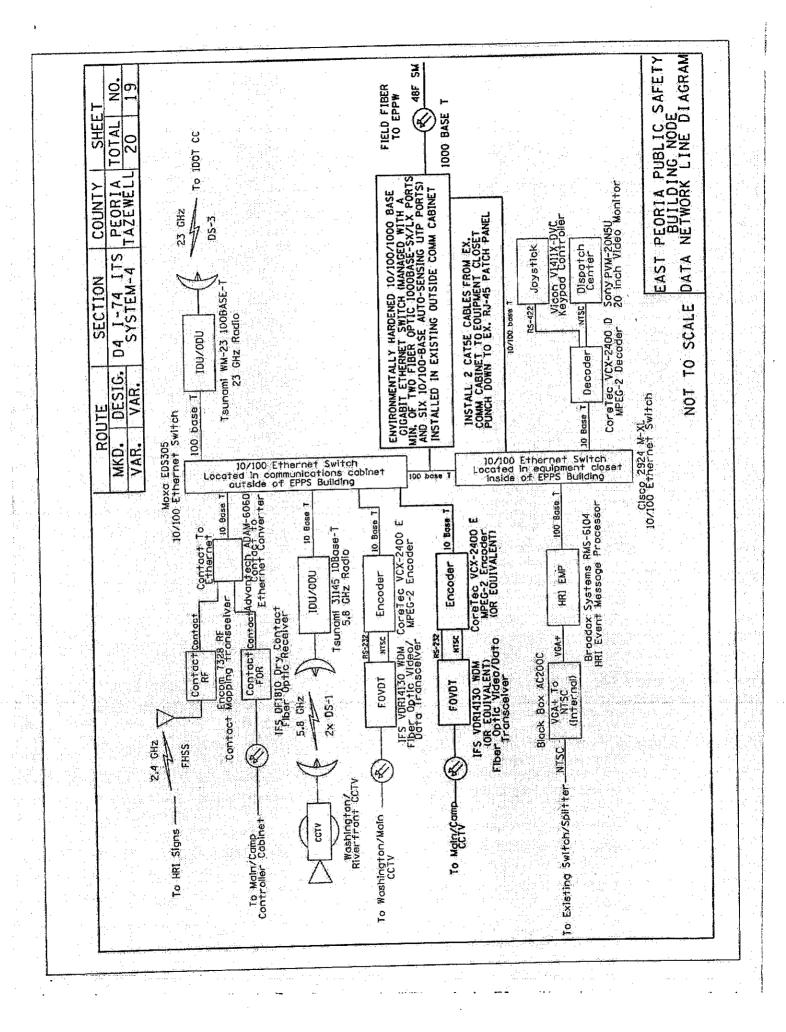


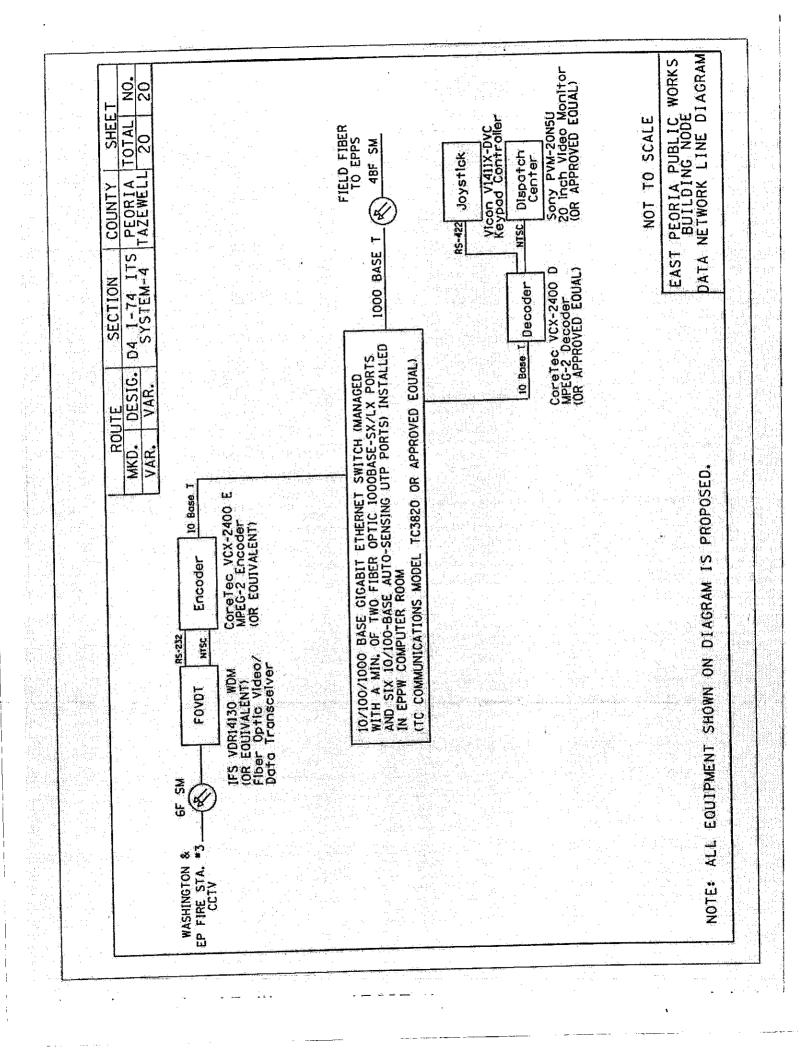


0N 0 IDOT COMMUNICATIONS CENTER BUILDING NODE DETAILS SHEET TOTAL 20 TAZEWELL NSTALL VIDEO DECODER (FOR PROPOSED CCTV CAMERA AT MAIN ST. & CAMP ST.) NSTALL VIDEO ENCODER (TO ENCODE VIDEO FROM VIDEO SWITCH TO EAST PEORIA PUBLIC WORKS BUILDING) COUNTY ITEMS TO BE INSTALLED (REFER TO PROJECT SPECIAL PROVISIONS FOR COMPLETE DETAILS D4 I-74 ITS SYSTEM-4 ILLINOIS DEPARTMENT OF TRANSPORTATION COMMUNICATIONS CENTER NODE NSTALL VIDEO DECODER (FOR PROPOSED CCTV CAMERA AT WASHINGTON ST. & FIRE STA. 3) SECTION NSTALL ALL OTHER ITEMS REQUIRED FOR THE IMPROVEMENT (CABLES, ACCESSORIES, ETC.) NOT TO SCALE DESIG. VAR. ROUTE AND SPECIFICATIONS) NTEGRATE PROPOSED COMPONENTS INTO EXISTING ITS SYSTEM MKD. VAR.



EP PUBLIC SAFETY BUILDING EP PUBLIC WORKS BUILDING DATA NETWORK LINE DIAGRAM NO. 18 SHEET TOTAL 20 PEORIA TAZEWELL INSTALL FIBER SPLICE TRAY IN EXISTING OUTDOOR COMM CABINET (USE EXISTING FIBER TERMINATION PANEL) COUNTY INSTALL HARDENED GIGABIT ETHERNET SWITCH (MANAGED WITH A MINIMUM OF Z FIBER PORTS AND 6 RJ-45 NSTALL CAT 5E CABLE FROM EXISTING OUTDOOR COMMUNICATION CABINET TO EQUIPMENT CLOSET USING PERFORM BUILDING WORK (WALL PENETRATION, INSTALL FLEXIBLE CONDUIT, ETC. AS SHOWN ON PLANS) INSTALL GIGABIT ETHERNET SWITCH (MANAGED WITH A MINIMUM OF2 FIBER PORTS AND 8 RJ-45 PORTS) NSTALL VIDEO DECODER (TO DECODE VIDEO SENT FROM THE IDOT COMMUNICATIONS CENTER NODE) ITEMS TO BE INSTALLED (REFER TO PROJECT SPECIAL PROVISIONS FOR COMPLETE DETAILS ITEMS TO BE INSTALLED (REFER TO PROJECT SPECIAL PROVISIONS FOR COMPLETE DETAILS D4 I-74 ITS SYSTEM-4 SECTION INSTALL ALL OTHER ITEMS REQUIRED FOR THE IMPROVEMENT (CABLES, ACCESSORIES, ETC.) NSTALL ALL OTHER ITEMS REQUIRED FOR THE IMPROVEMENT (CABLES, ACCESSORIES, ETC.) SCALE PORTS) IN EXISTING EQUIPMENT RACK IN EXISTING OUTDOOR COMMUNICATIONS CABINET EAST PEORIA PUBLIC SAFETY BUILDING NODE - 1.0 LSUM 2 DESIG. EAST PEORIA PUBLIC WORKS BUILDING NODE VAR. NOT ROUTE NSTALL VIDEO JOYSTICK CONTROLLER (VICON MODEL V1411X-DVC) AND SPECIFICATIONS) MKD. AND SPECIFICATIONS) VAR. NTEGRATE PROPOSED COMPONENTS INTO EXISTING ITS SYSTEM INTEGRATE PROPOSED COMPONENTS INTO EXISTING ITS SYSTEM NSTALL 24 PORT RJ-45 PATCH PANEL (FOR FUTURE USE) NSTALL FIBER SPLICE TRAY AND 24 FIBER PATCH PANEL EXISTING CONDUIT AND PUNCH DOWN CABLES **NSTALL 20" VIDEO MONITOR** 





# 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 word performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

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 <u>et seq.</u>) 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 an 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

Page 1

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 employees 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 which 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

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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 Executive 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:

 The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

## **III. NONSEGREGATED FACILITIES**

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

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

## IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

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

## 1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the

contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

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

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

 the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

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

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the question, 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 advised 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 cost 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 journeymanlevel 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 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 cases such trainees shall receive the same fringe benefits as apprentices.

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

#### c. Helpers:

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

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

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

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:

 that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

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

(3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for

inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

## VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of 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 he 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 form 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 <u>et seq.</u>, as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 <u>et seq.</u>, 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 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 knowingly 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.

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# 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 judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

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 tie 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 dealing.

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.

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## 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.

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# 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.

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# MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision

# **NOTICE**

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at <u>http://www.dot.il.gov/desenv/delett.html</u>.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at http://www.dot.il.gov/desenv/subsc.html.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.