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 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 "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 bidders check IDOT's website at http://www.dot.il.gov/desenv/delett.html before submitting final bid information.

IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL 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 Timothy.Garman@illinois.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

ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

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

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

BIDDERS

ILLI OKIT WITH BID
Proposal Submitted By
Name
Address
City

Letting March 6, 2009

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. 97367
RANDOLPH County
Section 06-00058-00-HP (Chester)
Route CHESTER WELCOME CENTER
Project TE-D8(120)
District 8 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:	
☐ A <u>Bid Bond</u> is included.	
A Cashier's Check or a Certified Check is included	

Prepared by

F

Checked by

Printed by authority of the State of Illinois)

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 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).</u>

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 will indicate the reason for denial. If a contractor has requested to bid but has not received a 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.

Call

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding

J	
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

Project TE-D8(120)

Route CHESTER WELCOME CENTER

District 8 Construction Funds

1.	Proposal of
Та	xpayer Identification Number (Mandatory) for the improvement identified and advertised for bids in the Invitation for Bids as:
	Contract No. 97367 RANDOLPH County Section 06-00058-00-HP (Chester)

Project consists of building a 1,200 sq ft welcome center with an attached deck, sidewalks, oil and chip existing parking area and drainage structures, located within the limits of Segar Memorial Park, which is located on the Illinois approach to the Chester Bridge on IL Route 150 in the city of Chester. 1 building; 861 sq ft PCC sidewalk; 36 sq yds PCC driveway pavement; 607 gals bituminous materials (prime coat); 567 gals bituminous materials (cover and seal coats); 16 tons seal coat aggregate; 72 sq ft sidewalk removal; 89 ft water service line; 262 ft sanitary sewer; 100 ft split rail fence to be removed and re-erected; 40 sq yds sodding; traffic control and protection; Federally funded. //j(Job No. C-98-306-07) //h(0-00989-0000) //P(Local Roads Job)

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.

- 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:

<u>A</u>	mount o	of Bid	Proposal <u>Guaranty</u>	<u>Am</u>	ount c	Proposal <u>of Bid</u> <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	e proposal guaranty shall become
the property of the State of Illinois, and shall be considered as payment of da	mages due to delay and other causes suf	fered by the State because of the
failure to execute said contract and contract bond; otherwise, the bid bond s	shall become void or the proposal guaran	ity check shall be returned to the
undersigned.		

undersigned.		
Attach Cashier's	Check or Certif	ied Check Here
In the event that one proposal guaranty check is intended to cover to fithe proposal guaranties which would be required for each individuatate below where it may be found.		
The proposal guaranty check will be found in the proposal for:	Item	
	Section No.	
	County	
1		

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

STATE JOB #- C-98-306-07 PPS NBR - 0-00989-0000

ILLINOIS DEPARTMENT OF TRANSPORTATION ECMS SCHEDULE OF PRICES CONTRACT NUMBER - 97367 RUN

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ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 97367

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ILLINOIS DEPARTMENT OF TRANSPORTATION ECMSO SCHEDULE OF PRICES CONTRACT NUMBER - 97367 RUN 1

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EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE.

NOTE:

- THE UNIT PRICE SHALL GOVERN IF NO TOTAL PRICE IS SHOWN OR IF THE PRODUCT OF THE UNIT PRICE MULTIPLIED BY THE QUANTITY. THERE IS A DISCREPANCY BETWEEN
- ω. A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.
- BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN.

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 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.

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 \$171,000.00. Sixty percent of the salary is \$102,600.00.

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 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.

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, Section 50-60(c), provides:

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.

L. Executive Order Number 1 (2007) Regarding Lobbying on Government Procurements

The bidder hereby warrants and certifies that they have complied and will comply with the requirements set forth in this Order. The requirements of this warrant and certification are a material part of the contract, and the contractor shall require this warrant and certification provision to be included in all approved subcontracts.

M. Disclosure of Business Operations in Iran

Public Act 95-0616 provides that each bid, offer, or proposal submitted for a State contract shall include a disclosure of whether or not the Company acting as the bidder, offer or, or proposing entity, or any of its corporate parents or subsidiaries, within the 24 months before submission of the bid, offer, or proposal had business operations that involved contracts with or provision of supplies or services to the Government of Iran, companies in which the Government of Iran has any direct or indirect equity share, consortiums or projects commissioned by the Government of Iran, or companies involved in consortiums or projects commissioned by the Government of Iran and either of the following conditions apply:

- (1) More than 10% of the Company's revenues produced in or assets located in Iran involve oil-related activities or mineral-extraction activities; less than 75% of the Company's revenues produced in or assets located in Iran involve contracts with or provision of oil-related or mineral-extraction products or services to the Government of Iran or a project or consortium created exclusively by that government; and the Company has failed to take substantial action.
- (2) The Company has, on or after August 5, 1996, made an investment of \$20 million or more, or any combination of investments of at least \$10 million each that in the aggregate equals or exceeds \$20 million in any 12-month period, which directly or significantly contributes to the enhancement of Iran's ability to develop petroleum resources of Iran.

The terms "Business operations", "Company", "Mineral-extraction activities", "Oil-related activities", "Petroleum resources", and "Substantial action" are all defined in the Act.

Failure to make the disclosure required by the Act shall cause the bid, offer or proposal to be considered not responsive. The disclosure will be considered when evaluating the bid, offer, or proposal or awarding the contract. The name of each Company disclosed as doing business or having done business in Iran will be provided to the State Comptroller.

	Check the appropriate statement:
	// Company has no business operations in Iran to disclose.
	// Company has business operations in Iran as disclosed the attached document.
N.	Registration with the State Board of Elections.
	Public Act 95-0971, amending the Illinois Procurement Code, 30 ILCS 500, adding new sections 20-160 and 50-37, and Executive Order 3 (2008) establish new requirements affecting contributions that contractors, consultants, vendors and bidders, including affiliated persons and entities, may make to state officeholders, declared candidates for state offices and political organizations established to benefit such officeholders and candidates. These provisions do not apply to federal-aid contracts.
	By submission of a bid, the bidder acknowledges and agrees that it has read and understands the requirements of PA 95-0971 and Executive Order 3 (2008), including but not limited to, all reporting requirements and all restrictions on soliciting and making contributions to state officeholders, declared candidates for state offices and covered political organizations that promote the candidacy of an officeholder or declared candidate for office. In addition, the bidder makes the following certifications:
	(1) As to Executive Order 3 (2008), the bidder certifies that no contribution will be made that would violate the order, and that the bidder will report all contributions as required by the order.
	(2) As to PA 95-0971, the bidder shall check either of the following certifications that apply:
	// The bidder is not required to register as a business entity with the State Board of Elections.
	// The bidder has registered as a business entity with the State Board of Elections, and acknowledges a continuing duty to update the registration as required the Act. A copy of the time-stamped certificate of registration is enclosed with the bid. The Department will not award this contract without the submission of a certificate of registration

In accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, this certification shall be part of the contract. Compliance with PA 95-0971 and Executive Order 3 (2008) is a material part of the contract and any breach shall be cause to void the contract under Section 50-60 of the Illinois Procurement Code.

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 check the following certification statement indicating that the information previously submitted by the bidder is, as of the date of submission, current and accurate. Before checking this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder checks 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)								
	Signature of Authorized Representative	Date							

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

D.

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 NOT APPLICABLE STATEMENT 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								
2.	 Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$102,600.00? YES NO 								
3.	Does anyone in your organization receive more than \$102,600.00 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 \$102,600.00? YES NO								
	(Note: Only one set of forms needs to be completed <u>per person per bid</u> even if a specific individual would require a yes answer to more than one question.)								
the bidd authoriz	"answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or ding 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 zed to execute contracts for your organization. Photocopied or stamped signatures are not acceptable . The person signing can be, but of the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.								
	nswer 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 on that is authorized to execute contracts for your company.								
bidding	3: Identifying Other Contracts & Procurement Related Information Disclosure Form B must be completed for each bid submitted by the entity. Note: Checking the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be sted, checked, and dated or the bidder may be considered nonresponsive and the bid will not be accepted.								
ongoing	dder shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other g procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:								
agency attached and are	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 pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an ed sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts onto be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital pment Board must be included. Bidders who submit Affidavits of Availability are suggested to use Option II.								
"See Afragency	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 ffidavit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois pending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the it of Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.								
Bidders	s Submitting More Than One Bid								
	s 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. indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms rence.								
	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:								

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

Contractor Name				٦
Legal Address				_
-				
City, State, Zip				
Telephone Number	Email Address		Fax Number (if available)	1
Disclosure of the information contained LCS 500). Vendors desiring to enter is potential conflict of interest information bublicly available contract file. This Formation contracts. A publicly traded company the requirements set forth in Form A.	nto a contract with the as specified in this orm A must be comply may submit a 10k	ne State of Illinois in Disclosure Form. Dieted for bids in each of the control o	must disclose the financial information shall become parexcess of \$10,000, and for all oper	tion and rt of the n-ended
<u>DI</u>	SCLOSURE OF FI	NANCIAL INFORM	<u>IATION</u>	
1. Disclosure of Financial Information of ownership or distributive income share of the Governor's salary as of 7/1/07). A for each individual meeting these FOR INDIVIDUAL (type or print info	are in excess of 5%, on the copies of this requirements)	or an interest which	has a value of more than \$102,600	.00 (60%
NAME:				
ADDRESS				
Type of ownership/distributable	income share:			
stock sole proprieto % or \$ value of ownership/distribut	· —	Partnership	other: (explain on separate sheet)	:
2. Disclosure of Potential Conflicts potential conflict of interest relationship describe.				
(a) State employment, currently of	or in the previous 3 ye	ears, including conti	ractual employment of services. YesNo	
If your answer is yes, please a	answer each of the fo	llowing questions.		
Are you currently an one Highway Authority?	officer or employee of	f either the Capitol I	Development Board or the Illinois To YesNo	oll
currently appointed to exceeds \$102,600.00	or employed by any , (60% of the Govern	agency of the State nor's salary as of 7	of the State of Illinois? If you are of Illinois, and your annual salary /1/07) provide the name the State	

3.	If you are currently appointed to or employed by any agency of the salary exceeds \$102,600.00, (60% of the Governor's salary as of (i) more than 7 1/2% of the total distributable income of your f corporation, or (ii) an amount in excess of the salary of the Govern	7/1/07) are you entitled to receive irm, partnership, association or
4.	If you are currently appointed to or employed by any agency of the salary exceeds \$102,600.00, (60% of the Governor's salary as of or minor children entitled to receive (i) more than 15% in aggregat of your firm, partnership, association or corporation, or (ii) an am salary of the Governor?	7/1/07) are you and your spouse e of the total distributable income
	employment of spouse, father, mother, son, or daughter, including or previous 2 years.	ontractual employment for services
If your	answer is yes, please answer each of the following questions.	YesNo
1.	Is your spouse or any minor children currently an officer or employed Board or the Illinois Toll Highway Authority?	ee of the Capitol Development YesNo
2.	Is your spouse or any minor children currently appointed to or emp of Illinois? If your spouse or minor children is/are currently appoint agency of the State of Illinois, and his/her annual salary exceeds Governor's salary as of 7/1/07) provide the name of the spouse at of the State agency for which he/she is employed and his/her annual	ted to or employed by any \$102,600.00, (60% of the nd/or minor children, the name
3.	If your spouse or any minor children is/are currently appointed to of State of Illinois, and his/her annual salary exceeds \$102,600.00, (as of 7/1/07) are you entitled to receive (i) more than 71/2% of the firm, partnership, association or corporation, or (ii) an amount in Governor?	60% of the salary of the Governor total distributable income of your
4.	If your spouse or any minor children are currently appointed to or State of Illinois, and his/her annual salary exceeds \$102,600.00, (607/1/07) are you and your spouse or any minor children entitled to reaggregate of the total distributable income from your firm, partnersh (ii) an amount in excess of 2 times the salary of the Governor?	0% of the Governor's salary as of eceive (i) more than 15% in the hip, association or corporation, or
		Yes No
unit of	e status; the holding of elective office of the State of Illinois, the gove local government authorized by the Constitution of the State of Illincurrently or in the previous 3 years.	
. ,	onship to anyone holding elective office currently or in the previous 2 daughter.	years; spouse, father, mother, YesNo
Americ of the S	ntive office; the holding of any appointive government office of the State, or any unit of local government authorized by the Constitution of the State of Illinois, which office entitles the holder to compensation in excharge of that office currently or in the previous 3 years.	he State of Illinois or the statues
	nship to anyone holding appointive office currently or in the previous daughter.	2 years; spouse, father, mother, YesNo
(g) Employ	yment, currently or in the previous 3 years, as or by any registered lo	obbyist of the State government. YesNo

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, son, or daughter. YesNo _									
(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. YesNo									
(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 Form A is submitted on behalf of the INDIVIDUAL named on previous page.									
Completed by:									
Signature of Individual or Authorized Representative	Date								
NOT APPLICABLE STATEMENT									
I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.									
This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.									
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 availa	able)				
Disclosure of the information contained in	this Form is required by the	e Section 50-35 of the Illinois	s Procurement				
Act (30 ILCS 500). This information shall	become part of the publicly	available contract file. This F	orm B must				
pe completed for bids in excess of \$10,00	0, and for all open-ended o	ontracts.					
DISCLOSURE OF OTHE	R CONTRACTS AND PRO	CUREMENT RELATED INF	ORMATION				
1. Identifying Other Contracts & Prochas any pending contracts (including learnly other State of Illinois agency: Yelf "No" is checked, the bidder only need to the contracts of the contract of the contracts of the contract of the c	ses), bids, proposals, or othes No	her ongoing procurement rela	tionship with				
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 F	OLLOWING STATEMENT	MUST BE CHECKED					
	Signature of Authorized Repr	esentative	Date				

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.



PART I. IDENTIFICATION

TRAINEES

Contract No. 97367
RANDOLPH County
Section 06-00058-00-HP (Chester)
Project TE-D8(120)
Route CHESTER WELCOME CENTER
District 8 Construction Funds

Dept. Human Rights #						Duration of Project:											
Name of Bidder: _																	
PART II. WORKFO A. The undersigned which this contract we projection including a	d bidder ha	as analyz e perform	ed mir ed, an	d for th d fema	ne locat	ions fro	m whic	h the b	idder re	cruits	employe	ees, and her	eby subm	its the follo	owir con	ng workfo	ı rce
		TOTA	AL Wo	rkforce	Projec	tion for	Contra	ıct					C	URRENT	EN	IPLOYEE	S
				MINI	ORITY	EMPLO	YEES			TR	AINEES			TO BE			
JOB CATEGORIES		TAL OYEES	BLA	ACK	HISP		*OTI		APPI TIC	REN-	ON T	HE JOB INEES		TAL OYEES		MINO EMPLO	
OFFICIALS	М	F	M	F	М	F	М	F	М	F	М	F	M	F		М	F
(MANAGERS)																	
SUPERVISORS																	
FOREMEN																	
CLERICAL																	
EQUIPMENT OPERATORS																	
MECHANICS																	
TRUCK DRIVERS																	
IRONWORKERS																	
CARPENTERS																	
CEMENT MASONS																	
ELECTRICIANS																	
PIPEFITTERS, PLUMBERS																	
PAINTERS																	
LABORERS, SEMI-SKILLED																	
LABORERS, UNSKILLED																	
TOTAL																	
	TAE TOTAL Tr	BLE C	niectio	n for C	ontract				1		Γ	FOR I	DEPARTM	IENT USE	٥N	ILY	
EMPLOYEES	TO	TAL						THER	1								
IN TRAINING	EMPL M	OYEES F	BL/ M	ACK F	HISF	PANIC	MIM M	NOR.	4								
APPRENTICES	IVI	Г	IVI	Г	IVI	Г	IVI	F	1								
ON THE JOB	+	1					1										

Note: See instructions on page 2

BC 1256 (Rev. 12/11/08)

Other minorities are defined as Asians (A) or Native Americans (N).
Please specify race of each employee shown in Other Minorities column.

Contract No. 97367
RANDOLPH County
Section 06-00058-00-HP (Chester)
Project TE-D8(120)
Route CHESTER WELCOME CENTER
District 8 Construction Funds

PART II. WORKFORCE PROJECTION - continued

B.		ded in "Total Employees" under Table A is the total n the undersigned bidder is awarded this contract.	umber of new hires that	er of new hires that would be employed in the				
	The u	ındersigned bidder projects that: (number)		new hires would be				
	recruit	ited from the area in which the contract project is located new hires would be	ated; and/or (number)					
	office	or base of operation is located.						
C.		ded in "Total Employees" under Table A is a projection of numbers of						
	be dire	undersigned bidder estimates that (number) rectly employed by the prime contractor and that (number) byed by subcontractors.	mber)	persons will be				
PART I	II. AFF	FIRMATIVE ACTION PLAN						
A. The undersigned bidder understands and agrees that in the event the foregoing minority and female er utilization projection included under PART II is determined to be an underutilization of minority persons in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, properties to the commencement of work, develop and submit a written Affirmative Action Plan including a specific times (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employutilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting age the Department of Human Rights .								
B.	submi	indersigned bidder understands and agrees that the itted herein, and the goals and timetable included ur part of the contract specifications.						
Compa	any		Telephone Number					
Addres	 SS							
		NOTICE REGARDING	SIGNATURE					
		signature on the Proposal Signature Sheet will constitute ted only if revisions are required.	the signing of this form. The	ne following signature block needs				
Signat	ure: 🗌		Title:	Date:				
Instructi	ons:	All tables must include subcontractor personnel in addition to personnel in addition ad	ime contractor personnel.					
Table A	-	Include both the number of employees that would be hired to perform the contract work and the total number currently employ (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" columns 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 currently employed.	to the contract work including a	any apprentices and on-the-job trainees				
Table C	-	Indicate the racial breakdown of the total apprentices and on-th	e-job trainees shown in Table A	١.				
				DO 4050 (D 40/44/00)				

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
2.	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. 97367
RANDOLPH County
Section 06-00058-00-HP (Chester)
Project TE-D8(120)
Route CHESTER WELCOME CENTER
District 8 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)	Signature of Owner	
	Business Address	
	Firm Name	
	Ву	
(IF A CO-PARTNERSHIP)	Business Address	
		Name and Address of All Members of the Firm:
-		
		,
	Ву	Signature of Authorized Representative
(IF A CORPORATION)		g ,
		Typed or printed name and title of Authorized Representative
	A+++	
	Attest	Signature
(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE	Business Address	
SECOND PARTY SHOULD SIGN BELOW)		
	Corporate Name	
(IE A JOINT VENTURE)	Ву	Circulary of Authorized Programme Information
(IF A JOINT VENTURE)		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	Signature
	Business Address	
	240000 / (441000	
If more than two parties are in the joint venture	nlagga attach an addit	ional cignature choot



Return with Bid

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 specified in Article 102.09 of the "Standard Specifications for I is the lesser sum, well and truly to be paid unto said STATE administrators, successors and assigns.	Road and Bridge Construct	tion" in effect on the date of invitation for bids, whichever
THE CONDITION OF THE FOREGOING OBLIGATION I STATE OF ILLINOIS, acting through the Department of Transhumber and Letting Date indicated above.	-	· ·
NOW, THEREFORE, if the Department shall accept the and as specified in the bidding and contract documents, submafter award by the Department, the PRINCIPAL shall enter in including evidence of the required insurance coverages and performance of such contract and for the prompt payment of failure of the PRINCIPAL to make the required DBE submission to the Department the difference not to exceed the penalty he which the Department may contract with another party to pervoid, otherwise, it shall remain in full force and effect.	nit a DBE Utilization Plan that of a contract in accordance providing such bond as if labor and material furnishing or to enter into such contereof between the amount	hat is accepted and approved by the Department; and if, the with the terms of the bidding and contract documents appecified with good and sufficient surety for the faithful hed in the prosecution thereof; or if, in the event of the tract and to give the specified bond, the PRINCIPAL pays appecified in the bid proposal and such larger amount for
IN THE EVENT the Department determines the PRINCI paragraph, then Surety shall pay the penal sum to the Department within such period of time, the Department may bring expenses, including attorney's fees, incurred in any litigation in In TESTIMONY WHEREOF, the said PRINCIPAL and the	ment within fifteen (15) days g an action to collect the ar n which it prevails either in which it SURETY have caus	s of written demand therefor. If Surety does not make full mount owed. Surety is liable to the Department for all its whole or in part. sed this instrument to be signed by
their respective officers this day of		A.D.,
PRINCIPAL		
(Company Name)		(Company Name)
By(Signature & Title)	Ву:	(Signature of Attorney-in-Fact)
(Signature & Title)		(Signature of Attorney-in-Fact)
Notary Certification for Principal and Surety		
STATE OF ILLINOIS, County of		
I,	. a Notarv Pul	olic in and for said County, do hereby certify that
	and	, , , , , , , , , , , , , , , , , , ,
(Insert names of individua	als signing on behalf of PRI	NCIPAL & SURETY)
who are each personally known to me to be the same persons and SURETY, appeared before me this day in person and ack and voluntary act for the uses and purposes therein set forth.	s whose names are subscr knowledged respectively, th	ibed to the foregoing instrument on behalf of PRINCIPAL at they signed and delivered said instrument as their free
Given under my hand and notarial seal this	day of	A.D
My commission expires		
In the of appropriate the character of the D	Forms the Delegate 1	Notary Public
In lieu of completing the above section of the Proposal Bid F marking the check box next to the Signature and Title line be and the Principal and Surety are firmly bound unto the State of	elow, the Principal is ensur	ing the identified electronic bid bond has been executed
Electronic Bid Bond ID# Company / Bidde	er 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:

Name:	
Address:	
Phone 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. 97367
RANDOLPH County
Section 06-00058-00-HP (Chester)
Project TE-D8(120)
Route CHESTER WELCOME CENTER
District 8 Construction Funds



Illinois Department of Transportation

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., March 6, 2009. 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. 97367
RANDOLPH County
Section 06-00058-00-HP (Chester)
Project TE-D8(120)
Route CHESTER WELCOME CENTER
District 8 Construction Funds

Project consists of building a 1,200 sq ft welcome center with an attached deck, sidewalks, oil and chip existing parking area and drainage structures, located within the limits of Segar Memorial Park, which is located on the Illinois approach to the Chester Bridge on IL Route 150 in the city of Chester. 1 building; 861 sq ft PCC sidewalk; 36 sq yds PCC driveway pavement; 607 gals bituminous materials (prime coat); 567 gals bituminous materials (cover and seal coats); 16 tons seal coat aggregate; 72 sq ft sidewalk removal; 89 ft water service line; 262 ft sanitary sewer; 100 ft split rail fence to be removed and re-erected; 40 sq yds sodding; traffic control and protection; Federally funded. //j(Job No. C-98-306-07) //h(0-00989-0000) //P(Local Roads Job)

- 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

Milton R. Sees, Secretary

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2009

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

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-07) (Revised 1-1-09)

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LR 105 112 Cooperation with Utilities Jan. 1, 1999 Jan. 1, 2007 LR 107-2 ☐ Railroad Protective Liability Insurance for Local Lettings Mar. 1, 2005 Jan. 1, 2006 LR 107-3 ☐ Disadvantaged Business Enterprise Participation Jan. 1, 2007 Nov. 1, 2008 LR 107-4 115 ☐ Insurance Feb. 1, 2007 Aug. 1, 2007 LR 107-5 ☐ Substance Abuse Prevention Program Jan. 1, 2008 Jan. 8, 2008 LR 108 ☐ Combination Bids Jan. 1, 1994 Mar. 1, 2005 LR 212 ☐ Shaping Roadway Aug. 1, 1969 Jan. 1, 2002 LR 355-1 ☐ Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix Oct. 1, 1973 Jan. 1, 2007 LR 400-1 ☐ Bituminous Treated Earth Surface Jan. 1, 2008 Jan. 1, 2008 LR 400-2 ☐ Bituminous Surface Mixture (Class B) Jan. 1, 2008 Jan. 1, 2008 LR 400-3 ☐ Pavement Rehabilitation by the Heat-Scarify-Overlay Method Jan. 1, 2008 Jan. 1, 2007 LR 403-2 ☐ Bituminous Hot Mix Sand Seal Coat Aug. 1, 1969 Jan. 1, 2007 LR 406 ☐ Filling HMA Core Holes with Non-shr	LR SD 13			Required Cold Milled Surface Texture		Jan. 1, 2007
LR 107-2 ☐ Railroad Protective Liability Insurance for Local Lettings Mar. 1, 2005 Jan. 1, 2006 LR 107-3 ☐ Disadvantaged Business Enterprise Participation Jan. 1, 2007 Nov. 1, 2008 LR 107-4 115 ☐ Insurance Feb. 1, 2007 Aug. 1, 2007 LR 107-5 ☐ Substance Abuse Prevention Program Jan. 1, 1908 Jan. 1, 2008 Jan. 1, 2008 Jan. 1, 2005 LR 108 ☐ Combination Bids Jan. 1, 1994 Mar. 1, 2005 Jan. 1, 1994 Mar. 1, 2005 LR 212 ☐ Shaping Roadway Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix Oct. 1, 1973 Jan. 1, 2007 LR 355-2 ☐ Asphalt Stabilized Base Course, Plant Mix Feb. 2, 1963 Jan. 1, 2007 LR 400-1 ☐ Bituminous Surface Mixture (Class B) Jan. 1, 2008 Jan. 1, 2008 LR 400-2 ☐ Bituminous Surface Mixture (Class B) Jan. 1, 2008 Jan. 1, 2008 LR 400-3 ☐ Pavement Rehabilitation by the Heat-Scarify-Overlay Method Jan. 1, 2008 Jan. 1, 2007 LR 403-2 ☐ Bituminous Hot Mix Sand Seal Coat Aug. 1, 1969 Jan. 1, 2007 LR 406 ☐ Filling HMA Core Hol				Protests on Local Lettings	Jan. 1, 2007	
LR 107-3 □ Disadvantaged Business Énterprise Participation Jan. 1, 2007 Nov. 1, 2008 LR 107-4 115 □ Insurance Feb. 1, 2007 Aug. 1, 2007 LR 107-5 □ Substance Abuse Prevention Program Jan. 1, 2008 Jan. 1, 2008 LR 108 □ Combination Bids Jan. 1, 1969 Jan. 1, 2005 LR 212 □ Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix Oct. 1, 1973 Jan. 1, 2002 LR 355-1 □ Asphalt Stabilized Base Course, Plant Mix Feb. 2, 1963 Jan. 1, 2007 LR 400-1 □ Bituminous Treated Earth Surface Jan. 1, 2008 LR 400-2 □ Bituminous Surface Mixture (Class B) Jan. 1, 2008 LR 400-3 □ Pavement Rehabilitation by the Heat-Scarify-Overlay Method Jan. 1, 2008 LR 403-2 □ Bituminous Hot Mix Sand Seal Coat Aug. 1, 1969 Jan. 1, 2007 LR 408 □ Filling HMA Core Holes with Non-shrink Grout Jan. 1, 2008 Jan. 1, 2008 LR 42 □ Bituminous Patching Mixtures for Maintenance Use Jan. 1, 2004 Jun. 1, 2007 LR 503-1 □ Crack Filling Bituminous Patching Mixtures for Maintenance Use Jan. 1, 2004 J	LR 105	112	\boxtimes	Cooperation with Utilities	Jan. 1, 1999	Jan. 1, 2007
LR 107-4 115	LR 107-2			Railroad Protective Liability Insurance for Local Lettings	Mar. 1, 2005	Jan. 1, 2006
R 107-4	LR 107-3			Disadvantaged Business Enterprise Participation	Jan. 1, 2007	Nov. 1, 2008
LR 108 □ Combination Bids Jan. 1, 1994 Mar. 1, 2005 LR 212 □ Shaping Roadway Aug. 1, 1969 Jan. 1, 2002 LR 355-1 □ Asphalt Stabilized Base Course, Plant Mix Oct. 1, 1973 Jan. 1, 2007 LR 400-1 □ Bituminous Treated Earth Surface Jan. 1, 2008 Jan. 1, 2008 LR 400-2 □ Bituminous Surface Mixture (Class B) Jan. 1, 2008 Jan. 1, 2008 LR 400-3 □ Pavement Rehabilitation by the Heat-Scarify-Overlay Method Jan. 1, 2008 Jan. 1, 2007 LR 402 □ Salt Stabilized Surface Course Feb. 20, 1963 Jan. 1, 2007 LR 403-2 □ Bituminous Hot Mix Sand Seal Coat Aug. 1, 1969 Jan. 1, 2007 LR 406 □ Filling HMA Core Holes with Non-shrink Grout Jan. 1, 2008 Jan. 1, 2008 LR 420 □ PCC Pavement (Special) May 12, 1964 Jan. 2, 2007 LR 451 □ Crack Filling Bituminous Patching Mixtures for Maintenance Use Jan. 1, 2004 Jan. 1, 2007 LR 503-1 □ Furnishing Class SI Concrete Oct. 1, 1973 Jan. 1, 2007 LR 503-2 □ Furnishing Class SI Concrete (Short Load) Sep. 1, 1964 <td< td=""><td>LR 107-4</td><td>115</td><td>\boxtimes</td><td>Insurance</td><td>Feb. 1, 2007</td><td></td></td<>	LR 107-4	115	\boxtimes	Insurance	Feb. 1, 2007	
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LR 355-2 Asphalt Stabilized Base Course, Plant Mix Feb. 2, 1963 Jan. 1, 2007 LR 400-1 Bituminous Treated Earth Surface Jan. 1, 2008 Jan. 1, 2008 LR 400-2 Bituminous Surface Mixture (Class B) Jan. 1, 2008 Jan. 1, 2008 LR 400-3 Pavement Rehabilitation by the Heat-Scarify-Overlay Method Jan. 1, 2008 Jan. 1, 2007 LR 402 Salt Stabilized Surface Course Feb. 20, 1963 Jan. 1, 2007 LR 403-2 Bituminous Hot Mix Sand Seal Coat Aug. 1, 1969 Jan. 1, 2007 LR 406 Filling HMA Core Holes with Non-shrink Grout Jan. 1, 2008 May 12, 1964 Jan. 2, 2007 LR 420 PCC Pavement (Special) May 12, 1964 Jan. 2, 2007 Jan. 1, 2004 Jun. 1, 2004 Jun. 1, 2007 LR 451 Crack Filling Bituminous Pavement with Fiber-Asphalt Oct. 1, 1991 Jan. 1, 2002 LR 503-1 Furnishing Class SI Concrete Oct. 1, 1973 Jan. 1, 2002 LR 542 Pipe Culverts, Type (Furnished) Sep. 1, 1964 Jan. 1, 2007 LR 663 Calcium Chloride Applied Jun. 1, 1958 Jan. 1, 2007 LR 700<	LR 212			Shaping Roadway	Aug. 1, 1969	
LR 400-1 ☐ Bituminous Treated Earth Surface Jan. 1, 2008 LR 400-2 ☐ Bituminous Surface Mixture (Class B) Jan. 1, 2008 LR 400-3 ☐ Pavement Rehabilitation by the Heat-Scarify-Overlay Method Jan. 1, 2008 LR 402 ☐ Salt Stabilized Surface Course Feb. 20, 1963 Jan. 1, 2007 LR 403-2 ☐ Bituminous Hot Mix Sand Seal Coat Aug. 1, 1969 Jan. 1, 2007 LR 406 ☐ Fillling HMA Core Holes with Non-shrink Grout Jan. 1, 2008 May 12, 1964 Jan. 2, 2007 LR 420 ☐ PCC Pavement (Special) May 12, 1964 Jan. 2, 2007 LR 442 ☐ Bituminous Patching Mixtures for Maintenance Use Jan. 1, 2004 Jun. 1, 2007 LR 451 ☐ Crack Filling Bituminous Pavement with Fiber-Asphalt Oct. 1, 1991 Jan. 1, 2007 LR 503-1 ☐ Furnishing Class SI Concrete Oct. 1, 1973 Jan. 1, 2002 LR 503-2 ☐ Furnishing Class SI Concrete (Short Load) Jan. 1, 1989 Jan. 1, 2002 LR 542 ☐ Pipe Culverts, Type	LR 355-1			Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 400-2				Asphalt Stabilized Base Course, Plant Mix	Feb. 2, 1963	Jan. 1, 2007
LR 400-3 Pavement Rehabilitation by the Heat-Scarify-Overlay Method Jan. 1, 2008 LR 402 Salt Stabilized Surface Course Feb. 20, 1963 Jan. 1, 2007 LR 403-2 Bituminous Hot Mix Sand Seal Coat Aug. 1, 1969 Jan. 1, 2007 LR 406 Filling HMA Core Holes with Non-shrink Grout Jan. 1, 2008 May 12, 1964 Jan. 2, 2007 LR 420 PCC Pavement (Special) May 12, 1964 Jan. 2, 2007 LR 442 Bituminous Patching Mixtures for Maintenance Use Jan. 1, 2004 Jun. 1, 2007 LR 451 Crack Filling Bituminous Pavement with Fiber-Asphalt Oct. 1, 1991 Jan. 1, 2007 LR 503-1 Furnishing Class SI Concrete Oct. 1, 1973 Jan. 1, 2002 LR 503-2 Furnishing Class SI Concrete (Short Load) Jan. 1, 1989 Jan. 1, 2002 LR 542 Pipe Culverts, Type (Furnished) Sep. 1, 1964 Jan. 1, 2007 LR 663 Calcium Chloride Applied Jun. 1, 1958 Jan. 1, 2007 LR 702 Construction and Maintenance Signs Jan. 1, 2004 Jun. 1, 2007 LR 1013 Rock Salt (Sodium Chloride) Aug. 1, 1969 Jan. 1, 20				Bituminous Treated Earth Surface	Jan. 1, 2008	
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LR 1004 Coarse Aggregate for Bituminous Surface Treatment Jan. 1, 2002 Jan. 1, 2007 LR 1013 Rock Salt (Sodium Chloride) Aug. 1, 1969 Jan. 1, 2002 LR 1030 Growth Curve Mar. 1, 2008 LR 1032-1 Penetrating Emulsions Jan. 1, 2007 Feb. 1, 2007 LR 1032-2 Multigrade Cold Mix Asphal Jan. 1, 2007 Feb. 1, 2007			Ц			Jan. 1, 2007
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LR 1032-2			\vdash			
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	LR 1102		Ш	Road IVIX or Traveling Plan Mix Equipment	Jan. 1, 2007	

BDE SPECIAL PROVISIONS For the January 16 and March 6, 2009 Lettings

The following special provisions indicated by an "x" are applicable to this contract. An * indicates a new or revised special provision for the letting.

File Name	Pg#		Special Provision Title	<u>Effective</u>	Revised
80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2007
* 80186	116	X	Alkali-Silica Reaction for Cast-in-Place Concrete	Aug. 1, 2007	Jan. 1, 2009
* 80213	119	X	Alkali-Silica Reaction for Precast and Precast Prestressed Concrete	Jan. 1, 2009	
80207	122	X	Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas Inside Illinois State Borders	Nov. 1, 2008	
80192			Automated Flagger Assistance Device	Jan. 1, 2008	
80173			Bituminous Materials Cost Adjustments	Nov. 2, 2006	Jan. 2, 2007
50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
50481			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
50491			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
50531			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	Jan. 1, 2007
80166	123	Х	Cement	Jan. 1, 2007	Nov. 1, 2007
80198			Completion Date (via calendar days)	April 1, 2008	
80199	İ		Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80193			Concrete Barrier	Jan. 1, 2008	
* 80214			Concrete Gutter, Type A	Jan. 1, 2009	
* 80215			Concrete Joint Sealer	Jan. 1, 2009	
80177	**********	######################################	Digital Terrain Modeling for Earthwork Calculations	April 1, 2007	
80029	126	Х	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Nov. 1, 2008
80178	0		Dowel Bars	April 1, 2007	Jan. 1, 2008
80179			Engineer's Field Office Type A	April 1, 2007	Aug. 1, 2008
80205	ŀ		Engineer's Field Office Type B	Aug. 1, 2007	Aug. 1, 2000
80175	ŀ		Epoxy Pavement Markings	Jan. 1, 2007	
80189	134	Х	Equipment Rental Rates		lan 2 2009
80169	104		High Tension Cable Median Barrier	Aug. 2, 2007	Jan. 2, 2008
80194			HMA – Hauling on Partially Completed Full-Depth Pavement	Jan. 1, 2007	
80181	136	$\overline{}$		Jan. 1, 2008	A
80201	138	X	Hot-Mix Asphalt – Field Voids in the Mineral Aggregate	April 1, 2007	April 1, 2008
80201			Hot-Mix Asphalt – Plant Test Frequency	April 1, 2008	
	140	<u> </u>	Hot-Mix Asphalt – Transportation .	April 1, 2008	
80136			Hot-Mix Asphalt Mixture IL-4.75	Nov. 1, 2004	Jan. 1, 2008
80195	}		Hot-Mix Asphalt Mixture IL-9.5L	Jan. 1, 2008	
80109			Impact Attenuators	Nov. 1, 2003	Nov. 1, 2008
80110		0.60.4174.3	Impact Attenuators, Temporary	Nov. 1, 2003	Jan. 1, 2007
* 80196	1		Mast Arm Assembly and Pole	Jan. 1, 2008	
* 80045				June 15, 1999	
80203	141	×	Metal Hardware Cast into Concrete	April 1, 2008	Nov. 1, 2008
			(NOTE: This special provision was previously named "Steel Inserts		
00165	Ļ		and Brackets Cast into Concrete".)		
80165	}-		Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2007
80082	440		Multilane Pavement Patching	Nov. 1, 2002	
80180	142	X	National Pollutant Discharge Elimination System / Erosion and	April 1, 2007	Nov. 1, 2008
		ı	Sediment Control Deficiency Deduction		
	-		(NOTE: This special provision was previously named "Erosion and		
90000	-		Sediment Control Deficiency Deduction".)		
80208	-		Nighttime Work Zone Lighting	Nov. 1, 2008	
80129 80182	-		Notched Wedge Longitudinal Joint	July 1, 2004	Jan. 1, 2007
	-		Notification of Reduced Width	April 1, 2007	
80069 * 80216	aras birar		Organic Zinc-Rich Paint System	Nov. 1, 2001	Jan. 1, 2008
Secretarion and the second of	140		Partial Exit Ramp Closure for Freeway/Expressway	Jan. 1, 2009	
80022	143		Payments to Subcontractors	June 1, 2000	Jan. 1, 2006
80209	145		Personal Protective Equipment	Nov. 1, 2008	
80134			Plastic Blockouts for Guardrail	Nov. 1, 2004	Jan. 1, 2007
* 80119			Polyurea Pavement Marking	April 1, 2004	Jan, 1, 2009

<u>File Name</u>	<u>Pg#</u>		Special Provision Title	<u>Effective</u>	Revised
80210			Portland Cement Concrete Inlay or Overlay	Nov. 1, 2008	
80170	ternami norme vicac	»,	Portland Cement Concrete Plants	Jan. 1, 2007	
* 80217			Post Clips for Extruded Aluminum Signs	Jan. 1, 2009	
80171	damanandar semasar	,	Precast Handling Holes	Jan. 1, 2007	
* 80218			Preventive Maintenance - Bituminous Surface Treatment	Jan. 1, 2009	
* 80219			Preventive Maintenance – Cape Seal	Jan. 1, 2009	
* 80220 * 80221			Preventive Maintenance – Micro-Surfacing	Jan. 1, 2009	
			Preventive Maintenance – Slurry Seal	Jan. 1, 2009	
80211			Prismatic Curb Reflectors	Nov. 1, 2008	
80015	146	X	Public Convenience and Safety	Jan. 1, 2000	
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	*****		Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	•
* 80223			Ramp Closure for Freeway/Expressway	Jan. 1, 2009	
80172	147	X	Reclaimed Asphalt Pavement (RAP)	Jan. 1, 2007	Aug. 1, 2007
80183	153	X	Reflective Sheeting on Channelizing Devices	April 1, 2007	Nov. 1, 2008
80151	154	X	Reinforcement Bars	Nov. 1, 2005	Jan. 2, 2008
80206	156	Х	Reinforcement Bars – Storage and Protection	Aug. 1, 2008	
* 80224			Restoring Bridge Approach Pavements Using High-Density Foam	Jan. 1, 2009	
80184			Retroreflective Sheeting, Nonreflective Sheeting, and Translucent	April 1, 2007	
			Overlay Film for Highway Signs		
* 80131	157	X	Seeding	July 1, 2004	Jan. 1, 2009
* 80152	an Salahan		Self-Consolidating Concrete for Cast-In-Place Construction	Nov. 1, 2005	Jan. 1, 2009
80132			Self-Consolidating Concrete for Precast Products	July 1, 2004	Jan. 1, 2007
80212	159	Χ	Sign Panels and Sign Panel Overlays	Nov. 1, 2008	
80197	160	Χ	Silt Filter Fence	Jan. 1, 2008	
80127			Steel Cost Adjustment	April 2, 2004	April 1, 2007
80153			Steel Plate Beam Guardrail	Nov. 1, 2005	Aug. 1, 2007
80191			Stone Gradation Testing	Nov. 1, 2007	
80143	161	Χ	Subcontractor Mobilization Payments	April 2, 2005	
80075			Surface Testing of Pavements	April 1, 2002	Jan. 1, 2007
80087	162	_ X	Temporary Erosion Control	Nov. 1, 2002	Jan. 1, 2008
* 80225			Temporary Raised Pavement Marker	Jan. 1, 2009	
80176			Thermoplastic Pavement Markings	Jan. 1, 2007	
20338			Training Special Provisions	Oct. 15, 1975	
80185			Type ZZ Retroreflective Sheeting, Nonreflective Sheeting, and	April 1, 2007	
00440			Translucent Overlay Film for Highway Signs		
80149	400		Variable Spaced Tining	Aug. 1, 2005	Jan. 1, 2007
80071	163	_X_	Working Days	Jan. 1, 2002	
80204	Į		Woven Wire Fence	April 1, 2008	

The following special provisions are in the 2009 Supplemental Specifications and Recurring Special Provisions:

<u>File</u>	Special Provision Title	New Location	Effective	Revised
<u>Name</u>				
80108	Asbestos Bearing Pad Removal	Check Sheet #32	Nov. 1, 2003	
72541	Asbestos Waterproofing Membrane and Asbestos	Check Sheet #33	June 1, 1989	Jan. 2, 2007
	Hot-Mix Asphalt Surface Removal		·	,
80167	Electrical Service Installation – Traffic Signals	Section 805	Jan. 1, 2007	
80164	Removal and Disposal of Regulated Substances	Section 669	Aug. 1, 2006	Jan. 1, 2007
80161	Traffic Signal Grounding	Sections 873 and 1076	April 1, 2006	Jan. 1, 2007
80162	Uninterruptable Power Supply (UPS)	Sections 801, 862 and 1074	April 1, 2006	Jan. 1. 2007
80163	Water Blaster with Vacuum Recovery	Articles 783.02 and 1101.12	April 1, 2006	Jan. 1, 2007

The following special provisions require additional information from the designer. The additional information needs to be included in a separate document attached to this check sheet. The Project Development and Implementation section will then include the information in the applicable special provision. The Special Provisions are:

Building Removal-Case I Building Removal-Case II	Completion Date Completion Date Plus Working Days	Railroad Protective Liability Insurance Training Special Provisions
Building Removal-Case III Building Removal-Case IV	DBE Participation Material Transfer Device	Working Days

SPECIAL PROVISIONS)**(

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", Adopted January 1, 2007, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", the "Manual of Test Procedures for Materials", the "Standard Specifications for Water and Sewer Main Construction in Illinois, 5th Edition", and the "2003 International Building Code" in effect on the date of the 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 the, Chester Welcome Center, Section 06-00058-00-HP, in the City of Chester and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

DESCRIPTION OF WORK

This work shall consist of furnishing all labor, equipment and materials necessary to construct a Welcome Center, drainage structures, sidewalk, and other collateral work required to complete the work shown on the plans.

SITE INSPECTION

The Contractor shall be responsible for an on-site inspection prior to submitting a bid on this project. Upon receipt of a bid, it shall be assumed that the Contractor is fully familiar with the construction site.

SAFETY AND PROTECTION -

Contractor shall be responsible for initiating, maintaining and supervising all safety and precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide necessary protection to prevent damage, injury or loss to:

- 1. All employees on the Work and other persons and organizations who may be affected thereby;
- 2. All the work and materials and equipment to be incorporated therein, whether in storage on or off site; and
- 3. Other property at the site adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of construction.
- 4. All pedestrians, especially school-aged children that will be present at the facilities that are adjacent to the project site.

Contractor shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of persons and property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of underground facilities and utility owners when prosecution of the Work may affect them and shall cooperate with them in the protection, removal, relocation and replacement of their property.

All damage, injury or loss to any property referred to in paragraph 2 or 3 caused, directly or indirectly, in whole or in part, by the Contractor, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the work or for anyone whose acts either directly or indirectly employed by any of them may be liable, shall be remedied by Contractor (Except damage

or loss attributable to the fault of Drawings or Specifications or to the acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor). Contractor's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor that the Work is acceptable.

Contractor shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent, unless otherwise designated in writing by Contractor to Owner.

In EMERGENCIES affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, Contractor, without special instructions or authorization from Engineer or Owner, is obligated to act to prevent threatened damage injury or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents is required because of action taken in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variations.

TRAFFIC CONTROL PLAN

Traffic control shall be according to 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.

At the preconstruction meeting, the Contractor shall furnish the name of the individual in his direct employ who is to be responsible for the actual installation and maintenance of the traffic control for this project. If the actual installation and maintenance are to be accomplished by a subcontractor, consent shall be requested of the Engineer at the time of the preconstruction meeting according to Article 108.01 of the Standard Specifications for Road and Bridge Construction. This shall not relieve the Contractor of the foregoing requirement for a responsible individual in his direct employ. The City will provide the Contractor the name of its representative who will be responsible for the administration of the Traffic Control Plan.

Special attention is called to Article 107.09 and 107.14 of the Standard Specifications for Road and Bridge Construction and the following Highway Standards: 701501 and 701901.

In addition, the following special provision(s) will also govern traffic control for this project:

Traffic Control and Protection, (Special)
Construction and Maintenance Sign Supports
Barricades or Drums
Contractor Access
Work Zone Traffic Control (LRS 3)
Reflective Sheeting on Channelizing Devices (BDE)
Automated Flagger Assistance Device (BDE)

TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

This work shall conform to the applicable portions of Section 701 of the Standard Specifications. This item of work shall include the furnishing, installing, maintaining, relocating, and removing all traffic control devices used for the purpose of regulating, warning or directing the traffic during the construction of this project.

All traffic control devices used on this project shall conform to the plans, special provisions, traffic control standards, Standard Specifications for Traffic Control Items, and the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways. No modification of these requirements will be allowed without prior written approval of the Engineer.

Traffic control devices shall include all temporary traffic control and regulatory signs as described herein, and their supports, temporary pavement markings, barricades with sand bags, plastic drums, channelizing devices, warning lights, arrowboards if necessary, flaggers, or any other device used for the purpose of regulating, warning, or guiding traffic through the construction zone.

The Contractor shall be responsible for the proper location, installation, and arrangement of all traffic control devices as shown on the plans or as directed by the Engineer.

The Contractor, when directed by the Engineer, shall remove all traffic control devices which were furnished, installed and maintained by him under this contract, and such devices shall remain in place until specific authorization for relocation or removal is received from the Engineer.

The Contractor shall contact the Engineer at least 72 hours in advance of beginning work, to allow for coordination between the Traffic Control Plan and the various items of work required.

When traveling in lanes open to public traffic, the Contractor's vehicles shall always move with and not against the flow of traffic. These vehicles shall enter or leave work areas in a manner that will not be hazardous to or interfere with traffic and shall not park or stop except within designated work areas. Personal vehicles shall not park within the right-of-way except in specific areas designated for parking.

The area for the Welcome Center, including the parking areas, will be closed completely. The Contractor will be required to place Type III barricades along the roadway to close this area to all vehicles during construction. Branch Street right turn lane shall be closed completely for construction of the sanitary sewer. The closure shall not be for more than three (3) days. Existing Branch Street shall be closed one lane at a time in accordance with Standard 701501. No traffic control will be required for IL. Route 150.

This work will be considered to be included in the lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL) except for Branch Street which shall be included in the lump sum price for Traffic Control and Protection Standard 701501 no additional compensation or remuneration will be allowed.

CONSTRUCTION AND MAINTENANCE SIGN SUPPORTS

This work shall be done according to Article 701.14 of the Standard Specification for Road and Bridge Construction and Highway Standard 701901 except as herein modified.

All construction signs mounted on permanent support for use in temporary control having an area of 10 square feet or more shall be mounted on two posts.

Type A metal post (two for each sign) conforming to Article 1006.29 of the Standard Specifications for Road and Bridge Construction may be used in lieu of wood posts. Type A metal posts used for these signs may be unfinished.

This item of work shall be considered included in the lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL) and no additional compensation will be allowed for this item of work

BARRICADES OR DRUMS

Prior to commencing construction of the sanitary sewer, sufficient barricades or drums conforming to Standard 701901 and the following requirements shall be on the job site ready for use in the stage construction of this project:

Type I or Type II barricades or drums used in channelizing traffic and protection of hazards shall be equipped with one Type C steady burning light meeting the requirements of Article 1084.01 of the Standard Specifications.

Type I or Type II barricades used in channelization shall be stabilized in a manner allowed by Article 701.14

This item shall be considered included in the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL) and no additional compensation or remuneration will be allowed.

CONTRACTOR ACCESS -

The Contractor shall furnish CA-6 aggregate for temporary access and maintain an all weather construction access to prevent mud from being deposited onto adjacent roadways or parking lots. Also at closure locations, where TYPE III barricades are installed in a manner that will not allow contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each work day may be relocated, when approved by the Engineer, in the manner shown on Highway Standard 701901for Road Closed to Through Traffic. At the end of each workday, the barricades shall be returned to their in-line positions.

All labor, equipment and material required to perform this task shall be considered included in the contract and no additional compensation will be allowed.

JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIE)

This work shall be done according to Article 107.31 of the Standard Specifications except as herein modified.

Because a minimum of 48 (forty-eight) hours advance notice is required for notification to utilities, the Contractor will be required to give the Resident Engineer 96 (ninety-six) hours notice, in writing, for a specific area prior to beginning any excavation.

Locations of proposed storm sewers, sign posts, sign, light, or signal foundations, etc. shall be staked by the Engineer and then notice provided as above.

If any of the location markers placed by a utility company in conformance with this procedure are destroyed by Contractor operations, the Contractor shall immediately notify the utility owner and bear the costs of remarking the facilities at his own cost and expense. Compliance with this special provision shall be considered included in the contract and no additional compensation will be allowed for any costs incurred.

COOPERATION WITH UTILITIES

The following companies have utility facilities within the limits of this project: Verizon Telephone
AmerenIP

City of Chester New Wave

In addition to the requirements of Article 105.07 of the Standard Specifications, the Contractor shall coordinate his operations with the proposed utility adjustments to minimize delays in construction of the project.

The Contractor's attention is directed to the Status of Utilities contained elsewhere herein and the estimated completion dates for the various relocations and adjustments.

Compliance with this special provision shall be according to Article 105.07 of the Standard Specifications, and no additional compensation or remuneration will be allowed for any delays, inconvenience or damage sustained by the Contractor due to any interference from utility appurtenances or the operation of moving them, or on account of any special construction methods required in prosecuting the proposed work due to the existence of said appurtenances either in their present or relocated positions.

SPLIT RAIL FENCE TO BE REMOVED AND RE-ERECTED

This shall consist of removing the existing split rail fence, posts and accessories and re-erecting in the location as shown in the plans. Any damage to the fence, resulting from the Contractor's negligence, shall be repaired or replaced at his/her expense. Adjustment of existing fence posts as shown in the plans shall be considered to be included in this pay item.

This shall be paid for at the contract unit price per foot for SPLIT RAIL FENCE TO BE REMOVED AND RE-ERECTED which price shall be payment in full for complying with this special provision.

PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 6"

This item shall consist of constructing a 6" concrete driveway pavement at the location shown in the plans and in accordance with the applicable portions of Section 423 of the Standard Specifications for Road and Bridge Construction. Also included in this item is the paint pavement marking as indicated in the plans.

Payment for this work shall be at the contract unit price per square yard for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT 6" and no additional compensation will be allowed.

TRASH RECEPTACLES

This shall consist of providing and locating trash receptacles as listed in the plans.

Payment for this item shall be at the contract unit price per each for TRASH RECEPTACLES and no additional compensation will be allowed.

BENCH

This shall consist of providing and locating a bench as listed in the plans.

Payment for this item shall be at the contract unit price per each for BENCH and no additional compensation will be allowed.

SANITARY SEWER, 6"

This item shall consist of constructing sanitary sewers at the location shown in the plans and as directed by the Engineer. Included in the cost of this installation will be the sanitary cleanouts and the steel casings as indicated in the plans.

The cost of performing this work will be at the contract unit price per foot for SANTARY SEWER, 6" which price shall include all labor, materials and equipment necessary and no additional compensation will be allowed.

REMOVE AND RELOCATE SIGN NO.1 AND NO. 2

This shall consist of removing the existing signs at the locations indicated in the plans and relocating these signs to there new location, also indicated in the plans. Any damage to the sign, resulting from the Contractor's negligence, shall be repaired or replaced at his/her expense.

This shall be paid for at the contract unit price per each for REMOVE AND RELOCATE SIGN NO. 1 and REMOVE AND RELOCATE SIGN NO. 2 which price shall be payment in full for complying with this special provision.

BUILDING

The Welcome Center Building shall consist of furnishing and installing one complete building as shown in the plan sheets and according to the Architectural Specifications included in these special provisions.

Payment for this work shall not be measured, but will be for at the contract unit price per lump sum for BUILDING which price shall include all labor, materials and equipment necessary to complete this item and no additional compensation will be allowed.

WOOD CHIP MULCH 4"

This item shall be furnished and installed in accordance with the applicable portions of Section 251 of the Standard Specifications for Road and Bridge Construction at the location indicated in the plans. The material shall be hardwood mulch.

Payment for this item shall be at the contract unit price per square yard for WOOD CHIP MULCH 4" and no additional compensation will be allowed.

CONCRETE PAD

The concrete pad shall be constructed in accordance with the applicable portions of Section 424 of the Standard Specifications for Road and Bridge Construction and the details in the plans. No reinforcement will be required.

Payment for this item shall be at the contract unit price per square yard CONCRETE PAD which price shall include all labor, material and equipment necessary and no additional compensation will be allowed.

STATUS OF UTILITIES TO BE ADJUSTED

Name and Address of Utility	<u>Type</u>	<u>Location</u>	Relocation <u>Estimated</u> Needed <u>Date of</u> Relocation
City of Chester 1330 Swanwick Street Chester, IL 62233 (618) 826-2326	Sewer Water Gas		No Relocation Anticipated
AmerenIP 1050 West Blvd. Belleville, IL 62221 (800) 755-5000	Electric		Relocation 2 Weeks After Anticipated Award of Contract
Verizon 1401 High Street Chester, IL 62233 (800) 483-4000 (618) 826-4591	Telephone		No Relocation Anticipated
New Wave 823 East Broadway Sparta, IL 62286 (888) 863-9928	Cable		No Relocation Anticipated

The above represents the best information of the Village and is only included for the convenience of the bidder. The applicable provisions of Article 102, 105.07, and 107.20 of the Standard Specifications for Road and Bridge Construction shall apply.

If any utility adjustment or removal has not been completed when required by the Contractor's operations, the Contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the Contractor's operations were affected.

Required Contract Provisions All Contracts Monthly Labor Summary and Activity Reporting System

Effective: 1-1-1995

Revised June 2001

I. Monthly Labor Summary Report, Form SBE 148

The <u>prime contractor and each first and second tier sub-contractor</u>, (hereinafter referred to as "subcontractor") shall submit a certified Monthly Labor Summary Report directly to the District Engineer.

This report is in lieu of submittal of the Monthly Workforce Analysis Report, Form SBE 956.

This report must be received in District Eight no later than the tenth day of the next month.

This Report shall be submitted by the prime contractor and each subcontractor, for each consecutive month, from the start, to the completion of their work on the contract.

The data source for this Report will be a summation of all personnel and hours worked on each subject contract for the month based on weekly payrolls for that month.

The Monthly Labor Summary Report is required to be submitted in one of the following formats:

- a.). For contractors having IDOT contracts valued in the aggregate at \$250,000 or less, the report may be typed or clearly handwritten using Form SBE 148 for submittal to the District Engineer for District Eight.
- b.) For contractors having IDOT contracts valued in the aggregate at more than \$250,000, the report must be submitted in a specific "Fixed Length Comma Delimited ASCII Text File Format". The subject file format is detailed on the next page. Submittal of this file may be by 3.5 inch disk, modem, or by e-mail.

II. Monthly Contract Activity Report, Form SBE 248

The prime contractor and each subcontractor shall submit a monthly report directly to the District Engineer, reflecting their contract activity on all Illinois Department of Transportation contracts they have in force in District Eight.

This report shall be submitted for each consecutive month, from the start, to the completion of all contracts in District Eight.

The report must be received in the District Office no later than the tenth day of the next month.

Monthly Labor Summary and Activity Reporting System Codes and Formats

Indicated below for your reference are the Employee Codes and File Formats required for this system.

Monthly Labor Summary Report, Form SBE 148

The following employee codes are to be used to identify each individual on the Summary Report:

1. Gender: M - Male

F - Female

2.

3.

Ethnic Group:

1 - White

2 - Black

3 - Hispanic

4 - American Indian/Alaskan Native

5 - Asian/Pacific Islander

Work Classification: CL - Clerical

OF - Official

SU - Supervisor

FO - Foremen

TD - Truck Driver

CA - Carpenter

EO - Operator

ME - Mechanic

EL - Electrician

IW - Ironworker PP - Pipefitter

PA - Painter

OT - Other

OT - Other

TE - Technical

LA - Laborer

CM - Cement Mason

Employee Status: 4. A - Apprentice O - Owner Operator T - Trainee

J - Journeyman

C - Company

Specific "Fixed Length Comma Delimited ASCII File Format"

Order	<u>Field Name</u>	<u>Type</u>	<u>Size</u>
1	Contractor Number	Α	4
2	Contractor Reference Number	Α	6
3	Contract Number	Α	5
4	Period (07/28/2000)	D	10
5	SSN (111-11-1111)	Α	11
6	Name	Α	40
7	Gender	Α	1
8	Ethnic Group	Α	1
9	Work Classification	Α	1
10	Employee Status	Α	1
11	Total Hours (0000060.00)	N	10

File Name Conventions: (Contractor Number + Report Month/Year).Txt i.e. 20001298.Txt

II.) Monthly Contract Activity Report, Form SBE 248

The following activity codes are to be used to identify the contractors contract status each month on the Monthly Activity Report, Form SBE 248:

A.

Contract Status: 1 - Not Started 2 - Active

3 - No Work

4 - Suspended 5 - Complete

Failure to comply with this special provision may result in the withholding of payments to the contractor, and/or cancellation, termination, or suspension of the contract in whole or part.

Compliance with this Special Provision shall be considered incidental to the cost of the contract and no additional compensation will be allowed for any costs incurred.

All prime and subcontractors having contracts in the aggregate exceeding \$250,000 must provide a " Fixed Length Comma Delimited ASCII File" for approval prior to the start of construction.

This Special Provision must be included in each subcontract agreement.

WELCOME CENTER SECTION 06-00058-00-HP CITY OF CHESTER

Hot-Mix Asphalt Mixture Requirement for Class D Patch

MIXTURE USE

PATCH

AC/PG

PG 64-22

RAP %

20%

Design Air Voids 4.0% @ Ndes=70

Mix Comp

IL 19.0

Friction Agg

Mix B

SANITARY SEWER SPECIFICATIONS:

MATERIALS:

SANITARY SEWER LATERAL PIPE SHALL BE POLY-VINYL CHLORIDE (PVC) CONFORMING TO ASTM D3034, TYPE PSM FOR SIZES 4" TO 12". THE STANDARD DIMENSION RATIO (SDR) SHALL BE 35. THE PIPE SHALL BE MADE OF PVC PLASTIC HAVING A MINIMUM CELL CLASSIFICATION OF 12454-C, AND SHALL HAVE A MINIMUM PIPE STIFFNESS OF FORTY-SIX (46) POUNDS PER INCH PER INCH OF PIPE DIAMETER. JOINTS SHALL BE IN CONFORMANCE WITH ASTM D3212. GASKETS SHALL BE IN CONFORMANCE WITH ASTM F477.

STANDARD DRAWING NO. 1 OF THE "STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION ILLINOIS" FIFTH EDITION WILL BE USED AS THE SANITARY LATERAL BEDDING DETAIL.

BEDDING MATERIAL SHALL BE CA-6 AGGREGATE IN ACCORDANCE WITH ARTICLE 1004.01 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION. BEDDING MATERIAL FOR SANITARY SEWER LATERAL PIPE SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

TRENCH BACKFILL SHALL BE COMPACTED CA-6 AGGREGATE AS SPECIFIED BY ARTICLE 1004.01 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

TESTING:

AIR TESTING: IN CONFORMANCE WITH THE FIFTH EDITION OF "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS".

EXECUTION:

ALL SANITARY LATERALS THAT COLLECT DEBRIS, SILT, MUD, CONCRETE, BUILDING SUPPLIES, OR OTHER DELETERIOUS MATERIALS DURING INSTALLATION, SHALL BE JET CLEANED AND THE CLEANING SHALL BE THE SOLE COST AND RESPONSIBILITY OF THE CONTRACTOR.

RECORD DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AND OWNER INDICATING THE INSTALLED PIPE SIZE AND STATIONING OF WYES, TEES AND CLEANOUTS.

SECTION 00233 - CONTRACTOR INSURANCE REQUIREMENTS

- 1.1 In accordance with of the General Conditions, the Contractor shall provide the following insurance, with the minimum coverage levels indicated, for this project:
- 1. Workmen's Compensation:
 - 1. State: Statutory
 - 2. Applicable Federal

(e.g., Longshoremen's) Statutory

- 3. Employer's Liability
 - \$ 500,000 each accident
 - \$ 500,000 each employee for occupational disease
 - \$ 500,000 aggregate which applies to occupational disease
- 2. Comprehensive General Liability (including Premises—Operations; Independent Contractors' Protective; Product and Completed Operations; and Broad Form Property Damage):
 - 1. Bodily Injury & Property Damage
 - \$1,000,000 each occurrence
 - \$2,000,000 annual aggregate

Products / Completed Operations to be maintained for three years after final payment to the Contractor.

- \$1,000,000 each occurrence
- \$2,000,000 annual aggregate
- 2. Property Damage Liability Insurance shall provide X, C, or U coverage, as applicable.
- 3. Contractual Liability
 - 1. Bodily Injury
 - \$1,000,000 each occurrence
 - 2. Property Damage
 - \$1,000,000 each occurrence
 - \$1,000,000 annual aggregate
- 4. Personal / Advertising Injury with Employment Exclusion deleted \$1,000,000 annual aggregate

- 5. Comprehensive Automobile Liability
 - 1. Bodily Injury
 - \$1,000,000 each person
 - \$1,000,000 each occurrence
 - 2. Property Damage
 - \$1,000,000 each occurrence
- 6. Umbrella Excess Liability
 - \$1,000,000 over primary insurance
- 1.2 Liability insurance shall include all major divisions of coverage and be on a comprehensive basis including:
 - 1. Premises Operations (including X-C/U, as applicable)
 - 2. Independent Contractors' Protective
 - 3. Products and Completed Operations
 - 4. Personal Injury Liability with employment Exclusion deleted.
 - 5. Owned, non-owned, and hired motor vehicles.
 - 6. Broad Form Property Damage including Completed Operations
 - 7. Umbrella Excess Liability
- 1.3 All insurance shall include the interest of The Owner, and Quadrant Design, Inc., as additional insured parties throughout the duration of the project. The above insurance shall contain the following wording verbatim:

The City of Chester (Owner) and all additional insureds are interested in the maintenance of this insurance, and it is agreed that this insurance will not be canceled, materially changed or not renewed without at least thirty (30) days advance written notice to the Owner in care of Michael Schneider at Quadrant Design, Inc., 135 S. Main Street, Waterloo, Illinois 62298. The carrying of the insurance described shall in no way be interpreted as relieving the Contractor of responsibility or liability under this Contract. The Contractor shall file Certificates of Insurance which are subject to the Owner's approval of adequacy of protection and the satisfactory character of the Insurer.

1.4 Certificates of Insurance for all required coverage shall be provided to the Owner with additional copies to the Architect upon execution of the Agreement before any project related work or mobilization occurs.

SECTION 01010 - SUMMARY OF WORK

1. The Project consists of an approximately 1236 square feet, new construction, one story building, and miscellaneous work indicated on the drawings.

A. Project Location:

Segar Park IL Route 150

Chester, IL 62233

B. Building Owner / Client:

City of Chester

1330 Swanwick Street

Chester, IL 62233

2. Other Work may be performed under multiple prime contracts. Cooperate with other contractors.

3. Limit use of the premises to work in areas indicated and necessary staging ground areas. Protect adjacent areas, including landscaping, from damage or staining.

SECTION 01011 - ARCHITECT SITE VISITS

- 1. The Contractor shall notify the Architect of any discrepancies as soon as they are discovered. Architect will provide clarifications or revisions as needed.
- 2. The Architect will visit the site at various times but the following stages of project development are key times for site visits. The Contractor must call Quadrant Design (618—939—0606) at least 36 hours before the following tasks take place:
 - a. Placement of any Concrete Footings or Slabs
 - b. Installation of any wiring, plumbing, etc in rough framed walls.
 - c. Installation of any gypsum board.
 - d. Start of Masonry work see masonry specification
- 3. The Architect may also prepare a punchlist of the project when it is nearly complete. See Project Close—Out specifications.

SECTION 01026 - UNIT PRICES

- 1. Unit price is an amount proposed by bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to, or deducted from, the Contract Sum by apppropriate modification, if the estimated quantities of Work required by the Contract Documents are increased of decreased.
- 2. Unit prices include necessary material, plus costs for delivery, installation, insurance, overhead, profit, and applicable taxes.
- 3. The Owner reserves the right to reject the Contractor's measurement of work—in—place that involves use of established unit prices, and to have this work measured, at the Owner's expense, by an independent surveyor acceptable to the Contractor.
- 4. A "Unit Price Schedule" is included on the Project Bid Form.

SECTION 01027 - APPLICATIONS FOR PAYMENT

- 1. Coordinate the Schedule of Values and Applications for Payment with the Contractor's Construction Schedule, Submittal Schedule, and List of Subcontract.
- 2. Coordinate preparation of the Schedule of Values with preparation of the Contractor's Construction Schedule.
- 3. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including the Contractor's Construction Schedule and the Schedule of Submittals.
- 4. Submit the Schedule of Values at the time of contract signing. Provide draft copy of schedule of values to architect for review at least four working days before contract signing.
- 5. Provide at least one line item for each Specification Division. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
 - a. Contractor name and value of work.
- 6. Provide a breakdown of the Contract Sum in sufficient detail to facilitate evaluation of Applications for Payment. Break subcontract amounts down into several line items. Round amounts to nearest whole dollar, the total shall equal the Contract Sum.
- 7. Upgrade and resubmit the Schedule of Values when Change Orders or Construction Change Directives change the Contract Sum.
- 8. Applications for Payment shall be consistent with previous applications and payments as certified by the Architect and paid for by the Owner.
- 9. Payment—Application Times shall be established as monthly with 10% retainage. Payment for completion of punch list items and project close—out = last 10% of contract plus value of punch list items.
- 10. Use AIA Document G702 and Continuation Sheets G703 as the form for Applications for Payment. Complete every entry, including notarization and execution by a person authorized to sign on behalf of the Contractor. The Architect will return incomplete applications without action.

- 11. With each Application for Payment, submit waivers of lien from every entity who may file a lien arising out of the Contract and related to the Work covered by the payment. Submit waivers of lien on forms, and executed in a manner acceptable to the Owner. Submit partial waivers on each item for the amount requested, prior to deduction for retainage, on each item. When an application shows completion of an item, submit final or full waivers. Submit each Application for Payment with Contractor's waiver of lien for the period of construction covered by the application. Submit final Applications for Payment with final waivers from every entity involved with performance of the Work covered by the application who may file a lien.
- 12. Administrative actions and submittals that must precede submittal of the first Application for Payment include the following:
 - a. List of subcontractors.
 - b. List of principal suppliers and fabricators.
 - c. Schedule of Values.
 - d. Contractor's Construction Schedule (preliminary if not final).
 - e. Submittal Schedule (preliminary if not final).
 - f. Copies of permits required by authorities with project jurisdiction.
 - g. Certificates of insurance and insurance policies.
 - h. Performance and payment bonds.
- 13. Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include the following:
 - a. Completion of Project close—out requirements.
- b. Completion of items specified for completion after Substantial Completion.
 - c. Transmittal of Project construction records to the Owner
 - d. Proof that taxes, fees and similar obligations were paid.
 - e. Fully executed warranties.

SECTION 01200 - PROJECT MEETINGS

- 1. This Section specifies administrative and procedural requirements for project meetings, including, but not limited to Preconstruction conferences, Preinstallation conferences, and Progress meetings.
- 2. Preconstruction Conference: Schedule a preconstruction conference before starting construction. Review responsibilities and personnel assignments.
- 3. Attendees: Authorized representatives of the Owner, Architect, and their consultants; the Contractor and its superintendent; major subcontractors; and other concerned parties shall attend. Participants shall be familiar with the Project and authorized to conclude matters relating to the Work.
- 4. Agenda: Discuss items that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Critical work sequencing.
 - c. Submittal of Shop Drawings, Product Data, and Samples.
 - d. Use of the premises.
- 5. Preinstallation Conferences: It is anticipated that normal Project Progress Meetings can be used to address the need for Preinstallation Conferences. Contractor shall schedule attendance of subcontractors as required to coordinate upcoming project activities.
- 6. Progress Meetings: Conduct progress meetings at the Project Site at regular intervals. Schedule the meetings in advance with the Architect and Notify the Owner of scheduled dates. Coordinate meeting dates with preparation of the payment request.
 - a. Record significant discussions and agreements and disagreements, and the approved schedule. Promptly distribute the record of the meeting to everyone concerned, including the Owner and the Architect.
 - b. Do not proceed with the installation if the conference cannot be successfully concluded. Initiate actions necessary to resolve problems and reconvene the conference.
- 7. Attendees: The Owner, Architect, representatives of Funding Groups, and other entities concerned with current progress or involved in planning, coordination, or future activities shall be represented. Participants shall be authorized to conclude matters relating to the Work.

- 8. Agenda: Review and correct or approve minutes of the previous meeting. Review items of significance that could affect progress. Include topics for discussion appropriate to Project status.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule. Determine how to expedite construction behind schedule; secure commitments from parties involved to do so. Discuss revisions required to insure subsequent activities will be completed within the Contract Time.
 - b. Review the present and future needs of each entity present, including Time, Sequences, Status of submittal, Deliveries and off—site fabrication problems, Temporary facilities and services, Quality and work standards, and Change Orders.
 - c. Reporting: Distribute meeting minutes to each party present and to parties who should have been present. Include a summary of progress since the previous meeting and report.
 - d. Schedule Updating: Revise the Contractor's Construction Schedule after each meeting where revisions have been made. Issue the revised schedule concurrently with the report of each meeting.

SECTION 01300 - SUBMITTALS

- 1. Submittal Procedures: Coordinate submittal preparation with construction, fabrication, other submittals, and activities that require sequential operations. Transmit in advance of construction operations to avoid delay. Coordinate submittals for related operations to avoid delay because of the need to review submittals concurrently for coordination. The Architect reserves the right to withhold action on a submittal requiring coordination until related submittals are received.
- 2. Allow 10 working days for initial review. Allow more time if the Architect must delay processing to permit coordination. Reprocessing also takes 10 working days. No extension of Contract Time will be authorized because of failure to transmit submittals sufficiently in advance of the Work to permit processing.
- 3. Submittal Preparation: Place a permanent label on each submittal for identification. Provide a 3x4 inch space on the label or beside title block to record review and approval markings and action taken. Include project name, current date and name of manufacturer on the label for processing and action taken.
- 4. Submittal Transmittal: Package each submittal appropriately. Transmit with a transmittal form. The Architect will not accept submittals from sources other than the General Contractor. On the transmittal, record requests for data and deviations from requirements. Include Contractor's certification that information complies with requirements.
- 5. Shop Drawings: Submit newly prepared information drawn to scale. Indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information. Include the following information:
- a. Dimensions & identification of products and materials included by sheet and detail number.
- b. Contractor verification of compliance with standards.
- c. Notation of coordination requirements.
- d. Notation of dimensions established by field measurement.
- e. Sheet Size: Except for templates and full—size Drawings, submit one correctable, reproducible print and one blue— or black—line print on sheets at least 8—1/2 by 11 inches but no larger than 36 by 48 inches. The Architect will return the reproducible print. Do not use Shop Drawings without an appropriate final stamp indicating action taken.

- 6. Product Data: Collect Product Data into a single submittal for each element of construction. Mark each copy to show applicable choices and options. Where Product Data includes information on several products, mark copies to indicate applicable information. Include Manufacturer's printed recommendations, Compliance with trade association standards, Compliance with recognized testing agency labels and seals, Notation of dimensions verified by field measurement, and Notation of coordination requirements.
- 7. Submittals: Submit 2 copies. The Architect will retain one and return the other marked with action taken. Unless noncompliance with Contract Documents is observed, the submittal serves as the final submittal.
- 8. Distribution: Furnish copies to installers, subcontractors, suppliers, and others required for performance of construction activities. Show distribution on transmittal forms. Do not proceed with installation until a copy of Product Data is in the Installer's possession. Do not use unmarked Product Data for construction.
- 9. Samples: Submit full—size Samples cured and finished as specified and identical with the material proposed. Mount Samples to facilitate review of qualities. Include Specification Section number and reference, Generic description of the Sample, and Product name or name of the manufacturer. Submit Samples for review of size, kind, color, pattern, and texture, for a check of these characteristics, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed. Where variations are inherent in the material, submit at least 3 units that show limits of the variations. Submit a full set of choices where Samples are submitted for selection of color, pattern, texture, or similar characteristics from standard choices. The Architect will review and return submittals indicating selection and other action.
- 10. Architect's Action: Except for submittals for the record or information, where action and return are required, the Architect will review each submittal, mark to indicate action taken, and return. Compliance with specified characteristics is the Contractor's responsibility. The Architect will stamp each submittal with an action stamp. The Architect will mark the stamp appropriately to indicate the action taken.

SECTION 01400 - QUALITY CONTROL

- 1. Quality—control services include inspections, tests, and related actions, including reports performed by Contractor, by independent agencies, and by governing authorities. They do not include contract enforcement activities performed by the Architect.
- 2. Contractor Responsibilities: Unless they are the responsibility of another entity, Contractor shall provide inspections and tests specified elsewhere and required by authorities having jurisdiction. Costs for these services are included in the Contract Sum.
 - a. Where inspections and tests are the Contractor's responsibility, the Contractor shall employ and pay a qualified independent testing agency to perform these services. Costs for these services are included in the Contract Sum.
 - Where inspections and tests are the Owner's responsibility, the Owner will employ and pay a qualified independent testing agency to perform those services.
 - c. Where inspections and tests are the Owner's responsibility, the Owner will engage the services of a qualified independent testing agency to perform those services. Payment will be made from the Inspection and Testing Allowance, as authorized by Change Orders.
 - Where the Owner engages an agency to test or inspect part of the Work and the Contractor is required to engage an entity to test or inspect the same or related element, the Contractor shall not employ the entity engaged by the Owner, unless the Owner agrees in writing.
- 3. Retesting: The Contractor is responsible for retesting where results of inspections and tests prove unsatisfactory and indicate noncompliance with requirements.
 - The cost of retesting is the Contractor's responsibility where tests performed indicated noncompliance with requirements.
- 4. Auxiliary Services: Cooperate with agencies performing inspections and tests. Provide auxiliary services as requested. Notify the agency in advance of operations to permit assignment of personnel. Auxiliary services include the following:
 - a. Providing access to the Work.
 - b. Furnishing incidental labor and facilities to assist inspections and tests.
 - c. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
 - d. Providing facilities for storage and curing of test samples.
 - e. Delivering samples to testing laboratories.
 - f. Providing preliminary design mix proposed for use for materials mixes that require control by the testing agency.
 - g. Providing security and protection of samples and test equipment

- 5. Duties of the Testing Agency: The testing agency shall cooperate with the Architect and the Contractor in performing its duties. The agency shall provide qualified personnel to perform inspections and tests.
 - a. The agency shall notify the Architect and the Contractor of irregularities or deficiencies observed in the Work during performance of its services.
 - b. The agency shall not release, revoke, alter, or enlarge requirements or approve or accept any portion of the Work.
 - c. The agency shall not perform duties of the Contractor.
- 6. Coordination: Coordinate activities to accommodate services with a minimum of delay. Avoid removing and replacing construction to accommodate inspections and tests. The Contractor is responsible for scheduling inspections, tests, taking samples, and similar activities.
- 7. Submittals: The testing agency shall submit a certified written report, in duplicate, of each inspection and test to the Architect. If the Contractor is responsible for the service, submit a certified written report, in duplicate, of each inspection or test through the Contractor.
 - Submit additional copies of each report to the governing authority, when the authority so directs.
 - b. Report Data: Reports of each inspection, test, or similar service include, but are not limited to, the following:
 - 1. Date of issue

Work

- 2. Project title and number.
- 3. Name, address, and telephone number of testing agency.
- 4. Dates and locations of samples and tests or inspections.
- 5. Names of individuals making the inspection or test.
- 6. Designation of the Work and test method.
- 7. Identification of product and Specification Section.
- 8. Complete inspection or test data.
- 9. Test results and an interpretation of test results.
- 10. Ambient conditions at the time of sample taking and testing.
- 11. Comments or professional opinion on whether inspected or tested complies with requirements.
- 12. Name and signature of laboratory inspector.
- 13. Recommendations on retesting.
- 8. Qualifications for Service Agencies: Engage inspection and testing service agencies that are prequalified as complying with the American Council of Independent Laboratories' "Recommended Requirements for Independent Laboratory Qualification" and that specialize in the types of inspections and tests to be performed.
 - a. Each agency shall be authorized by authorities having jurisdiction to operate in the state where the Project is located.

- 9. Repair and Protection: Upon completion of inspection, testing, and sample taking, repair damaged construction. Restore substrates and finishes. Comply with Division 1 Section "Cutting and Patching."
- 10. Protect construction exposed by or for quality-control service activities, and protect repaired construction.
- 11. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for inspection and testing.

SECTION 01631 - SUBSTITUTIONS

- 1. Substitutions: Changes in products, materials, equipment, and methods of construction required by the Contract Documents proposed after award of the Contract are considered requests for substitutions. The following are not requests for substitutions: Substitutions requested during the bidding period and accepted by Addendum prior to award of the Contract, Revisions to the Contract Documents requested by the Owner, Specified options included in the Contract Documents, and Contractor's compliance with regulations issued by governing authorities.
- 2. Substitution Request Submittal: The Architect will consider requests for substitution received within 60 days after commencement of the Work. Submit 3 copies of each request for substitution. Submit requests according to procedures required for change—order proposals. Identify the product or method to be replaced in each request. Include related Specification Section and Drawing numbers. Provide documentation showing compliance with the requirements for substitutions and the following:
- a. Coordination information, including a list of changes needed to other Work that will be necessary to accommodate the substitution.
- b. A comparison of the substitution with the Work specified, including performance, weight, size, durability, and visual effect.
- c. Product Data, including Drawings and descriptions of products and installation procedures.
- d. Samples, where applicable or requested.
- e. A statement indicating the effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the substitution on Contract Time.
- f. Cost information, including a proposal of the net change, if any in the Contract Sum.
- g. Certification that the substitution conforms to the Contract Documents and is appropriate for the applications indicated.
- h. The Contractor's waiver of rights to additional payment or time that may become necessary because of the failure of the substitution to perform adequately.
- 3. Architect's Action: If necessary, the Architect will request additional information within one week of receipt of a request for substitution. The Architect will notify the Contractor of acceptance or rejection within 2 weeks of receipt of the request. Acceptance will be in the form of a change order. Use the product specified if the Architect cannot make a decision within the time allocated.

- 4. Conditions: The Architect will receive and consider a request for substitution when one or more of the following conditions are satisfied. Otherwise, the Architect will return the requests without action except to record noncompliance with these requirements.
- a. Extensive revisions to the Contract Documents are not required.
- b. Changes are in keeping with the intent of the Contract Documents.
- c. The specified product cannot be provided within the Contract Time. The Architect will not consider the request if the specified product cannot be provided as a result of failure to pursue the Work promptly.
- d. The request is related to an "or-equal" clause.
- e. The substitution offers the Owner a substantial advantage, in cost, time, or other considerations, after deducting compensation to the Architect for redesign and increased cost of other construction.
- f. The specified product cannot receive approval by a governing authority, and the substitution can be approved.
- 5. The Contractor's submittal and the Architect's acceptance of Shop Drawings, Product Data, or Samples for construction not complying with the Contract Documents do not constitute an acceptable request for substitution, nor do they constitute approval.

SECTION 01700 - CONTRACT CLOSE-OUT

- 1. Before requesting inspection for certification of Substantial Completion, complete the following:
- a. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the work claimed as substantially complete. Include supporting documentation for completion and an accounting of changes to the Contract Sum.
- b. Submit specific warranties, final certifications, and similar documents.
 - c. Return keys (if any) to the Owner.
- d. Remove temporary facilities, mockups, construction tools, and similar elements.
 - e. Complete final cleanup requirements.
 - f. Touch up and repair and restore marred, exposed surfaces.
- 2. On receipt of a request for inspection, the Architect will proceed or advise the Contractor of untilled requirements. The Architect will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued. The Architect will repeat inspection when requested and assured that the Work is substantially complete. Results of the completed inspection will form the basis of requirements for final acceptance.
- 3. Before requesting inspection for certification of final acceptance and final payment, complete the following:
- a. Final payment request with releases and supporting documentation.
- b. Submit a copy of the final inspection list stating that each item has been completed or otherwise resolved for acceptance.
 - c. Submit consent of surety to final payment.
- 4. The Architect will reinspect the Work upon receipt of notice that the Work has been completed, except for items whose completion is delayed under circumstances acceptable to the Architect. Upon completion of reinspection, the Architect will prepare a certification of final acceptance. If the Work is incomplete, the Architect will advise the Contractor of Work that is incomplete or obligations that have not been fulfilled but are required. If necessary, reinspection will be repeated.

- 5. Maintain one copy of the Project Manual (including addenda), specs, and drawings. Mark to show variations in Work performed in comparison with the text of the Specifications and modifications. Give attention to substitutions and selection of options and information on concealed construction. Note related record drawing information and Product Data. Upon completion of the Work, submit record documents to the Architect for the Owner's records.
- 6. Bind in individual, heavy—duty, 3—ring, binders, with pocket folders for folded sheet information. Mark identification on front and spine of each binder. Include the following information:
 - a. Copies of warranties.
 - b. Shop Drawings and Product Data.
- 7. Clean all surfaces, storage areas, disposal paths, and access paths. Clean the site areas used by tradesmen of rubbish, litter, and foreign substances. Sweep paved areas; remove stains, spills, and foreign deposits.

SECTION 01740 - WARRANTIES

- 1. Standard product warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- 2. Special warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner. Refer to the General Conditions for terms of the Contractor's period for correction of the Work.
- 3. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
- 4. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
- 5. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- 6. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- 7. Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies. The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents. Where the Contract Documents require a special warranty, or similar commitment, the Owner reserves the right to refuse to accept the Work, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

- 8. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Architect's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion, submit written warranties upon request of the Architect. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within 15 days of completion of that designated portion of the Work.
- 9. When the Contract Documents require the Contractor, or the Contractor and a subcontractor, supplier or manufacturer to execute a special warranty, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner, through the Architect, for approval prior to final execution. Refer to Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.
- 10. Bind warranties and bonds in heavy—duty, commercial—quality, durable 3-ring, vinyl—covered loose—leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11—inch paper. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address, and telephone number of the Installer. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project title or name, and name of the Contractor. When warranted construction requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.
- 11. Provide warranties on products and installations as specified in the specification sections in the Project Manual and as noted on the drawings.

SECTION 02200 - EARTHWORK / EXCAVATION

- 1. Preparation: Protect structures, utilities, sidewalks, pavements, trees, landscaping, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations. Repair or replace, at contractor's expense, sidewalks, structures, landscaping to remain, or other site features damaged during Earthwork processes. Call for 'Julie Locate' before doing any work.
- 2. Provide erosion and sedimentation control measures as required by common practice and code or regulation. Do not allow erosion or silt fill to affect adjacent properties.
- 3. Strip topsoil (friable clay loam surface soil of at least 4" deep) from the site area to be developed and store for use in final grading. Do not store soils with large clay clumps, stones, or other objects over 2" in diameter. Store topsoil and excavated borrow soil materials acceptable for backfill and fill in separate shaped, graded, drained, and covered stockpiles. Locate stockpiles away from edge of excavations and outside drip line of remaining trees.
- 4. Existing Utilities: Do not interrupt existing utilities serving facilities occupied by the Owner or others except when permitted in writing by the Architect and then only after acceptable temporary utility services have been provided.
- 5. Excavate for structures, pavements, and walks to indicated elevations and dimensions. Widen excavations to permit placing and removing concrete formwork, installing services and other construction, and for inspections. Trim subgrades to required lines and grades to leave solid base to receive other work. Shovel or otherwise remove loose soil from trenches before placing any concrete. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities. Fill unauthorized excavation under foundations or wall footings by extending indicated bottom elevation of concrete foundation or footing to excavation bottom, without altering required top elevation. Fill unauthorized excavations under other construction as directed by Architect.
- 6. Contractor, at their own expense, shall take precautions against any movement or settlement of existing or new construction, utilities or other site amenities. Precautions may include piling, bracing, or shoring. The Contractor shall be responsible for the design and adequacy of any such precautions.

- 7. Prevent surface water and subsurface or ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area. Protect subgrades and foundation soils from softening and damage by rain or water accumulation and from freezing temperatures or frost.
- 8. Do not use explosives.
- 9. If soil testing reports from the field determine that existing soils do not meet assumed bearing capacities, soil amendments or other remedial work will be required. Do not proceed until directed by Architect or Engineer. Payment will be made according to Contract provisions for changes in the Work.
- 10. Satisfactory soil materials are those described as follows and in greater detail in ASTM D2487. Use graded gravel, crushed stone, or sand for subbase material. Use washed, even graded crushed stone or gravel with 100% passing a 1-1/2" sieve and 5% passing a No. 4 sieve for drainage fill. Backfill and fill materials to be soils free of clay, rock or gravel larger than 2" in any dimension. Debris, waste, frozen materials, vegetation, or other deleterious matter is not acceptable in backfill or fill material. Crushed concrete will be acceptable if complying with other project requirements.
- 11. Excavate utility trenches to indicated slopes, lines, depths, and invert elevations of uniform widths to provide a maximum 12 inches of working clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than the top of pipe or conduit. Excavate and shape trench subgrade to provide uniform bearing and continuous support for pipe and conduit.
- 12. Utility Trench Backfill: Place, compact, and shape bedding course to provide continuous support for pipes and conduits over rock and other unyielding bearing surfaces and to fill unauthorized excavations. Place and compact initial backfill of satisfactory soil material or subbase material, free of particles larger than 1 inch, to a height of 12 inches over the utility pipe or conduit. Place and compact final backfill of satisfactory soil material to final subgrade. Coordinate backfilling with utilities testing. Install warning tape directly above utilities, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

- 13. Contractor shall perform all items of excavation and placing of fill and backfill as early in the construction as possible. Filled areas shall be allowed to settle or prove themselves during the building construction period and be reshaped and regraded at the end of that period. No flooding, ponding, or jetting is permitted.
- 14. After completion of foundation walls and associated drain lines, clean the excavation of trash and debris before placement of backfill. Maintain symmetrical backfill loading and compact each layer with mechanical tampers or other equipment. Place backfill with special care to prevent wedge action, eccentric loading, and damage to or overloading of the structure.
- 15. Place fill materials in horizontal loose layers of uniform thickness of 8" or less, spread, and mix. Start in the deepest area and progress parallel to the finished grade. On slopes of more than 1 in 4, plow strip or break up the soil for material bonding. Compact each layer of fill to maximum density at optimum moisture as follows (ASTM D1557, method D), unless noted otherwise in a soils report:

Under load bearing building footings and slabs — 95% Under pavement, sidewalks, and sheds — 95%

Under areas of general grading - 85%

When subgrade or existing ground surface to receive fill has a density less than that required for fill, break up ground surface to depth required, pulverize, moisture—condition or aerate soil, and recompact to required density. Uniformly moisten or aerate subgrade and each subsequent fill or backfill layer to within 2 percent of optimum moisture content before compaction. Remove and replace, or scarify and air dry, satisfactory soil material that is too wet to compact to specified density. Lime may be used to dry soil if specified and approved in writing by a Licensed Soils Engineer.

- 16. Testing and Inspection Service: Contractor shall employ a qualified independent geotechnical engineering testing agency to verify that specified soil bearing capacities and compaction rates are met. Do not proceed until test results for previously completed work verify compliance with requirements. Perform field in-place density tests according to ASTM D 1556 (sand cone method), ASTM D 2167 (rubber balloon method), ASTM D 2922 (nuclear method) or ASTM D 2937 (drive cylinder method), as applicable.
- A. Footing Subgrades: Test each soil stratum to verify design bearing capacities.

Paved Areas and Building Slabs: At subgrade and at each compacted fill and backfill layer, perform at least one field in-place density test for every 2,000 sq. ft. or less of paved area or building slab, but in no case fewer than three tests.

- B. Foundation Wall Backfill: At each compacted backfill layer, perform at least one field in—place density test for each 100 feet or less of wall length, but in no case fewer than two tests.
- C. Trench Backfill: In each compacted initial and final backfill layer, perform at least one field in-place density test for each 150 feet or less of trench, but in no case fewer than two tests.
- 17. Follow the practices and procedures of the geothecnical report.
- 18. When testing agency reports that subgrades, fills, or backfills are below specified density, scarify and moisten or aerate, or remove and replace soil to the depth required, recompact, and retest until obtaining required density.
- 19. Uniformly grade building and adjacent areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated. Grade lawns, walks, and unpaved subgrades to tolerances of plus or minus 0.10 foot and pavements and areas within building lines to plus or minus 1/2 inch. Provide grading so that water drains away from buildings without ponding or running onto adjacent property. Cuts and fills are not necessarily balanced. Transport surplus satisfactory soil to designated area on the Owner's property. Remove waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off the Owner's property. Fill materials brought in from off—site to create the designated elevations or slopes shall be part of the base project bid.

SECTION 02920 - GRASS LAWNS

- 1.Submit product data / certification of seed mixture from vendors for both grass to be seeded and turf sod to be installed. Include seed mixture and planting schedule indicating anticipated dates and locations for each type of planting.
- 2.Soil Analysis and Amendment see Landscape Schedule for required amendments.

OR

for each unamended soil type, furnish soil analysis and a written report by a qualified soil—testing laboratory. The soil—testing laboratory shall oversee soil sampling. Report suitability of tested soil for turf growth. State recommendations for nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce satisfactory planting soil suitable for healthy, viable plants. Report presence of problem salts, minerals, or heavy metals; if present, provide additional recommendations for corrective action

- 3. Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, manufacturer, and conformance with applicable laws. Harvest, deliver, store, and handle sod according to requirements in TPI's "Guideline Specifications to Turfgrass Sodding." Protect sod from breakage and drying and plant within 24 hours of harvesting.
- 4.See Landscape Schedule for Grass Seed and/or Sod species and mix information. Grass Seed to be fresh, clean, dry, new-crop seed complying with AOSA's "Journal of Seed Technology; Rules for Testing Seeds" for purity and germination tolerances. Sod to comply with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture, strongly rooted, and capable of vigorous growth and development when planted.
- 5.Installing crew shall have an experienced full—time supervisor who is authorized and able to discuss the project at the site when work is in progress. Any pesticide applicators shall be appropriately licensed by State and other jurisdictions.

- 6.Seed or Sod Turf Soil Prep: At newly graded areas, loosen subgrade to a minimum depth of 4 inches and remove stones (larger than 1 inch in any dimension), sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property. If sod turf is to be planted in areas unaltered or undisturbed by excavating. grading, or surface-soil stripping operations, remove existing grass, vegetation, and turf. Loosen surface soil to a depth of at least 6 inches and then remove stones etc. Apply soil amendments and fertilizer (if any) directly to subgrade before loosening. elevation of planting soil to allow for soil thickness of sod. Finish grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 1/2 inch of finish elevation. Roll and rake areas that can be planted in the immediate future, remove ridges, and fill depressions to meet finish grades. Moisten prepared area before planting if soil is dry. thoroughly and allow surface to dry before planting. Do not create muddy soil. Obtain Architect's acceptance of finish grading before planting; restore planting areas if eroded or otherwise disturbed after finish grading.
- 7.Seeding: Broadcast or drop seed only when wind velocity is 5 mph or less. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other. Do not seed against existing trees. Limit extent of seed to outside edge of planting saucer. Sow and rake seed lightly into top 1/8 inch of soil, roll lightly, and water with fine spray. Protect seeded areas with slopes by spreading straw mulch at a minimum rate of 2 tons/acre to make a continuous 1-1/2" thick blanket over seeded areas. Spread by hand, blower, or other suitable equipment.
- 8.Sod Installation: Lay sod within 24 hours of harvesting. Do not lay sod if dormant or if ground is frozen or muddy. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in Avoid damage to subgrade or sod during adiacent courses. installation. Tamp and roll lightly to ensure contact with subgrade, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass. Lay sod across angle of slopes exceeding 1:3. Anchor sod on slopes exceeding 1:6 with staples or peas as recommended by sod manufacturer. Saturate sod with fine water spray within two hours of planting. week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

- 9.Initial Turf Maintenance Service: Provide full maintenance by skilled employees of landscape installer until acceptable turf is established, or 30 days (sod) and 60 days (seed) whichever is longer. initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue maintenance Maintenance work includes watering, during next planting season. fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation. Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain height appropriate for species without cutting more than 1/3 of grass height.
- 10. Acceptable seeded turf is a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. and bare spots not exceeding 5 by 5 inches. Acceptable Sodded Turf is a healthy, well—rooted, even—colored, viable turf has been established, free of weeds, open joints, bare areas, and surface irregularities. Re—establish turf that does not comply with these definitions and continue maintenance until turf does comply.

SECTION 02935 - LANDSCAPE PLANTS

- 1. Submit product data and product certificates for each type of product included in this spec. Submit recommended maintenance procedures for each plant type during the first and a typical calendar year.
- 2. Conduct a pre—installation conference at the project site with the General Contractor and Architect before delivering any plant material to the site.
- 3. Soil Analysis and Amendment see Landscape Schedule for required amendments. OR for each unamended soil type, furnish soil analysis and a written report by a qualified soil—testing laboratory. The soil—testing laboratory shall oversee soil sampling. Report suitability of tested soil for plant growth. State recommendations for nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce satisfactory planting soil suitable for healthy, viable plants. Report presence of problem salts, minerals, or heavy metals; if present, provide additional recommendations for corrective action
- 4. Provide nursery—grown plants of quality, size, species, and variety of plants indicated in Landscape Schedule and complying with ANSI Z60.1. Provide plants with healthy root systems developed by transplanting or root pruning. Provide well—shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
- a. Deliver bare—root stock plants freshly dug. Immediately after digging up bare—root stock, pack root system in wet straw, hay, or other suitable material to keep root system moist until planting.
- b. Root-Ball Plants: furnish trees and shrubs with root balls measured from top of root ball, (root flare) Handle planting stock by root ball. Do not prune trees and shrubs before delivery. Protect bark, branches, and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind—tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of plants during shipping and delivery. Do not drop plants during delivery and handling.
- c. Container Plants: Provide healthy, disease—free plants of species and variety shown or listed, with well—established root systems reaching to sides of the container to maintain a firm ball, but not with excessive root growth encircling the container. Provide only plants that are acclimated to outdoor conditions before delivery.
- d. Store bulbs, corms, and tubers in a dry place at 60 to 65 deg F until planting.

- 5. Deliver plants after preparations for planting have been completed, and install immediately. If planting is delayed more than six hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.
- 6. Installing crew shall have an experienced full—time supervisor who is authorized and able to discuss the project at the site when work is in progress. Any pesticide applicators shall be appropriately licensed by State and other jurisdictions.
- 7. Excavation and soil preparation:
- a. Loosen planting bed subgrades to a minimum depth of 6 inches, unless noted otherwise in drawings. Remove stones larger than 1 inch in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property. Apply fertilizer (if any) directly to subgrade before loosening. Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.
- b. Trees & Shrubs: Excavate circular planting pits with sides sloping inward at a 45-degree angle. Excavations with vertical sides are not acceptable. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure that root ball will sit on undisturbed base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation. Excavate approximately three times as wide as ball diameter. Bare root plans require excavation at least 12 inches wider than root spread and deep enough to accommodate vertical roots. Do not excavate deeper than depth of the root ball, measured from the root flare to the bottom of the root ball. Subsoil and topsoil removed from excavations may be used as planting soil.

- 8. Tree, Shrub, and Vine Planting
- a. Ball & Burlap: Before planting, verify that root flare is visible at top of root ball. Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break. Set stock plumb and in center of planting pit or trench with root flare2 inches aboveadjacent finish grades. Backfill with planting soil. After placing some backfill around root ball to stabilize plant, carefully cut and remove burlap, rope, and wire baskets from tops of root balls and from sides, but do not remove from under root balls. Do not use planting stock if root ball is cracked or broken before or during planting operation.
- b. Container Grown Plantings: Carefully remove root ball from container without damaging root ball or plant.
- c. Fabric Bag—Grown Stock: Carefully remove root ball from fabric bag without damaging root ball or plant. Do not use planting stock if root ball is cracked or broken before or during planting operation.
- d. Backfill around root ball (all 3 types above) in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one—half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Place planting tablets (if any) in each planting pit when pit is approximately one—half filled; in amounts recommended in soil reports from soil—testing laboratory. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole. Continue backfilling process. Water again after placing and tamping final layer of soil.
- e. Bare-Root Stock: Set and support bare-root stock in center of planting pit or trench with root flare 2 inches above adjacent finish grade. Backfill with planting soil. Spread roots without tangling or turning toward surface, and carefully work backfill around roots by hand. Puddle with water until backfill layers are completely saturated. Plumb before backfilling, and maintain plumb while working backfill around roots and placing layers above roots. Place planting tablets (if any) in each planting pit is half full. Place tablets beside soil—covered roots about 1 inch from root tips; do not place tablets in bottom of the hole or touching the roots. Continue backfilling process. Water again after placing and tamping final layer of soil.
- f. When planting on slopes, set the plant so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.
- g. Prune (only) dying, or broken branches. Do not prune for shape.

- 9. Ground Cover And Plant Planting: Set out and space ground cover and plants other than trees, shrubs, and vines at spacing indicated on drawings in even rows with triangular spacing. Use planting soil for backfill. Dig holes large enough to allow spreading of roots. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water. Water thoroughly after planting, taking care not to cover plant crowns with wet soil. Protect plants from hot sun and wind; remove protection when plants show evidence of recovery from transplanting shock.
- 10. Plant Area Mulching: Mulch backfilled surfaces of planting areas and other areas indicated in drawings and Landscape Schedule. Do not place mulch within 3 inches of trunks or stems. Provide average thickness indicated in Schedule and finish level with adjacent finish grades.
- Plant Maintenance Period: 11. Maintenance Period shall be the same as that for Grass Lawns, except that trees shall be pruned and reset to proper grades or vertical position for 12 months. Maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings. Spray or treat as required to keep trees and shrubs free of insects and disease. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use practices to minimize the use of pesticides and reduce hazards. Protect plants from damage due to landscape operations and operations of other contractors and trades. protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.
- 12. Warranty: The installer will repair or replace plantings and accessories that fail in materials, workmanship, or growth within periods listed below. Failures include, but are not limited to Death and unsatisfactory growth. Installer is not responsibile for failures resulting from abuse, lack of adequate maintenance, or neglect by Owner, or incidents that are beyond Contractor's control.
- a. Trees, Shrubs, Vines, and Ornamental Grasses: 12 months
- b. Ground Covers, Biennials, Perennials, and Other Plants: 3 months
- c. Annuals: 2 months

SECTION 03300 - CONCRETE

- 1. Contractor shall provide all necessary labor, materials, and equipment to complete all concrete cement grout and finishing shown, detailed or specified in these documents. The concrete Contractor shall be responsible for coordination of all sleeves in the concrete with the plumbing, electrical, mechanical and any other related trades. Provide proper shop drawings for review.
- 2. Concrete Strength: Concrete used in the work shall have a minimum compressive strength at the age of 28 days. Portland cement shall conform to A.S.T.M. C—150. All concrete shall be mixed and placed according to the A.C.I. codes.
- 3. Cast in place Concrete: ACI 301-72 "Specifications for Structural Concrete for Buildings" and ACI 318-71 "Building Code" will generally govern concrete work. Aggregates shall be normal weight ASTM C33. Proportioning as required to produce 3500 psi strength, unless otherwise shown, with good placement characteristics. Exterior nonstructural slabs, steps and ramps shall be minimum 6% air entrained. Use of admixtures to prevent freezing is not permitted without written approval from the Architect. Unless otherwise noted, concrete shall have the following strengths:
 - a. Footings: 3,500 psi
 - b. Foundation and Basement Slabs: 3,500 psi
 - c. Topping: 4,000 psi
 - d. Exterior Slabs: 4,000 psi
- 4. Unless otherwise noted or shown, concrete coverage for reinforcement bars to face of bar shall be as follows:
 - a. Concrete in contact with earth: 3"
 - b. Wall, exterior face: 1 1/2"
 - c. Wall, interior face: 1"
- 5. Unless otherwise noted or shown, install reinforcement in the following locations:
 - a. Footing: two #5 bars bottom of footing with 12" overlap
 - b. Foundation Wall: two #5 bars top & bottom with 12" overlap
- c. Wing Walls & Joints: #4 bars 12" o.c. stacked vertical, extended 24" each side of joint.
- d. Slabs: 6"x6"x2.9Wx2.9W welded wire fabric. "Fibermesh" is acceptable in slabs to receive finish flooring material.

- 6. Curing: Begin curing immediately after finishing using moisture retaining covering a liquid membrane curing compound meeting ASTM C309. All concrete shall be protected from drying too rapidly for the curing period of at least seven days when using normal Portland cement, and three days when high early strength cement is used. The concrete contractor shall be responsible to provide and maintain heaters, provide proper protection and enclosure as needed to ensure proper curing and prevent freezing.
- 7. Seal and Defects: Seal all concrete slabs before other trades are able to walk on the new slabs. Apply sealer dense enough to eliminate any dusting. Patch tie holes, honeycombs and other defects on exposed walls. Grind off fins and other projections.

SECTION 03351 POLISHED CONCRETE FINISHING

1. This specification pertains to staining and sealing cast concrete floors. Work shall comply with the following standards:

ACI 302.1R Guide for Concrete Floor and Slab Construction ASTM C309 Standard Specification for Liquid Membrane—Forming Compounds for Curing Concrete.

ASTM C171 Standard Specification for Sheet Materials for Curing Concrete.

ASTM C779 Standard Test Method for Abrasion Resistance of Horizontal Concrete Surfaces.

National Floor Safety Institute (NFSI): 101—A Standard for Evaluating High—Traction Flooring Materials, Coatings, and Finishes.

2. Finished polished flooring that has been selected, manufactured and installed to achieve the following:

Abrasion Resistance: ASTM C779, Method A, high resistance, no more than 0.008 inch wear in 30 minutes.

Reflectivity: Increase of 35% as determined by standard gloss meter. Waterproof Properties: Rilem Test Method 11.4, 70% or greater reduction in absorption.

High Traction Rating: NFSI 101-A, non-slip properties.

3. Number Not Used

- 4. New concrete slabs to be made of material with slump of 4 1/2 inches 5 inches. Admixtures may be used. Flatness required equals FF40 overall and FF20 local.
- 5. Concrete finish before staining begins to be hard steel troweled (3 passes) without burn marks, finished to ACI 302 Class 5.
- 6. Use Membrane forming curing compounds (ASTM C309, Type 1, Class B, all resin, dissipating cure). Acrylic curing and sealing compounds not recommended. Sheet membrane (ASTM C171); polyethylene film not recommended. Slabs to be cured for seven days before starting work.

- 7. Submit the following materials to Architect: Shop drawings with typical layout including dimensions, floor grinding schedule, and joint pattern layout. Include areas to receive colored surfaces, hardener, sealer and densifier. Submit product data and color selection charts. Upon completion of work submit to owner through general contractor (who will include in maintenance manual) manufacturer's instructions on maintenance renewal of applied treatments, joint filling, crack repair, and surface repair.
- 8. Work to be carried out by Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project. Company and crew leader must be trained and certified by manufacturer of products to be installed.
- 9. Work to be completed in a manner compliant with NFSI Test Method 101—A Phase Two Level High Traction Material.
- 10. Mock-Ups:
- 11. Schedule a preinstallation meeting with Architect and General Contractor to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements. Review scheduling and phasing of work, coordinating with other work and personnel, protection of adjacent surfaces, surface preparation, repair of defects and defective work prior to installation, cleaning, installation of polished floor finishes, application of liquid hardener, densifier, and protection of finished surfaces after installation.
- 12. Protect concrete slab during construction. Protect from petroleum stains, diaper hydraulic power equipment, restrict vehicular parking, restrict use of pipe cutting machinery, placement of reinforcing steel on slab and use of acids or acidic detergents on slab.

Use only products in sealed, original containers, from a single manufacturer. The following list is based on L&M Construction Chemicals, Inc. Equivilent products from other companies will be considered:

> FGS Hardener Plus: Hardener, Sealer, Densifier: Proprietary, water based, adorless liquid, VOC compliant, environmentally safe chemical hardening solution leaving no surface film. Joint Tite 750: Joint Filler: Semi-rigid, 2-component. self—leveling, 100% solids, rapid curing, polyurea control joint and crack filler with Shore A 80 or higher hardness. Oil Repellent Sealer: Ready to use, silane, siloxane and fluoropolymers blended water based solution sealer, quick drying, low-odor, oil and water repellent, VOC compliant and compatible with chemically hardened floors. Vivid Concrete Dyes: Fast-drying dye, packaged in premeasured units ready for mixing with VOC exempt solvent; formulated for application to polished cementitious surfaces. FGS Concrete Conditioner: Cleaning Solution: Proprietary, mild.

> highly concentrated liquid concrete cleaner and conditioner containing wetting and emulsifying agents; biodegradable, environmentally safe and certified High Traction by National Floor Safety Institute (NFSI).

Verify that concrete substrate conditions, which have been previously installed under other sections or contracts, are acceptable for product installation in accordance with manufacturer's instructions prior to installation of concrete finishing materials. Verify concrete is cured to 28 day, 3500 psi strength. Verify concrete surfaces received a hard steel—trowel finish (3 passes) during placement.

Ensure surfaces are clean and free of dirt and other foreign matter harmful to performance of concrete finishing materials. Examine surface to determine soundness of concrete for polishing. General Contractor to remove surface contamination.

- 16. Floor Surface Polishing and Treatment: Provide polished concrete floor treatment in entirety of slab indicated by drawings. Provide consistent finish in all contiguous areas. Apply floor finish prior to installation of fixtures and accessories.
 - a. Diamond polish concrete floor surfaces with power disc machine recommended by floor finish manufacturer. Sequence with coarse to fine grit using dry method. Comply with manufacturer's recommended polishing grits for each sequence to achieve desired finish level. Level of sheen shall match that of approved mock—up. All concrete surfaces shall be as uniform in appearance as possible.
 - b. Dyed and Polished Concrete Areas: Locate demarcation line between dyed surfaces and other finishes. Polish concrete to final finish level. Apply diluted dyes to polished concrete surface. Allow dye to dry. Remove residue with dry buffer; reapply as necessary for desired result.
 - c. Apply FGS Hardener Plus, Hardener, Densifier As Follows: First coat at 250 ft2/gal and Second coat at 350 ft2/gal. Follow manufacturer's recommendations for drying time between successive coats.
 - d. Remove defects and repolish defective areas. Finish edges of floor finish adjoining other materials in a clean and sharp manner.
- 17. Polish to higher gloss those areas not meeting specified gloss levels. Fill joints flush to surface.
- 18. Final Cleaning Mechanically scrub treated floors for seven days with soft to medium pads with approved cleaning solution. Upon completion, remove surplus and excess materials, rubbish, tools and equipment.
- 19. Protect installed product from damage during construction. Protect with EZ Cover™ by McTech Corp., or comparable product.
- 20. See drawings for locations of the following finishes. Notify architect if finishes and colors are not scheduled:

Standard Finish High Gloss HG-1, Color Optional Finish Medium Gloss MG-2, Color Optional Finish Very High Gloss VHG-3, Color

SECTION 04200 - MASONRY VENEER

- 1. Do not begin work without approved submittals. Mason and General Contractor shall schedule a meeting with the Architect before masonry installation work begins to review details and field conditions. If masonry is for an addition to match the existing building, provide a mock—up panel (4'x4') for approval before starting work. Revise as required to match the existing masonry as approved by the Architect. Stone veneer shall be installed per brick methods.
- 2. Submit product data for brick, stone, masonry ties, anchors, weep material, flashing, lintels, mortar, mortar tinting, brick, CMU, and other accessories. Do not begin installation until ALL submittals are approved. Allow time for review and possible re—submittal.
- 3. Furnish face brick noted on the drawings or under allowances noted in the Project Manual. Mortar tint color as noted on drawings or as selected by Architect from samples.
- 4. Cold Weather: Do not build on frozen subgrade or setting beds. Remove and replace unit masonry damaged by frost or freezing conditions. Heat mixing water and sand to produce mortar and grout temperatures between 40 and 120 deg F. Maintain mortar and grout above freezing. Heat masonry units to 40 deg F if grouting. Cover masonry with insulating blankets or provide enclosure and heat to maintain temperatures above 32 deg F for 48 hours after construction. Install wind breaks when wind velocity exceeds 15 mph.
- 5. Hot Weather: Protect unit masonry work from excessive evaporation of water from mortar and grout. Do not apply mortar to substrates with temperatures of 100 deg F and above.
- 6. Lay masonry in patterns indicated on drawings. Unless noted otherwise on drawings, standard running bond is used. Do not install "slivers" of brick with less than 4" face exposure. Provide solid brick without cores (but with finished surfaces) for ends of sills and caps and for similar applications that would otherwise expose unfinished brick surfaces.

- 7. Face brick to be Grade SW by ASTM C216, Type FBS, unless noted otherwise on drawings.
- 7b. "Limestone" is cut Indiana Limestone. Shop fabricate units of longest feasible length. Provide drip edge at any projecting courses or lintels. to have drip edge. Avoid joints in sill stones. Sills to have continuous slope from back to front. Transition lug sills from wall to window without a joint. Use sealant & backer rod for stone joints open to sky.
- 8. Mortar and Grout Materials to be as follows: Portland Cement: ASTM C150, Type I or II, except Type III may be used for cold—weather construction. Masonry Cement: ASTM C91. Hydrated Lime: ASTM C207, Type S. Aggregate for Mortar: ASTM C144; except for joints less than 1/4 inch, use aggregate graded with 100 percent passing the No. 16 sieve. Aggregate for Grout: ASTM C404. Water: Potable.
- 9. Use Veneer anchors as called out on drawings. Contact Architect if anchors are not indicated on drawings. All anchors to be hot dip galvanized. Attach anchors into studs behind building sheathing, do not use corrugated strap ties.
- 10. Use self adhesive rubberized asphalt flashing such as Grace "Perm—a—Barrier". Nailed in place flashing is not acceptable. Submit substitution request for any other material. Any substitution must have same characteristics, thicknesses, etc. Turn up ends of flashing at least 2" at building corners, lintels, sills, etc to create an "end dam" or "pan". Securely seal flashing to substrate to prevent moisture from traveling beneath the flashing. Extend flashing past face of wall and trim off after installation is complete.
- 11. Install cotton rope weeps through wall at 24" on center and continue weep chord horizontal in cavity to next weep. Do not use synthetic rope. Extend weep chord past face of wall and trim off after installation is complete.
- 12. Install "Mortar Net" or approved equivilent continuously at base of all cavities. Submit substitution request for any other material.

- 13. Clean masonry with either a) Job-Mixed Detergent Solution of 1/2-cup dry measure tetrasodium polyphosphate and 1/2-cup dry measure laundry detergent dissolved in 1 gal, of water or Proprietary Acidic standard-strength cleaner designed for removing mortar/grout stains, efflorescence, and other stains from masonry surfaces; expressly approved for intended use by manufacturer of masonry units being cleaned. DO NOT use job site mixed solutions including acid or straight acid to clean masonry. Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears prior to tooling joints. After mortar is thoroughly set and cured. remove mortar particles with nonmetallic scrapers, and clean exposed masonry. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes. Protect adjacent surfaces from contact with cleaner. Wet wall surfaces with water prior to application of cleaners; remove cleaners promptly by rinsing thoroughly with clear water. Clean brick by bucket and brush method described in BIA Technical Note No. 20 Revised, using the specified masonry cleaner.
- 14. Mortar and Grout Mixes: Do not use admixtures unless otherwise indicated. Do not use calcium chloride in mortar or grout. Mortar for Unit Masonry: Comply with ASTM C 270, Property Specification, for job-mixed mortar; and ASTM C 1142 for ready-mixed mortar, of types indicated below. Limit cementitious materials in mortar to portland cement and lime. For masonry below grade, in contact with earth, reinforced masonry, and where indicated, use Type S. For exterior, above-grade, load-bearing and nonload-bearing walls and parapet walls; for interior load-bearing walls; for interior nonload-bearing partitions; and for other applications where another type is not indicated, use Type N.
- 15. Cut masonry units with motor—driven saws. Allow units cut with water—cooled saws to dry before placing, unless wetting of units is specified. Install cut units with cut surfaces and cut edges concealed. Install with kiln cured surfaces exposed to weather or view.
- 16. Mix units for exposed unit masonry from several pallets or cubes as they are placed to produce uniform blend of colors and textures. Wet brick prior to laying if the initial rate of absorption exceeds 30 g/30 sq. in.per minute when tested per ASTM C 67. Allow units to absorb the water so they are damp but not wet at the time of laying.

- 17. Install masonry with the following tolerances:
- Variation from Plumb: For vertical lines and surfaces less than 1/4 inch in 10 feet, and 3/8 inch in 20 feet. For vertical alignment of head joints, do not exceed plus or minus 1/4 inch in 10 feet nor 1/2 inch maximum.
- Variation from Level: Less than 1/4 inch in 20 feet and 1/2 inch in 40 feet.
- Variation of Linear Building Line: For position shown in plan, less than 1/2 inch in 20 feet and 3/4 inch in 40 feet.
- Variation in Cross-Sectional Dimensions: For columns and thickness of walls, from dimensions shown, do not exceed minus 1/4 inch nor plus 1/2 inch.
- Variation in Mortar-Joint Thickness: Do not vary from bed-joint thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch. Do not vary from head-joint thickness indicated by more than plus or minus 1/8 inch.
- 18. Lay out walls in advance for accurate spacing of surface bond patterns and for accurate locating of openings, movement—type joints, returns, and offsets. Avoid the use of less—than—half—size units at corners, jambs, and where possible at other locations.
- 19. Build in items specified under this and other Sections of the Specifications. Fill in solidly with masonry around built—in items.
- 20. Fill cores in hollow concrete masonry units with grout 24 inches under bearing plates, beams, lintels, posts, and similar items, unless otherwise indicated.
- 21. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness, unless otherwise indicated.
- 22. Keep cavities clean of mortar droppings and other materials during construction. Strike joints facing cavities flush. Use wood strips temporarily placed in cavity to collect mortar droppings. As work progresses, remove strips, clean off mortar droppings, and replace in cavity. Propose alternate methods of keeping cavity clean to Architect. Clear cavities are essential to minimize moisture problems with the wall. Maintain 1 inch minimum clear at all points with wood framed walls. Maintain 1-1/4" clear at steel stud framed walls.

- 23. Masonry Waste Disposal: Dispose of clean masonry waste, including broken masonry units, waste mortar, and excess or soil—contaminated sand, by crushing and mixing with fill material as fill is placed. Do not dispose of masonry waste as fill within 18 inches of finished grade.
- 24. Use Tinted Type 'N' Mortar unless noted otherwise on the drawings.
- 25. use solid bricks at exposed ends of rowlocks, soldier courses, etc. do not slice thin brick trim or grout cores for finish. Slope rowlock sills 1" min. Provide anchors at any brickwork isolated by flashing regardless of spacing specified.

SECTION 06101 - L.C. ROUGH CARPENTRY

- 1. Provide rough carpentry materials and labor required for proper completion of the work. Identify all lumber and plywood by grade stamps. Install rough carpentry work to comply with applicable codes and the "National Design Specification for Wood Construction" by the National Forest Products Assoc. and standards published by the APA Engineered Wood Association, unless otherwise indicated in drawings. Set carpentry work to required levels and lines, with members plumb and true and cut to fit. Securely attach carpentry work to substrate and supporting members using fasteners of size that will not penetrate members where opposite side will be exposed to view or receive finish materials. Install fasteners without splitting wood; fasten panel products to allow for expansion at joints unless otherwise indicated. Provide wood framing member of size and spacing indicated; do not splice structural members between supports.
- 2. Immediately upon delivery to site, place materials in area protected from weather. Store materials at least 6" above ground on blocking and cover with waterproof material, allowing air circulation.
- 3. Unless noted otherwise on drawings, use factory pressure treated lumber on all exterior locations and members exposed to weathering and moisture, or in direct contact with masonry or concrete. Do not use CCA for handrails, decks, or other surfaces exposed to the public. All exterior decking, posts, joists, handrails, stairs and wood members making contact with the earth or concrete, and roofing cants or blocking shall be factory pressure treated. Coordinate type and finish of rough hardware such as nails, steel plates screws, spikes and bolts, as required for proper installation with formula of lumber treatment.
- 4. Fasteners and Anchorages: Of size, type, material and finish suited to application shown. Provide metal hangers and framing anchors of size and type recommended for intended use by manufacturer. Provide coated common nails for all work, except on flooring use ring shank nails and use hot—dip galvanized fasteners and anchorages for work exposed to weather, in ground contact and high relative humidity. Use double hot dipped galvanized or stainless steel metals in contact with corrosive pressure treated woods such as ACQ. Use all nail holes in anchors or hangers with fully embedded nails of size specified by manufacturer. Use power nailers only in compliance with hanger / anchor manufacturer's recommendations for equipment and nail type.

- Manufacturer shall design trusses, gussets, glue laminated beams, laminated veneer lumber, and the associated bearing required. See truss specifications.
- 6. Framing lumber shall meet the following minimum standards including 19% max moisture content, unless noted otherwise on drawings: Walls Studs: SPF#2 2x4 or 2x6 Fb=875 Fc parallel to grain = 1100 E=1,400,000

Non-Load Bearing: Utility Grade

Horizontal Framing: SYP 2x10 Fb=1050 Fc parallel to grain = 1500

E=1,600,000

SYP 2x12 Fb=975 Fc parallel to grain =

1450 E=1,600,000

- 7. Provide 2x lumber (or other code approved) fire stop blocking at combustible exterior walls, interior partitions, areas of architectural trim. etc as required by code.
- Wall double top plates to have staggered joints of at least 24". Holes through the sill plate at anchor bolt locations to be as small as possible. Oversized holes in the sill plate will require adjacent epoxy anchors to be added. Sill plate / anchor bolt connections to have 2x2x3/16" galvanized washers, unless noted otherwise. posts of at least three 2x studs beneath bearing points, u.n.o.
- 9. Headers in walls framed of 2x4s shall have $\frac{1}{2}$ " thick plywood spacer. Load bearing headers shall be (2) 2x12s and non-load bearing headers shall be (2) 2x6s unless noted otherwise in drawings. Headers in walls framed of 2x6s shall be box headers with insulation fill of same members listed for 2x4 walls, unless noted otherwise. Provide built-up posts of three wall studs, u.n.o.

- 10. Use solid wood blocking, equal in size of bearing, under all wood posts. Provide double joists members under all walls and under bath tubs.
- 11. Wood Blocking and Bridging: Provide bridging at third points of floor spans with solid wood framing. Provide 2x6 strongbacks at third points on the bottom chord of truss framed floors and roofs, unless noted otherwise on drawings. Use strongbacks of 8 ft min length at the connection of end walls to roof/ceiling and floor framing.
- 12. Sheathing and Plywood Panels: For all types of panel and sheathing application comply with "APA Performance Standard and Policies for Structural Use Panels" for requirements indicated. For wall, roofing and exterior panel sheathing application, provide EXPOSURE I and rating required to suit support spacing. Protect sheet corners from damage. Do not use panels smaller than 24" in their narrow dimension.
- a. Plywood Backing for Electrical and Telephone Equipment: APA C-D PLUGGED INT with exterior glue, fire-retardant treated, 1/2" thick except as otherwise indicated.
- b. Plywood Underlayment for Resilient Tile: APA UNDERLAYMENT EXT with fully sanded face, in thickness indicated.
- c. Roof sheathing: Unless noted otherwise, use 19/32" thick, APA rated sheathing 24/0. Nail to framing with 10d nails at 6" o.c. at panel edges and 12" o.c. in panel "field". Note special nailing requirements above some bearing walls called out in details.
- d. Floor sheathing: Unless noted otherwise, use 23/32" thick, tongue and groove "Advantech" or approved equivalent. Fasten floor sheathing to all framing with continuous bead of construction adhesive and 10d nails at 6" o.c.
- e. Exterior Walls: Unless noted otherwise, use 15/32" APA rated sheathing 24/0. Fasten to all framing with 10d nails at 6" o.c., except intermediate studs with 10d nails at 12" o.c. When applicable, base of second floor wall panels to be nailed through sill plate to framing below with 10d nails at 6" o.c.
- f. Fire Rated Exterior Walls: Use structural sheathing as noted above or on drawings. Apply 5/8" "Dens Glass Gold" to exterior surface of structural sheathing. Fasten per UL assembly requirements.

- 13. Framing connections: Unless noted otherwise on drawings, fasten typical framing members to each other as follows.
- a. Wall stud to top or sill plates: (2) 16d nails end nailed or (4) 8d nails toenailed
 - b. Wall studs to adjacent studs: 16d nails at 12" o.c.
- c. Multiple ply top plates or sill plates between plies: 16d nails at 16" o.c.
 - d. Floor framing to sill plate: (2) 10d nails
 - e. Floor framing to rim joist: (3) 8d nails
 - f. Blocking or bridging to joists or trusses: (3) 8d nails
- 14. If contractor decides to use pre-panelized assemblies, shop drawings shall be prepared and sealed by a licensed Structural Engineer. Contractor is responsible for review and coordination of panels with Contract Documents, codes, etc.

SECTION 06192 - PREFABRICATED WOOD TRUSSES

- 1. Floor loads and roof loads to be as noted on the framing plans of the drawing set. Notify architect if information is not clear.
- 2. Wood trusses include structural units consisting of metal—plate—connected members fabricated from dimension lumber and cut and assembled before delivery to project site.
- 3. Structural Performance: Engineer, fabricate, and erect metal-plate-connected wood trusses to withstand design loads indicated and building code requirements under conditions required. If deflections are indicated on framing plans, that information supersedes that below Roof Trusses: Vertical deflection of 1/240 due to total load, and 1/360 for live load only, horizontal deflection less than 1-1/4", unless plaster ceilings are provided. Notify architect for alternate deflection limits if roof membrane other than shingles or epdm is proposed. Floor Trusses: Vertical deflection of 1/480 of span due to live load, normally. Vertical deflection of 1/640 at ceramic tile finishes (if any). Verify floor finishes with architect before designing trusses.
- 4. Engage a fabricator who uses a qualified professional engineer to prepare calculations, shop drawings, and other structural data for metal-plate-connected wood trusses. Submit shop drawings detailing location, pitch, span, camber, configuration, and spacing for each type of truss required; species, sizes, and stress grades of lumber to be used; splice details; type, size, material, finish, design values, and orientation and location of metal connector plates; and bearing details before any fabrication takes place. Schedule submittal several weeks in advance to allow for thorough review. Shop drawings shall be stamped by a structural engineer licensed by the state.
- 5. Use a fabricator that is experienced in fabricating metal-plate-connected wood trusses similar to those indicated for this project and with a record of successful in-service performance. Use metal plates produced by a member of the Truss Plate Institute (TPI). The truss fabricator should participate in a recognized quality-assurance program that involves the truss plate institute or another independent inspecting and testing agency acceptable to architect and authorities having jurisdiction

- 6. Comply with applicable requirements and recommendations of the following publications: ANSI/TPI 1, "National Design Standard for Metal—Plate—Connected Wood Truss Construction", TPI HIB "Commentary and Recommendations for Handling Installing & Bracing Metal Plate Connected Wood Trusses", and TPI DSB "Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Trusses."
- 7. Handle and store trusses with care and comply with manufacturer's written instructions and TPI recommendations to avoid damage and lateral bending. Inspect trusses showing discoloration, corrosion, or other evidence of deterioration. discard and replace trusses that are damaged or defective.
- 8. Use lumber with each piece factory marked with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.
- 9. Do not install wood trusses until supporting construction is in place and is braced and secured. Before installing, splice trusses delivered to project site in more than one piece. Hoist trusses in place by lifting equipment suited to sizes and types of trusses required, exercising care not to damage truss members or joints by out—of—plane bending or other causes. Install and brace trusses according to recommendations of TPI and as indicated. Install trusses plumb, square, and true to line and securely fasten to supporting construction.
- 10. Anchor trusses securely at all bearing points using metal framing anchors. Install fasteners through each fastener hole in metal framing anchor according to manufacturer's fastening schedules and written instructions.
- 11. Install and fasten permanent bracing during truss erection and before construction loads are applied. Anchor ends of permanent bracing where terminating at walls or beams. Install and fasten strongback bracing vertically against vertical web of parallel—chord floor trusses less than 10' on center, or as indicated on drawings.

- 12. Do not cut or remove truss members. Return wood trusses that are damaged or do not meet requirements to the fabricator and replace with trusses that do meet requirements. Do not alter trusses in the field.
- 13. Provide continuous vertical truss members at seismic bracing locations.

SECTION 07190 - VAPOR BARRIER

- 1. Vapor Barriers: Vapor impermeable 4—mils plasticized PVC film, rated .5 perms or less over all interior surfaces of exterior or cold walls and ceilings. Lap and seal all edges min. 6". Use a 4—mils carbonated polyethylene film, rated .1 perms or less, under all interior concrete slabs, interior areas of fill and over interior unexcavated earth work.
- 2. Anchorage: Install vapor barriers with adhesive or fasteners as appropriate for supporting substrate, and of type recommended by vapor barrier manufacturer.
- 3. Installation: Provide minimum 6" overlap at all seams and onto other work at edges of coverage. Seal all penetrations by other work. Seal lapped seams and laps onto other work with adhesive or self—adhesive tape of type recommended by vapor barrier manufacturer. Before covering over vapor barriers with other (concealing) work, patch punctures and tears with adhesively applied barrier material or tape with perm rating equal to barrier rating.

SECTION 07195 - AIR INFILTRATION BARRIER (BUILDING WRAP)

- 1. Pre-approved materials include the following: Tyvek, Amowrap, and Barricade Building Wrap. Building wrap behind fiber cement siding and other locations noted as "Home Slicker" shall be "Homeslicker Plus Typar" by Benjamin Obdyke, Inc. or approved equiv. Submit samples and product literature if Contractor intends to install an alternate material to those listed above.
- 2. Install material in strict adherence to manufacturer's written recommendations and instructions and as described in the following notes.
- 3. Apply wrap in full width of roll to minimize joints. Provide a minimum lap of 3". Overlap base brick or lintel flashing by at least 6" to provide positive drainage for any moisture. Completely cover window or door openings, X—cut, and fold and fasten flaps to framing. Tape all lap joints with manufacturer's specified tape.
- 4. Fasten building wrap with large head (3/8" minimum) galvanized nails or 16 gauge staples intended for this use at maximums of 6" o.c. along the perimeter and 12" o.c. in field areas. Install wrap just before the installation of masonry or vinyl siding. Replace damaged sections of wrap material with new materials of minimum dimensions of 4' by roll width.

SECTION 07210 - BUILDING INSULATION

1. Provide the following minimal building insulation, or as shown on the drawings: These are min. DOE recommendations for project area.

Attic Floor — R49 loose blown fiberglass, unless noted otherwise. 2x6 Walls — Blown—in fiberglass, minimum R—23. Add vapor barrier.

2x4 Walls - Blow-in fiberglass, minimum R-19. Add vapor barrier.

- 2. Installation: Insulate both sides of all plumbing walls. Wrap all waste lines with 1-1/2 in. sound attenuation batts. With pipe insulation, wrap all main hot and cold water lines, and condesate lines and fittings. Fill with spray foam or fiber insulation any voids, tears and penetrations in walls or ceilings. Use only fire—rated fiber insulation around mechanical flues, fireplace chimney and electrical fixtures. Upon completion of the work of this Section, secure, fill out, and properly post such certificates of compliance as are required by government agencies having jurisdiction.
- 3. Products: Approved manufacturer for rigid insulation is "Dow" or equal, for fiberglass insulation use "Owens—Corning", "Certainteed", or approved equivalent.
- 4. Batt Installation: Staple faced batts to the inside face of framing, not to edges to receive gyp. board screws. Tape any tears or joints in batt facing. Position batts to fill entire framing cavity fluff as necessary. Locate insulation around conduits, and fully around and behind electrical boxes or piping. Split batts as necessary to fit in front of and behind piping or conduit. Cut around electrical boxes, etc.
- 5. Use snugly fit, but not packed, fiberglass material around door and window frames. Close any gaps in the building exterior with sealant before installing fiberglass material. Expanding foam spray is acceptable in these locations. Do not install any materials that interfere with the smooth operation of doors or windows.

- 6. Use prefabricated ventilation troughs in attics or at cathedral ceilings to maintain air flow to the roof ridge. At attic pull—down stairs or scuttle hatch, use encapsulated fiberglass batts in the largest available sizes as removable insulation.
- 7. Blown—in Fiberglass Installation: Use "Certainteed Insul—Safe", "Arkseal", or approved equivalent. Use mesh to contain material in wall cavities. Where mesh is not concealed by gypsum board, use light resistant material. Use other facings if noted on drawings. Include binder to prevent any settling of insulation. Thoroughly fill all cavities to achieve the highest R—value available with this method certified by the manufacturer.

SECTION 07465 - FIBER CEMENT SIDING

- 1. Submit Manufacturer's data sheets on each product to be used, including preparation instructions and recommendations, storage and handling requirements and recommendations, and installation guides. Submit color samples for selection or verification if pre-finished siding will be used.
- 2. Fiber cement siding to be installed by crews with a minimum of 2 years experience with installation of similar products. Submit past project information if requested by Architect.
- Provide siding materials as indicated on drawings. Products by the following manufacturers with same physical characteristics and warranties by James Hardie Co, CertainTeed, or L—P will be considered. Store products

1 level surface and keep dry.

Protect edges and corners from chipping.

- 4. General Siding Installation Requirements: Do not begin installation until substrates have been properly prepared. Clean surfaces thoroughly prior to installation. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions. Install siding over "Home Slicker" rain screen by Benjamin Obdyke Co per manufacturer's instructions. Install air infiltration barrier beneath "Home Slicker" per specifications in set note lap and tape requirements for air infiltration barrier. Provide metal flashing at base of walls, window and door heads, horizontal panel joints, and other locations noted in drawings. Fasten all siding products with non-corrosive nails or screws approved by manufacturer. See installation guides concerning nail driving depth. Maintain clearance between siding and adjacent finished grade. Leave 1/8" gap for sealant between siding and trim pieces. Seal gap with high quality, paint-able (not silicone) caulk.
- 5. Horizontal Plank Siding Installation: Install materials in strict accordance with manufacturer's installation instructions including vertical clearance between the edge of siding and any other material. Align vertical siding joints of the planks over framing members. Locate splices at least one stud cavity away from window and door openings. Do not nail closer than 3/8 inch to plank edges or 1 inch from plank top. Maintain clearance between siding and adjacent finished grade.
- 6. Panel Siding Installation: Install materials in strict accordance with manufacturer's installation instructions. Block framing between study where Panel siding horizontal joints occur. Do not nail closer than 3/8 inch to panel edges or 2 inches from panel corners. Allow minimum vertical clearance between the edge of siding and any other material per manufacturer's installation instructions. Add framing as necessary to locate panel joints at batten locations shown on building elevations.

- 7. Shingle / Shake Siding Installation: Install materials in strict accordance with manufacturer's installation instructions. Install a minimum 1/4 inch thick starter strip at the bottom course of the wall. Maintain clearance between siding and adjacent finished grade. Apply starter course overlapping the starter strip. Apply subsequent courses horizontally with a minimum 10 inch overlap at the top and a minimum 2 inch (51 mm) side lap. The bottom edge of the first two courses overlaps the starter strip. Fasten between 1/2 inch and 1 inch in from the side edge and between 8-1/2 to 9 inches up from the shingle bottom edge. Provide vertical clearance between the edge of siding and any other materials per manufacturer's installation instructions. Ensure vertical joints of overlapping shingle course do not align.
- 8. Fascia, Trim, and Moulding Installation: Install per manufacturer's installation instructions. Install flashing around all wall openings. Fasten through trim into structural framing or code complying sheathing. Fasteners must penetrate minimum 3/4 inch or full thickness of sheathing. Additional fasteners may be required to ensure adequate security. Place fasteners between 3/4 inch and 2 inches from side edge of trim board and no closer than 1 inch from end. Fasten at 16" o.c., max. Maintain clearance between trim and adjacent finished grade. Shim frieze board as required to align with corner trim. Overlay siding with trim boards or moulding at windows, doors and inside corners. Fasten through overlapping boards. Do not nail between lap joints. Install fascia over structural subfascia.
- 9. Unless noted otherwise on drawings, install trim as follows: Trim inside corner with single board. Trim outside corner boards with 5/4" pre-built corners by fastening trim together with 16 ga. corrosion resistant finish nail 1/2 inch from edge spaced 16", o.c., weather cut each end spaced minimum 12 inches apart. Allow 1/8 inch gap between trim and siding. Overlay siding with single board of outside corner board then align second corner board to outside edge of first corner board. Do not fasten trim boards to each other.
- 10. See building elevation drawings for types, shapes, and colors of siding.
 - a. Unless noted otherwise in drawings, paint unprimed siding with a minimum one coat high quality, alkali resistant primer and one coat of either, 100 percent acrylic or latex or oil based, exterior grade topcoats or two coats high quality alkali resistant 100 percent acrylic or latex, exterior grade topcoat within 90 days of installation. Follow paint manufacturer's written product recommendation and written application instructions.
 - b. Finish factory primed siding with a minimum of one coat of high quality 100 percent acrylic or latex or oil based exterior grade paint within 180 days of installation, unless noted otherwise in drawings. Follow paint manufacturer's written product recommendation and written application instructions.

11. Protect installed products until completion of project. Touch—up, repair or replace damaged products before Substantial Completion.

SECTION 07610 - SHEET METAL ROOFING

- 1. Metal roofing system is based on 24 gauge, hot dip galvanized steel, with 1 mil finish 70% min "Kynar" finish. Material from Petersen Aluminum Co., Berridge, MCBI, or JMS Metals of Sparta, IL shall be acceptable. Submit product data, standard specifications and installation guides, cut sheets, and material samples for architect review and color selection. After color selection is made, provide a 12x12" sample to architect for use in other material color selections.
- 2. All metal panels, accessories, ridge caps, hip covers, valley flashing, related trim, fascia, soffit, etc to be supplied by one manufacturer and installed by one contractor with relevant project experience and references. Entire assembly to be installed to create a watertight system.
- 3. Except as otherwise shown or specified, comply with applicable recommendations and details of "Architectural Sheet Metal Manual" by SMACNA. Conform to dimensions and profiles shown.
- 4. The main metal roofing pans are to be of one-piece fabrication with upturned ends at the end of the panel edge for each sloping roof area without joints of laps; the cleats for the roofing panels are to be spaced to provent wind uplift and provide structural bearing capacity. Fastening system shall be designed to accommodate thermal expansion $(+/-120\ deg\ F)$ of the roofing system as an integral assembly. Field crimp panel joints with electric crimping machine.
- 5. Unless noted otherwise on drawings, installed panel width to be 20" and standing seams to be 1-1/4" tall. Panels shall not have end joints between ridge and roof edge.
- 6. For buildings over 33 feet in height, design roof assembly to conform to the requirements of ANSI A58.1 for wind uplift and design of attachments.
- 7. Metal Paint Finish Warranty: Furnish manufacturer's written warranty covering failure of the factory—applied exterior finish on sheet metal roofing within the warranty period. This warranty shall be in addition to and not a limitation of other rights the Owner may have against the Contractor under the Contract Documents. Warranty period is 20 years after date of Substantial Completion.

- 8. Watertight Roof Assembly Warranty: Provide an alternate price for warranting the entire roofing system assembly as described in this section is to have a 15 year watertight assembly warranty for materials and workmanship labor defects which may cause leakage of the roof assembly. The warrantee shall be signed jointly by the installing contractor and the manufacturer.
- 9. Paint finish to be Fluoropolymer Coating: Manufacturer's standard coil—coated, thermocured, full—strength 70 percent "Kynar 500" coating consisting of a primer and a minimum 0.75—mil dry film thickness with a total minimum dry film thickness of 0.9 mil and 30 percent reflective gloss when tested in accordance with ASTM D 523. Provide coating that has been field tested under normal range of weathering conditions for minimum of 20 years without significant peel, blister, flake, chip, crack, or check in finish and without chalking in excess of No. 8in accordance with ASTM D 659, and without fading in excess of 5 NBS units.
- 10. Miscellaneous Materials: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants and accessory items as recommended by sheet metal manufacturer and fabricator for metal roofing work, except as otherwise indicated.
- 11. Expansion Joint Sealant: For hooked—type expansion joints, which must be free to move, provide nonsetting, nonhardening, nonmigrating, heavy—bodied polyisobutylene mastic sealant. Sealing Tape: Pressure—sensitive 100 percent solids polyisobutylene compound sealing tape with release paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape.
- 12. Accessories: Except as indicated as work of another specification Section, provide components required for a complete roof system, including trim, copings, fascias, ridge closures, clips, seam covers, battens, flashings, gutters, louvers, sealants, gaskets, and closure strips. Match materials and finishes of roof. Include prefinished metal flashing at roof perimeter to prevent ice or water from backing up below the roof panel at the perimeter of the roof.
- 13. Provide alternate price to Owner to provide snow guards at the perimeter of metal roof sections, unless indicated otherwise on drawings.

- 14. Expansion Provisions: Where lapped or bayonet—type expansion provisions in work cannot be used, or would not be sufficiently water/weatherproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with mastic sealant (concealed within joints).
- 15. Sealant Joints: Where movable, non—expansion—type joints are indicated or required for proper performance of work, form metal to provide for proper installation of elastomeric sealant, in compliance with SMACNA standards.
- 16. Provide for separation of metal from noncompatible metal or corrosive substrate by coating concealed surfaces at locations of contact, with bituminous coating, by applying rubberized asphalt underlayment to each metal surface, or other permanent separation as recommended by manufacturer/fabricator.
- 17. Coordinate metal roofing with rain drainage work, gutters, downspouts, flashing, trim and construction of decks, parapets, walls, and other adjoining work to provide a permanently leakproof, secure, and noncorrosive installation.
- 18. Install underlayment and paper slip sheet on substrate under metal roofing to greatest extent possible unless otherwise recommended by manufacturer of sheet metal. Use adhesive for temporary anchorage, where possible, to minimize use of mechanical fasteners under metal roofing. Lap joints 2 inches minimum.
- 19. Sealant—Type Joints: Where sealant—filled joints are used, embed hooked flanges of joint members not less than 1 inch into sealant. Form joints to conceal sealant completely. When ambient temperature is moderate at time of installation [40 to 70 deg F], set joint members for 50 percent movement either way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant—type joints at temperatures below 40 deg F. Comply with requirements of Division 7 "Sealant" Sections for handling and installing sealants.
- 20. Fabricate and install work with lines and corners of exposed units true and accurate. Form exposed faces flat and free of buckles, excessive waves, and avoidable tool marks considering temper and reflectivity of metal. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant. Except as otherwise shown, fold back sheet metal to form a hem on concealed side of exposed edges.

- 21. Conceal fasteners and expansion provisions where possible in exposed work, and locate so as to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.
- 22. Remove protective film (if any) from exposed surfaces of metal roofing promptly upon installation. Strip with care to avoid damage to finishes. Clean exposed metal surfaces of substances that would interfere with uniform oxidation and weathering. Provide final protection in a manner acceptable to installer that ensures that metal roofing is without damage or deterioration at time of Substantial Completion.

SECTION 07900 - SEALANTS

- 1. Throughout the work, seal and caulk joints as required, to barrier against passage of moisture and passage of air. Use sealant as described below for exposed exterior and all moving joints. Install materials in strict accordance with the recommendations of each manufacturers, tooling the joints to a neat and smooth profile.
- 2. Submit product data and certified test reports for joint sealers evidencing compliance with application to attached substrates. Acceptable sealant manufacturers include Sika, Tremco, or Sonneborn.
- 3. Sealant: Provide sealant to fill all gaps and uneven adjoining interior materials. Fill all linear and spot gaps at walls and at ceiling channels and walls. Sealant to match adjoining surfaces. Paint to conceal sealant application. See ASTM C920 for type, use and grade classifications and descriptions. Contractor to choose applicable sealant and manufacturer according to specified requirements for use intended.
- 4. Non-Staining Test: Test results for "non-staining" of porous materials are to be performed for sealant to be used at window perimeters and other joint locations.
- 5. Before installing sealant, test adhession to substrates. When needed, use primers recommended by sealant manufacturer. Use sealant primer at joints in EIFS finishes, metals, or plastics. Remove existing material that has absorbed silicone oils from prior sealant before installing new. When replacing silicone with silicone, apply sealant primer.
- 6. Sealant joints must be clean, dry, and free of dust or dirt before installation. Sealant to be 1/2" deep in joints. Use properly sized foam backer rod at all joints. Joints without backer rod will fail in short periods of time.
- 7. Do not use silicone sealant anywhere without written direction to do so.
- 8. The following are common substrates and appropriate sealant for them:
- a. Pourable Urethane Sealant: Multi-part pourable urethane sealant exterior and interior joints in horizontal surfaces of concrete; between metal and concrete, mortar, stone and masonry

- b. Mildew-Resistant Silicone: One-part mildew-resistant silicone sealant interior joints in vertical surfaces of ceramic tile in toilet rooms and at perimeter of all bathroom fixtures. Color to match fixture or tile.
- c. Acrylic—Emulsion Sealant: Interior joints in field—painted vertical and overhead surfaces at perimeter of elevator door frames and hollow metal door frames; in gypsum drywall, plaster and concrete or concrete masonry; and all other interior joints not indicated otherwise.
- d. Foamed—In—Place Fire—Stopping Sealant: Through penetrations in fire—resistance—rated floor and wall assemblies involving multiple pipes, conduits, and other items.
- e. One—Part Fire—Stopping Sealant: Through penetrations in fireresistance—rated floor and wall assemblies involving single pipes, conduits where joint widths are narrow and of uniform width. Use red color in mechanical rooms
- f. Non-Acid Curing Silicone: One-part non acid curing silicone or two-part non-acid curing to be used for butt glazing application at Entry doors or for sealing of insulated glazing units.
- g. Moisture Curing Urethane: One—part moisture curing urethane sealant to be used at perimeters of doors, windows, louvers, and expansion or control joints.
- 9. Tool all sealant joints to create finished, smooth, professional installation. Do not use detergent or other solvents in the tooling process.
- 10. Color Samples: Contractor to submit color samples for choice by architect for all sealant types and locations.

08200 WOOD DOORS

- 1. Provide doors as indicated on plans, schedules, or door type drawings. Obtain exterior and interior doors from, one source for each.
- 2. Submit manufacturer's Product Data for each type of door if from other than the specified manufacturer. Products shall meet standards of Nat'l Wood Door & Window Assoc.
- 3. Protect doors during transit, storage, and handling to prevent damage or soiling. Do not deliver or install doors until temperature and humidity conditions have been stabilized and will remain constant until project completion.
- 4. Manufacturer to warrant doors against warping or signs of veneer telegraphing for a period of five years. Warranty to cover materials and installation.
- 5. Align and fit non-rated doors to $\frac{1}{8}$ " at jambs and heads, $\frac{3}{8}$ " at sill, except door sills with thresholds to be fit to $\frac{1}{4}$ " clear. Verify conditions such as carpet.
- 6. Protect doors from damage. Rehang or replace doors damaged during installation.
- 7. Adjust units as necessary to assure smooth, quiet, operation without warping or binding. Check & re—adjust for accurate and positive latching without forcing or binding.

SECTION 08410 - ALUMINUM ENTRANCES AND STOREFRONTS

- 1. Provide and install aluminum storefront windows and entrances as indicated on the drawings.
- 2. Thermal Movement: Provide for expansion and contraction resulting from an ambient temperature range of 180 deg F without buckling, joint seal failure, undue stress on structural elements, damaging loads on fasteners, reduction of performance, or stress on glass. Doors shall function normally over specified range. Provide assemblies capable of withstanding windload pressures of 30 psf inward and outward, acting normal to plane of the wall.
- 3. Structural Performance: Test in accordance with ASTM E 330. There shall be no glass breakage or permanent damage to fasteners, anchors, hardware or actuating mechanism or permanent deformation of framing members in excess of 0.2 percent of their clear span. Deflection Parallel to the Plane of the Wall: Test pressure shall be 1.5 times wind pressure. Deflection of members carrying full dead load shall not exceed amount that will reduce glass bite below 75 percent of design dimension or edge clearance between member and fixed glass or other fixed member above to less than 1/8 inch. Clearance between the member and operable door or window shall be at least 1/16 inch.
- 4. Performance Data: Unless noted otherwise on the drawings, provide systems that meet the following criteria. Air Infiltration: Not more than 0.06 CFM per sq. ft. of fixed area (excluding operable door edges) when tested in accordance with ASTM E 283 at inward test pressure differential of 1.57 psf. Water Penetration: No uncontrolled water penetration (excluding operable door edges) when tested in accordance with ASTM E 331 at an inward test pressure differential of 6.24 lbf per sq. ft. Condensation Resistance: Provide units showing condensation resistance factor (CRF) of not less than 45 when tested in accordance with AAMA 1503. Thermal Transmittance: Provide U-value of not more than 0.65 BTU/(hr x sq. ft. x deg F) at 15-mph exterior wind velocity when tested in accordance with AAMA 1503.

- 5. Submit Product Data including fabrication methods, data on finishing, hardware and accessories and surface maintenance recommendations. Submit shop drawings indicating layout, installation details, 1/4-inch scale elevations, detail sections of composite members, anchors and reinforcement, hardware mounting heights and glazing details. Include a Hardware schedule organized into sets. Include item and manufacturer's name and designation of each item required. Submit finish samples in pairs of each finish on 12-inch-long sections. Where normal color variations are anticipated, include sets indicating full range of color variations.
- 6. Installer Qualifications: Installer who has completed installations similar to those required and whose work has resulted in a record of successful in—service performance.
- 7. Manufacturers: Kawneer, EFCO, Vistawall, Manko, or approved other. Drawings indicate size, profile, and dimensional requirements and are based on specific types and models indicated. Aluminum entrance and storefront by other manufacturers may be considered provided deviations do not change the design concept or performance.
- 8. Aluminum Members: Alloy and temper recommended; comply with ASTM B 221 for extrusions, ASTM B 209 for sheet or plate, and ASTM B 211 for bars, rods, and wire.
- 9. Carbon Steel Reinforcement: Comply with ASTM A 36 for structural shapes, plates and bars, ASTM A 611 for cold—rolled sheet and strip, or ASTM A 570 for hot—rolled sheet and strip.
- 10. Glazing Materials: 1" insulated glazing units with argon gas fill and Low—e coating, unless noted otherwise on drawings.All glass to have Low—E coating.

- 11. Fasteners: Aluminum, nonmagnetic stainless steel, zinc plated steel, or material warranted to be noncorrosive and compatible with aluminum components, hardware, anchors, and other components. Do not use exposed fasteners except for application of hardware. For hardware, use Star Pattern or other non-screwdriver flat-head machine screws that match finish of member or hardware fastened. Brackets and Reinforcements: High-strength aluminum; where use of aluminum is not feasible provide nonmagnetic stainless steel or hot-dip galvanized steel complying with ASTM A 123.
- 12. Compression Weatherstripping: Replaceable molded neoprene gaskets complying with ASTM D 2000 or molded PVC complying with ASTM D 2287.
- 13. Hardware: Heavy—duty units required for operation; finish to match door. Door hardware to be as scheduled in drawings. Thresholds to be extruded aluminum in mill finish, with anchors and clips, coordinated with pivots and floor—concealed closers. At locations without weatherstripping, provide neoprene silencers on stops to prevent metal—to—metal contact.
- 14. Stile—and—Rail Type Entrance Doors: Provide tubular frame members, fabricated with mechanical joints using heavy inserted reinforcing plates and concealed tie—rods or j—bolts. Fabricate to facilitate replacement of glass or panels, without disassembly. Provide snap—on extruded aluminum glazing stops with exterior stops anchored for nonremoval. Provide 1—3/4—inch—thick medium stile doors, unless noted otherwise in drawings.
- 15. Thermal break construction: Fabricate components to designs, sizes and thicknesses indicated and comply with indicated standards. Sizes and profiles are indicated on the drawings. Fabricate framing with an integrally concealed, low conductance thermal barrier, between exterior materials and interior members to eliminate direct metal—to—metal contact.
- 16. Prefabrication: Complete fabrication, assembly, finishing and hardware application before shipment to the Project. Disassemble only as necessary for shipment and installation. Do not drill and tap for surface—mounted hardware items until time of installation. Preglaze door and frame units to greatest extent possible.

- 17. Reinforcing: Install reinforcing for hardware and as necessary for performance requirements, sag resistance and rigidity. Separate dissimilar metals with bituminous paint, suitable sealant, nonabsorptive plastic or elastomeric tape or gasket between surfaces. Do not use coatings containing lead.
- 18. Finishes: Comply with NAAMM "Metal Finishes Manual" for recommendations relative to application and designations of finishes. Finish designations prefixed by "AA" conform to the system established by the Aluminum Association for designating aluminum finishes. Unless otherwise indicated on drawings, provide anodized class I finish, color to be selected by architect.
- 19. Installation: Comply with manufacturer's instructions. Set units plumb, level, and true to line, without warp or rack of framing members, doors, or panels. Install in proper alignment and relation to established lines and grades. Provide support and anchor securely in place. Maintain accurate relation of planes and angles, with hairline fit of contacting members. Conceal fasteners wherever possible. Provide finger guards of collapsible neoprene or PVC gasketing securely anchored into frame at hinge—jamb of center—pivoted doors. Set sill members in bed of sealant, or with joint fillers or gaskets. Adjust hardware to function properly. Clean completed system after installation. Avoid damage to coatings.

15000 16000
GENERAL REQUIREMENTS OF MECHANICAL, PLUMBING, & ELECTRICAL WORK

- 1. The various Mechanical Contractors are responsible to finishing a system with all direct and indirect work of miscellaneous and auxiliary items and other work required for a complete and properly functioning systems in operation, ready for satisfactory use by the Owner. Provide all labor and supervision as required to complete the work including supervised start—up and adjustment of all components. All materials furnished shall be new. Contractor shall protect his work by keeping all piping, ducts, equipment, etc., capped or plugged, drained, salted, or otherwise protected from injury by freezing, water damage, or stoppage from material, concrete, sand, or dirt and shall repair any such injury without additional charge to the Owner. Injury shall be interpreted to include scratches, discoloring, denting.
- 2. Mechanical Work: Furnish all equipment specified, deliver, set in place and make all necessary connections in accordance with the drawings and the manufacturer's recommended method. Provide mechanical work which is finished work, tested and ready for operation.
- Installation: Contractor furnishing an item of equipment is responsible for the proper handling, setting, installation, protection, start-up and initial operation. Furnish access panels, where required, for installation by the Contractor. Contractor shall include all necessary allowances to insure that all equipment and systems furnished will be serviced as required during the guarantee period. Contractor shall furnish the Owner one set of complete catalog data, manufacturer's literature and detailed manuals covering the operation and maintenance of all equipment furnished. Contractor shall also supervise the initial operation of all equipment and instruct the operators selected by the Owner as required to acquaint him thoroughly with best practice. Instruction shall be by a technically qualified person with thorough understanding of the systems involved. Contractor and the Subcontractors shall coordinate and provide all cutting to restore adjacent surfaces to original, or new type of finish. All opening through roofs exterior wall and foundations shall be weatherproofed, absolutely watertight.

SECTION 08710 - DOOR HARDWARE

- 1. Submit final hardware schedule and product cut sheets organized by "hardware sets", to indicate specifically the product to be furnished for each item required on each door. Furnish templates to each fabricator of doors and frames as required for hardware preparation.
- 2. For fire rated openings, provide hardware tested and listed by UL of FM (NFPA std. 80).
- 3. Finish and base material designations are indicated in accordance with ANSI/BHMA A156.18. All hardware on the project is intended to be of the same finish or appearance. Notify architect if base material and finish are not available for a hardware item.
- 4. Key new locks to match existing master key system or create one with architect's direction. Submit proposed keying schedule to Architect. If requested, meet with Owner and Architect to review schedule. Master key or Grand master key cylinders and key in groups, unless otherwise noted. Factory masterkey with manufacturer retaining permanent keying records. Provide 6 masterkeys for each masterkey set. Provide 3 change keys for each lock. Provide 2 control keys for core removal. Stamp keys "DO NOT DUPLICATE". Provide high security removable core cylinders, with patented key control, for each lock with construction masterkeying. Permanent cores shall be installed upon completion of the project. No door shall require keys, special tools, or special knowledge to travel in the direction of egress.
- 5. All keys to be prepared by a state licensed locksmith.
- 6. Provide continuous weatherstripping at head and jambs of exterior doors or doors leading to unheated spaces. Attach with non-corrosive fasteners. Use sponge neoprene (class II closed cell), flexible vinyl hollow bulb or loop insert, or brush pile insert of polypropylene or nylon woven pile with aluminum backing complying with AAMA 701.2 If drawings call out a specific weatherstrip, use that material.

- 7. Set thresholds for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant, forming tight seal between threshold and surface to shich set. Securely and permanently anchor thresholds, using countersunk non-ferrous screws to match color of thesholds (stainless stee screws at aluminum thresholds). Exterior doors shall have thermally broken thresholds. Remove excess sealant and clean adjacent surfaces. Doors leading from spaces into unheated spaces shall have door mounted sweeps, unless noted otherwise. Both interior and exterior thresholds shall terminate finish flooring materials.
- 8. Use hardware mounting locations recommended by the Door Hardware Institute, unless noted otherwise. Verify that mail slots (if any) do not allow exterior access to lock controls within the project space.
- 9. Doors to stairs (other than exit stairs), loading platforms, boiler rooms, stages and doors serving other hazardous locations shall have knurled or similar approved marking of door lever handles or cross bars in accordance with local building codes.
- 10. Properly prepare all doors including aluminum storefront doors to accept door hardware as scheduled.
- 11. Electric Strikes: Provide electric strikes designed for use with the type locks shown at each opening where specified. Electric strikes shall be UL listed as Burglary—Resistant Electric Door Strikes and where required shall be UL listed as Electric Strikes for Fire Doors and Frames. Provide non fail—safe type electric strikes, unless noted otherwise. Provide transformers and rectifiers for each strike as required. Verify voltage with electrical contractor.
- 12. Pocket Doors: Pocket doors in public facilities to meet requirements of ADA, unless noted otherwise. Provide wire pull and bumpers for those doors.
- 13. Wall Stops: Provide wall stops at all doors where door leaf or lever may contact adjacent walls. When stop is not feasible, review condition with architect and provide similar floor stop.

- 14. Sound gasketing: Provide automatic door bottoms and sound gasketing as indicated in drawings. Cutting or notching of sound gasket for stop mounted hardware is not permitted.
- 15. Lead protection: Lead wrap hardware penetrating lead—lined doors. Levers and roses to be lead lined. Apply kick and armor plates with 3M adhesive #1357, as recommended by 3M Co., on lead—lined doors.
- 16. Low Energy Door Operators: Provide low energy door operators as indicated in drawings. Low energy door operators shall meet ANSI/BHMA A156.19 requirements. Door control shall be adjustable to provide compliance with the requirements of ADA and Illinois Accessibility Code. Provide adjustable motor assist, adjustable door closing force and back check, motor start up delay, vestibule interface delay, electric lock delay, and door hold open delay.
- 17. Provide Coordinators for pairs of doors with closers and astragals.
- 18. When pre-hung doors are used, hinges on these doors shall match other door hardware in finish.
- 19. Prefit hardware before finish is applied, remove and reinstall after finish is completed. Install hardware so that parts operate smoothly, close tightly and do not rattle. Hardware installation shall comply with NFPA 80 and NFPA 101 requirements. Set units level, plumb and true to line and location. Adjust and reinforce attachment to substrate as necessary for proper installation and operation. Drill and countersink units which are not factory—prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.
- 20. Set hardware items level, plumb and true for smooth operation. Reinforce the installation substrate as required for proper installation and operation.
- 21. Immediately before Substantial Completion, adjust, lubricate, and check each operation item of hardware and each door, to ensure proper function of each unit. Replace those units which cannot be adjusted to operate smoothly and freely as intended for the application made.

- 22. Provide closers as indicated in hardware schedule and at all fire rated doors. Provide hold open feature wherever allowed by code. Locate closer on room side of door, u.n.o. Adjust door closers to comply with accessibility standards including the following opening forces: exterior hinged doors = 8.5 lbf max, interior hinged doors = 5 lbf max, sliding or folding doors = 5 lbf max. Door shall take at least 3 seconds to travel from 70° open to 3" open.
- 23. Provide on—site training for the owners staff on projects with programmable locks, keycards, software, etc. Train owners personnel in proper adjustment and maintenance of door hardware and hardware finishes.

SECTION 09512 - ACOUSTICAL TILE CEILINGS

- 1. Submit product data for each type of acoustical panel and suspension system. Submit 6x6 inch samples of each tile type, pattern, and color required.
- 2. Provide acoustic ceiling tiles as scheduled in the drawings, or approved equal. Any proposed substitutions must be approved by the architect in advance. The proposed product must have similar appearance, same fire rating / flame spread, same acoustic rating, etc. Provide data to confirm.
- 3. Size suspension system attachment devices for 5 times the design load indicated in ASTM C 635, Table 1. Select wire hangers, braces, and ties for stress at 3 times the hanger design load (ASTM C 635, Table 1, Direct Hung) will be less than the yield stress of wire, but provide not less than 0.106-inch- wire. Use Zinc-Coated Carbon Steel Wire (ASTM A 641) for hangers. Support ceiling for seismic activity per manufacturer details and details included in the drawing set.
- 4. Provide grid and edge moldings and trim as indicated on the drawings.
- 5. Install acoustical tile ceilings per manufacturer's instructions, the CISCA "Ceiling Systems Handbook", "Recommendations for Direct—Hung Acoustical Tile and Lay—In Panel Ceilings", and "Guidelines for Seismic Restraint of Direct—Hung Suspended Ceiling Assemblies."
- 6. Suspend ceiling hangers as follows: Secure wire hangers to ceiling suspension members and to supports above. Connect hangers either directly to structures or to inserts, eye screws, or other devices that are secure, that are appropriate for substrate, and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures. Space hangers not more than 48 inches o.c. along each member supported directly from hangers, unless otherwise shown; and provide hangers not more than 8 inches from ends of each member.
- 7. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical tiles. Install foam baffles where ceiling perimeter meets corrugated metal wall liner panels.

- 8. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.
- 9. Install acoustical tiles in coordination with suspension system. Place splines or suspension system flanges into kerfed edges so that tile—to—tile joints are closed by double lap of material. Fit adjoining tile to form flush, tight joints. Scribe and cut tile for accurate fit at borders and around penetrations through tile.
- 10. Replace any scuffed or damaged ceilings before requesting punchlist preparation.

SECTION 09899 GYPSUM BOARD PRIMER SURFACER

- 1. Product Data: Submit manufacturer's specifications and installation instructions with project conditions and materials clearly identified or detailed for each required system.
- 2. Where noted in Room Finish or Paint Schedule, prepare walls surfaces with "SHEETROCK" brand "TUFF—HIDE" primer—surfacer by USG or approved equivilent dual—purpose vinyl acrylic latex—based coating designed especially for interior application over new drywall. Installation to be single spray application in lieu of typical two—step process of skim coating surfaces with joint compound followed by a coat of primer.
- 3. See Drawings for areas (if any) requiring "GA Level 5 finish". Follow USG recommendations & model specs for achieving Level 5 with Tuff—Hide at those areas.
- 4. Complete taping and joint filling on gypsum board surfaces. Treat all joints, fasteners, and accessories. Fill all nicks, voids, and gouges with joint compound. Examine substrates and adjoining construction and conditions under which work is to be installed. Do not proceed with work until unsatisfactory conditions are corrected.
- 5. Machine apply with airless sprayer in conformance with manufacturer's application instructions to a wet film thickness of 15 to 20 mils [9–12 mils dry film thickness]. Surface may be painted after overnight drying. Airless spray application only. Use professional equipment that meets or exceeds the following rating when spraying through 50 ft. of ¼" i.d. high-pressure hose: output at least 1 gallon per minute; pump pressure rated at 2700–3000 psi; and accommodates a 0.031" spray tip at 2000 psi. Graco MARK V, and GMax 5900 HD are examples of approved airless pumping equipment. Use a 30-mesh filter located in the high-pressure manifold. Use a spray tip orifice between 0.023" to 0.031". It is recommended to use a Graco heavy-duty texture spray gun or equivalent that accommodates a Graco RAC V 527 (0.027"), RAC V 529 (0.029"), or RAC V 531 (0.031") tip.
- 6. Do not thin product. Tint as directed by manufacturer and requested by painter on surfaces to be painted. Coverage to be per manufacturer's recommendations, 100–125 sq. ft. per gallon.

- 7. Test the spray pattern prior to application. To apply, hold spray gun perpendicular to the surface approximately 12 to 18 inches away. Move the gun parallel to the surface at a steady rate. Lap each stroke approximately 50% over the previous stroke for uniform paint thickness. Spray from left to right to scratch in the initial coat at approximately half of the desired thickness. Then crosshatch spray up and down as the double-up coat to the desired thickness. When painting corners, aim the gun toward the center of the corner to ensure both sides are sprayed evenly. When used in lieu of a skim coat of joint compound and paint primer coat in a Level 5 gypsum board finish, apply to a minimum Wet Film Thickness (WFT) of 15 mils. In all applications a wet film thickness in excess of 20 mils is not recommended. Use a wet film thickness gauge to ensure proper application thickness and maximum performance. During and after application, avoid drafts and maintain 55 °F (13 °C) minimum product, air and surface temperatures until surface is dry.
- 7. Wipe up spills and drips immediately with damp cloth. Correct damage and defects which may telegraph through finish work. Leave work smooth and uniform, ready for finish paint coat or coats per paint schedule.

SECTION 09900 PAINTING

- 1. Paint exposed surfaces, except where the paint schedules indicate that a surface or material is not to be painted or is to remain natural. If the paint schedules do not specifically mention an item or a surface, paint the item or surface the same a s similar adjacent materials or surfaces whether or not schedules indicate colors. If the schedules do not indicate color or finish, the Architect will select from standard colors and finishes available.
- 2. Do not paint prefinished items, tinted plaster surfaces(u.n.o.), concealed surfaces, finished metal surfaces, operating parts, and labels. Do not paint over Underwriters Laboratories (UL), Factory Mutual (FM), or other code—required labels or equipment name, identification, performance rating, or nomenclature plates.
- 3. For each paint system provide an inclusive list of required coating materials. Indicate each material and cross—reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification. Provide manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material proposed for use.
- 4. Samples (Mock—ups) of Paint Finish for Verification: Provide mock—up areas as follows for verification of color and finish: None required at this project.
- 5. Obtain block fillers, primers, and undercoat materials for each coating system from the same manufacturer as the finish coats.
- 6. Deliver materials to the Project Site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label.
- 7. Store materials not in use in tightly covered containers in a well ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain containers in clean condition, free of foreign materials and residue. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily.

- 8. Do not apply paint in snow, rain, fog, or mist; or when the relative humidity exceeds 85 percent; or at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.
- 9. Material Quality: Provide manufacturer's best—quality paint material of the various coating types specified. Paint—material containers not displaying manufacturer's product identification will not be acceptable.
- 10. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers.
- 11. Examine substrates, areas, and conditions under which painting will be performed for compliance with paint application requirements. Do not begin to apply paint until unsatisfactory conditions have been corrected and surfaces receiving paint are thoroughly dry.
- 12. Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of the size or weight of the item, provide surface—applied protection before surface preparation and painting. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
- 13. Apply rust converter coating to any metals with visible rust before applying scheduled primer. Clean oils from galvanized metals and use primer intended for that substrate.
- 14. Mix and prepare paint materials according to manufacturer's written instructions. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using. Use only thinners approved by paint manufacturer and only within recommended limits.

- 15. Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied. Paint colors, surface treatments, and finishes are indicated in the schedules. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film. Provide finish coats that are compatible with primers used. The term "exposed surfaces" includes areas visible when permanent or built—in items are in place. Extend coatings in these areas, as required, to maintain the system integrity and provide desired protection.
- 16. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces behind permanently fixed equipment or furniture with prime coat only.
- 17. Finish exterior doors on tops, bottoms, and side edges the same as exterior faces. Paint or varnish all edges, tops, and bottoms of interior doors to fully seal them. Sand lightly between each succeeding enamel or varnish coat.
- 18. Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn through or other defects due to insufficient sealing,
- 19. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.
- 20. At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from the site. After completing painting, clean glass and paint—splattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.

- 21. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect,
- 22. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.
- 23. At completion of construction activities of other trades, touch up and restore or defaced painted surfaces. Comply with procedures specified in PDCA P1.

SECTION 10155 - TOILET COMPARTMENTS

- 1. Submit product data and color charts for selection by architect.
- 2. Provide products by Accurate Partitions Corporation, General Partitions, Global Steel Products Corp, or approved equal.
- 3. Painted metal partitions shall be mill—phosphatized steel sheet, in manufacturer's standard baked finish and thickness, that is leveled to stretcher—leveled flatness and that complies with the requirements of ASTM A 591. Use panels whose cores are a sound—deadening honeycomb of resin—impregnated kraft paper in thickness required to provide finished thickness of 1 inch (25 mm) minimum for doors, panels, and screens and 1—1/4 inches (32 mm) minimum for pilasters.
- 4. Plastic laminate partitions shall meet or exceed NEMA LD 3, GP-50, and be 0.050-inch thick. Color and pattern will be selected by Architect from manufacturer's full range of colors and patterns. The core material for plastic laminate shall be ANSI 208.1, Type M-2 particleboard with 45-lb density in 1" thickness for doors, panels, and screens and 1-1/4 inches minimum for pilasters.
- 5. Provide Pilaster Shoes and Sleeves (Caps) of type 302 or 304 stainless steel, not less than 0.0312 inch thick and 3 inches high, finished to match hardware.
- 6. Use manufacturer's standard Stirrup Brackets in ear or U-brackets for attaching panels and screens to walls and pilasters of chrome-plated, nonferrous, cast zinc alloy (zamac).
- 7. Hardware and Accessories: Manufacturer's standard design, heavy—duty operating hardware and accessories of chrome—plated, nonferrous, cast zinc alloy (zamac) or clear—anodized aluminum. Hinges to be self—closing manufacturer's standard hinges that can be adjusted to hold door open at any angle up to 90 degrees. Latch and Keeper to be manufacturer's standard surface—mounted designed for emergency access and must comply with all applicable accessibility requirements. Coat hook to be manufacturer's standard combination hook and rubber—tipped bumper, sized to prevent door from hitting compartment—mounted accessories. Door Bumper to be manufacturer's standard rubber—tipped bumpers at out—swinging doors or entrance screen doors. Door pulls to be Manufacturer's standard unit that complies with accessibility requirements of authorities having jurisdiction at out—swinging doors. Provide units on both sides of doors at compartments indicated to be handicapped accessible.

- 8. Overhead Bracing to be Manufacturer's standard continuous, extruded—aluminum head rail with anti—grip profile in manufacturer's standard finish.
- 9. Anchorages and Fasteners to be Manufacturer's standard exposed fasteners of stainless steel or chrome-plated steel or brass, finished to match hardware, with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors, use hot-dip galvanized or other rust-resistant, protective-coated steel. Provide Panel Fabrication units with cutouts and drilled holes to receive compartment-mounted hardware, accessories, and grab bars, as indicated. Provide internal reinforcement in metal units for compartment-mounted hardware, accessories, and grab bars, as indicated. Provide Wall-Hung Screen units in sizes indicated of same construction and finish as compartment panels, unless otherwise indicated.
- 10. Comply with manufacturer's written installation instructions. Install units rigid, straight, plumb, and level. Provide clearances of not more than 1/2 inch between pilasters and panels and not more than 1 inch between panels and walls. Secure units in position with manufacturer's recommended anchoring devices. Secuructio□∃e panels to walls and panels with not less than 2 stirrup brackets attached near top and bottom of panel. Locate wall brackets so holes for wall anchors occur in masonry or tile joints. Align brackets at pilasters with brackets at walls. Attach Wall—Hung Screens with anchoring devices according to manufacturer's written instructions and to suit supporting structure. Set units level and plumb and to resist lateral impact. Adjust and lubricate hardware according to manufacturer's written instructions. Set hinges on in—swinging doors to hold open approximately 30 degrees from closed position when unlatched. Set hinges on out—swinging doors and swing doors in entrance screens to return to fully closed position.

SECTION 12372 - KITCHEN CASEWORK

- 1. Submit drawings for casework showing location and size, accessories, materials, finishes, filler panels, and anchorage details to countertop and walls.
- 2. Submit shop drawings for countertops showing sizes, shapes, edge and backsplash profiles, cutouts for plumbing fixtures, and methods of joining.
- 3. Submit samples of sections of units showing the full range of colors, textures, and patterns available for each type of material indicated or exposed to view.
- 4. Plastic Laminate countertops to comply with ANSI A161.2. Hardware to comply with ANSI A156.9.
- 5. Verify casework and countertop dimensions by field measurements. Verify kitchen casework can be installed in compliance with the original design and referenced standards.
- 6. Install casework with no variations in flushness of adjoining surfaces using concealed shims. Where casework abuts other finished work, scribe and cut for accurate fit. Provide filler strips, scribe strips, and moldings in finish to match casework fee.
- 7. Install casework without distortion so that doors and drawers fit openings properly and are aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete the installation of hardware and accessories as indicated.
- 8. Install casework and countertop level and plumb to a tolerance of %" in 8 feet. Provide finished panels on all exposed surfaces. Note accessible counter height and work areas throughout project.
- 9. Fasten unit of casework to adjacent unit and into structural support members of wall construction with #10 sheet metal or wood screws with washer head or washer.
- 10. Fasten plastic laminate countertops by screwing through corner blocks in base units into underside of countertop. Spline and glue joints in countertops and provide concealed mechanical clamping joint.

15000 MECHANICAL - GENERAL REQUIREMENTS

- 1. Materials and equipment to be new and will bear the manufacturer's name, model number and other identification markings. Materials and equipment to be the standard product of a manufacturer regularly engaged in the production of the required type of material or equipment for at least five years, unless specifically exempted. All items to be the manufacturer's latest design having the listed or published properties.
- 2. The drawings for mechanical work are diagrammatic and are a graphic representation or requirements intended to convey the scope of work and to indicate the general arrangement of piping, ducts, equipment, fixtures and other included work. Duct and pipe rerouting and duct size changes to be made at no additional cost to the Owner.
- 3. Location of items not definitely fixed by dimensions are approximate only and exact locations necessary to secure the best conditions and results to be determined at the site and to be subject to review.
- Mechanical: Provide heating, cooling and ventilating system, complete in place, tested and approved, where shown on the drawings and specified, and as needed for a complete, proper installation. Line rigid toilet exhaust ducts within 10 feet of each register and each discharge or intake plenums of fan coil units as shown. All sheet metal ducts shall be erected in a first-class, workman-like manner, straight and smooth with neatly finished airtight joints. Securely anchor ducts to the building in an approved manner, free of vibration in any mode of operation. Low pressure ducts shall be properly braced and reinforced with steel angles of other structural members not more than 60 inches on center. All slip joints shall be made in the direction of flow, and unless limited by physical dimension, all elbows shall have a centerline radius of 1 1/2 times the duct width. Sheet metal thickness and stiffener sizes or spacing shall be in accordance with the current edition of ASHRAE Guide and Data Book. Connections to diffusers, grilles, and register faces shall be absolutely airtight. All 90 degree takeoffs shall be of the sizes shown on drawings, but it shall be specifically understood that changes in shape, offsets or crossovers necessary to clear piping, lights, or building construction shall be made without additional cost to the Owner. Low pressure return air and exhaust ducts shall be sealed.

- 5. Accessories: Apparatus, appliance, material or work not indicated or any incidental accessories necessary to make the work complete and ready for operation, even though not specified or shown on the drawings, are to be provided by the Contractor.
- 6. Inspection: The Mechanical Contractor shall provide the Owner with evidence of inspection and approval of the competed installation.
- 7. Coordination: Carefully check and coordinate the location and level of all pipes, ducts, etc. Run preliminary levels and check with all other subcontractors so that conflicts in all locations may be avoided. Where conflicts occur, if any, the following preference schedule shall be observed: a. Recessed electrical light fixtures. b. Fire protection sprinkler heads. c. Low pressure ductwork. d. Soil, waste, vent and storm piping. e. Domestic water piping. f. electric conduits
- 8. Air Outlets: Air outlets sizes shown on the drawings are approximate. Outlets shall be selected to provide throw and distribution required for their respective location without objectionable drafts. Maximum pressure drop through outlet shall be 0.10 inches of water. Outlets shall be selected on the basis of maintaining a maximum sound level range of NC30.
- 9. Duct Acoustical Treatment: All ducts (except spiral duct) shall be insulated lined complete to air grille or diffuser, or to indicated termination point. In all cases where ducts are to be lined, the actual finished sheet metal ductwork shall be increased by two times the applied lining thickness.
- 10. Ductwork: Unless otherwise specified, all chambers, ductwork, connections, angles, stiffeners, access doors, and frames, etc., shall be of hot—dipped galvanized prime quality steel. Construct ductwork as specified in "HVAC Duct Construction Standards", published by Sheet Metal and Air Conditioning Contractors National Association.

- 11. Grilles, Registers and Diffusers: Equipment shall be as sized and scheduled on the drawings with etched and lacquer finish, colors as selected by Architect. Blades to be run in "long" direction regardless of the way the register is mounted on the ceiling or wall. All air inlets and outlets shall be aluminum, unless noted otherwise. Consult mechanical and architectural plans and elevations for exact locations for all outlets and ceiling grilles. Verify exact location of all outlets in the field with Architect. All registers and diffusers shall be mounted tight to wall and ceiling with rubber gaskets to prevent air leakage. All supply registers to have manual volume controls.
- 12. All registers and grilles to be as manufactured by "Hart & Cooley" or as indicated on the drawings. White finish. Sizes and CFM as per contractors design. Model numbers as follows unless noted otherwise:
 - a. Floor supply registers: N/A
 - b. Clg supply registers at grid clgs: Price 2X2 Model Number SCDA
 - c. Clg supply registers at gyp. clgs: Price 510 Series
 - d. Return air grilles: Price 2X2 Model Number PDDR
- 13. Fire Dampers: Fire dampers shall be installed complete with sleeves and angles in accordance with UL Standard 555 in all fire—rated partitions equal in to or greater than the rating of the wall. Provide an access panel in the ductwork adjacent to each fire damper.
- 14. No ductwork or heating main shall have preference over plumbing lines below plumbing fixtures, or over electrical conduits above or below electric switchgear and panels.
- 15. Number Not Used
- 16. Spray with dull, flat paint the inside of all ducts leading to an air outlet inward to the first elbow, unless interior insulation is provided.
- 17. Contractor to obtain and pay for all licenses, and inspection fees. Submit installation manuals for HVAC equipment to local authorities as required.
- 18. Temperature & Humidifier Controls
- a. Provide setback type thermostat for heating & cooling units to match existing.
 - b. Mount humidistat provided with humidifier adjacent to thermostat.
 - c. Control wiring and conduits by HVAC contractor
- d. Provide clear plastic locking covers in all buildings except single family dwellings.

- 19. Number Not Used
- 20. Shop drawing submittals: Contractor to submit shop drawing of duct layout (1/4" scale) and of all equipment supplied under this contract for Architect's review.
- 21. Start-up and Guarantee
- a. Contractor shall start—up, check and adjust systems for proper operation.
- b. Contractor to balance air distribution system to be within \pm/\pm 5% of values shown on plan and submit report to Architect for review.
- c. Contractor to guarantee his work (both material and labor) to be free from defect for a period of 1 year but not less than standard equipment warranty. Provide alternate pricing for extended compressor warranties.
- 22. Mechanical air terminals at ceiling grids weighing less than 20 lbs shall be positively attaced to the ceiling grid. Air terminals weighing 20 lbs but not more than 56 lbs shall be secured to the shell building structure above the ceiling in addition to attaching the air terminal to the ceiling grid. These two No. 12 gauge wires may be slack. Air terminals weighing more than 56 lbs shall require independent support from the shell building structure above the ceiling.

15000 - PLUMBING WORK

- 1. Provide a complete plumbing system, tested and approved, where shown on the drawings, as specified herein, and as needed for a complete and proper installation.
- 2. All piping, fitting and connections protruding out of the plumbing wall shall have the same finish as the faucet and an escutcheon.
- 3. Provide the scheduled fixtures, or equal products, as approved in advance by the Architect. All fixtures shall have all necessary trim to finish openings and provide a professional operational installation.
- 4. Plumbing Clearances: All plumbing fixtures to be supplied and installed by plumbing contractor, unless noted otherwise. Plumbing contractor to supply all necessary information for cut outs to be performed by cabinet contractors or other trades. Insure proper clearance for operation of faucets, accessories, appliances, and fixture.
- 5. Accessible Fixtures: Insulate all hot water piping and drain piping below handicapped lavatories. No sharp objects shall be present bellow the accessible lavatories, sinks, etc.
- 6. Public Toilet Shut Off: All public toilet rooms are to have a master shutoff valve for both the hot and cold water supply. The shut off shall be located under the lavatory concealed behind a 1'x1' access panel.
- 7. Plumbing Inspection: It shall be the responsibility of the Plumbing Contractor to notify applicable plumbing inspectors when the work reaches each individual stage requiring inspection in accordance with code. No work shall proceed until such inspections have been carried out and full approval received.
- 8. Temporary Caps: All openings in the piping system during construction shall be securely capped to prevent foreign matter from entering the piping system.
- 9. Plumbing Fixtures: Plumbing fixtures shall be provided complete, as shown on drawings, with all required supply, waste, soil, and vent connections, together with all fitting, supports, fastening devices, cocks, valves, and traps. All fixtures shall have stop valves on all water connection.

- 10. Rough—In: The plumbing fixtures shall be roughed—in, in accordance with the "rough—in information" provided by the manufacturer. Provisions for mounting wall fixtures shall be made while the wall is being built.
- 11. Cleaning: All plumbing fixtures shall be cleaned, adjusted, and left in first—class working order before the project is turned over to the Owner.
- 12. Related Work: All Plumbing connections shall be made to all equipment furnished by others.
- 13. Carriers: Wall mounted fixtures shall be installed on adjustable steel floor supported carriers independent of the wall, unless noted otherwise.
- 14. Submittal shop drawing of piping layout and product cut sheets for equipment or fixtures. Coordinate drawings with HVAC and electrical contractors before fabrication.
- 15. Contractor to provide all excavation and backfilling as required for his portion of work.
- 16. Piping Materials & Methods
- a. All hot and cold water piping to be type "k" hard copper tube with wrought copper sweat fittings. Solder to be lead free.
- b. Below grade sanitary piping to be pvc soil pipe, unless noted otherwise.
- c. All above grade sanitary and waste piping and all vent piping to be PVC schedule 40, unless noted otherwise.
- 17. Piping Insulation: All hot and cold water piping to be insulated with 1/2" thick fiberglass insulation with factory applied vapor barrier. Any piping in attics or exterior walls must be located on the "warm side" of insulation. Use baffles when necessary.
- 18. Valves and Specialties: All valves and specialties to be provided suitable for purposes intended. All valves to be tagged and labeled.
- a. Backflow preventers to be equal to "Watts" Model 900 or as scheduled.
 - b. Cleanouts to be provided as required.
- c. Provide air gaps, chambers, vacuum breakers, backflow preventers, etc. as required by code or indicated on the drawings.

- 19. Gas Piping Provide gas piping to all new gas fired appliances as required. All gas piping to be black iron schedule 40 thread and coupled pipe and fittings. Provide a shutoff valve for each appliance within 42" of the appliance.
- 20. Testing and Guarantee
- a. Contractor shall startup, check and adjust systems for proper operation. Leak testing to be performed before applying insulation.
- b. Contractor shall flush and sterilize entire water system as required by local codes. Provide all tests as required by governing authorities in the presence of the plumbing inspector. Submit reports as required.
- c. Contractor shall instruct owner on proper operation of all systems under his contract.
- d. Contractor to guarantee his work (both material and labor) to be free from defect for a period of one year.

16000 - ELECTRICAL WORK

1. Perform the work of this section in strict accordance with the drawings, the National Electrical Code, the companies providing utility services, and the governmental agencies having jurisdiction. Provide electrical system, complete in places tested and approved, as shown on the drawings and needed for a complete and proper installation including, but not necessarily limited to: Primary service conduits for service conductors and cables, cable television, intercom system, door bells, security system, lights, receptacles, grounding system, and other required items. Lighting fixtures, complete with lamps, as specified on drawings or by the Owner. Telephone service to main telephone terminals in locations to be specified on drawings or by the Owner. Label and identify circuits, panel boards, pull boxes, feeders, and similar items. Provide cutting, drilling and patching of the building structure as required for the work of this section. Test the completed system and correct as required. Install a/c powered smake detectors with interfaced d/c back-up where indicated on drawings.

Use Ground Fault Circuit Interrupters receptacles in all wet locations, bathrooms, laundry rooms, garage and exterior of the building.

- 2. Contractor and Subcontractor shall study Drawings and Specifications prior to submitting their proposal, and, if local code or labor conditions require work in addition to that specified or shown, Contractor shall state in their bid the items involved and the additional amounts required for such items. After entering into a Contract, Contractor agrees such items are included in their bid and will be no cause for additional charges to the owner.
- 3. At the completion of the work, Contractor shall obtain and turn over to Owner (through Architect) a Certification of Inspection, indicating approval and acceptance of the work by the inspection authorities.
- 4. Coordinate with the Utility Company and Telephone Company as to the requirements of these utilities, the amount of work they propose to furnish, and Subcontractor shall pay, and include in Contract any such payments for work coming under their jurisdiction for which they require payment.
- 5. Provide temporary electrical service for use during construction for all trades.
- 6. All service equipment, both temporary and permanent, shall be in compliance with the requirements of the Utility Company and all applicable code requirements.

- 7. No branch circuit shall be over 1920 watts for 20 amp breakers and 1200 watts for 15 amp breakers. Each outlet shall be figured at 180 watts unless noted otherwise.
- 8. Conduits, unless noted otherwise, shall be galvanized thin wall (EMT) with a minimum size of 1/2" except for the following: All conduit used for service conduits and exterior conduits shall be hot—dipped galvanized heavy wall (threaded); all conduits used in concrete slabs shall be a minimum of 3/4", all conduit for telephone service outlets shall be a minimum of 3/4".
- 9. Coordinate selection of recessed electrical panel with parition thickness.
- 10. Subcontractor shall pre—wire telephone outlets in locations as shown on drawings or and or as directed by Owner. Subcontractor will pay all costs charges by telephone company for the telephone work. It shall be the responsibility of the Subcontractor to see that service and outlets are located properly in accordance to Drawings and Specifications.
- 11. Wiring devices; receptacle, switches, phone outlets etc.. Use Levition or approved equivalent Commercial Grade Devices, u.n.o. Colors to be selected by Architect.
- 12. Should there be any discrepancies or a question of intent, refer the matter to the Architect/Engineer for a final decision before ordering any equipment, materials or before starting any related work. In case of conflict between project specifications and drawings, project specifications govern.
- 13. Materials and equipment shall be new unless otherwise noted, UL or CSA labeled and shall bear the manufacturer's name, model number and other identification markings. Each major electrical component, such as panel boards, circuit breakers, disconnect switches, etc., shall have the manufacturer's name and address, catalog number and rating a plate or label located inside the cover or in any other readily accessible location.
- 14. Support all fixtures, conduits, and equipment by means appropriate for seismic zone of project. Light fixtures at ceiling grids must be positively attached to the ceiling grid with an attachment capable of carrying 100% of the weight of the light fixture. Light fixtures weighing up to 56 lbs require two vertical support wires. These wires may be slack. Light fixtures weighing more than 56 lbs shall require independent support from the shell building structure above the ceiling.

16100 - VOICE & DATA CABLING

- 1. Install residential and light commercial voice/data wiring per TIA 570 standards. Install large commercial voice / data per TIA 568 standards. Use category 5e cable for data (including fax) and category 3 for voice only wiring, unless noted otherwise on drawings. Use termination hardware compatible with each cable type.
- 2. Maintain the twisted nature of the cable as close to the termination point as possible. Untwisted length to be less than $\frac{1}{2}$ " for cat 5e and less than 2" for cat 3. Maintain cable jacket as close as possible to each termination.
- 3. Maintain maximum wiring run from workstation to panel or hub/switch at 295 feet or less. Do not splice wires on cable runs. Do not exert more than 25 lbs of pulling tension on cables. Leave 18" of spare cable at outlets and connection points.
- 4. Do not bend cables sharply, knot cables, or kink them. Use sweeping bends and curves.
- 5. Do not stress cables by overtightening cable ties. Use J-hooks, Velcro tie wraps or loose plastic tie wraps to secure cables.
- 6. Do not run cables in parallel with power wiring or in the same conduit as power wiring. Maintain separation distances outlined in TIA standards. Cross power wiring at 90 degree angles.
- 7. When staples are allowed, use non-metallic plastic type and install loose to cable.
- 8. When conduit is used, always leave a pull cord inside.
- 9. Do not install under carpet without the written concurrence of the owner's computer network consultant and phone system supplier.
- 10. Avoid sources of heat such as hot water pipes, mechanical ductwork, or cavities exposed to sunlight.
- 11. Grounding and bonding of the completed systems to comply with the NEC and TIA 607 for telecom infrastructure.
- 12. Clearly mark all wiring at both ends of the cable. Provide a legend to decipher labels if required.

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STRUCTURAL NOTES
DESIGN CODES AND SPECIFICATIONS.
 THE INTERNATIONAL BUILDING CODE 2006 (IBC 2006).
 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE ACI 318-05
 MANUAL OF STEEL CONSTRUCTION, ASD 9TH EDITION (AISC)
 STRUCTURAL WELDING CODE - STEEL (D1.1) - AWS
 THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS), 2005 EDITION
 DESIGN LOADS
   DECK LIVE LOAD = 65 psf.
   SNOW LOAD
       Pf = 20 psf.
       Ce = .9
       1 = 1.1
       C_{\dagger} = 1
  EARTHQUAKE LOAD (BUILDINGS)
       Seismic Importance Factor = 1.0
       Occupancy Category = II
       Ss = 0.72
       S_1 = 0.20
       Site Class = 0
       Seismic Design Category = D
       Basic Seismic Force Resisting System
              = Ordinary Reinforced
                Masonry Shear Walls
       Cs = 0.294
       R = 2.0
      Analysis procedure = Equivalent
             Lateral Force Procedure
  WIND LOAD
       Basic Wind speed = 90 mph (3 SECOND GUST)
      Importance Factor: I = 2.00
      Exposure = C
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STRUCTURAL SPECIFICATIONS GENERAL REQUIREMENTS

- 1. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER IF THE CONTRACTOR DETERMINES OR SUSPECTS THAT ANY DETAILS, MATERIALS, MEANS OR METHODS INCLUDED IN THE STRUCTURAL SPECIFICATIONS OR STRUCTURAL DRAWINGS ARE INCORRECT, NEED TO BE CHANGED, INADEQUATE, UNFEASIBLE OR DETRIMENTAL TO THE COMPLETED CONSTRUCTION. NOTIFICATION SHALL BE MADE AT THE EARLIEST POSSIBLE TIME AND, WHEN POSSIBLE, PRIOR TO ORDERING MATERIALS OR COMMENCING WORK.
- 2. DEVIATION FROM THE STRUCTURAL SPECIFICATIONS AND STRUCTURAL DRAWINGS SHALL NOT BE MADE WITHOUT APPROVAL FROM THE STRUCTURAL ENGINEER.
- 3. DO NOT SCALE DIMENSIONS FROM STRUCTURAL DRAWINGS, (S SHEETS) WHEN SCALES ARE NOT SHOWN. WHEN SCALES AND DIMENSIONS ARE BOTH SHOWN FOR A DETAIL OR SHEET, DIMENSIONS SHALL TAKE PRECEDENCE WHEN IN CONFLICT WITH SCALE. ANY CONFLICT DISCOVERED BY THE CONTRACTOR SHALL BE REPORTED IN ACCORDANCE WITH NOTE 1. OF THIS SPECIFICATION SECTION.
- HOLES FOR ANCHORS, DOWELS, ETC., SHALL NOT BE DRILLED THROUGH REINFORCING BARS WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.
- 5. NEITHER THE PRESENCE NOR LACK OF CONSTRUCTION OBSERVATION SHALL RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF COMPLETING WORK IN FULL COMPLIANCE WITH THE STRUCTURAL SPECIFICATION AND STRUCTURAL DRAWINGS.

STRUCTURAL FOUNDATION AND EXCAVATION SPECIFICATION

- 1. NET BEARING CAPACITY = 1,800 PSF
- 2. FOUNDATIONS SHALL BEAR ON UNDISTURBED NATURAL INORGANIC SOIL OR STRUCTURAL FILL OF BEARING CAPACITY CONFIRMED TO EQUAL OR EXCEED THE MINIMUM INDICATED IN NOTE 1. BOTTOMS OF FOOTINGS SHALL ALSO BE A MINIMUM OF TWELVE INCHES BELOW EXISTING NATURAL GRADE. BOTTOMS OF FOOTINGS SHALL BE DEEPENED AS NECESSARY TO SATISFY THESE REQUIREMENTS, OR UNSUITABLE SOIL SHALL BE REMOVED DOWN TO ACCEPTABLE SOIL AND REPLACED WITH LEAN CONCRETE OR CA6 PLACED IN LIFTS NOT TO EXCEED 4" AND COMPACTED TO 95 STANDARD PROCTOR.
- BOTTOMS OF FOUNDATIONS SHALL BE FREE OF LOOSE MATERIAL AND EXCAVATOR CLAW MARKS
- 4. FOUNDATION CONCRETE SHALL BE PLACED BEFORE DETERIORATION OF THE SUBGRADE DUE TO WEATHER, GROUND WATER SEEPAGE, FOOT TRAFFIC, OR CONSTRUCTION OPERATIONS. ANY PORTIONS OF THE SUBGRADE PERMITTED TO DETERIORATE SHALL BE REMOVED AND REPLACED WITH COMPACTED CAS OR LEAN CONCRETE WITHOUT ADDITIONAL COMPENSATION TO THE CONTRACTOR.
- COMPACTED GRANULAR BACKFILL SHALL BE CAB.
- 6. COMPACTED GRANULAR BACKFILL SHALL BE PLACED IN MAXIMUM LIFTS OF 8".
- 7. COMPACTED GRANULAR BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN AND CONSTRUCTION OF TEMPORARY SHORING. TEMPORARY SHORING SHALL BE INSTALLED AS REQUIRED TO PROTECT EXISTING STRUCTURES AND CONSTRUCTION OPERATIONS.
- THE CONTRACTOR SHALL SUBMIT DESIGN DETAILS AND CALCULATIONS SEALED BY AN ILLINOIS
 LICENSED STRUCTURAL ENGINEER FOR TEMPORARY SHORING.

STRUCTURAL CONCRETE SPECIFICATIONS

- 1. STRUCTURAL CONCRETE WORK ON THIS PROJECT SHALL BE CONFORM TO ALL REQUIREMENTS OF ACI 301-05, SPECIFICATION FOR STRUCTURAL CONCRETE, PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE, FARMINGTON HILLS, MICHIGAN, EXCEPT AS MODIFIED BY THESE STRUCTURAL CONCRETE SPECIFICATIONS AND/OR STRUCTURAL DRAWINGS.
- 2. THE FOLLOWING INFORMATION IS EITHER MODIFIES OR IS IN ADDITION TO ACI 301-05. ACI 301-05 AND ALL DOCUMENTS REFERENCED BY ACI 301-05 MUST BE REVIEWED FOR COMPLETE REQUIREMENTS FOR STRUCTURAL CONCRETE WORK.
- 3. REFER TO GENERAL REQUIREMENTS OF STRUCTURAL SPECIFICATIONS. GENERAL REQUIREMENTS OF STRUCTURAL SPECIFICATIONS APPLY TO STRUCTURAL CONCRETE.
- 4. STRUCTURAL CONCRETE SHALL BE DEFINED AS ALL CONCRETE CONSTRUCTION DESCRIBED OR DETAILED BY THE STRUCTURAL CONCRETE SPECIFICATIONS AND STRUCTURAL DRAWINGS.
- 5. THE CONTRACTOR SHALL POSSESS AND BE FAMILIAR WITH ALL REFERENCED SPECIFICATIONS. A COMPLETE SET OF THE STRUCTURAL DRAWINGS AND ACI 301-D5 SHALL BE MAINTAINED AT THE PROJECT SITE AND SHALL BE AVAILABLE TO ALL PARTIES (SUBCONTRACTORS, SUPERINTENDENTS, FOREMEN, ETC.) WHOSE UNDERSTANDING OF THE PROJECT REQUIREMENTS MAY AFFECT THE QUALITY OF STRUCTURAL CONCRETE CONSTRUCTION.

SUBMITTALS

- 6.1 THE CONTRACTOR SHALL SUBMIT TO THE STRUCTURAL ENGINEER THE METHODS AND PRODUCTS THAT WILL BE USED TO PROTECT AND CURE STRUCTURAL CONCRETE.
- 5.2 THE CONTRACTOR SHALL SUBMIT THE LOCATIONS, DETAILS AND MATERIALS DATA FOR ALL JOINTS IN STRUCTURAL CONCRETE THAT ARE NOT INCLUDED IN THE STRUCTURAL SPECIFICATIONS AND STRUCTURAL DRAWINGS, AND ARE PROPOSED BY THE CONTRACTOR.
- 6.3 SUBMITTALS, AS APPLICABLE IN COMPLIANCE WITH THE FOLLOWING SECTIONS OF ACI 301-05: 1.6.3.2E, 1.6.3.4.1C, 3.1.1.1, 3.1.1.2, 3.1.1.3, 3.3.2.2, 3.3.2.8, 4.1.2.1, 4.1.2.5, 4.1.2.9, 4.2.1.1, 5.1.2.2B, 5.1.2.3A

7. REINFORCEMENT

- 7.1 MINIMUM SPECIFIED YIELD STRENGTH OF REINFORCING BARS AND WELDED WIRE FABRIC . FY = 60,000 PSI.
- 7.2 WELDED WIRE FABRIC SHALL BE FLAT SHEETS, NOT FROM ROLLS. WELDED WIRE FABRIC SHALL BE SUPPORTED ON CHAIRS THAT LOCATE THE FABRIC AT MID—DEPTH OF SLABS UNLESS SHOWN OTHERWISE. CHAIRS SHALL BE SPACED CLOSE ENOUGH TO PREVENT BENDING AND MAINTAIN FLATNESS OF THE SHEETS. CHAIRS PLACED ON SOIL OR CRUSHED ROCK SHALL HAVE CONTINUOUS RUNNERS, NOT INDIVIDUAL FEET.
- 7.3 REINFORCING BIARS AND FABRIC SHALL BE FIRMLY TIED IN PLACE AND NOT FLOATED IN LINLESS NOTED OTHERWISE.
- 7.4 CARE SHALL BE TAKEN IN THE LOCATION OF REINFORCEMENT TO AVOID CONFLICT WITH DRILLED ANCHORS.
- 7.5 REINFORCEMENT SHALL NOT BE WELDED WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.

8. CONCRETE REQUIREMENTS ACCORDING TO CLASSIFICATION.
STRUCTURAL CONCRETE SHALL BE PROVIDED ACCORDING TO THE CLASSIFICATION INDICATED IN
THE STRUCTURAL CONCRETE SCHEDULE. REQUIREMENTS ACCORDING TO CLASS ARE AS FOLLOWS:

	CLASS A	CLASS B	CLASS C
28 DAY COMPRESSIVE STRENGTH, F°C (PSI) MINIMUM CEMENT CONTENT (LB/CY) WATER/CEMENTITIOUS RATIO SLUMP WITHOUT HIGH RANGE WATER REDUCER (INCHES) +/- 1"	4,000 540 .45 3	4,000 554 .45 3	5,000 564 .40 2.5
SLUMP WITH HIGH RANGE WATER REDUCER	5	5	4.5
(INCHES) +/- 1 1/2" AIR ENTRAINMENT EXPOSURE CONDITION *	MILD	SEVERE	SEVERE

^{*} PROVIDE AIR ENTRAINMENT IN ACCORDANCE WITH TABLE 4.2.2.4 OF ACI 301-05, REPRINTED.

TABLE 4.2.2.4-AIR CONTENT: OF CONCRETE FOR VARIOUS SIZES OF COARSE AGGREGATE

	AIR CON	ITENT, PERCENT†	
NOMINAL MAXIMUM SIZE OF	SEVERE	MODERATE	MILD
AGGREGATE, IN.	exposure	EXPOSURE	exposure
LESS THAN 3/8	9	7	5
3/8	7.5	6	4.5
1/2	7	5.5	4
3/4	6	5	3.5
1	6	4.5	3
1-1/2	5.5	4.5	2,5
2	5	4	2
3	4.5	3.5	1.5
б	4	3	1

*MEASURED IN ACCORDANCE WITH ASTM C 231, C 173, OR C 138 AIR-CONTENT TOLERANCE IS ±1-1/2%.

Portland Cement Type Requirement per Concrete Class shall be as follows:

Class A - Any Type

Class B and C: Type II, Type IP (MS), Type IS (MS), Type I (PM)(MS) or Type I (SM)(MS).

9. CHLORIDE CONTENT

- 9.1 CALCIUM CHLORIDE OR ADMIXTURES CONTAINING WATER SOLUBLE CHLORIDE FROM OTHER THAN INCIDENTAL IMPURITIES SHALL NOT BE USED.
- 9.2 THE MAXIMUM WATER-SOLUBLE ION CONTENT, EXPRESSED AS A PERCENT OF THE CEMENT, CONTRIBUTED FROM ALL INGREDIENTS OF THE CONCRETE MIX, INCLUDING WATER, AGGREGATES, CEMENTITIOUS MATERIALS, AND ADMIXTURES, SHALL NOT EXCEED 0.10%.

10. WATER ADDED AT JOB SITE

- 10.1 WATER MAY BE ADDED TO STRUCTURAL CONCRETE AT THE JOB SITE ONLY IN THE AMOUNT INDICATED ON THE BATCH TICKET.
- 10.2 IF NO AMOUNT OF JOB SITE WATER IS INDICATED ON THE BATCH TICKET NO WATER SHALL BE ADDED AT THE JOB SITE.

- 10.3 WHEN WATER IS ADDED AT THE JOB SITE, IT SHALL BE DONE SO AT THE CONTRACTORS RISK. A SLUMP TEST SHALL BE TAKEN AFTER WATER HAS BEEN ADDED. IF THE SLUMP EXCEEDS THE LIMIT SET BY THE STRUCTURAL CONCRETE SPECIFICATION THE CONCRETE SHALL NOT BE USED.
- 11. STRUCTURAL CONCRETE SHALL BE VIBRATED TO ENSURE CONSOLIDATION. VIBRATION SHALL NOT BE USED TO MOVE CONCRETE. CARE SHALL BE TAKEN TO PREVENT SEGREGATION AND LOSS OF AIR ENTRAINMENT CAUSED BY EXCESSIVE VIBRATION.

FINISHING UNFORMED SURFACES

- 12.1 DO NOT SPRINKLE WATER ONTO CONCRETE SURFACES.
- 12.2 DO NOT WORK BLEED WATER INTO CONCRETE SURFACES. WAIT UNTIL BLEED WATER HAS DISAPPEARED OR, IF BLEED WATER IS PRESENT WHEN FINISHING MUST BEGIN, REMOVE BLEED WATER BY BLOTTING.
- 12.3 DO NOT SPRINKLE DRYERS SUCH AS SAND/CEMENT MIXTURES ONTO CONCRETE SURFACE.
- 12.4 DO NOT USE STEEL TROWELS UNLESS INDICATED IN THE STRUCTURAL CONCRETE SCHEDULE FOR A SMOOTH FINISH.

13. PROTECTION AND CURING

- 13.1 IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF PROBLEMS RESULTING FROM INADEQUATE PROTECTION AND CURING OF CONCRETE.
- 13.2 THE CONTRACTOR SHALL DETERMINE WHEN PROTECTION IS NECESSARY AND WHAT METHODS AND MATERIALS WILL BE USED. PROTECTION SHALL BE IN COMPLIANCE WITH SECTION 5.3.6.5 OF ACI 301—05.
- 13.3 CURING SHALL COMMENCE AS SOON AS NECESSARY TO PRESERVE MOISTURE AND SHALL BE CONTINUOUSLY MAINTAINED FOR A MINIMUM OF SEVEN DAYS, CURING SHALL BE IN ACCORDANCE WITH SECTION 5.3.6.1 OF ACI 301-05.
- 14. BATCH TICKET INFORMATION —
 THE CONCRETE SUPPLIER SHALL INDICATE ON EACH BATCH TICKET THE AMOUNT OF WATER THAT
 MAY BE ADDED AT THE JOB SITE, PER CUBIC YARD OF CONCRETE, WHICH WILL NOT RESULT IN A
 WATER/CEMENTITIOUS RATIO IN EXCESS OF THAT SPECIFIED. THIS SHALL BE IN ADDITION TO THE
 INFORMATION REQUIRED BY ASTM C94/C 94M—99.

STRUCTURAL CONCRETE SCHEDULE			
STRUCTURAL MEMBER OR COMPONENT	CONCRETE CLASS	UNFORMED SURFACE FINISH	
BUILDING FOOTINGS	A	BOARD STRIKE OFF	
INTERIOR SLABS ON GRADE	A	STEEL TROWEL FINISH	
EXTERIOR SLABS ON GRADE	A	BROOM FINISH	

STRUCTURAL STEEL SPECIFICATIONS

- 1. STRUCTURAL STEEL WORK ON THIS PROJECT SHALL CONFORM TO ALL REQUIREMENTS OF PART 5 SPECIFICATIONS AND CODES OF THE MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN, NINTH EDITION, AND TO THESE STRUCTURAL STEEL SPECIFICATIONS AND STRUCTURAL DRAWINGS.
- 2. HOT ROLLED STRUCTURAL STEEL SHAPED, PLATES AND BARS SHALL BE ASTM A572 GRADE 50 OR ASTM A992. UNLESS SHOWN OTHERWISE.
- 3. BOLTED CONNECTIONS SHALL BE MADE WITH ASTM A325 OR ASTM 490 BOLTS
- 4. CAST IN PLACE ANCHOR BOLTS SHALL BE ASTM A3D7 UNLESS NOTED OTHERWISE.
- WELDING SHALL BE DONE WITH E70XX ELECTRODES.
- INDICATED STRUCTURAL STEEL SHALL BE HOT DIPPED GALVANIZED PER ALL REQUIREMENTS OF ASTM A123.
- INDICATED STRUCTURAL STEEL HARDWARE, SHALL BE HOT DIPPED GALVANIZED PER ALL REQUIREMENTS OF ASTM A153.

STRUCTURAL WOOD FRAMING SPECIFICATIONS

- 1 STRUCTURAL FRAMING LUMBER SHALL BE NO. 2 S-P-F OR BETTER UNLESS OTHERWISE INDICATED IN THIS SPECIFICATION, OR IN THE SCHEDULES AND DETAILS ON THESE DRAWINGS. SHORT INDIVIDUAL PIECES OF BLOCKING SHALL BE FREE OF SPLITS, KNOTS, TWISTS, AND WARPS WHICH REDUCE THE STRENGTH OF MECHANICAL CONNECTIONS.
- 2 STRUCTURAL COMPOSITE LUMBER (SCL) MAY BE EITHER LAMINATED VENEER LUMBER (LYL) OR PARALLEL STRAND LUMBER (PSL).
- 3 SCL JOISTS, BEAMS, HEADERS OR COLUMNS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

MODULUS OF ELASTICITY Ε 2,000,000 PSI FLEXURAL STRESS Fh 2,850 PSI = 1,850 PSI TENSION PARALLEL TO GRAIN Fŧ = COMPRESSION PERPENDICULAR TO GRAIN F_{cl} 750 PSI = 2,750 PSI COMPRESSION PARALLEL TO GRAIN Fall = HORIZONTAL SHEAR (JOIST) 285 PSI F۷

4 SCL RIM BOARDS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

Ε 1.300.000 PSI MODULUS OF ELASTICITY 1,700 PSI FLEXURAL STRESS Fh = 1,100 PSI TENSION PARALLEL TO GRAIN Ft = 600 PSI COMPRESSION PERPENDICULAR TO GRAIN For = COMPRESSION PARALLEL TO GRAIN 1.800 PSI Fall = 220 PSI HORIZONTAL SHEAR (JOIST) F_{ν} =

- FRAMING ANCHORS SHALL BE FASTENED WITH THE TOTAL NUMBER OF FASTENERS WHICH THE ANCHOR CAN RECEIVE. THE TYPE AND SIZE OF FASTENERS SHALL BE AS REQUIRED BY THE MANUFACTURER. THE ANCHORS SHALL BE PLACED AND ALIGNED SO THAT ALL FASTENERS ARE FULLY EMBEDDED AND DO NOT CONFLICT WITH OTHER FASTENERS OR COMPONENTS. ANCHORS SHALL NOT BE INSTALLED AND THE ENGINEER SHALL BE CONTACTED IF PHYSICAL CONSTRAINTS PREVENT THE PROPER INSTALLATION OF ANCHORS. POWER NAILING OF FRAMING ANCHORS WILL BE PERMITTED ONLY WHEN THE NAIL TYPE AND DRIVING METHOD BOTH MEET THE REQUIREMENTS OF THE FRAMING ANCHOR MANUFACTURER.
- 6 THE MINIMUM HORIZONTAL OR VERTICAL DIMENSIONS OF ANY STRUCTURAL WOOD PANEL SHALL NOT BE LESS THAN 2'-0".
- 7 SHEATHING NAILS WHICH ARE NOT FULLY EMBEDDED INTO FRAMING SHALL BE REMEDIATED AS AND IF DEEMED NECESSARY BY THE ENGINEER. ADDITIONAL COMPENSATION WILL NOT BE PAID AND THE REMEDIATION SHALL BE COMPLETED AT THE CONTRACTORS EXPENSE.
- 8 SOLTHERN PINE HEADERS SHALL BE NO. 1 GRADE OR BETTER.
- 9 SHEATHING SHALL BE APA RATED SHEATHING 24/0 EXTERIOR.

PLATED WOOD TRUSS SPECIFICATION

- THE TRUSS FABRICATOR SHALL PROVIDE A FRAMING PLAN, A SHOP DRAWING FOR EACH TRUSS TYPE AND DESIGN CALCULATIONS. THE FRAMING PLAN, EACH TRUSS SHOP DRAWING AND DESIGN CALCULATIONS SHALL BE SEALED BY AN ILLINOIS LICENSED STRUCTURAL ENGINEER.
- 2 IF TRUSSES ARE NOT TO BE IMMEDIATELY INSTALLED, THEY SHALL BE STORED IN A HORIZONTAL OR VERTICAL POSITION AS RECOMMENDED BY THE TRUSS PLATE MANUFACTURER. THEY SHALL NOT BE IN CONTACT WITH THE EARTH AND SHALL BE COVERED TO PREVENT CONTACT WITH WATER, SNOW OR ICE.
- 3 CONTRACTOR AND TRUSS FABRICATOR SHALL FIELD MEASURE AND COORDINATE TRUSS DIMENSIONS.
- 4. GABLE END TRUSSES SHALL HAVE VERTICAL WEB MEMBERS SPACED AT 16" CENTERS.
- 5. SHOP DRAWINGS SHALL NOT BE PREPARED AND TRUSSES SHALL NOT BE FABRICATED UNTIL LOAD BEARING WALLS AND STRUCTURAL STEEL FRAMING IS ERECTED AND TRUSS DETAILING DIMENSIONS HAVE BEEN FIELD MEASURED FROM ERECTED FRAMING. ANY FABRICATION OR SHOP DRAWING PREPARATION PRIOR TO FIELD MEASUREMENTS SHALL BE AT THE RISK OF THE CONTRACTOR.

WOOD DECK SPECIFICATION

- 1 ALL SIMPSON'S SDS SCREWS SHALL HAVE A DOUBLE BARRIER COATING.
- 2. WOOD SHALL BE PRESSURE TREATED WITH ALKALINE COPPER QUATERNARY (ACQ) ACQ WITH NOT LESS THAN 0.25 PCF OR MORE THAN 0.30 PCF PRESERVATIVE RETENTION. ACQ PRESERVATIVE TREATMENT SHALL NOT CONTAIN AMMONIA.

State of Illinois Department of Transportation Bureau of Local Roads and Streets

SPECIAL PROVISION FOR COOPERATION WITH UTILITIES

Effective: January 1, 1999 Revised: January 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

Replace Article 105.07 of the Standard Specifications with the following:

"105.07 Cooperation with Utilities. The adjustment of utilities consists of the relocation, removal, replacement, rearrangements, reconstruction, improvement, disconnection, connection, shifting, new installation or altering of an existing utility facility in any manner.

When the plans or special provisions include information pertaining to the location of underground utility facilities, such information represents only the opinion of the Department as to the location of such utilities and is only included for the convenience of the bidder. The Department assumes no responsibility in respect to the sufficiency or the accuracy of the information shown on the plans relative to the location of the underground utility facilities.

Utilities which are to be adjusted shall be adjusted by the utility owner or the owner's representative or by the Contractor as a contract item. Generally, arrangements for adjusting existing utilities will be made by the Department prior to project construction; however, utilities will not necessarily be adjusted in advance of project construction and, in some cases, utilities will not be removed from the proposed construction limits. When utility adjustments must be performed in conjunction with construction, the utility adjustment work will be shown on the plans and/or covered by Special Provisions.

When the Contractor discovers a utility has not been adjusted by the owner or the owner's representative as indicated in the contract documents, or the utility is not shown on the plans or described in the Special Provisions as to be adjusted in conjunction with construction, the Contractor shall not interfere with said utility, and shall take proper precautions to prevent damage or interruption of the utility and shall promptly notify the Engineer of the nature and location of said utility.

All necessary adjustments, as determined by the Engineer, of utilities not shown on the plans or not identified by markers, will be made at no cost to the Contractor except traffic structures, light poles, etc., that are normally located within the proposed construction limits as hereinafter defined will not be adjusted unless required by the proposed improvement.

- (a) Limits of Proposed Construction for Utilities Paralleling the Roadway. For the purpose of this Article, limits of proposed construction for utilities extending in the same longitudinal direction as the roadway, shall be defined as follows:
 - (1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 600 mm (2 ft) distant at right angles from the plan or revised slope limits.
 - In cases where the limits of excavation for structures are not shown on the plans, the horizontal limits shall be a vertical plane 1.2 m (4 ft) outside the edges of structure footings or the structure where no footings are required.
 - (2) The upper vertical limits shall be the regulations governing the roadbed clearance for the specific utility involved.
 - (3) The lower vertical limits shall be the top of the utility at the depth below the proposed grade as prescribed by the governing agency or the limits of excavation, whichever is less.
- (b) Limits of Proposed Construction for Utilities Crossing the Roadway. For the purpose of this Article, limits of proposed construction for utilities crossing the roadway in a generally transverse direction shall be defined as follows:
 - (1) Utilities crossing excavations for structures that are normally made by trenching such as sewers, underdrains, etc. and all minor structures such as manholes, inlets, foundations for signs, foundations for traffic signals, etc., the limits shall be the space to be occupied by the proposed permanent construction unless otherwise required by the regulations governing the specific utility involved.
 - (2) For utilities crossing the proposed site of major structures such as bridges, sign trusses, etc., the limits shall be as defined above for utilities extending in the same general direction as the roadway.

The Contractor may make arrangements for adjustment of utilities outside of the limits of proposed construction provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any adjustments made outside the limits of proposed construction shall be the responsibility of the Contractor unless otherwise provided.

The Contractor shall request all utility owners to field locate their facilities according to Article 107.31. The Engineer may make the request for location from the utility after receipt of notice from the Contractor. On request, the Engineer will make an inspection to verify that the utility company has field located its facilities, but will not assume responsibility for the accuracy of such work. The Contractor shall be responsible for maintaining the excavations or markers provided by the utility owners. This field location procedure may be waived if the utility owner has stated in writing to the Department it is satisfied the construction plans are sufficiently accurate. If the utility owner does not submit such statement to the Department, and they do not field locate their facilities in both horizontal and vertical alignment, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer, and be paid according to Article 109.04.

The Contractor shall coordinate with any planned utility adjustment or new installation and the Contractor shall take all precautions to prevent disturbance or damage to utility facilities. Any failure on the part of the utility owner, or their representative, to proceed with any planned utility adjustment or new installation shall be reported promptly by the Contractor to the Engineer orally and in writing.

The Contractor shall take all necessary precautions for the protection of the utility facilities. The Contractor shall be responsible for any damage or destruction of utility facilities resulting from neglect, misconduct, or omission in the Contractor's manner or method of execution or nonexecution of the work, or caused by defective work or the use of unsatisfactory materials. Whenever any damage or destruction of a utility facility occurs as a result of work performed by the Contractor, the utility company will be immediately notified. The utility company will make arrangements to restore such facility to a condition equal to that existing before any such damage or destruction was done.

It is understood and agreed that the Contractor has considered in the bid all of the permanent and temporary utilities in their present and/or adjusted positions.

No additional compensation will be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the said utility facilities or the operation of relocating the said utility facilities.

State of Illinois Department of Transportation Bureau of Local Roads and Streets

SPECIAL PROVISION FOR INSURANCE

Effective: February 1, 2007 Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

City of Chester	
Thouven, Wade & Moerchen, INc.	
Quadrant Design	

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

ALKALI-SILICA REACTION FOR CAST-IN-PLACE CONCRETE (BDE)

Effective: August 1, 2007 | Revised: January 1, 2009

<u>Description</u>. This special provision is intended to reduce the risk of a deleterious alkali-silica reaction in concrete exposed to humid or wet conditions. The special provision is not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate or sodium formate. The special provision shall not apply to the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy. The special provision shall also not apply to precast products or precast prestressed products.

Aggregate Expansion Values. Each coarse and fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II cement having a total equivalent alkali content (Na $_2$ O + 0.658K $_2$ O) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates and 0.03 percent to limestone or dolomite fine aggregates (manufactured stone sand); however the Department reserves the right to perform the ASTM C 1260 test.

Aggregate Groups. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

AGGREGATE GROUPS			
Coarse Aggregate or Coarse Aggregate Blend	Fine Aggregate or Fine Aggregate Blend		
ASTM C 1260 Expansion	ASTM C 1260 Expansion ≤ 0.16% > 0.16% - 0.27% > 0.27%		
≤ 0.16%	Group I	Group II	Group III
> 0.16% - 0.27%	Group II	Group II	Group III
> 0.27%	Group III	Group III	Group IV

<u>Mixture Options</u>. Based upon the aggregate group, the following mixture options shall be used; however, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

Group I - Mixture options are not applicable. Use any cement or finely divided mineral.

Group II - Mixture options 1, 2, 3, 4, or 5 shall be used.

Group III - Mixture options 1, 2 and 3 combined, 4, or 5 shall be used.

Group IV - Mixture options 1, 2 and 4 combined, or 5 shall be used.

For Class PP-3 concrete the mixture options are not applicable, and any cement may be used with the specified finely divided minerals.

a) Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value = $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + ...$

Where:

a, b, c... = percentage of aggregate in the blend;

A, B, C...= expansion value for that aggregate.

- b) Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. The replacement ratio is defined as "finely divided mineral:portland cement".
 - 1) Class F Fly Ash. For Class PV, BS, MS, DS, SC, and SI concrete and cement aggregate mixture II (CAM II), Class F fly ash shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.
 - 2) Class C Fly Ash. For Class PV, MS, SC, and SI Concrete, Class C fly ash with 18 percent to less than 26.5 percent calcium oxide content, and less than 2.0 percent loss on ignition, shall replace 20 percent of the portland cement at a minimum replacement ratio of 1:1; or at a minimum replacement ratio of 1.25:1 if the loss on ignition is 2.0 percent or greater. Class C fly ash with less than 18 percent calcium oxide content shall replace 20 percent of the portland cement at a minimum replacement ratio of 1.25:1.

For Class PP-1, RR, BS, and DS concrete and CAM II, Class C fly ash with less than 26.5 percent calcium oxide content shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.

3) Ground Granulated Blast-Furnace Slag. For Class PV, BS, MS, SI, DS, and SC concrete, ground granulated blast-furnace slag shall replace 25 percent of the portland cement at a minimum replacement ratio of 1:1.

For Class PP-1 and RR concrete, ground granulated blast-furnace slag shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.

For Class PP-2, ground granulated blast-furnace slag shall replace 25 to 30 percent of the portland cement at a minimum replacement ratio of 1:1.

- 4) Microsilica or High Reactivity Metakaolin. Microsilica solids or high reactivity metakaolin shall be added to the mixture at a minimum 25 lb/cu yd (15 kg/cu m) or 27 lb/cu yd (16 kg/cu m) respectively.
- c) Mixture Option 3. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.60 percent. When aggregate in Group II is involved, any finely divided mineral may be used with a portland cement.
- d) Mixture Option 4. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.45 percent. When aggregate in Group II or III is involved, any finely divided mineral may be used with a portland cement.
- e) Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is ≤ 0.16 percent when performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly. For latex concrete, the ASTM C 1567 test shall be performed without the latex. The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content $(Na_2O + 0.658K_2O)$, a new ASTM C 1567 test will not be required.

Testing. If an individual aggregate has an ASTM C 1260 expansion value > 0.16 percent, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The ASTM C 1293 test shall be performed with Type I or II cement having a total equivalent alkali content (Na₂O + 0.658K₂O) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper. If the testing laboratory desires to use an alternate container or wick of absorbent material, ASTM C 1293 test results with an alkali-reactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 or 1567 test result. The Engineer will not accept the result if the precision and bias for the test methods are not met.

The laboratory performing the ASTM C 1567 test shall either be accredited by the AASHTO Materials Reference Laboratory (AMRL) for ASTM C 227 under Portland Cement Concrete or Aggregate; or shall be inspected for Hydraulic Cement - Physical Tests by the Cement and Concrete Reference Laboratory (CCRL) and shall be approved by the Department. The laboratory performing the ASTM C 1293 test shall be inspected for Portland Cement Concrete by CCRL and shall be approved by the Department.

ALKALI-SILICA REACTION FOR PRECAST AND PRECAST PRESTRESSED CONCRETE (BDE)

Effective: January 1, 2009

<u>Description</u>. This special provision is intended to reduce the risk of a deleterious alkali-silica reaction in precast and precast prestressed concrete exposed to humid or wet conditions. The special provision is not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate or sodium formate. The special provision shall not apply to the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy. The special provision shall also not apply to cast-in-place concrete.

Aggregate Expansion Values. Each coarse and fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates and 0.03 percent to limestone or dolomite fine aggregates (manufactured stone sand); however the Department reserves the right to perform the ASTM C 1260 test.

<u>Aggregate Groups</u>. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

AGGREGATE GROUPS			
Coarse Aggregate or Coarse Aggregate Blend	Fine Aggregate or Fine Aggregate Blend		
ASTM C 1260 Expansion	ASTM C 1260 Expansion ≤ 0.16% > 0.16% - 0.27% > 0.27%		
≤ 0.16%	Group I	Group II	Group III
> 0.16% - 0.27%	Group II	Group II	Group III
> 0.27%	Group III	Group III	Group IV

<u>Mixture Options</u>. Based upon the aggregate group, the following mixture options shall be used; however, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

Group I - Mixture options are not applicable. Use any cement or finely divided mineral.

Group II - Mixture options 1, 2, 3, 4, or 5 shall be used.

Group III - Mixture options 1, 2 and 3 combined, 4, or 5 shall be used.

Group IV - Mixture options 1, 2 and 4 combined, or 5 shall be used.

a) Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value = $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + ...$

Where: a, b, c... = percentage of aggregate in the blend; A, B, C... = expansion value for that aggregate.

- b) Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. The replacement ratio is defined as "finely divided mineral:portland cement".
 - 1) Class F Fly Ash. For Class PC concrete, precast products, and PS concrete, Class F fly ash shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.
 - 2) Class C Fly Ash. For Class PC Concrete, precast products, and Class PS concrete, Class C fly ash with 18 percent to less than 26.5 percent calcium oxide content, and less than 2.0 percent loss on ignition, shall replace 20 percent of the portland cement at a minimum replacement ratio of 1:1; or at a minimum replacement ratio of 1.25:1 if the loss on ignition is 2.0 percent or greater. Class C fly ash with less than 18 percent calcium oxide content shall replace 20 percent of the portland cement at a minimum replacement ratio of 1.25:1.
 - 3) Ground Granulated Blast-Furnace Slag. For Class PC concrete, precast products, and Class PS concrete, ground granulated blast-furnace slag shall replace 25 percent of the portland cement at a minimum replacement ratio of 1:1.
 - 4) Microsilica or High Reactivity Metakaolin. Microsilica solids or high reactivity metakaolin shall be added to the mixture at a minimum 25 lb/cu yd (15 kg/cu m) or 27 lb/cu yd (16 kg/cu m) respectively.
- c) Mixture Option 3. The cement used shall have a maximum total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.60 percent. When aggregate in Group II is involved, any finely divided mineral may be used with a portland cement.
- d) Mixture Option 4. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.45 percent. When aggregate in Group II or III is involved, any finely divided mineral may be used with a portland cement.
- e) Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is \leq 0.16 percent when performed on the aggregate in

the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly. The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content $(Na_2O + 0.658K_2O)$, a new ASTM C 1567 test will not be required.

Testing. If an individual aggregate has an ASTM C 1260 expansion value > 0.16 percent, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The ASTM C 1293 test shall be performed with Type I or II cement having a total equivalent alkali content (Na₂O + 0.658K₂O) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper. If the testing laboratory desires to use an alternate container or wick of absorbent material, ASTM C 1293 test results with an alkali-reactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 or 1567 test result. The Engineer will not accept the result if the precision and bias for the test methods are not met.

The laboratory performing the ASTM C 1567 test shall either be accredited by the AASHTO Materials Reference Laboratory (AMRL) for ASTM C 227 under Portland Cement or Aggregate; or shall be inspected for Hydraulic Cement - Physical Tests by the Cement and Concrete Reference Laboratory (CCRL) and shall be approved by the Department. The laboratory performing the ASTM C 1293 test shall be inspected for Portland Cement Concrete by CCRL and shall be approved by the Department.

APPROVAL OF PROPOSED BORROW AREAS, USE AREAS, AND/OR WASTE AREAS INSIDE ILLINOIS STATE BORDERS (BDE)

Effective: November 1, 2008

Revise the title of Article 107.22 of the Standard Specifications to read:

"107.22 Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas Inside Illinois State Borders."

Add the following sentence to the end of the first paragraph of Article 107.22 of the Standard Specifications:

"Proposed borrow areas, use areas, and/or waste areas outside of Illinois shall comply with Article 107.01."

CEMENT (BDE)

Effective: January 1, 2007 Revised: November 1, 2007

Revise Section 1001 of the Standard Specifications to read:

"SECTION 1001. CEMENT

1001.01 Cement Types. Cement shall be according to the following.

(a) Portland Cement. Acceptance of portland cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland cement shall be according to ASTM C 150, and shall meet the standard physical and chemical requirements. Type I or Type II may be used for cast-in-place, precast, and precast prestressed concrete. Type III may be used according to Article 1020.04, or when approved by the Engineer. All other cements referenced in ASTM C 150 may be used when approved by the Engineer.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement and the total of all inorganic processing additions shall be a maximum of 4.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids that improve the flowability of cement, reduce pack set, and improve grinding efficiency. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302 and Class C fly ash according to the chemical requirements of AASHTO M 295.

(b) Portland-Pozzolan Cement. Acceptance of portland-pozzolan cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland-pozzolan cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type IP or I(PM) may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. The pozzolan constituent for Type IP shall be a maximum of 21 percent of the weight (mass) of the portland-pozzolan cement. All other cements referenced in ASTM C 595 may be used when approved by the Engineer.

For cast-in-place construction, portland-pozzolan cements shall not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-

reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall not be used.

(c) Portland Blast-Furnace Slag Cement. Acceptance of portland blast-furnace slag cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland blast-furnace slag cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type I(SM) slag-modified portland cement may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. All other cements referenced in ASTM C 595 may be used when approved by the Engineer.

For cast-in-place construction, portland blast-furnace slag cements shall not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall not be used.

- (d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department's current "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs", and shall be according to the following.
 - (1) The cement shall have a maximum final set of 25 minutes, according to Illinois Modified ASTM C 191.
 - (2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified ASTM C 109.
 - (3) The cement shall have a maximum drying shrinkage of 0.050 percent at seven days, according to Illinois Modified ASTM C 596.
 - (4) The cement shall have a maximum expansion of 0.020 percent at 14 days, according to Illinois Modified ASTM C 1038.

- (5) The cement shall have a minimum 80 percent relative dynamic modulus of elasticity; and shall not have a weight (mass) gain in excess of 0.15 percent or a weight (mass) loss in excess of 1.0 percent, after 100 cycles, according to Illinois Modified AASHTO T 161, Procedure B. At 100 cycles, the specimens are measured and weighed at 73 °F (23 °C).
- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used when specified by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to ASTM C 150, except the time of setting shall not apply. The chemical requirements shall be determined according to ASTM C 114 and shall be as follows: minimum 38 percent aluminum oxide (Al₂O₃), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide (MgO), maximum 0.4 percent sulfur trioxide (SO₃), maximum 1 percent loss on ignition, and maximum 3.5 percent insoluble residue.
- **1001.02 Uniformity of Color.** Cement contained in single loads or in shipments of several loads to the same project shall not have visible differences in color.
- 1001.03 Mixing Brands and Types. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall not be mixed or used alternately in the same item of construction unless approved by the Engineer.
- 1001.04 Storage. Cement shall be stored and protected against damage, such as dampness which may cause partial set or hardened lumps. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall be kept separate."

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: November 1, 2008

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory or most recent addendum.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

<u>CONTRACTOR ASSURANCE</u>. The Contractor makes the following assurance and agrees to include the assurance in each subcontract that the Contractor signs with a subcontractor:

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is

- (a) The bidder documents that firmly committed DBE participation has been obtained to meet the goal; or
- (b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

<u>DBE LOCATOR REFERENCES</u>. Bidders may consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217)785-4611, or by visiting the Department's web site at www.dot.il.gov.

<u>BIDDING PROCEDURES</u>. Compliance with the bidding procedures of this Special Provision is required prior to the award of the contract and the failure of the as-read low bidder to comply will render the bid not responsive.

(a) In order to assure the timely award of the contract, the as-read low bidder shall submit a Disadvantaged Business Utilization Plan on Department form SBE 2026 within seven working days after the date of letting. To meet the seven day requirement, the bidder may send the Plan by certified mail or delivery service within the seven working day period. If a question arises concerning the mailing date of a Plan, the mailing date will be established by the U.S. Postal Service postmark on the original certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. responsibility of the bidder to ensure that the postmark or receipt date is affixed within the seven working days if the bidder intends to rely upon mailing or delivery to satisfy the The Plan is to be submitted to the Department of submission day requirement. Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). It is the responsibility of the bidder to obtain confirmation of telefax delivery. The Department will not accept a Utilization Plan if it does not meet the seven day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. The signatures on these forms must be original signatures. All elements of information indicated on the said form shall be provided, including but not limited to the following:
 - (1) The name and address of each DBE to be used;
 - (2) A description, including pay item numbers, of the commercially useful work to be done by each DBE;
 - (3) The price to be paid to each DBE for the identified work specifically stating the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
 - (4) A commitment statement signed by the bidder and each DBE evidencing availability and intent to perform commercially useful work on the project; and
 - (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (d) The contract will not be awarded until the Utilization Plan submitted by the bidder is approved. The Utilization Plan will be approved by the Department if the Plan commits sufficient commercially useful DBE work performance to meet the contract goal. The Utilization Plan will not be approved by the Department if the Plan does not commit sufficient DBE performance to meet the contract goal unless the bidder documents that it made a good faith effort to meet the goal. The good faith procedures of Section VIII of this special provision apply. If the Utilization Plan is not approved because it is deficient in a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no less than a five working day period in order to cure the deficiency.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contact. Credit will be given for the full value of all such DBE trucks operated using DBE employed drivers. Goal credit will be limited to the value of the reasonable fee or commission received by the DBE if trucks are leased from a non-DBE company.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

GOOD FAITH EFFORT PROCEDURES. If the bidder cannot obtain sufficient DBE commitments to meet the contract goal, the bidder must document in the Utilization Plan the good faith efforts made in the attempt to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which could reasonably be expected to obtain sufficient DBE participation. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts are not good faith efforts; rather, the bidder is expected to have taken those efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
 - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
 - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
 - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
 - (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and

using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.

- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that a good faith effort has not been made, the Department will notify the bidder of that preliminary determination by contacting the responsible company official The preliminary determination shall include a designated in the Utilization Plan. statement of reasons why good faith efforts have not been found, and may include additional good faith efforts that the bidder could take. The notification will designate a five working day period during which the bidder shall take additional efforts. The bidder is not limited by a statement of additional efforts, but may take other action beyond any stated additional efforts in order to obtain additional DBE commitments. The bidder shall submit an amended Utilization Plan if additional DBE commitments to meet the contract goal are secured. If additional DBE commitments sufficient to meet the contract goal are not secured, the bidder shall report the final good faith efforts made in the time allotted. All additional efforts taken by the bidder will be considered as part of the bidder's good faith efforts. If the bidder is not able to meet the goal after taking additional efforts, the Department will make a pre-final determination of the good faith efforts of the bidder and will notify the designated responsible company official of the reasons for an adverse determination.
- (c) The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five working days after the notification date of the

determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The pre-final determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. In addition, the request shall be considered a consent by the bidder to extend the time for award. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal.

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. If a DBE listed in the Utilization Plan is terminated for reasons other than convenience, or fails to complete its work on the contract for any reason, the Contractor shall make good faith efforts to

find another DBE to substitute for the terminated DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, but only to the extent needed to meet the contract goal or the amended contract goal. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau of Small Business Enterprises and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau of Small Business Enterprises will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.

- (c) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefor to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (d) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (e) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

EQUIPMENT RENTAL RATES (BDE)

Effective: August 2, 2007 Revised: January 2, 2008

Replace the second and third paragraphs of Article 105.07(b)(4)a. of the Standard Specifications with the following:

"Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4)."

Replace Article 109.04(b)(4) of the Standard Specifications with the following:

- "(4) Equipment. Equipment used for extra work shall be authorized by the Engineer. The equipment shall be specifically described, be of suitable size and capacity for the work to be performed, and be in good operating condition. For such equipment, the Contractor will be paid as follows.
 - a. Contractor Owned Equipment. Contractor owned equipment will be paid for by the hour using the applicable FHWA hourly rate from the "Equipment Watch Rental Rate Blue Book" (Blue Book) in effect when the force account work begins. The FHWA hourly rate is calculated as follows.

FHWA hourly rate = (monthly rate/176) x (model year adj.) x (Illinois adj.) + EOC

Where: EOC = Estimated Operating Costs per hour (from the Blue Book)

The time allowed will be the actual time the equipment is operating on the extra work. For the time required to move the equipment to and from the site of the extra work and any authorized idle (standby) time, payment will be made at the following hourly rate: 0.5 x (FHWA hourly rate - EOC).

All time allowed shall fall within the working hours authorized for the extra work.

The rates above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals. The rates do not include labor.

The Contractor shall submit to the Engineer sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper equipment category. If a rate is not established in the Blue Book for a particular piece of equipment, the Engineer will establish a rate for that piece of equipment that is consistent with its cost and use in the industry.

b. Rented Equipment. Whenever it is necessary for the Contractor to rent equipment to perform extra work, the rental and transportation costs of the equipment plus five percent for overhead will be paid. In no case shall the rental rates exceed those of established distributors or equipment rental agencies.

All prices shall be agreed to in writing before the equipment is used."

HOT-MIX ASPHALT - FIELD VOIDS IN THE MINERAL AGGREGATE (BDE)

Effective: April 1, 2007 Revised: April 1, 2008

Add the following to the table in Article 1030.05(d)(2)a. of the Standard Specifications:

"Parameter	Frequency of Tests	Frequency of Tests	Test Method See Manual of Test
	High ESAL Mixture Low ESAL Mixture	All Other Mixtures	Procedures for Materials
VMA	Day's production ≥ 1200 tons:	N/A	Illinois-Modified AASHTO R 35
Note 5.	1 per half day of production	·	
	Day's production < 1200 tons:		
	1 per half day of production for first 2 days and 1 per day		
	thereafter (first sample of the day)		

Note 5. The G_{sb} used in the voids in the mineral aggregate (VMA) calculation shall be the same average G_{sb} value listed in the mix design."

Add the following to the Control Limits table in Article 1030.05(d)(4) of the Standard Specifications:

"CONTROL LIMITS			
Parameter	High ESAL Low ESAL Individual Test	High ESAL Low ESAL Moving Avg. of 4	All Other Individual Test
VMA	-0.7 % 2/	-0.5 % ^{2/}	N/A

^{2/} Allowable limit below minimum design VMA requirement"

Add the following to the table in Article 1030.05(d)(5) of the Standard Specifications:

"CONTROL CHART	High ESAL	All Other
REQUIREMENTS	Low ESAL	
	VMA"	

Revise the heading of Article 1030.05(d)(6)a.1. of the Standard Specifications to read:

"1. Voids, VMA, and Asphalt Binder Content."

Revise the first sentence of the first paragraph of Article 1030.05(d)(6)a.1.(a.) of the Standard Specifications to read:

"If the retest for voids, VMA, or asphalt binder content exceeds control limits, HMA production shall cease and immediate corrective action shall be instituted by the Contractor."

Revise the table in Article 1030.05(e) of the Standard Specifications to read:

"Test Parameter	Acceptable Limits of Precision
% Passing: 1/	
1/2 in. (12.5 mm)	5.0 %
No. 4 (4.75 mm)	5.0 %
No. 8 (2.36 mm)	3.0 %
No. 30 (600 μm)	2.0 %
Total Dust Content No. 200 (75 μm) ^{1/}	. 2.2 %
Asphalt Binder Content	0.3 %
Maximum Specific Gravity of Mixture	0.026
Bulk Specific Gravity	0.030
VMA	1.4 %
Density (% Compaction)	1.0 % (Correlated)

^{1/} Based on washed ignition."

HOT-MIX ASPHALT – PLANT TEST FREQUENCY (BDE)

Effective: April 1, 2008

Revise the table in Article 1030.05(d)(2)a. of the Standard Specifications to read:

"Parameter	Frequency of Tests High ESAL Mixture Low ESAL Mixture	Frequency of Tests All Other Mixtures	Test Method See Manual of Test Procedures for Materials
Aggregate Gradation Hot bins for batch and continuous plants. Individual cold-feed or combined belt-feed for drier drum plants. % passing sieves: 1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 μm) No. 200 (75 μm) Note 1.	1 dry gradation per day of production (either morning or afternoon sample). and 1 washed ignition oven test on the mix per day of production (conduct in the afternoon if dry gradation is conducted in the morning or vice versa). Note 3. Note 4.	1 gradation per day of production. The first day of production shall be a washed ignition oven test on the mix. Thereafter, the testing shall alternate between dry gradation and washed ignition oven test on the mix. Note 4.	Illinois Procedure
Asphalt Binder Content by Ignition Oven Note 2.	1 per half day of production	1 per day	Illinois-Modified AASHTO T 308
Air Voids Bulk Specific Gravity of Gyratory Sample	Day's production ≥ 1200 tons: 1 per half day of production Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the	1 per day	Illinois-Modified AASHTO T 312

"Parameter	Frequency of Tests High ESAL Mixture Low ESAL Mixture	Frequency of Tests All Other Mixtures	Test Method See Manual of Test Procedures for Materials
Maximum Specific Gravity of Mixture	Day's production ≥ 1200 tons: 1 per half day of production Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	1 per day	Illinois-Modified AASHTO T 209"

HOT-MIX ASPHALT - TRANSPORTATION (BDE)

Effective: April 1, 2008

Revise Article 1030.08 of the Standard Specifications to read:

"1030.08 Transportation. Vehicles used in transporting HMA shall have clean and tight beds. The beds shall be sprayed with asphalt release agents from the Department's approved list. In lieu of a release agent, the Contractor may use a light spray of water with a light scatter of manufactured sand (FA 20 or FA 21) evenly distributed over the bed of the vehicle. After spraying, the bed of the vehicle shall be in a completely raised position and it shall remain in this position until all excess asphalt release agent or water has been drained.

When the air temperature is below 60 °F (15 °C), the bed, including the end, endgate, sides and bottom shall be insulated with fiberboard, plywood or other approved insulating material and shall have a thickness of not less than 3/4 in (20 mm). When the insulation is placed inside the bed, the insulation shall be covered with sheet steel approved by the Engineer. Each vehicle shall be equipped with a cover of canvas or other suitable material meeting the approval of the Engineer which shall be used if any one of the following conditions is present.

- (a) Ambient air temperature is below 60 °F (15 °C).
- (b) The weather is inclement.
- (c) The temperature of the HMA immediately behind the paver screed is below 250 °F (120 °C).

The cover shall extend down over the sides and ends of the bed for a distance of approximately 12 in. (300 mm) and shall be fastened securely. The covering shall be rolled back before the load is dumped into the finishing machine."

METAL HARDWARE CAST INTO CONCRETE (BDE)

Effective: April 1, 2008 Revised: November 1, 2008

Add the following to Article 503.02 of the Standard Specifications:

"(g) Metal Hardware Cast into Concrete......1006.13"

Add the following to Article 504.02 of the Standard Specifications:

Revise Article 1006.13 of the Standard Specifications to read:

"1006.13 Metal Hardware Cast into Concrete. All metal hardware cast into concrete, such as inserts, brackets, cable clamps, metal casings for formed holes, and other miscellaneous items, shall be steel and shall be galvanized according to AASHTO M 232 or AASHTO M 111.

The inserts shall be ferrules with loop or strut type anchorages having the following minimum certified proof load.

Insert Diameter	Proof Load
5/8 in. (16 mm)	6600 lb (29.4 kN)
3/4 in. (19 mm)	6600 lb (29.4 kN)
1 in. (25 mm)	9240 lb (41.1 kN)"

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM / EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2007 Revised: November 1, 2008

Revise Article 105.03(a) of the Standard Specifications to read:

"(a) National Pollutant Discharge Elimination System (NPDES) / Erosion and Sediment Control Deficiency Deduction. When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, or the Contractor's activities represents a violation of the Department's NPDES permits, the Engineer 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 1 week based on the urgency of the situation and the nature of the work effort required. The Engineer will be the sole judge.

A deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the Department's NPDES permits. A deficiency may also be applied to situations where corrective action is not an option such as the failure to participate in a jobsite inspection of the project, failure to install required measures prior to initiating earth moving operations, disregard of concrete washout requirements, or other disregard of the NPDES permit.

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 \$1000.00 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day."

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000 Revised: January 1, 2006

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 and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier 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 and material suppliers throughout the contracting chain.

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

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain 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 and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section

7(b) of the State Prompt Payment Act. State law creates other and additional 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 according to the Public Construction Bond Act, 30 ILCS 550.

PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: November 1, 2008

Revise the first sentence of Article 701.12 of the Standard Specifications to read:

"All personnel on foot, excluding flaggers, within the highway right-of-way shall wear a fluorescent orange, fluorescent yellow/green, or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of ANSI/ISEA 107-2004 for Conspicuity Class 2 garments."

PUBLIC CONVENIENCE AND SAFETY (BDE)

Effective: January 1, 2000

Add the following paragraph after the fourth paragraph of Article 107.09 of the Standard Specifications:

"On weekends, excluding holidays, roadways with Average Daily Traffic of 25,000 or greater, all lanes shall be open to traffic from 3:00 P.M. Friday to midnight Sunday except where structure construction or major rehabilitation makes it impractical."

RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007 Revised: August 1, 2007

In Article 1030.02(g), delete the last sentence of the first paragraph in (Note 2).

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT

1031.01 Description. Reclaimed asphalt pavement (RAP) is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.

1031.02 Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District to provide verification of the quality of the RAP to clarify appropriate stockpile.

- (a) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (b) Conglomerate 5/8. Conglomerate 5/8 RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate 5/8 RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate 5/8 RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (c) Conglomerate 3/8. Conglomerate 3/8 RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least B quality. This RAP may have an

inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate 3/8 RAP shall be processed prior to testing by crushing to where all RAP shall pass the 3/8 in. (9.5 mm) or smaller screen. Conglomerate 3/8 RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.

- (d) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, Superpave (High or Low ESAL), HMA (High or Low ESAL), or equivalent mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (e) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

1031.03 Testing. When used in HMA, the RAP shall be sampled and tested either during or after stockpiling.

For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

(a) Testing Conglomerate 3/8. In addition to the requirements above, conglomerate 3/8 RAP shall be tested for maximum theoretical specific gravity (G_{mm}) at a frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

(b) Evaluation of Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G_{mm}. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	Homogeneous / Conglomerate	Conglomerate "D" Quality
1 in. (25 mm)		± 5 %
1/2 in. (12.5 mm)	± 8 %	± 15 %
No. 4 (4.75 mm)	± 6 %	± 13 %
No. 8 (2.36 mm)	± 5 %	
No. 16 (1.18 mm)		± 15 %
No. 30 (600 μm)	± 5 %	
No. 200 (75 μm)	± 2.0 %	± 4.0 %
Asphalt Binder	± 0.4 % 1/	± 0.5 %
G _{mm}	± 0.02 2/	

- 1/ The tolerance for conglomerate 3/8 shall be \pm 0.3 %.
- 2/ Applies only to conglomerate 3/8. When variation of the G_{mm} exceeds the \pm 0.02 tolerance, a new conglomerate 3/8 stockpile shall be created which will also require an additional mix design.

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt binder content test results fall outside the appropriate tolerances, the RAP shall not be used in HMA unless the RAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

1031.04 Quality Designation of Aggregate in RAP. The quality of the RAP shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

- (a) RAP from Class I, Superpave (High ESAL), or HMA (High ESAL) surface mixtures are designated as containing Class B quality coarse aggregate.
- (b) RAP from Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder and IL-9.5L surface mixtures are designated as Class D quality coarse aggregate.
- (c) RAP from Class I, Superpave (High ESAL), or HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.

(d) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

1031.05 Use of RAP in HMA. The use of RAP in HMA shall be as follows.

- (a) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (b) Steel Slag Stockpiles. RAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) surface mixtures only.
- (c) Use in HMA Surface Mixtures (High and Low ESAL). RAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be either homogeneous or conglomerate 3/8, in which the coarse aggregate is Class B quality or better.
- (d) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be homogeneous, conglomerate 5/8, or conglomerate 3/8, in which the coarse aggregate is Class C quality or better.
- (e) Use in Shoulders and Subbase. RAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be homogeneous, conglomerate 5/8, conglomerate 3/8, or conglomerate DQ.
- (f) The use of RAP shall be a contractor's option when constructing HMA in all contracts. When the contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in the table for a given N Design.

Max RAP Percentage

HMA MIXTURES 1/, 3/	MAXIMUM % RAP			
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified	
30	30	30	10	
50	25 .	15	10	
70	15 / 25 ^{2/}	10 / 15 ^{2/}	10	
90	10	10	10	
105	10	10	10	

- 1/ For HMA Shoulder and Stabilized Sub-Base (HMA) N-30, the amount of RAP shall not exceed 50% of the mixture.
- 2/ Value of Max % RAP if 3/8 RAP is utilized.

3/ When RAP exceeds 20%, the high & low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25% RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

1031.06 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP material meeting the above detailed requirements.

RAP designs shall be submitted for volumetric verification. If additional RAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP stockpiles may be used in the original mix design at the percent previously verified.

1031.07 HMA Production. The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

To remove or reduce agglomerated material, a scalping screen, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP and either switch to the virgin aggregate design or submit a new RAP design. When producing mixtures containing conglomerate 3/8 RAP, a positive dust control system shall be utilized.

HMA plants utilizing RAP shall be capable of automatically recording and printing the following information.

- (a) Dryer Drum Plants.
 - (1) Date, month, year, and time to the nearest minute for each print.
 - (2) HMA mix number assigned by the Department.
 - (3) Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - (4) Accumulated dry weight of RAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - (5) Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.

- (6) Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- (7) Residual asphalt binder in the RAP material as a percent of the total mix to the nearest 0.1 percent.
- (8) Aggregate and RAP moisture compensators in percent as set on the control panel. (Requied when accumulated or individual aggregate and RAP are printed in wet condition.)
- (b) Batch Plants.
 - (1) Date, month, year, and time to the nearest minute for each print.
 - (2) HMA mix number assigned by the Department.
 - (3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - (4) Mineral filler weight to the nearest pound (kilogram).
 - (5) RAP weight to the nearest pound (kilogram).
 - (6) Virgin asphalt binder weight to the nearest pound (kilogram).
 - (7) Residual asphalt binder in the RAP material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

1031.08 RAP in Aggregate Surface Course and Aggregate Shoulders. The use of RAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Other". The testing requirements of Article 1031.03 shall not apply.
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)

Effective: April 1, 2007 Revised: November 1, 2008

Revise the seventh paragraph of Article 1106.02 of the Standard Specifications to read:

"At the time of manufacturing, the retroreflective prismatic sheeting used on channelizing devices shall meet or exceed the initial minimum coefficient of retroreflection as specified in the following table. Measurements shall be conducted according to ASTM E 810, without averaging. Sheeting used on cones, drums and flexible delineators shall be reboundable as tested according to ASTM D 4956. Prestriped sheeting for rigid substrates on barricades shall be white and orange. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll. The color shall conform to the latest appropriate standard color tolerance chart issued by the U.S. Department of Transportation, Federal Highway Administration, and to the daytime and nighttime color requirements of ASTM D 4956.

Initial Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material				
Observation	Entrance Angle			Fluorescent
Angle (deg.)	(deg.)	White	Orange	Orange
0.2	-4	365	160	150
0.2	+30	175	80	70
0.5	-4	245	100	95
0.5	+30	100	50	40"

Revise the first sentence of the first paragraph of Article 1106.02(c) of the Standard Specifications to read:

"Barricades and vertical panels shall have alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

Revise the third sentence of the first paragraph of Article 1106.02(d) of the Standard Specifications to read:

"The bottom panels shall be 8 x 24 in. (200 x 600 mm) with alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

REINFORCEMENT BARS (BDE)

Effective: November 1, 2005 Revised: January 2, 2008

Revise Article 1006.10(a) of the Standard Specifications to read:

- " (a) Reinforcement Bars. Reinforcement bars will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reinforcement Bar and/or Dowel Bar Plant Certification Procedure". The Department will maintain an approved list of producers.
 - (1) Reinforcement Bars (Non-Coated). Reinforcement bars shall be according to ASTM A 706 (A 706M), Grade 60 (420) for deformed bars and the following.
 - a. For straight bars furnished in cut lengths and with a well-defined yield point, the yield point shall be determined as the elastic peak load, identified by a halt or arrest of the load indicator before plastic flow is sustained by the bar and dividing it by the nominal cross-sectional area of the bar.
 - b. For bars without a well-defined yield point, including bars straightened from coils, the yield strength shall be determined by taking the corresponding load at 0.005 strain as measured by an extensometer (0.5% elongation under load) and dividing it by the nominal cross-sectional area of the bar.
 - c. For bars straightened from coils or bars bent from fabrication, there shall be no upper limit on yield strength; and for bar designation Nos. 3 6 (10 19), the elongation after rupture shall be at least 9%.
 - d. Heat Numbers. Bundles or bars at the construction site shall be marked or tagged with heat identification numbers of the bar producer.
 - e. Guided Bend Test. Bars may be subject to a guided bend test across two pins which are free to rotate, where the bending force shall be centrally applied with a fixed or rotating pin of a certain diameter as specified in Table 3 of ASTM A 706 (A 706M). The dimensions and clearances of this guided bend test shall be according to ASTM E 190.
 - f. Spiral Reinforcement. Spiral reinforcement shall be deformed or plain bars conforming to the above requirements or cold-drawn steel wire conforming to AASHTO M 32.
 - (2) Epoxy Coated Reinforcement Bars. Epoxy coated reinforcement bars shall be according to Article 1006.10(a)(1) and shall be epoxy coated according to AASHTO M 284 (M 284M) and the following.

- a. Certification. The epoxy coating applicator shall be certified according to the current Bureau of Materials and Physical Research Policy Memorandum, "Epoxy Coating Plant Certification Procedure". The Department will maintain an approved list.
- b. Coating Thickness. The thickness of the epoxy coating shall be 7 to 12 mils (0.18 to 0.30 mm). When spiral reinforcement is coated after fabrication, the thickness of the epoxy coating shall be 7 to 20 mils (0.18 to 0.50 mm).
- c. Cutting Reinforcement. Reinforcement bars may be sheared or sawn to length after coating, providing the end damage to the coating does not extend more than 0.5 in. (13 mm) back and the cut is patched before any visible rusting appears. Flame cutting will not be permitted."

REINFORCEMENT BARS - STORAGE AND PROTECTION (BDE)

Effective: August 1, 2008

Revise Article 508.03 of the Standard Specifications to read:

"508.03 Storage and Protection. Reinforcement bars, when delivered on the job, shall be stored off the ground using platforms, skids, or other supports; and shall be protected from mechanical injury and from deterioration by exposure. Epoxy coated bars shall be stored on wooden or padded steel cribbing and all systems for handling shall have padded contact areas. The bars or bundles shall not be dragged or dropped.

When it is necessary to store epoxy coated bars outside for more than two months, they shall be protected from sunlight, salt spray, and weather exposure. The protection shall consist of covering with opaque polyethylene sheeting or other suitable opaque material. The covering shall be secured and allow for air circulation around the bars to minimize condensation under the cover.

When placed in the work the bars shall be free from dirt, detrimental scale, paint, oil, or other foreign substances. A light coating of rust will not be considered objectionable on black bars."

SEEDING (BDE)

Effective: July 1, 2004 Revised: January 1, 2009

Revise the following seeding mixtures shown in Table 1 of Article 250.07 of the Standard Specifications to read:

	"Tal	ole 1 - SEEDING MIXTURES	
	Class – Type	Seeds	lb/acre (kg/hectare)
2	Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	100 (110)
		Perennial Ryegrass	50 (55)
		Creeping Red Fescue	40 (50)
		Red Top	10 (10)
2A	Salt Tolerant Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	60 (70)
		Perennial Ryegrass	20 (20)
		Red Fescue (Audubon, Sea Link, or Epic)	30 (20)
		Hard Fescue (Rescue 911, Spartan II, or Reliant IV)	30 (20)
		Fults Salt Grass 1/	60 (70)"

Revise Note 7 of Table 1 – Seeding Mixtures of Article 250.07 of the Standard Specifications to read:

"7/ In Districts 1 through 6, the planting times shall be April 1 to June 15 and August 1 to November 1. In Districts 7 through 9, the planting times shall be March 1 to June 1 and August 1 to November 15. Seeding may be performed outside these dates provided the Contractor guarantees a minimum of 75 percent uniform growth over the entire seeded area(s) after a period of establishment. Inspection dates for the period of establishment will be as follows: Seeding conducted in Districts 1 through 6 between June 16 and July 31 will be inspected after April 15 and seeding conducted between November 2 and March 31 will be inspected after September 15. Seeding conducted in Districts 7 through 9 between June 2 and July 31 will be inspected after April 15 and seeding conducted between November 16 and February 28 will be inspected after September 15. The guarantee shall be submitted to the Engineer in writing prior to performing the work. After the period of establishment, areas not exhibiting 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at no additional cost to the Department."

Revise Table II of Article 1081.04(c)(6) of the Standard Specifications to read:

		TAI	BLE II			
	Hard		Pure		Secondary *	
	Seed	Purity	Live	Weed	Noxious Weeds	
	%	%	Seed %	%	No. per oz (kg)	
Variety of Seeds	Max.	Min.	Min.	Max.	Max. Permitted	Notes
Alfalfa	20	92	89	0.50	6 (211)	1/
Clover, Alsike	15	92	87	0.30	6 (211)	21
Red Fescue, Audubon	0	97	82	0.10	3 (105)	-
Red Fescue, Creeping	-	97	82	1.00	6 (211)	-
Red Fescue, Epic	-	98	83	0.05	1 (35)	-
Red Fescue, Sea Link	-	98	83	0.10	3 (105)	-
Tall Fescue, Blade Runner	-	98	83	0.10	2 (70)	•
Tall Fescue, Falcon IV	-	98	83	0.05	1 (35)	-
Tall Fescue, Inferno	0	98	83	0.10	2 (70)	-
Tall Fescue, Tarheel II	-	97	82	1.00	6 (211)	-
Tall Fescue, Quest	0	98	83	0.10	2 (70)	
Fults Salt Grass	0	98	85	0.10	2 (70)	-
Kentucky Bluegrass	-	97	80	0.30	7 (247)	4/
Oats	-	92	88	0.50	2 (70)	3/
Redtop	-	90	78	1.80	5 (175)	3/
Ryegrass, Perennial, Annual	-	97	85	0.30	5 (175)	3/
Rye, Grain, Winter	-	92	83	0.50	2 (70)	3/
Hard Fescue, Reliant IV	-	98	83	0.05	1 (35)	-
Hard Fescue, Rescue 911	0	97	82	0.10	3 (105)	-
Hard Fescue, Spartan II	-	98	83	0.10	3 (105)	
rimothy	-	92	84	0.50	5 (175)	3/
Wheat, hard Red Winter	_	92	89	0.50	2 (70)	3/"

Revise the first sentence of the first paragraph of Article 1081.04(c)(7) of the Standard Specifications to read:

"The seed quantities indicated per acre (hectare) for Prairie Grass Seed in Classes 3, 3A, 4, 4A, 6, and 6A in Article 250.07 shall be the amounts of pure, live seed per acre (hectare) for each species listed."

SIGN PANELS AND SIGN PANEL OVERLAYS (BDE)

Effective: November 1, 2008

<u>Description</u>. This work shall consist of furnishing, fabricating, and installing sign panels and/or sign panel overlays. Work shall be according to Sections 720 and 721 of the Standard Specifications, except as modified herein.

<u>Materials</u>. Type AP and AZ sheeting shall meet the requirements of the special provision, "Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs". Type ZZ sheeting shall meet the requirements of the special provision, "Type ZZ Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs".

The sheeting for the background, legend, border, shields, and symbols shall be provided by the same manufacturer.

CONSTRUCTION REQUIREMENTS

<u>Fabrication</u>. Signs shall be fabricated according to the current Bureau of Operations Policy Memorandum, "Fabrication of Highway Signs", the MUTCD, the FHWA Standard Highway Signs manual, the Illinois standard highway signs, and as shown on the plans.

Signs shall be fabricated such that the material for the background, legend, border, shields, and symbols is applied in the preferred orientation for the maximum retroreflectivity per the manufacturer's recommendation. The nesting of legend, border, shields, or symbols will not be permitted.

SILT FILTER FENCE (BDE)

Effective: January 1, 2008

For silt filter fence fabric only, revise Article 1080.02 of the Standard Specifications to read:

"1080.02 Geotextile Fabric. The fabric for silt filter fence shall be a woven fabric meeting the requirements of AASHTO M 288 for unsupported silt fence with less than 50 percent geotextile elongation."

Replace the last sentence of Article 1081.15(b) of the Standard Specifications with the following:

"Silt filter fence stakes shall be a minimum of 4 ft (1.2 m) long and made of either wood or metal. Wood stakes shall be 2 in. x 2 in. (50 mm x 50 mm). Metal stakes shall be a standard T or U shape having a minimum weight (mass) of 1.32 lb/ft (600 g/300 mm)."

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.

TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002 Revised: January 1, 2008

Revise the third paragraph of Article 280.03 of the Standard Specifications to read:

"Erosion control systems shall be installed prior to beginning any activities which will potentially create erodible conditions. Erosion control systems for areas outside the limits of construction such as storage sites, plant sites, waste sites, haul roads, and Contractor furnished borrow sites shall be installed prior to beginning soil disturbing activities at each area. These offsite systems shall be designed by the Contractor and be subject to the approval of the Engineer."

Add the following paragraph after the third paragraph of Article 280.03 of the Standard Specifications:

"The temporary erosion and sediment control systems shown on the plans represent the minimum systems anticipated for the project. Conditions created by the Contractor's operations, or for the Contractor's convenience, which are not covered by the plans, shall be protected as directed by the Engineer at no additional cost to the Department. Revisions or modifications of the erosion and sediment control systems shall have the Engineer's written approval."

Add the following paragraph after the ninth paragraph of Article 280.07 of the Standard Specifications:

"Temporary or permanent erosion control systems required for areas outside the limits of construction will not be measured for payment."

Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications.

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within $\ _{115}$ working days.

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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 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
 - **a.** The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract
 - **b.** The contractor will accept as his operating policy the following statement: "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job-training."
- 2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for 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 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 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:
 - (1) The number of minority and non-minority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
 - (4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.
 - b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

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

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

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

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

1. General:

- a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.
- b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.
- c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

- **a.** The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- **b.** The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
- (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination:
- (2) the additional classification is utilized in the area by the construction industry;
- (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- **(4)** with respect to helpers, when such a classification prevails in the area in which the work is performed.

- c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the 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.

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

a. Apprentices:

- (1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
- (2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not

- be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.
- (3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.
- (4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

- (1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.
- (2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- (3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which 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 Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, 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 submitting payroll copies of all subcontractors.

- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
- (2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
- (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- **e**. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

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

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

VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractors' own organization (23 CFR 635).
 - a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
 - b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S. C. 333).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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

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

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

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

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

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

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

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

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

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

1. Instructions for Certification - Primary Covered Transactions:

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

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
 b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an 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," low er 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.

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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.

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 shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

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 http://www.dot.state.il.us/desenv/delett.html.

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.state.il.us/desenv/subsc.html.

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